

40	A	15030
40	A	15031
25	A	15033
25	A	15034
25	A	15035
25	A	15036
25	A	15037
25	A	15038
50	A	15039
50	A	15040
25	A	15041
25	A	15042
25	A	15043
25	A	15044
25	A	15045
250	A	16001
150	A	16002
300	WC	16003
25	A	16004
25	A	16005
80	LV	16505
150	LV	16801
100	N	20004
250	O	20006
600	N	20008
400	N	20008 1
400	N	20009
500	N	20010
700	N	20011
600	N	20011 1
500	N	20012
100	N	20013
500	N	20016
400	N	20017
150	N	20018
80	N	20018 1
200	N	20018 2
300	O	20019
150	O	20019 1
15	N	20028
50	OL	21009
25	NL	21015
50	OL	21024
25	NL	23008
50	N	23011
50	WC	24101
15	WC	24101 1
150	LV	24102
25	A	24103
25	A	24105

25	A	24106
150	LV	24180
80	WC	24201
15	WC	24201 1
150	LV	24202
25	A	24203
150	LV	24205
25	A	24206
150	LV	24280
500	WC	24301

01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 40A15030AA10C1 0 40 A 15030 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0099	40	0	Flat packings Graphite with CrNi-insert Standard 40002 92x2x49		1,00				0,00
GW10	40	0	girth weld 1.0254 (St 37.0) 48,3x4		3,00				0,00
GW8	40	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 48,3x2		1,00				0,00
P0042	40	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 48,3x2,6	2,93 kg	1,44				0,00
P0204	40	0	ELBOW 45 -BA3- SEAMLESS St35.8I /DIN 2605-1/ 48,3x2,6	0,26 kg	2,00				0,00
SC4	40	0	Segment cut 48,3		2,00				0,00
Summe: 0 40A15030AA10C1 0				4,74 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

*** Ende der Ausgabe

4,74 kg

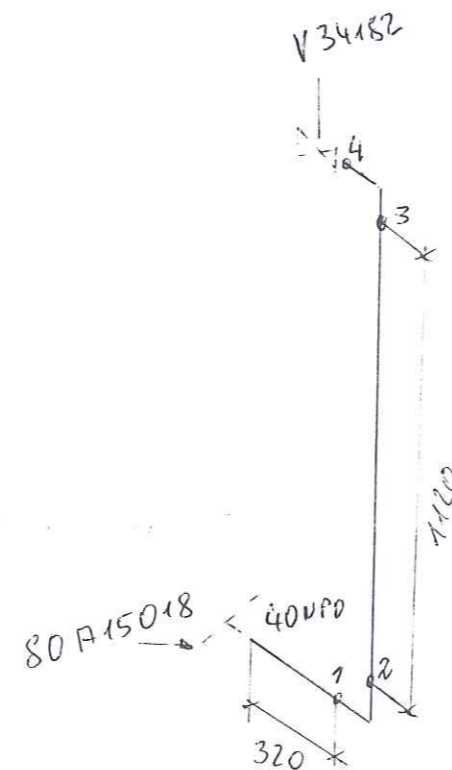
AS BUILT

As built

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	300 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
2	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	300	25		SQ.CUT	BEVEL	RN



NUR ZUR INFORMATION
FÜR INFORMATION ONLY

21. OCT. 2005

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked



Air Liquide AGS GmbH

Replaces: 79_-----
Replaced by: 79_-----

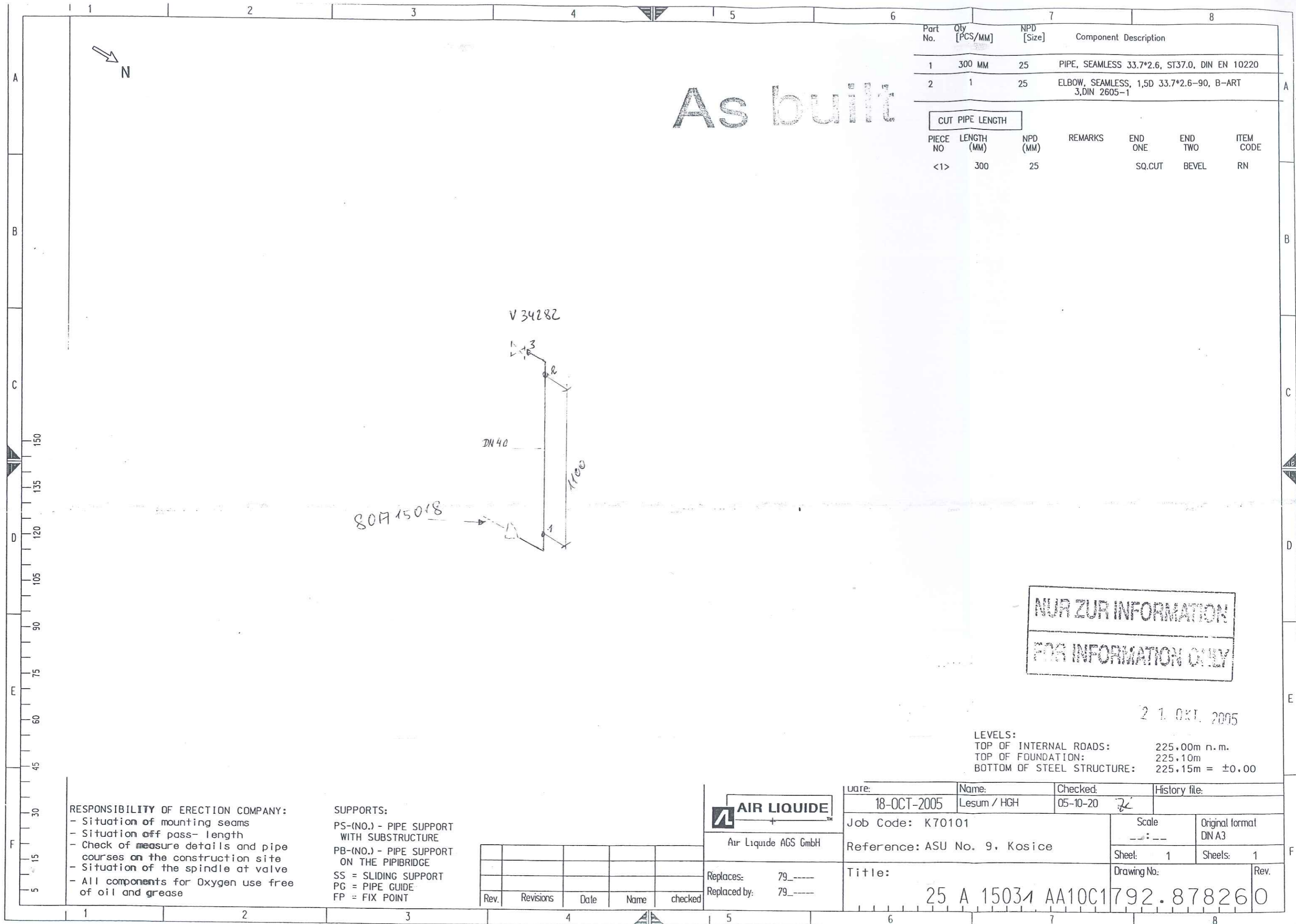
Date: 18-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
Job Code: K70101		Scale: 1:1	Original format: DIN A3
Reference: ASU No. 9. Kosice		Sheet: 1	Sheets: 1
Title: 25 A 1503.0 AA10C1792.878260		Drawing No:	Rev.

Preis-Stückliste 0 40A15031AA10C1 0 40 A 15031 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0099	40	0	Flat packings Graphite with CrNi-insert Standard 40002 92x2x49		1,00				0,00
GW10	40	0	girth weld 1.0254 (St 37.0) 48,3x4		2,00				0,00
GW8	40	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 48,3x2		1,00				0,00
P0042	40	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 48,3x2,6	2,93 kg	1,10				0,00
P0204	40	0	ELBOW 45 -BA3- SEAMLESS St35.8I /DIN 2605-1/ 48,3x2,6	0,26 kg	1,00				0,00
SC4	40	0	Segment cut 48,3		1,00				0,00
Summe: 0 40A15031AA10C1 0				3,48 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	3,48 kg
Gesamtgewicht:	
** Ende der Ausgabe	

ABGELIEFERT



Preis-Stückliste 0 25A15033AA10C1 0 25 A 15033 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		1,00				0,00
GW6	25	0	girth weld 1.0305 (St 35.8 I) (Leer) 33,7x2,6		7,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	3,60				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	3,00				0,00
P0555	25	25	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 33,7x2,6x33,7x2,6	0,23 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		3,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		1,00				0,00
SPS227	0	0	SUPPORT PS-227, L 50, L=500	0,20 kg	1,00				0,00
			Summe: 0 25A15033AA10C1 0	7,95 kg		0,00	0,00		0,00

AS BUILT

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	7,95 kg

Preis-Stückliste 0 25A15033AA10C1 0 25 A 15033 AA10C1 Revision:											
Teilenummer		NW1	NW2	Teilebezeichnung		Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
***		Ende der Ausgabe									

AS BUILT



Job Code:	K70101 ASU No. 9, Kosice	Order No.:
-----------	--------------------------	------------

Title: 25 A 15033

Drawing No.:

Project No.: 9050300

Maker's No.:

(Kunde / TÜV, ...)

geprüft

erstellt:

17.02.06

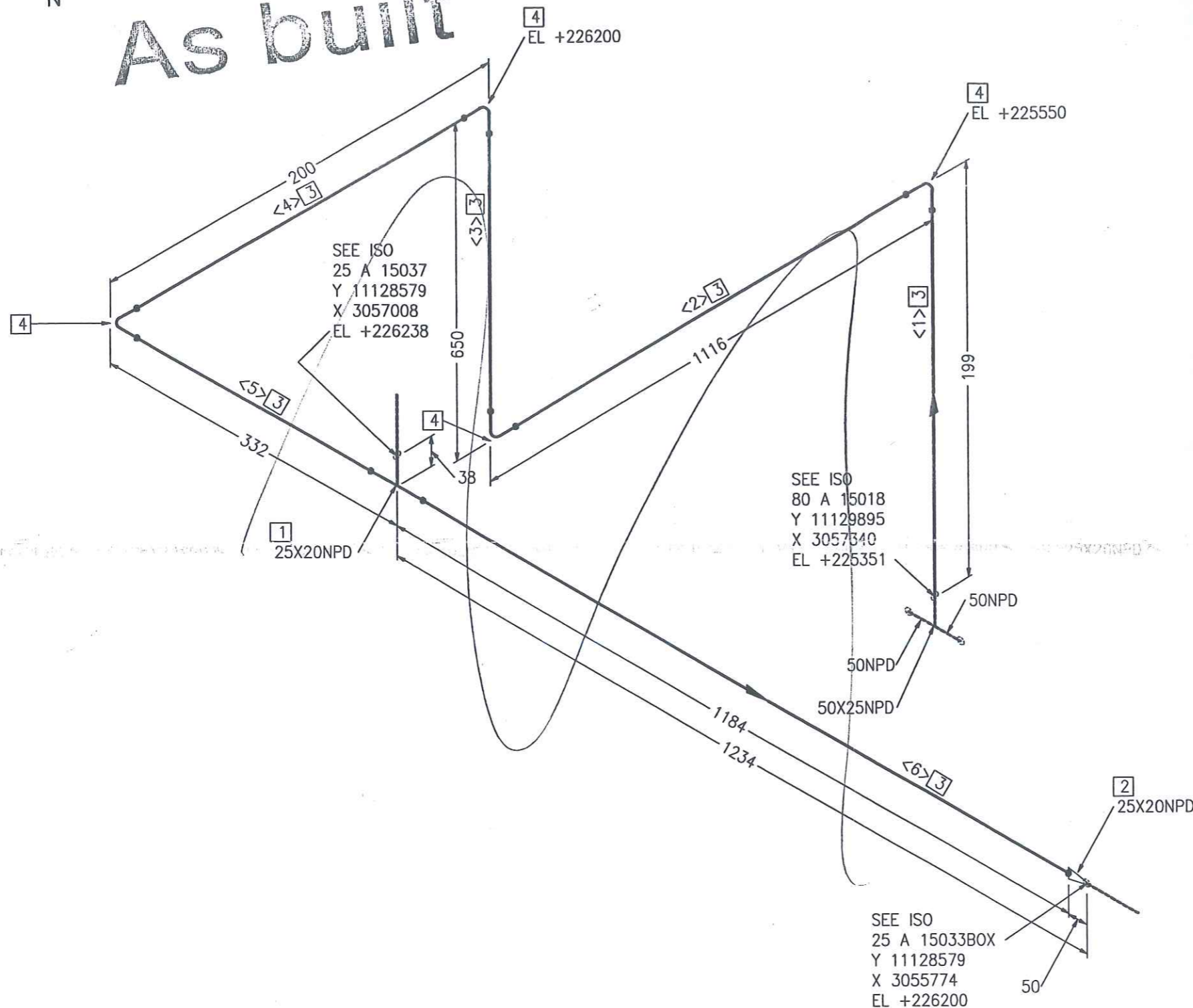
PLL
Pelzeder Erich

Schweisstechnologie VAM

Datum / Unterschrift

[illegible]

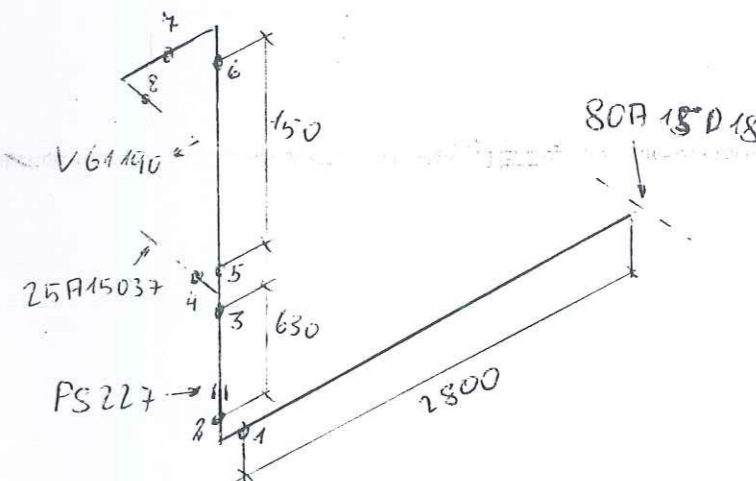
As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25X20	TEE, SEAMLESS 33.7*2.6/26.9*2.3, ST37.0, DIN 2615-1
2	1	25X20	REDUCER, CONCENTRIC, SEAMLESS 33.7*2.6/26.9*2.3, ST37.0, DIN 2616-1
3	3301 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
4	4	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3, DIN 2605-1

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	161	25		BEVEL	BEVEL	RN
<2>	1040	25		BEVEL	BEVEL	RN
<3>	574	25		BEVEL	BEVEL	RN
<4>	124	25		BEVEL	BEVEL	RN
<5>	256	25		BEVEL	BEVEL	RN
<6>	1146	25		BEVEL	BEVEL	RN



NUR ZUR INFORMATION

FOR INFORMATION ONLY

12.1. OKT. 2005

LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
 - Situation of mounting seams
 - Situation off pass- length
 - Check of measure details and pipe courses on the construction site
 - Situation of the spindle at valve
 - All components for Oxygen use free of oil and grease

SUPPORTS:
 PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
 PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
 SS = SLIDING SUPPORT
 PG = PIPE GUIDE
 FP = FIX POINT

Rev.	Revisions	Date	Name	checked

 Air Liquide AGS GmbH	Date: 17-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
	Job Code: K70101		Scale: ---	Original format: DIN A3
Replaces: 79_	Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 1
Replaced by: 79_	Title: 25 A 15033 AA1064		Drawing No: 792.878260	Rev.

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25A15034AA16C1 0 25 A 15034 AA16C1 Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		1,00				0,00
GW6	25	0	girth weld 1.0305 (St 35.8 I) (Leer) 33,7x2,6		11,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	8,20				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	5,00				0,00
P0555	25	25	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 33,7x2,6x33,7x2,6	0,23 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		4,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		3,00				0,00
SPS228	25	0	SUPPORT PS-228, L 50, L=260	0,98 kg	1,00				0,00
SPS229	25	0	SUPPORT PS-229, L 50, L=260	0,98 kg	1,00				0,00
SPS230	25	0	SUPPORT PS-230, L 50, L=300	1,13 kg	1,00				0,00
Summe: 0 25A15034AA16C1 0				20,24 kg		0,00	0,00		0,00

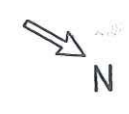
AS BUILT

Liefersumme:
Montagesumme:

Preis-Stückliste 0 25A15034AA16C1 0 25 A 15034 AA16C1 Revision:						
Teilenummer	NW1 NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage
Gesamtsumme:					L + M	Gesamt
Gesamtgewicht:						
** Ende der Ausgabe						

20,24 kg

AS BUILT



As built

SEE ISO
25 A 15035
Y 11142421
X 3057067
EL +226238

1
25X25NPD
EL +226200

SEE ISO
25 A 15034BOX
Y 11142421
X 3055774
EL +226200

2
25X20NPD

4
EL +225300

SEE ISO
80 A 15018
Y 11135377
X 3052210
EL +225730

50NPD
50NPD
50X25NPD

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked



Replaces: 79_—
Replaced by: 79_—

Date:	17-OCT-2005	Name:	Lesum / HGH	Checked:	05-10-20	History file:	
Job Code: K70101				Scale:	1:—	Original format:	DIN A3
Reference: ASU No. 9, Kosice				Sheet:	1	Sheets:	1
Title:				Drawing No:			
25 A 15034 AA1001792.878260				Rev.			

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25X25	TEE, SEAMLESS 33.7*2.6/33.7*2.6, ST37.0, DIN 2615-1
2	1	25X20	REDUCER, CONCENTRIC, SEAMLESS 33.7*2.6/26.9*2.3, ST37.0, DIN 2616-1
3	13942 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
4	6	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	3600	25		BEVEL	BEVEL	RN
<2>	2104	25		BEVEL	BEVEL	RN
<3>	2909	25		BEVEL	BEVEL	RN
<4>	354	25		BEVEL	BEVEL	RN
<5>	2601	25		BEVEL	BEVEL	RN
<6>	345	25		BEVEL	BEVEL	RN
<7>	824	25		BEVEL	BEVEL	RN
<8>	1205	25		BEVEL	BEVEL	RN

NUR ZUR INFORMATION
FOR INFORMATION ONLY

21.01.2005

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

Preis-Stückliste 0 25A15035AA16C1 0 25 A 15035 AA16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		1,00				0,00
GW6	25	0	girth weld 1.0305 (St 35.8 I) (Leer) 33,7x2,6		4,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	2,00				0,00
P0174	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	3,00				0,00
SC3	25	0	Segment cut 33,7		2,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		1,00				0,00
SPS231	25	0	SUPPORT PS-231, L 50, L=300 pipe support	1,13 kg	1,00				0,00
Summe: 0 25A15035AA16C1 0				5,47 kg		0,00	0,00		0,00

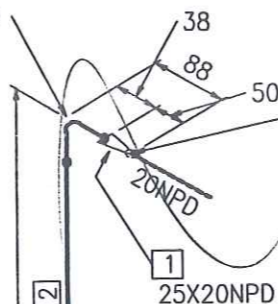
AS BUILT

Liefersumme:	
Montagesumme:	
Gesamtsumme:	5,47 kg
Gesamtgewicht:	
** Ende der Ausgabe	

As built



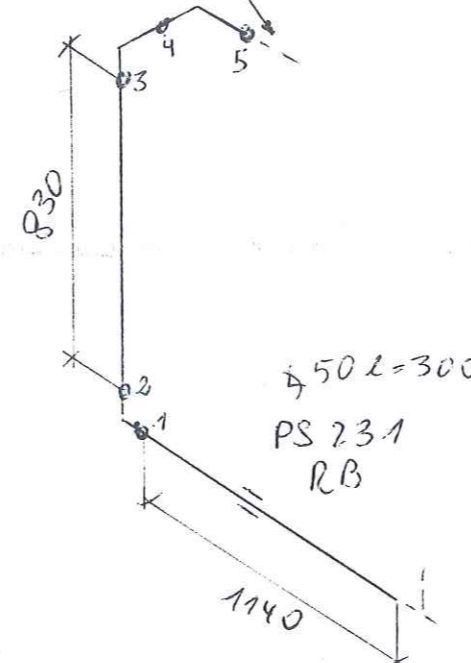
3
EL +226300



SEE ISO
25 A 15035BOX
Y 11142421
X 3056979
EL +226300

SEE ISO
25 A 15034
Y 11142421
X 3057067
EL +226238

25X25NPD
25NPD



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25X20	REDUCER, CONCENTRIC, SEAMLESS 33.7*2.6/26.9*2.3, ST37.0, DIN 2616-1
2	24 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
3	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	24	25		BEVEL	BEVEL	RN

NUR ZUR INFORMATION

FOR INFORMATION ONLY

21 OCT. 2005

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT



Air Liquide AGS GmbH

Replaces: 79_---
Replaced by: 79_---

Rev.	Revisions	Date	Name	checked

Date: 17-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
Job Code: K70101	Reference: ASU No. 9, Kosice	Title: 25 A 15035 AA10C1792.878260	Scale: 1:1
Sheet: 1	Sheets: 1	Drawing No:	Rev.

Preis-Stückliste 0 25A15036AA10C1 0 25 A 15036 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		1,00				0,00
GW6	25	0	girth weld 1.0305 (St 35.8 I) (Leer) 33,7x2,6		10,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	8,55				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	5,00				0,00
SC3	25	0	Segment cut 33,7		6,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		3,00				0,00
SPS232	25	0	SUPPORT PS-232, L 50, L=100	0,37 kg	1,00				0,00
SPS233	25	0	SUPPORT PS-233, L 50, L=200	0,74 kg	1,00				0,00
SPS234	25	0	SUPPORT PS-234, L 50, L=200	0,74 kg	1,00				0,00
Summe: 0 25A15036AA10C1 0				19,46 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	19,46 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Jop Code: K70101 ASU No. 9, Kosice

Title: 25 A 15036

Drawing No.:

Project No.: 9050300

Maker's No.:

100

(Kunde / TÜV, ...)

geprüft

erstellt:

06.03.26 *DL*
Pelzeder Erich
Datum / Unterschrift

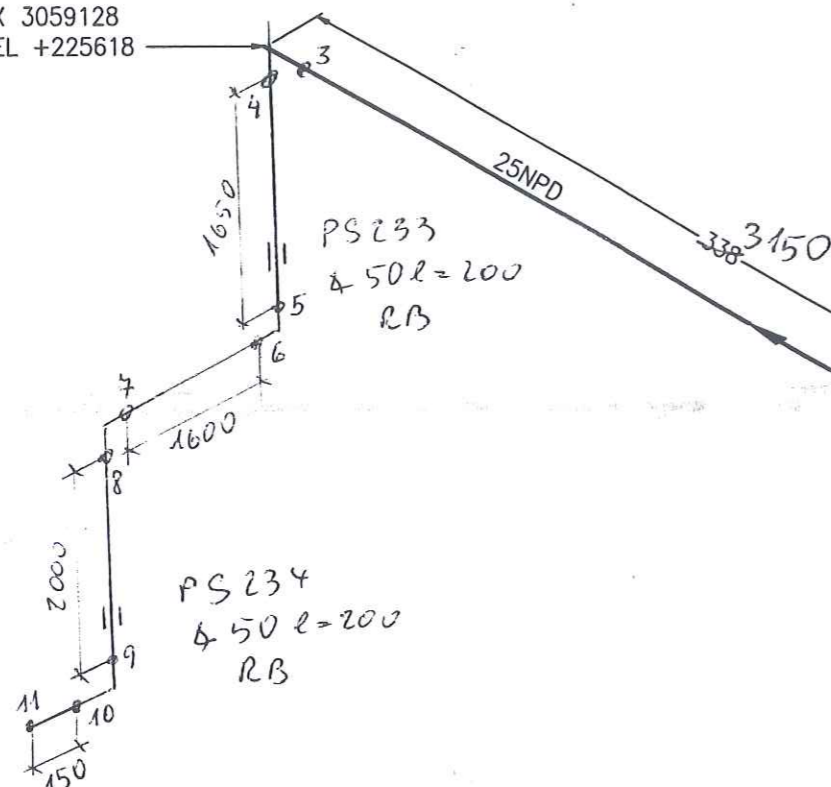
Schweisstechnologie VAM

Datum / Unterschrift

[illegible]

As built

Y 11129895
X 3059128
EL +225618



PS 232

50L=100
RB

25NPD
50X25NPD
-SEE ISO
80 A 15018
Y 11129895
X 3058790
EL +225580

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	300 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
2	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	300	25		SQ.CUT	BEVEL	RN

NUR ZUR INFORMATION

FÜR INFORMATION ONLY

21.01.2005

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT



Air Liquide AGS GmbH

Replaces: 79____
Replaced by: 79____

Rev.	Revisions	Date	Name	checked

Date: 18-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
Job Code: K70101	Reference: ASU No. 9, Kosice	Title: 25 A 15036 AA10C1792.878260	Scale: 1:1
Replaces: 79____	Replaced by: 79____	Drawing No:	Original format DIN A3
			Sheets: 1
			Sheets: 1
			Rev.

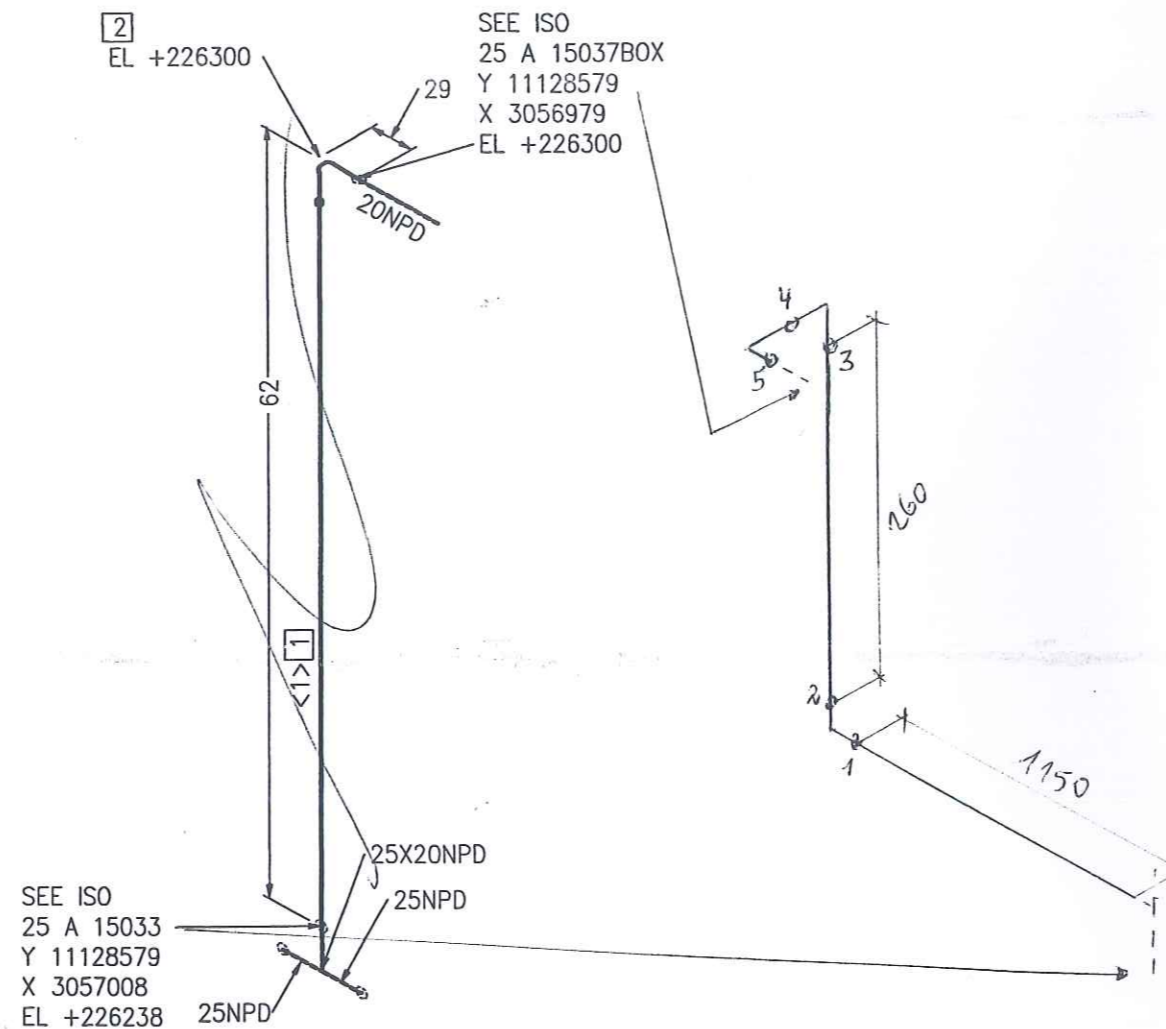
Preis-Stückliste 0 25A15037AA16C1 0 25 A 15037 AA16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		1,00				0,00
GW6	25	0	girth weld 1.0305 (St 35.8 I) (Leer) 33,7x2,6		4,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	1,50				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	3,00				0,00
SC3	25	0	Segment cut 33,7		2,00				0,00
Summe: 0 25A15037AA16C1 0				3,35 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	3,35 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

As built



SEE ISO
25 A 15033
Y 11128579
X 3057008
EL +226238

SEE ISO
25 A 15037BOX
Y 11128579
X 3056979
EL +226300

NUR ZUR INFORMATION
FOR INFORMATION ONLY


2 1. OKT. 2005

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ± 0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked

 Air Liquide AGS GmbH	Date: 17-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:	
	Job Code: K70101		Scale: ---:---		Original format: DIN A3
Reference: ASU No. 9, Kosice		Sheet: 1		Sheets: 1	
Title: 25 A 15037 AA10C1792.878260		Drawing No:		Rev.	
Replaces: 79_		Replaced by: 79_			

Preis-Stückliste 0 25A15038AA10C1 0 25 A 15038 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0002	12	55	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,06 kg	16,00				0,00
B0516	12	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,02 kg	16,00				0,00
G0092	15	0	Flat packings Graphite with CrNi-insert Standard 40002 50x2x22		2,00				0,00
G0095	20	0	Flat packings Graphite with CrNi-insert Standard 40002 60x2x28		1,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		2,00				0,00
GW2	15	0	girth weld 1.0254 (St 37.0) 21,3x2		4,00				0,00
GW3	20	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 26,9x1,6		1,00				0,00
GW6	25	0	girth weld 1.0305 (St 35.8 l) (Leer) 33,7x2,6		43,00				0,00
IV43081	15	0	V43081 supplied by AGS		1,00				0,00
IW430880	25	0	W430880 supplied by AGS		1,00				0,00
P0034	15	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 21,3x2	0,95 kg	3,35				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	51,54				0,00

Preis-Stückliste 0 25A15038AA10C1 0 25 A 15038 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0200	15	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 21,3x2	0,04 kg	1,00				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	17,00				0,00
P0555	25	25	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 33,7x2,6x33,7x2,6	0,23 kg	1,00				0,00
P1283	25	20	REDUCER, CONCENTRIC, SEAMLESS St35.8l / DIN 2616-1/ 33,7x26,9	0,21 kg	1,00				0,00
P1417	25	15	Reducer, concentric, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6x21,3x2	0,08 kg	1,00				0,00
P2933	15	0	Welding neck flanges; PN 40 1.0038 (S235JRG2) DIN EN 1092-1 21,3	1,00 kg	2,00				0,00
P2935	25	0	Welding neck flanges; PN 40 1.0038 (S235JRG2) DIN EN 1092-1 33,7	1,00 kg	2,00				0,00
SC1	15	0	Segment cut 21,3		2,00				0,00
SC3	25	0	Segment cut 33,7		20,00				0,00
SCP01	15	0	PIPE CLAMP, RB10A 22 W3 HESTERBERG 21,3		1,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		18,00				0,00

Preis-Stückliste 0 25A15038AA10C1 0 25 A 15038 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SPC01	25	0	PIPE CLAMP, DN 25 33,7		1,00				0,00
SPS235	25	0	SUPPORT PS-235, L 50, L=200	0,74 kg	1,00				0,00
SPS236	25	0	SUPPORT PS-236, L 50, L=200	0,74 kg	1,00				0,00
SPS237	25	0	SUPPORT PS-237, PL 100X80X10	0,64 kg	18,00				0,00
Summe: 0 25A15038AA10C1 0				126,63 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

** Ende der Ausgabe

126,63 kg

AS BUILT

CC

CC

VAM		SCHWEISSDOKUMENTATION WELDING DOCUMENTATION		erstellt: 09.02.06 <i>Pelzeder Erich</i> Datum / Unterschrift		geprüft Schweisstechnologie VAM Datum / Unterschrift		(Kunde / TÜV, ...)	
Prot. Nr.		Jop Code: K70101 ASU No. 9, Kosice		Order No.:		Project No.: 9050300			
Client: AIR LIQUIDE		Title: 25 A 15038		Sheet 1		Drawing No.: 792.87826 - 00		Maker's No.:	

Seam No.:	Welder No.:	Material	Dimension	Wärmebehandlung	RT	Protocol No.:			Remerk
						UT	MT/PT	SP	
1	V1	ST37.0	33,7*2,6						
2	V1	ST37.0	33,7*2,6						
3	V1	ST37.0	33,7*2,6						
4	V1	ST37.0	33,7*2,6						
5	V1	ST37.0	33,7*2,6						
6	V1	ST37.0	33,7*2,6						
7	V1	ST37.0	33,7*2,6						
8	V1	ST37.0	33,7*2,6						
9	V1	ST37.0	33,7*2,6						
10	V1	ST37.0	33,7*2,6						
11	V1	ST37.0	33,7*2,6						
12	V1	ST37.0	33,7*2,6						
13	V1	ST37.0	33,7*2,6						
14	V1	ST37.0	33,7*2,6						
15	V1	ST37.0	33,7*2,6						
16	V1	ST37.0	33,7*2,6						
17	V1	ST37.0	33,7*2,6						
18	V1	ST37.0	33,7*2,6						
19	V1	ST37.0	33,7*2,6						
20	V1	ST37.0	33,7*2,6						
21	V1	ST37.0	33,7*2,6						
22	V1	ST37.0	33,7*2,6						
23	V1	ST37.0	33,7*2,6						
24	V1	ST37.0	33,7*2,6						
25	V1	ST37.0	33,7*2,6						
26	V1	ST37.0	33,7*2,6						
27	V1	ST37.0	33,7*2,6						



Jop Code:	K70101 ASU No. 9, Kosice	Order No.:
------------------	---------------------------------	-------------------

Title: 25 A 15038

Drawing No.:

792 87826 - 00

Maker's No.:

(Kunde / TÜV, ...)

geprüft

06.03.06 P.Ll
Pelzeder Enich
Datum / Unterschrift

Schweisstechnologie VAM
Datum / Unterschrift

Datum / Unterschrift

[illegible]

As built

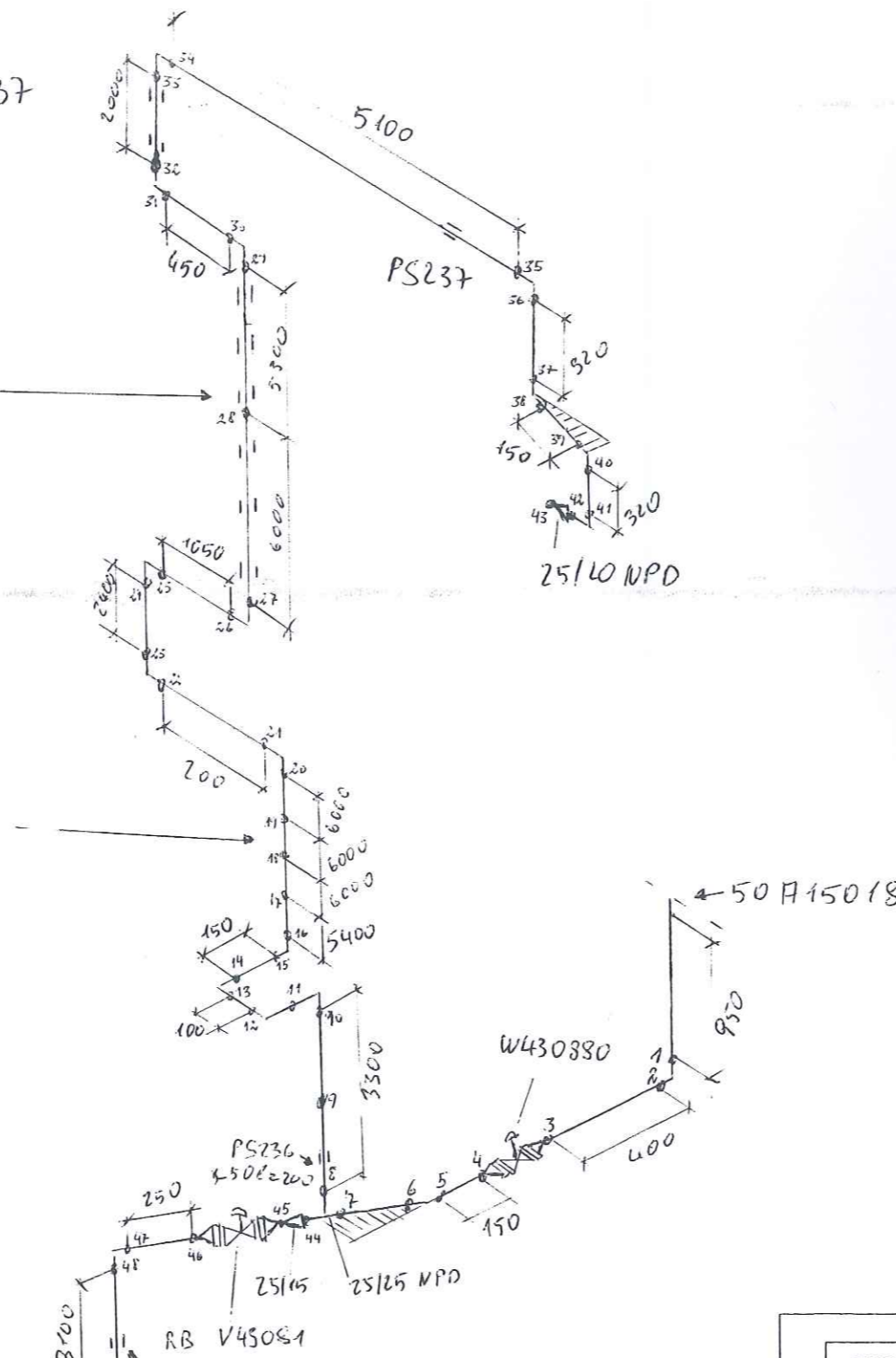


2x PS237

6x PS237

9x PS237

BL 100x30x10



RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

- PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
- PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
- SS = SLIDING SUPPORT
- PG = PIPE GUIDE
- FP = FIX POINT

Rev.	Revisions	Date	Name	checked

 Air Liquide AGS GmbH	Date: 18-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
	Job Code: K70101		Scale: 1:1	Original format: DIN A3
Replaces: 79_	Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 1
Replaced by: 79_	Title: 25 A 15038 AA10C1		Drawing No: 1792.878260	Rev. 0

LEVELS:

- TOP OF INTERNAL ROADS: 225.00m n.m.
- TOP OF FOUNDATION: 225.10m
- BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

NUR ZUR INFORMATION
FOR INFORMATION ONLY

21 OCT. 2005

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25X20	REDUCER, CONCENTRIC, SEAMLESS 33.7*2.6/26.9*2.3, ST37.0, DIN 2616-1
2	1	25X15	TEE, SEAMLESS 33.7*2.6/21.3*2.0, ST37.0, DIN 2615-1
3	2	25	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
4	2	15	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
5	2	25	FLAT GASKET
6	2	15	FLAT GASKET
7	16	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 50.0MM LANG
8	54124	MM	25 PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
9	100	MM	15 PIPE, SEAMLESS 21.3*2.0, ST37.0, DIN EN 10220
10	5	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3, DIN 2605-1
11	1	25	V43080
12	1	15	V43081

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	655	25		BEVEL	BEVEL	RN
<2>	1585	25		BEVEL	BEVEL	RN
<3>	400	25		BEVEL	BEVEL	RN
<4>	1500	25		BEVEL	BEVEL	RN
<5>	100	15		BEVEL	BEVEL	RN
<6>	8020	25		BEVEL	BEVEL	RN
<7>	2002	25		BEVEL	BEVEL	RN
<8>	39962	25		BEVEL	BEVEL	RN

Preis-Stückliste 0 50A15039AA10C1 0 50 A 15039 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW12	50	0	girth weld 1.0254 (St 37.0) 60,3x2,9		15,00				0,00
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		38,00				0,00
IAD01	25	0	AIR DISTRIBUTOR, DN 25		5,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	41,61				0,00
P0044	50	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 60,3x2,9	4,11 kg	32,05				0,00
P0157	25	0	BEND 1.0254	0,12 kg	6,00				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	16,00				0,00
P0205	50	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9	0,49 kg	3,00				0,00
P0718	50	25	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 60,3x2,9x33,7x2,6	0,59 kg	4,00				0,00
P1433	50	25	Reducer, concentric, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9x33,7x2,6	0,24 kg	1,00				0,00
SAS01	25	0	DISTRIBUTOR SUPPORT, DN 25		5,00				0,00
SC3	25	0	Segment cut 33,7		15,00				0,00
SC5	50	0	Segment cut 60,3		6,00				0,00

Preis-Stückliste 0 50A15039AA10C1 0 50 A 15039 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SCP02	50	0	PIPE CLAMP, RB10A 61 W3 HESTERBERG 60,3		10,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		13,00				0,00
SPS239	0	0	SUPPORT PS-239, L 50, L=200	0,74 kg	18,00				0,00
SPS240	0	0	SUPPORT PS-240, L 50, L=300	1,11 kg	2,00				0,00
SPS241	0	0	SUPPORT PS-241, PL 100X80X10	0,64 kg	4,00				0,00
XZB09	25	0	HOLLÄNDER 5,6		5,00				0,00
Summe: 0 50A15039AA10C1 0				239,34 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

** Ende der Ausgabe

239,34 kg

AS BUILT

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prof. Nr.

Jop Code: K70101 ASU No. 9, Kosice

Order No.:

Client: AIR LIQUIDE

Title: 25 A 15039

Sheet 1

(Kunde / TÜV, ...)

geprüft

erstellt:

Schweisstechnologie VAM
Datum / Unterschrift

Datum / Unterschrift

Project No.: 9050300

Drawing No.: 792.87826 - 00

Maker's No.:

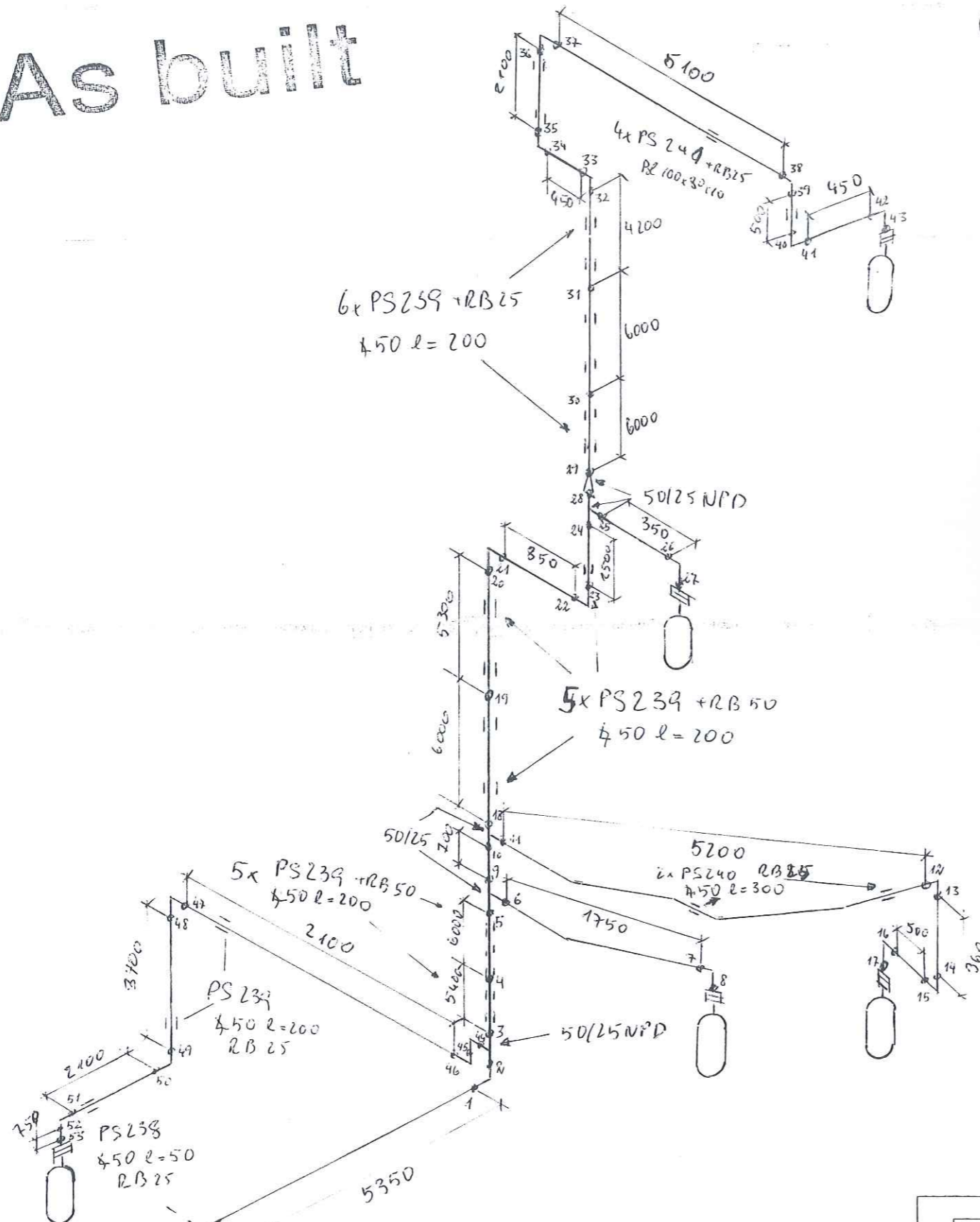
Seam No.:	Welder No.:	Material	Dimension	Protocol No.:				Wärme- behandlung	RT	UT	MT/PT	SP	Remerk
1	V1	ST37.0	60,3*2,9										
2	V1	ST37.0	60,3*2,9										
3	V1	ST37.0	60,3*2,9										
4	V1	ST37.0	60,3*2,9										
5	V1	ST37.0	60,3*2,9										
6	V1	ST37.0	33,7*2,6										
7	V1	ST37.0	33,7*2,6										
8	V1	ST37.0	33,7*2,6										
9	V1	ST37.0	60,3*2,9										
10	V1	ST37.0	60,3*2,9										
11	V1	ST37.0	33,7*2,6										
12	V1	ST37.0	33,7*2,6										
13	V1	ST37.0	33,7*2,6										
14	V1	ST37.0	33,7*2,6										
15	V1	ST37.0	33,7*2,6										
16	V1	ST37.0	33,7*2,6										
17	V1	ST37.0	33,7*2,6										
18	V1	ST37.0	60,3*2,9										
19	V1	ST37.0	60,3*2,9										
20	V1	ST37.0	60,3*2,9										
21	V1	ST37.0	60,3*2,9										
22	V1	ST37.0	60,3*2,9										
23	V1	ST37.0	60,3*2,9										
24	V4	ST37.0	60,3*2,9										
25	V4	ST37.0	33,7*2,6										
26	V4	ST37.0	33,7*2,6										
27	V4	ST37.0	33,7*2,6										

		SCHWEISSDOKUMENTATION WELDING DOCUMENTATION		erstellt: Pelzeder Erich Datum / Unterschrift	geprüft Schweißtechnologie VAM Datum / Unterschrift	(Kunde / TÜV, ...)
Jop Code: K70101 ASU No. 9, Kosice		Order No.: 25 A 15039		Project No.: 9050300		
Client: AIR LIQUIDE		Title: 25 A 15039		Drawing No.: 792.87826 - 00		
Prot Nr.		Sheet 1		Maker's No.:		

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:				Remerk
				Wärme-behandlung	RT	UT	MT/PT	SP
28	V4	ST37.0	60,3*2,9					
29	V4	ST37.0	33,7*2,6					
30	V4	ST37.0	33,7*2,6					
31	V4	ST37.0	33,7*2,6					
32	V4	ST37.0	33,7*2,6					
33	V4	ST37.0	33,7*2,6					
34	V4	ST37.0	33,7*2,6					
35	V4	ST37.0	33,7*2,6					
36	V4	ST37.0	33,7*2,6					
37	V4	ST37.0	33,7*2,6					
38	V4	ST37.0	33,7*2,6					
39	V4	ST37.0	33,7*2,6					
40	V4	ST37.0	33,7*2,6					
41	V4	ST37.0	33,7*2,6					
42	V4	ST37.0	33,7*2,6					
43	V4	ST37.0	33,7*2,6					
44	V4	ST37.0	33,7*2,6					
45	V4	ST37.0	33,7*2,6					
46	V4	ST37.0	33,7*2,6					
47	V4	ST37.0	33,7*2,6					
48	V4	ST37.0	33,7*2,6					
49	V4	ST37.0	33,7*2,6					
50	V4	ST37.0	33,7*2,6					
51	V4	ST37.0	33,7*2,6					
52	V4	ST37.0	33,7*2,6					
53	V4	ST37.0	33,7*2,6					

As built

Cold box



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25X20	REDUCER, CONCENTRIC, SEAMLESS 33.7*2.6/26.9*2.3, ST37.0, DIN 2616-1
2	1	25X15	TEE, SEAMLESS 33.7*2.6/21.3*2.0, ST37.0, DIN 2615-1
3	2	25	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
4	2	15	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
5	2	25	FLAT GASKET
6	2	15	FLAT GASKET
7	16	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 50.0MM LANG
8	54124 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
9	100 MM	15	PIPE, SEAMLESS 21.3*2.0, ST37.0, DIN EN 10220
10	5	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3, DIN 2605-1
11	1	25	V43080
12	1	15	V43081

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	655	25		BEVEL	BEVEL	RN
<2>	1585	25		BEVEL	BEVEL	RN
<3>	400	25		BEVEL	BEVEL	RN
<4>	1500	25		BEVEL	BEVEL	RN
<5>	100	15		BEVEL	BEVEL	RN
<6>	8020	25		BEVEL	BEVEL	RN
<7>	2002	25		BEVEL	BEVEL	RN
<8>	39962	25		BEVEL	BEVEL	RN

NUR ZUR INFORMATION

FÜR INFORMATION ONLY

21 OCT. 2005

LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
 PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE
 SS = SLIDING SUPPORT
 PG = PIPE GUIDE
 FP = FIX POINT

AIR LIQUIDE

Air Liquide AGS GmbH

Date:	Name:	Checked:	History file:
18-OCT-2005	Lesum / HGH	05-10-20	
Job Code: K70101	Reference: ASU No. 9, Kosice	Scale: 1	Original format: DIN A3
Title:	Drawing No:	1	Rev.
	50 A 15039 AA10C1	792	878260

Rev.	Revisions	Date	Name	checked

Preis-Stückliste 0 50A15040AA10C1 0 50 A 15040 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW12	50	0	girth weld 1.0254 (St 37.0) 60,3x2,9		29,00				0,00
GW2	15	0	girth weld 1.0254 (St 37.0) 21,3x2		1,00				0,00
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		17,00				0,00
IAD01	25	0	AIR DISTRIBUTOR, DN 25		2,00				0,00
P0012	15	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 21,3x2	0,95 kg	1,35				0,00
P0014	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	7,71				0,00
P0044	50	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 60,3x2,9	4,11 kg	12,48				0,00
P0156	15	0	BEND	0,03 kg	2,00				0,00
P0174	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	6,00				0,00
P0205	50	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9	0,49 kg	10,00				0,00
P0718	50	25	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 60,3x2,9x33,7x2,6	0,59 kg	4,00				0,00
P0721	50	50	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 60,3x2,9x60,3x2,9	0,67 kg	1,00				0,00

Preis-Stückliste 0 50A15040AA10C1 0 50 A 15040 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P1433	50	25	Reducer, concentric, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9x33,7x2,6	0,24 kg	1,00				0,00
P2616	50	0	CAPS 1.0254 (St 37.0) DIN 2609 60,3x2,9	0,17 kg	1,00				0,00
PWI52	50	15	PIPE WELD-IN 1.0254		1,00				0,00
S0018	50	0	T-support TA 120G 61 W1 OZN 1.0 Hesterberg 61	8,30 kg	4,00				0,00
SAS01	25	0	DISTRIBUTOR SUPPORT, DN 25		2,00				0,00
SC1	15	0	Segment cut 21,3		3,00				0,00
SC3	25	0	Segment cut 33,7		6,00				0,00
SC5	50	0	Segment cut 60,3		13,00				0,00
SCP02	50	0	PIPE CLAMP, RB10A 61 W3 HESTERBERG 60,3		1,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		3,00				0,00
SPS242	0	0	SUPPORT PS-242, L 50, L=800	3,01 kg	1,00				0,00
SPS243	0	0	SUPPORT PS-243, L 30, L=100	0,13 kg	3,00				0,00
XZB06	15	0	HOLENDER 1.4404 21,3	0,35 kg	1,00				0,00
XZB09	25	0	HOLLÄNDER 5,6		2,00				0,00

Preis-Stückliste 0 50A15040AA10C1 0 50 A 15040 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
XZB10	15	0	THREAD END		2,00				0,00
			5,6						
			21,3						
Summe: 0 50A15040AA10C1 0				113,99 kg		0,00	0,00		0,00

Liefersumme:
Montagesumme:
Gesamtsumme:
Gesamtgewicht: 113,99 kg
** Ende der Ausgabe

AS BUILT

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot Nr.

Jop Code: K70101 ASU No. 9, Kosice Order No.:

Client: AIR LIQUIDE

Title: 50 A 15040

Sheet 1

Drawing No.:

Project No.: 9050300

Maker's No.:

geprüft

(Kunde / TÜV, ...)



Schweisstechnologie VAM

Datum / Unterschrift

erstellt:

25.12.2016
Pelzeder Erich

Datum / Unterschrift

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:					Remerk
				Wärme- behandlung	RT	UT	MT/PT	SP	
1	V3	ST37.0	60,3*2,9						
2	V3	ST37.0	60,3*2,9						
3	V3	ST37.0	60,3*2,9						
4	V3	ST37.0	60,3*2,9						
5	V3	ST37.0	60,3*2,9		R0596				
6	V3	ST37.0	60,3*2,9		R0595				
7	V3	ST37.0	60,3*2,9		R0594				
8	V3	ST37.0	60,3*2,9		R0593				
9	V3	ST37.0	60,3*2,9						
10	V3	ST37.0	60,3*2,9		R0592				
11	V3	ST37.0	60,3*2,9		R0591				
12	V3	ST37.0	60,3*2,9		R0590				
13	V3	ST37.0	60,3*2,9		R0589				
14	V3	ST37.0	60,3*2,9		R0588				
15	V3	ST37.0	60,3*2,9						
16	V3	ST37.0	60,3*2,9						
17	V3	ST37.0	60,3*2,9						
18	V3	ST37.0	33,7*2,6						
19	V3	ST37.0	60,3*2,9		R0586				
20	V3	ST37.0	33,7*2,6						
21	V3	ST37.0	60,3*2,9						
22	V3	ST37.0	33,7*2,6						
23	V3	ST37.0	60,3*2,9		R0585				
24	V3	ST37.0	NPT15						
25	V3	ST37.0	21,3*2,6						
26	V3	ST37.0	60,3*2,9						
27	V3	ST37.0	60,3*2,9						



Job Code: K70101 ASU No. 9, Kosice

Client:	AIR LIQUIDE	Title:	50 A 15040
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Title: 50 A 15040 Sheet 1

Sheet 1

Project No.: 9050300

Maker's No.:

geprüft

erstellt:

Schweisstechnologie VAM

Pelzeder Erich

Datum / Unterschrift

Datum / Unterschrift

[illegible]

Preis-Stückliste 0 25A15041AA10C1 0 25 A 15041 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW12	50	0	girth weld 1.0254 (St 37.0) 60,3x2,9		26,00				0,00
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		34,00				0,00
IAD01	25	0	AIR DISTRIBUTOR, DN 25		4,00				0,00
P0006	50	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 60,3x2,9	4,11 kg	43,20				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	28,85				0,00
P0164	50	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9	0,49 kg	10,00				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	15,00				0,00
P0718	50	25	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 60,3x2,9x33,7x2,6	0,59 kg	3,00				0,00
P1433	50	25	Reducer, concentric, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9x33,7x2,6	0,24 kg	1,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	3,00				0,00
SAS01	25	0	DISTRIBUTOR SUPPORT, DN 25		4,00				0,00
SC3	25	0	Segment cut 33,7		16,00				0,00

Preis-Stückliste 0 25A15041AA10C1 0 25 A 15041 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SC5	50	0	Segment cut 60,3		12,00				0,00
SCP02	50	0	PIPE CLAMP, RB10A 61 W3 HESTERBERG 60,3		9,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		8,00				0,00
SPC01	25	0	PIPE CLAMP, DN 25 33,7		3,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		3,00				0,00
SPS244	0	0	SUPPORT PS-244, L 40, L=150	0,44 kg	4,00				0,00
SPS245	0	0	SUPPORT PS-245, L 30, L=100	0,17 kg	3,00				0,00
SPS246	0	0	SUPPORT PS-246, L 40, L=700	2,07 kg	1,00				0,00
SPS247	0	0	SUPPORT PS-247, L 40, L=200	0,59 kg	2,00				0,00
SPS248	0	0	SUPPORT PS-248, L 30, L=200	0,35 kg	6,00				0,00
SPS249	0	0	SUPPORT PS-249, L 40, L=400	1,18 kg	1,00				0,00
SPS250	0	0	SUPPORT PS-250, L 40, L=200	1,92 kg	2,00				0,00
SPS251	0	0	SUPPORT PS-251, L 50, L=2200	8,29 kg	1,00				0,00
XZB09	25	0	HOLLÄNDER 5.6		4,00				0,00
Summe: 0 25A15041AA10C1 0				287,40 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	287,40 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot Nr.

Jop Code: K70101 ASU No. 9, Kosice Order No.:

Client: AIR LIQUIDE

Title: 25 A 15041

Sheet 1

Drawing No.:

Project No.: 9050300

Maker's No.:

(Kunde / TÜV, ...)

geprüft

erstellt:

Schweisstechnologie VAM
Datum / UnterschriftPelzeder Erich
Datum / Unterschrift

Datum / Unterschrift

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:			Wärme- behandlung	RT	UT	MT/PT	SP	Remerk
1	V4	ST37.0	60,3*2,9									
2	V4	ST37.0	60,3*2,9									
3	V4	ST37.0	60,3*2,9									
4	V4	ST37.0	60,3*2,9									
5	V4	ST37.0	60,3*2,9									
6	V4	ST37.0	60,3*2,9									
7	V4	ST37.0	60,3*2,9									
8	V4	ST37.0	60,3*2,9									
9	V4	ST37.0	60,3*2,9									
10	V4	ST37.0	60,3*2,9									
11	V4	ST37.0	60,3*2,9									
12	V4	ST37.0	60,3*2,9									
13	V4	ST37.0	60,3*2,9									
14	V4	ST37.0	60,3*2,9									
15	V4	ST37.0	60,3*2,9									
16	V4	ST37.0	33,7*2,6									
17	V4	ST37.0	33,7*2,6									
18	V4	ST37.0	33,7*2,6									
19	V4	ST37.0	33,7*2,6									
20	V4	ST37.0	33,7*2,6									
21	V4	ST37.0	33,7*2,6									
22	V4	ST37.0	33,7*2,6									
23	V4	ST37.0	60,3*2,9									
24	V4	ST37.0	60,3*2,9									
25	V4	ST37.0	60,3*2,9									
26	V4	ST37.0	60,3*2,9									
27	V4	ST37.0	60,3*2,9					R0641				

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot. Nr.

Jop Code: K70101 ASU No. 9, Kosice Order No.:

Client: AIR LIQUIDE Title: 25 A 15041

Sheet 1

Drawing No.:

Project No.: 9050300

Maker's No.:

(Kunde / TÜV, ...)

geprüft

erstellt:



Schweisstechnologie VAM

Datum / Unterschrift

Ad. W. L. 2016
Pelzeder Erich
Datum / Unterschrift

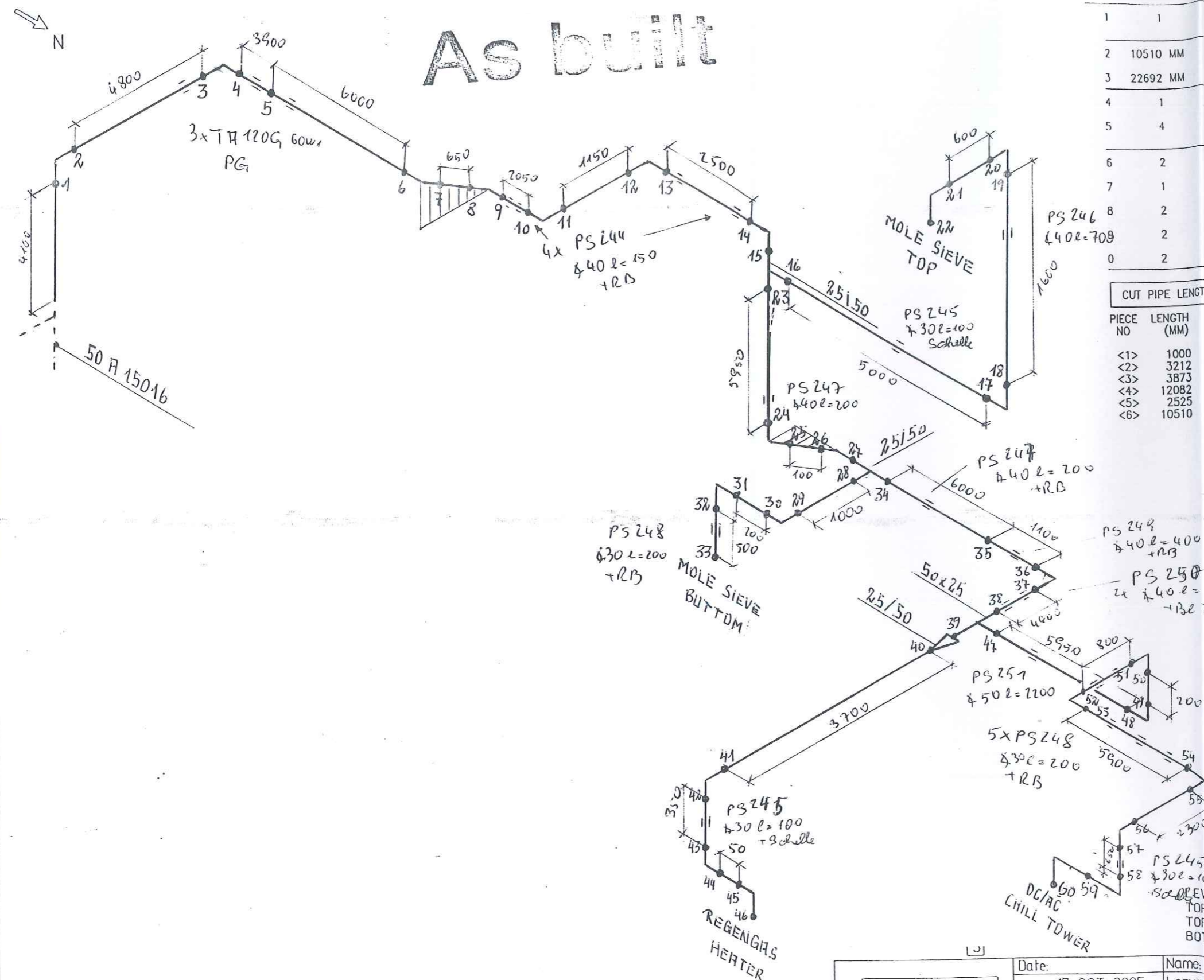
Seam No.:	Welder No.:	Material	Dimension	Protocol No.:				Remerk
				Wärme- behandlung	RT	UT	MT/PT	SP
28	V4	ST37.0	33,7*2,6					
29	V4	ST37.0	33,7*2,6		R0640			
30	V4	ST37.0	33,7*2,6					
31	V4	ST37.0	33,7*2,6					
32	V4	ST37.0	33,7*2,6					
33	V4	ST37.0	33,7*2,6					
34	V4	ST37.0	60,3*2,9		R0639			
35	V4	ST37.0	60,3*2,9					
36	V4	ST37.0	60,3*2,9					
37	V4	ST37.0	60,3*2,9					
38	V4	ST37.0	60,3*2,9					
39	V4	ST37.0	60,3*2,9					
40	V4	ST37.0	33,7*2,6					
41	V4	ST37.0	33,7*2,6					
42	V4	ST37.0	33,7*2,6		R0637			
43	V4	ST37.0	33,7*2,6		R0638			
44	V4	ST37.0	33,7*2,6					
45	V4	ST37.0	33,7*2,6					
46	V4	ST37.0	33,7*2,6					
47	V4	ST37.0	33,7*2,6					
48	V4	ST37.0	33,7*2,6					
49	V4	ST37.0	33,7*2,6					
50	V4	ST37.0	33,7*2,6					
51	V4	ST37.0	33,7*2,6					
52	V4	ST37.0	33,7*2,6					
53	V4	ST37.0	33,7*2,6					
54	V4	ST37.0	33,7*2,6					



VAM	SCHWEISSDOKUMENTATION WELDING DOCUMENTATION		erstellt: <i>A. L. L. L. L.</i> <i>Polzeder Erich</i> Datum / Unterschrift	geprüft Schweißstechnologie VAM Datum / Unterschrift	(Kunde / TÜV, ...)
	Prot. Nr.	Jop Code: K70101 Client: AIR LIQUIDE	ASU No. 9, Kosice Title: 25 A 15041	Order No.:	Project No.: 9050300 792.87826 - 00
Sheet 1			Drawing No.:		

[illegible]

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	50X25	REDUCER, CONCENTRIC, SEAMLESS 60.3*2.9/33.7*2.6, ST37.0, DIN 2616-1
2	10510 MM	50	PIPE, SEAMLESS 60.3*2.9, ST37.0, DIN EN 10220
3	22692 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
4	1	50	ELBOW, SEAMLESS, 1,5D 60.3*2.9-90, B-ART 3, DIN 2605-1
5	4	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3, DIN 2605-1
6	2	50	PIPE GUIDE PSUPPORT
7	1	50	SLIDE SUPPORT PSUPPORT
8	2	25	FIX POINT PSUPPORT
9	2	25	PIPE GUIDE PSUPPORT
0	2	25	SLIDE SUPPORT PSUPPORT

CUT PIPE LENGTH			REMARKS	END ONE	END TWO	ITEM CODE
PIECE NO	LENGTH (MM)	NPD (MM)				
<1>	1000	25		SQ.CUT	BEVEL	RN
<2>	3212	25		BEVEL	BEVEL	RN
<3>	3873	25		BEVEL	BEVEL	RN
<4>	12082	25		BEVEL	BEVEL	RN
<5>	2525	25		BEVEL	BEVEL	RN
<6>	10510	50		BEVEL	BEVEL	RN

NUR ZUR INFORMATION
FOR INFORMATION ONLY

21.0KT. 2005

TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE

PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

		Date: 17-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
Air Liquide AGS GmbH		Job Code: K70101		Scale: 1:1	Original format: DIN A3
Replaces: 79----		Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 1
Replaced by: 79----		Title: 25 A 15041 AA10C1792.878260		Drawing No: 1792.878260	

Rev.	Revisions	Date	Name	checked

Preis-Stückliste 0 25A15042AA10C1 0 25 A 15042 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW12	50	0	girth weld 1.0254 (St 37.0) 60,3x2,9		15,00				0,00
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		23,00				0,00
IAD01	25	0	AIR DISTRIBUTOR, DN 25		3,00				0,00
P0006	50	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 60,3x2,9	4,11 kg	24,61				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	33,65				0,00
P0164	50	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9	0,49 kg	4,00				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	7,00				0,00
P0718	50	25	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 60,3x2,9x33,7x2,6	0,59 kg	1,00				0,00
P0721	50	50	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 60,3x2,9x60,3x2,9	0,67 kg	1,00				0,00
P1433	50	25	Reducer, concentric, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9x33,7x2,6	0,24 kg	2,00				0,00
SAS01	25	0	DISTRIBUTOR SUPPORT, DN 25		3,00				0,00
SC3	25	0	Segment cut 33,7		10,00				0,00

Preis-Stückliste 0 25A15042AA10C1 0 25 A 15042.AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SC5	50	0	Segment cut 60,3		7,00				0,00
SCP02	50	0	PIPE CLAMP, RB10A 61 W3 HESTERBERG 60,3		7,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		4,00				0,00
SPC01	25	0	PIPE CLAMP, DN 25 33,7		4,00				0,00
SPS252	0	0	SUPPORT PS-252, L 50, L=550	2,83 kg	2,00				0,00
SPS253	0	0	SUPPORT PS-253, L 50, L=200	0,75 kg	4,00				0,00
SPS254	0	0	SUPPORT PS-254, L 50, L=250	0,94 kg	3,00				0,00
SPS255	0	0	SUPPORT PS-255, L 50, L=500	1,88 kg	2,00				0,00
SPS256	0	0	SUPPORT PS-256, L 50, L=100	0,37 kg	1,00				0,00
SPS257	0	0	SUPPORT PS-257, L 40, L=450	1,33 kg	1,00				0,00
Summe: 0 25A15042AA10C1 0				189,59 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	189,59 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot. Nr.

Jop Code: K70101 ASU No. 9, Kosice Order No.:

Client: AIR LIQUIDE Title: 25 A 15042 Sheet 1

Project No.: 9050300

Drawing No.: 792.87826 - 00 Maker's No.:

(Kunde / TÜV, ...)

geprüft

erstellt:

Schweisstechnologie VAM
Datum / Unterschrift02.03.06
Pelzeder Erich
Datum / Unterschrift

Datum / Unterschrift

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:				Wärme- behandlung	RT	UT	MT/PT	SP	Remerk
1	V4	ST37.0	60,3*2,9										
2	V4	ST37.0	60,3*2,9										
3	V4	ST37.0	60,3*2,9										
4	V4	ST37.0	60,3*2,9						R0611				
5	V4	ST37.0	60,3*2,9						R0612				
6	V4	ST37.0	60,3*2,9						R0613				
6,1	V4	ST37.0	60,3*2,9										
7	V4	ST37.0	60,3*2,9										
8	V4	ST37.0	33,7*2,6										
9	V4	ST37.0	33,7*2,6										
10	V4	ST37.0	60,3*2,9										
11	V4	ST37.0	33,7*2,6										
11,1	V4	ST37.0	33,7*2,6										
12	V4	ST37.0	33,7*2,6										
13	V4	ST37.0	33,7*2,6										
14	V4	ST37.0	33,7*2,6										
15	V4	ST37.0	60,3*2,9										
16	V4	ST37.0	60,3*2,9						R0610				
17	V4	ST37.0	60,3*2,9						R0609				
18	V4	ST37.0	60,3*2,9										
19	V4	ST37.0	60,3*2,9						R0614				
20	V4	ST37.0	60,3*2,9						R0615				
21	V4	ST37.0	33,7*2,6						R0616				
22	V4	ST37.0	33,7*2,6						R0617				
23	V4	ST37.0	33,7*2,6						R0618				
24	V4	ST37.0	33,7*2,6										
25	V4	ST37.0	33,7*2,6										



Jop Code: K70101 ASU No. 9, Kosice

25 A 15042

ving No.:

792.87826 - 00

Maker's No.:

(Kunde / TÜV, ...)

geprüft

erstellt:

02.03.06
Pelzeder Erich

Schweisstechnologie VAM
Datum / Unterschrift

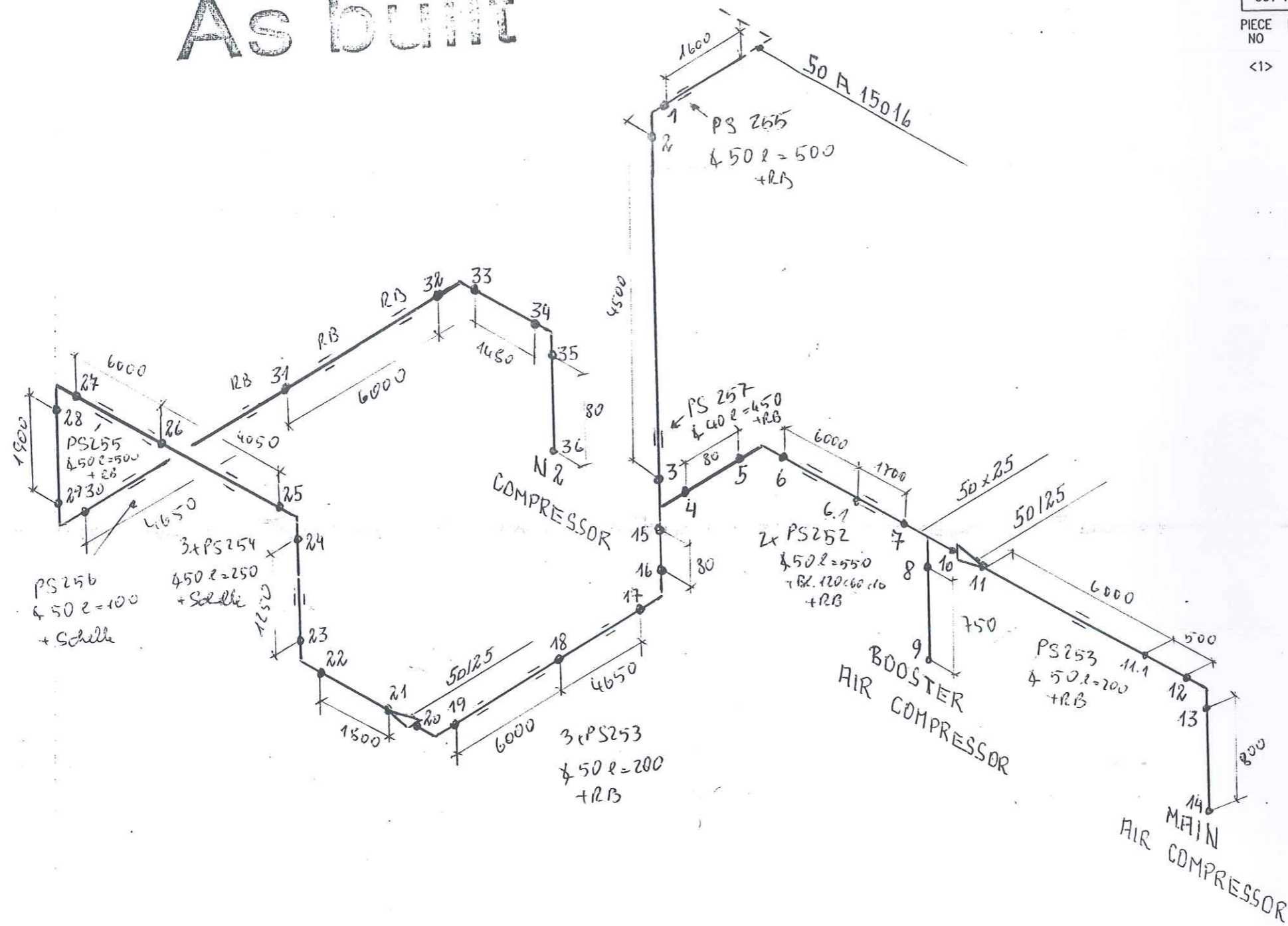


Datum / Unterschrift

[illegible]



As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	6940 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220

CUT PIPE LENGTH					
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO
<1>	6940	25		BEVEL	SQ.CUT
					RN

NUR ZUR INFORMATION
FOR INFORMATION ONLY


21. OCT. 2005

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked

 Air Liquide AGS GmbH	Date: 17-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
	Job Code: K70101			Scale: ---:---
	Reference: ASU No. 9, Kosice			Original format: DIN A3
	Title: 25 A 15042 AA10C1792.878260			Sheet: 1 / Sheets: 1
Replaces: 79----- Replaced by: 79-----	Drawing No:			Rev.

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		8,00				0,00
IAD01	25	0	AIR DISTRIBUTOR, DN 25		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	1,03				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	4,00				0,00
SAS01	25	0	DISTRIBUTOR SUPPORT, DN 25		1,00				0,00
SC3	25	0	Segment cut 33,7		4,00				0,00
XZB09	25	0	HOLLÄNDER 5.6		1,00				0,00
Summe: 0 25A15043AA10C1 0				2,53 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	2,53 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Job Code: K70101 ASU No. 9, Kosice

Title: 25 A 15043

Drawing No.:

Maker's No.:

geprüft

erstellt:

Schweisstechnologie VAM

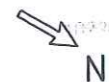
211
Pelzeder Erich



Datum / Unterschrift

[illegible]

As built



Y 11135500
X 3052455
EL +226396

CONNECT TO ET24101/ET24201

S4
PS
FP
TA120B 34 W1

S3
PS
PG
TA120G 34 W1

SEE ISO
50 A 15040
Y 11130683
X 3052455
EL +225576

50NPD
50NPD
50X25NPD

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked

<p>AIR LIQUIDE</p> <p>Air Liquide AGS GmbH</p> <p>Replaces: 79_</p> <p>Replaced by: 79_</p>	Date: 17-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
	Job Code: K70101		Scale: ---	Original format: DIN A3
	Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 1
	Title: 25 A 15043 AA1001792.878260		Drawing No:	Rev.

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

NUR ZUR INFORMATION

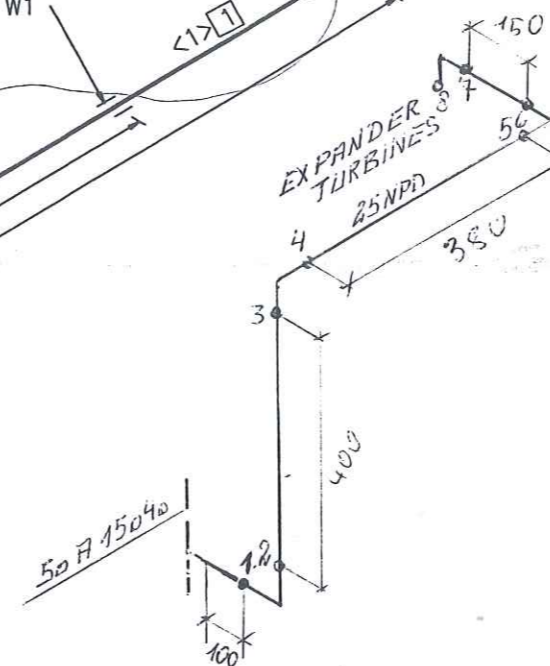
FÜR INFORMATION ONLY

2 1. OKT. 2005

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	5561 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
2	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3, DIN 2605-1
3	1	25	PIPE GUIDE PSUPPORT
4	1	25	FIX POINT PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	4779	25		BEVEL	BEVEL	RN
<2>	782	25		BEVEL	SQ.CUT	RN



Preis-Stückliste 0 25A15044AA10C1 0 25 A 15044 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		18,00				0,00
IAD01	25	0	AIR DISTRIBUTOR, DN 25		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	9,00				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	9,00				0,00
SAS01	25	0	DISTRIBUTOR SUPPORT, DN 25		1,00				0,00
SC3	25	0	Segment cut 33,7		9,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		4,00				0,00
SPS258	0	0	SUPPORT PS-258, L 50, L=250	0,94 kg	1,00				0,00
SPS259	0	0	SUPPORT PS-259, L 50, L=200	0,75 kg	1,00				0,00
SPS432	0	0	SUPPORT PS-432, L 50, L=300	1,13 kg	2,00				0,00
XZB09	25	0	HOLLÄNDER 5,6		1,00				0,00
Summe: 0 25A15044AA10C1 0				22,94 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	22,94 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Job Code: K70101 ASU No. 9, Kosice

Order No.:

Title: 25 A 15044

044

Sheet 1

Drawing No.:

Maker's No.:

Maker's No.:

(Kunde / TÜV, ...)

geprüft

erstellt:

10.02.06 
Pelzeder Erich

Schweisstechnologie VAM

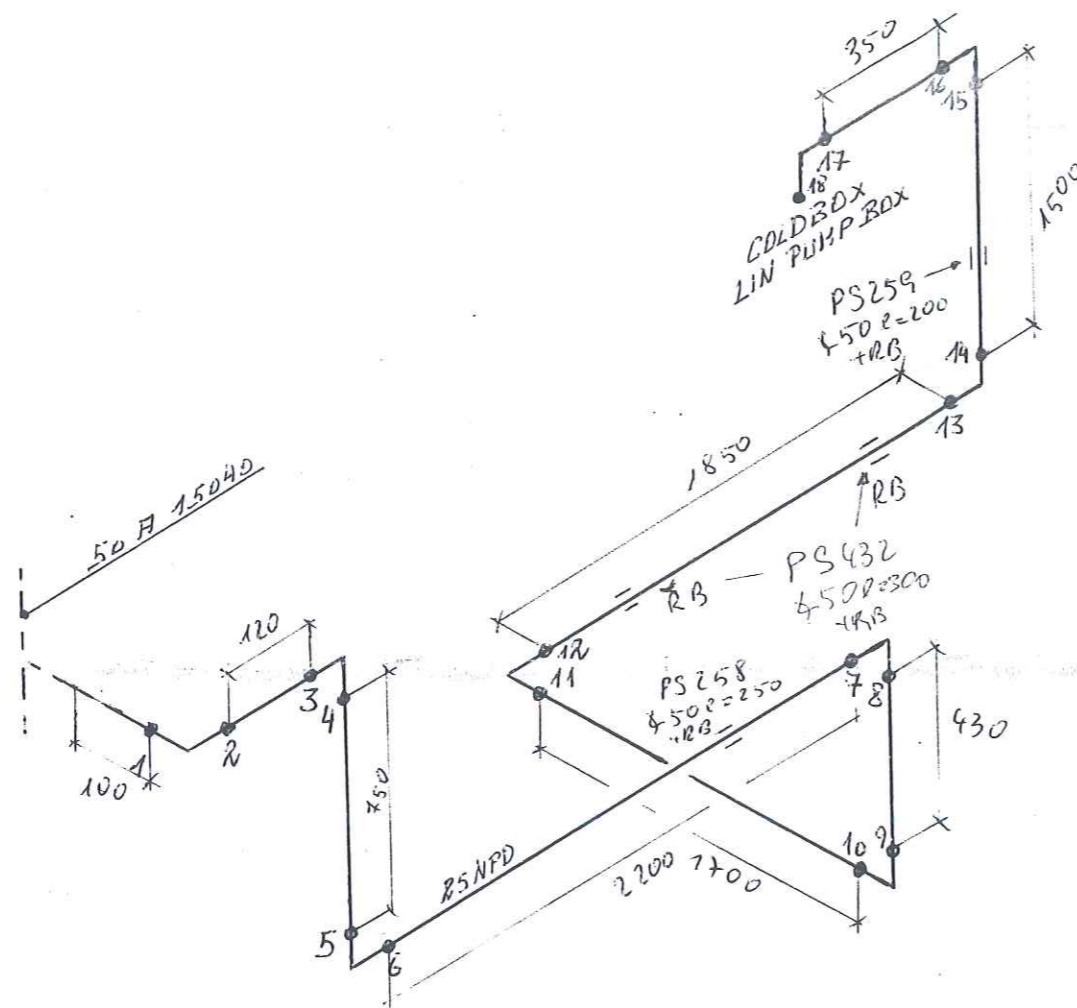
Datum / Unterschrift



Datum / Unterschrift

[illegible]

As built



RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

- PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
- PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
- SS = SLIDING SUPPORT
- PG = PIPE GUIDE
- FP = FIX POINT

Rev.	Revisions	Date	Name	checked
1				
2				
3				
4				
5				

AIR LIQUIDE Air Liquide AGS GmbH	Date:	23-JUN-2005	Name:	Lesum / HGH	Checked:	05-07-11	History file:
	Job Code: K70101				Scale:	Original format DIN A3	
Reference: ASU No. 9, Kosice				Sheet:	Sheets:		
Title:				Drawing No:		Rev.	
25 A 15044				792.8782600			

LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

Preis-Stückliste 0 25A15045AA10C1 0 .25 A 15045 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		13,00				0,00
IAD01	25	0	AIR DISTRIBUTOR, DN 25		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	8,40				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	6,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	3,00				0,00
SAS01	25	0	DISTRIBUTOR SUPPORT, DN 25		1,00				0,00
SC3	25	0	Segment cut 33,7		6,00				0,00
SPS260	0	0	SUPPORT PS-260, L 60, L=100	0,45 kg	1,00				0,00
SPS261	0	0	SUPPORT PS-261, L 60, L=300	1,37 kg	1,00				0,00
SPS262	0	0	SUPPORT PS-262, L 60, L=550	2,51 kg	1,00				0,00
XZB09	25	0	HOLLÄNDER 5,6		1,00				0,00
Summe: 0 25A15045AA10C1 0				44,57 kg		0,00	0,00		0,00

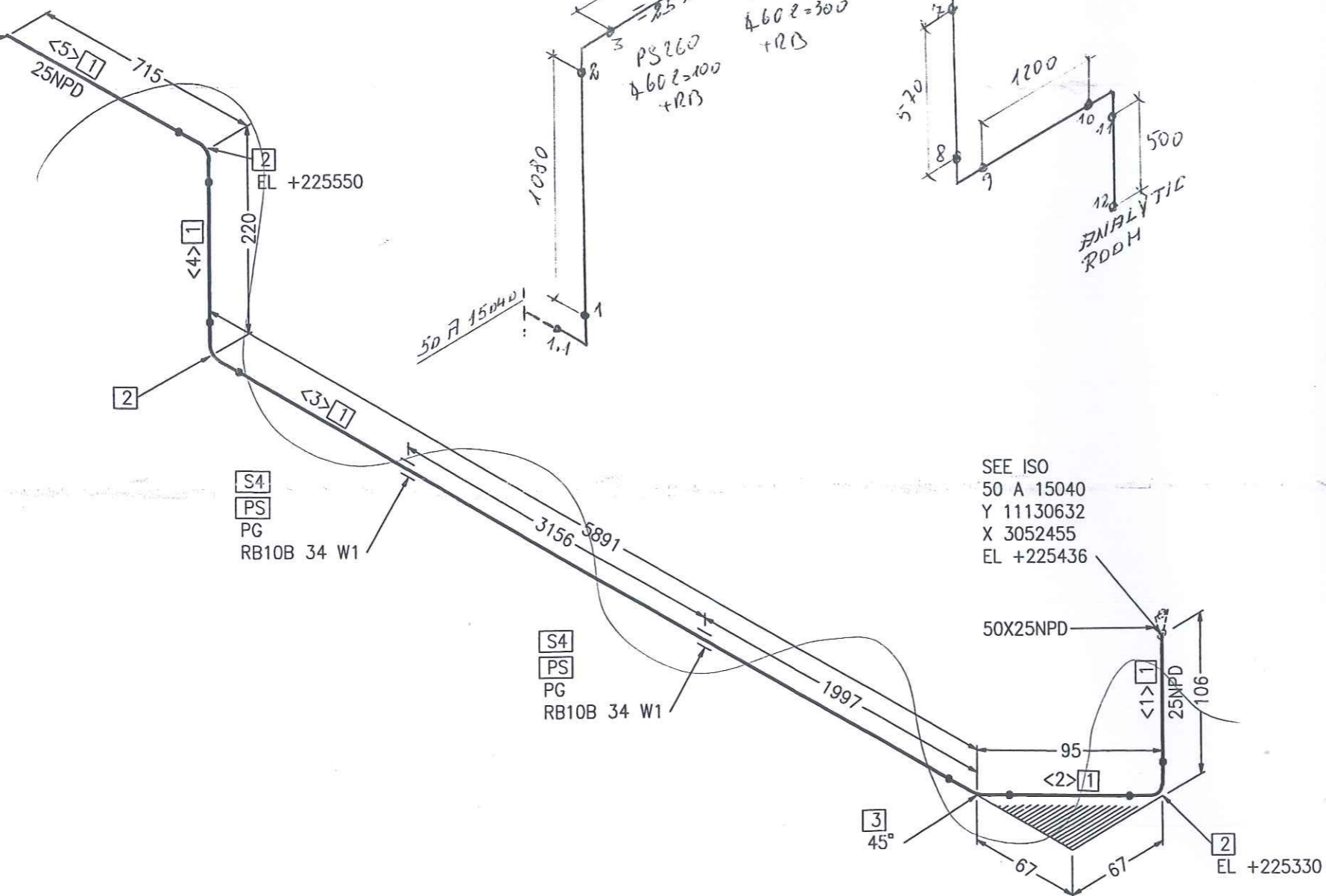
Liefersumme:	
Montagesumme:	
Gesamtsumme:	44,57 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



As built

Y 11130565
X 3059128
EL +225550



S4
PS
PG
RB10B 34 W1

S4
PS
PG
RB10B 34 W1

SEE ISO
50 A 15040
Y 11130632
X 3052455
EL +225436

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	6767 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
2	3	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1
3	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-45, B-ART 3,DIN 2605-1
4	2	25	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	68	25		BEVEL	BEVEL	RN
<2>	41	25		BEVEL	BEVEL	RN
<3>	5837	25		BEVEL	BEVEL	RN
<4>	144	25		BEVEL	BEVEL	RN
<5>	677	25		BEVEL	SQ.CUT	RN

NUR ZUR INFORMATION
FOR INFORMATION ONLY

21.01.2005

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

 Air Liquide AGS GmbH	Date:	17-OCT-2005	Name:	Lesum / HGH	Checked:	05-10-20	History file:	
	Job Code:	K70101			Scale:	1:1		
	Reference:	ASU No. 9, Kosice			Sheet:	1	Sheets:	1
	Title:	25 A 15045 AA10C1792.878260			Drawing No:			

Rev.	Revisions	Date	Name	checked

Preis-Stückliste 0 250A16001AA63C1 0 250 A 16001 AA63C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0018	20	80	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,26 kg	8,00				0,00
B0020	20	110	HEXAGON HEAD SCREWS 5.6		8,00				0,00
B0170	20	110	SCREW BOLTS 5.6		4,00				0,00
B0202	33	170	Screw bolts 5.6 DIN 267-13	1,41 kg	72,00				0,00
B0212	33	290	Screw bolts 5.6 DIN 267-13	2,90 kg	12,00				0,00
B0518	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	24,00				0,00
B0521	33	0	HEXAGON NUTS 5.6		168,00				0,00
G0020	40	0	COMB DEFINED SEALS, PN63 1.4541		1,00				0,00
G0021	80	0	COMB DEFINED SEALS, PN 63		1,00				0,00
G0058	250	0	Comb defined seals 1.4541 (X 6 CrNiTi 18 10 - Graphite) S 364x5x290		9,00				0,00
G0105	100	0	Flat packings Graphite with CrNi-insert Standard 40002 168x2x115		1,00				0,00
GW10	40	0	girth weld 1.0254 (St 37.0) 48,3x4		1,00				0,00
GW16	80	0	girth weld 1.0254 (St 37.0) 88,9x3,2		6,00				0,00
GW18	100	0	girth weld 1.0254 (St 37.0) 114,3x3,6		1,00				0,00

Preis-Stückliste 0 250A16001AA63C1 0 250 A 16001 AA63C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW22	150	0	girth weld 1.0254 (St 37.0) 168,3x4,5		2,00				0,00
GW30	250	0	girth weld 1.0254 (St 37.0) 273x8,8		43,00		106,95	106,95	4.598,85
IEXP16001	250	0	EXP16001 supplied by AGS		1,00				0,00
IFE16073	40	0	FE16073 supplied by AGS		1,00				0,00
IHK16073	250	0	HK16073 supplied by AGS		1,00				0,00
IQ16055	15	0	Q16055 supplied by AGS		1,00				0,00
IR16070	250	0	R16070 supplied by AGS		1,00				0,00
IV16055H1	15	0	V16055H1 supplied by AGS		1,00				0,00
IZ16074	80	100	SAFETY VALVE Z16074 supplied by AGS		1,00				0,00
P0048	80	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 88,9x3,2	6,76 kg	1,30				0,00
P0054	150	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 168,3x4,5	18,20 kg	0,60				0,00
P0084	250	0	pipe, welded 1.0254 (St 37.0) DIN 1626 273x8,8	57,30 kg	55,80				0,00
P0166	80	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 88,9x3,2	1,21 kg	3,00				0,00

Preis-Stückliste 0 250A16001AA63C1 0 250 A 16001 AA63C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0239	250	0	Elbow 90° R=1,5 DA, welded 1.0254 (St 37.0) DIN 2609 273x8,8	48,06 kg	12,00				0,00
P0681	250	150	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 273x14,2x168,3x11	51,00 kg	1,00				0,00
P1476	150	100	Reducer, concentric, seamless 1.0254 (St 37.0) DIN 2609 168,3x7,1x114,3x6,3	3,30 kg	1,00				0,00
P2876	40	0	WELDING NECK FLANGES, PN 160 1.0038 (S235JRG2) DIN EN 1092-1 48,6		1,00				0,00
P2912	100	0	Welding neck flanges; PN 40 1.0038 (S235JRG2) DIN EN 1092-1 114,3	6,50 kg	1,00				0,00
P2925	250	0	Welding neck flanges; PN 63 1.0038 (S235JRG2) DIN EN 1092-1 273	48,00 kg	9,00				0,00
P2925_A	250	0	WELDING NECK FLANGES, PN 63 1.0038	48,00 kg	1,00				0,00
P2939	80	0	WELDING NECK FLANGES, PN 63 C22.8 /DIN 2336/		1,00				0,00
PWI14	250	40	Pipe weld-in 1.0254 (St 37.0) 273x8,8x48,3x4		1,00				0,00
PWI29	250	15	PIPE WELD-IN 1.4541		1,00				0,00
PWI47	250	80	PIPE WELD-IN 1.0254		1,00				0,00
S0011	150	0	T-support TA 120B 169 W1 OZN 1.0 Hesterberg 169	5,00 kg	1,00				0,00

Preis-Stückliste 0 250A16001AA63C1 0 250 A 16001 AA63C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
S0049	250	0	Web-support, SV 150B 273 W1 OZN 1.0 Hesterberg 273	30,90 kg	1,00				0,00
S0061	250	0	Web-support, SV 150G 273 W1 OZN 1.0 Hesterberg 273	49,60 kg	6,00				0,00
S0124	250	0	Web-support, SV 150H 273 W1 OZN 1.0 Hesterberg 273	49,60 kg	1,00				0,00
S0169	250	0	Web-support, SV 150G 273 W1 OZN LF 1.0 Hesterberg 273	49,80 kg	1,00				0,00
SC11	250	0	Segment cut 273		19,00				0,00
SC6	80	0	Segment cut 88,9		3,00				0,00
SC9	150	0	Segment cut 168,3		1,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		3,00				0,00
SPS014	0	0	SUPPORT PS-014 pipe support	52,61 kg	1,00				0,00
SPS035	250	0	Support PS-035, DN 250, PG pipe support	105,11 kg	1,00				0,00
SPS167	0	0	SUPPORT PS-167 pipe support	92,89 kg	1,00				0,00
XZB01	250	40	welding nozzle for flowmeter, supplied b acc. to Mfr. supplied by Mfr. 40		1,00				0,00
XZB03	250	15	welding nozzle for sample line, drawing 1.4541 22		1,00				0,00

Preis-Stückliste 0 250A16001AA63C1 0 250 A 16001 AA63C1 Revision:




(Fortsetzung)

Teilenummer	NW1 NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Summe: 0 250A16001AA63C1 0			5.161,55 kg		0,00	4.598,85		4.598,85

Liefersumme:
Montagesumme: 4.598,85
Gesamtsumme: 4.598,85
Gesamtgewicht: 5.161,55 kg
** Ende der Ausgabe

AS BUILT



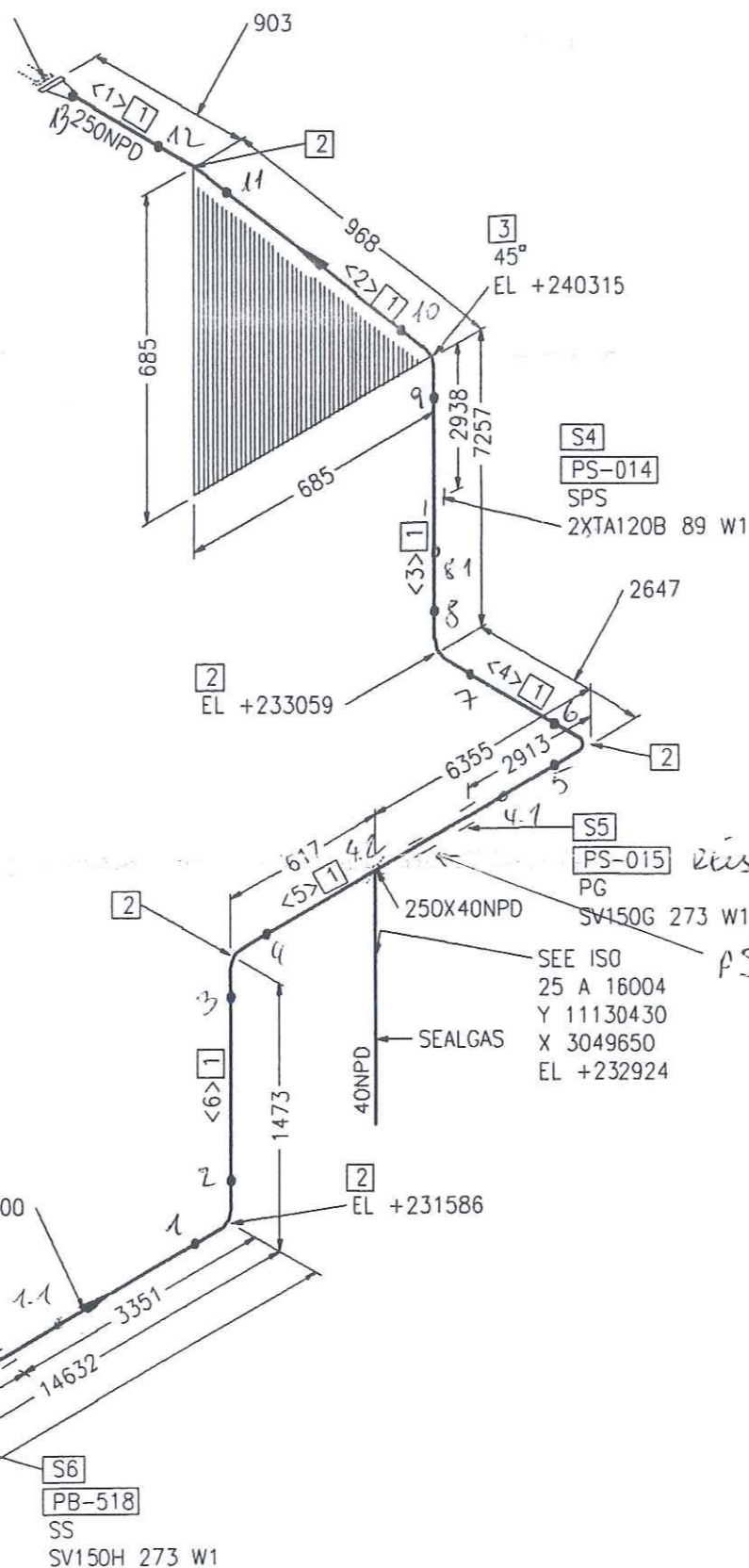
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	Prot. Nr.	Project No.: 9050300			
Jop Code: K70101	ASU No. 9, Kosice	Order No.:	Drawing No.: 792.87826 - 01	Maker's No.:	
Client: AIR LIQUIDE	Title: 250 A 16001	Sheet 1			

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CONN TO
W20010/ 250A-16001
Y 11136100
X 3053200
EL +241000

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	30622 MM	250	PIPE, WELDED 273*8.8, ST37.0, DIN EN 10220
2	5	250	ELBOW, WELDED, 1,5D 273*12.5-90, B-ART 3,DIN 2605-1
3	1	250	ELBOW, WELDED, 1,5D 273*12.5-45, B-ART 3,DIN 2605-1
4	1	250	SPRING SUPPORT PSUPPORT
5	2	250	PIPE GUIDE PSUPPORT
6	1	250	SLIDE SUPPORT PSUPPORT


CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	417	250		BEVEL	BEVEL	RG
<2>	429	250		BEVEL	BEVEL	RG
<3>	6719	250		BEVEL	BEVEL	RG
<4>	1885	250		BEVEL	BEVEL	RG
<5>	6211	250		BEVEL	BEVEL	RG
<6>	710	250		BEVEL	BEVEL	RG
<7>	14251	250		BEVEL	BEVEL	RG

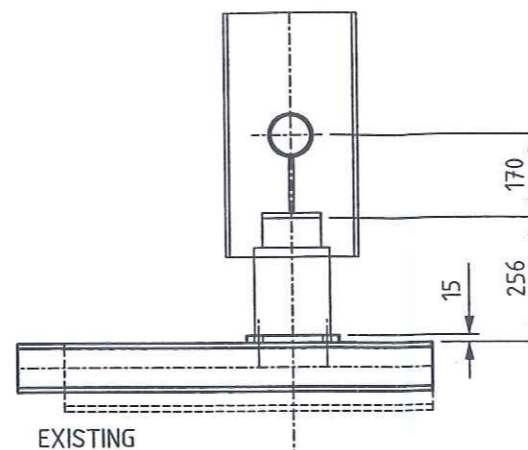
RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
01	General Rev	15.09.2005	Les	Zul

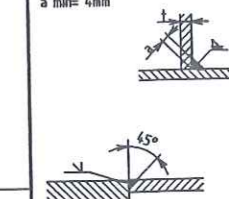
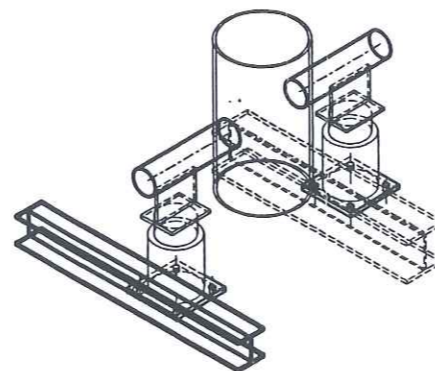
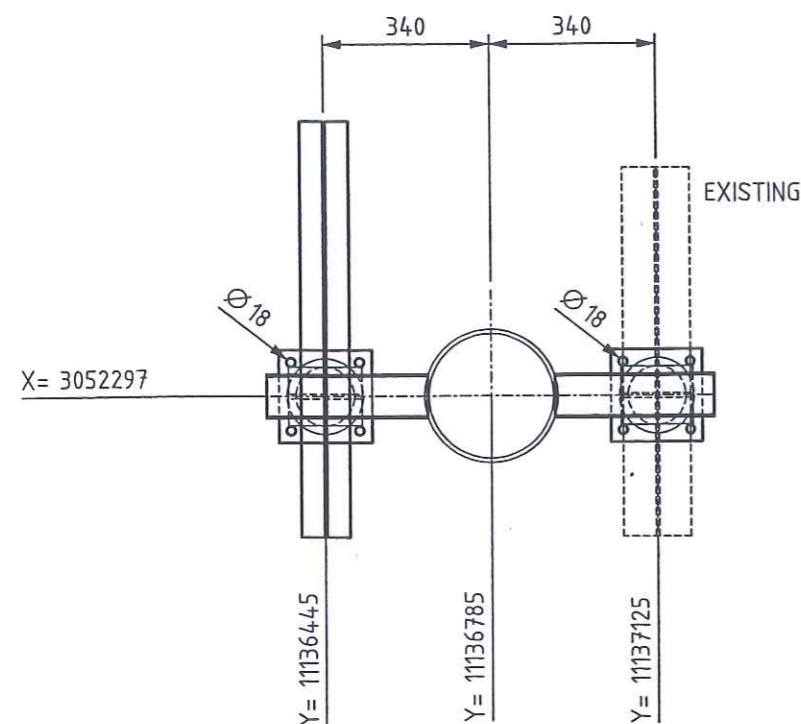
 Air Liquide AGS GmbH	Date: 06-SEP-2005	Name: Lesum / HGH	Checked: 05-09-15	History file.	
	Job Code: K70101			Scale: ---:---	Original format: DIN A3
	Reference: ASU No. 9, Kosice			Sheet: 1	Sheets: 4
	Title: 250 A 16001 AA63C1792.8782601			Drawing No.	Rev.

As built



FREIGABE FÜR CONSTRUCTION

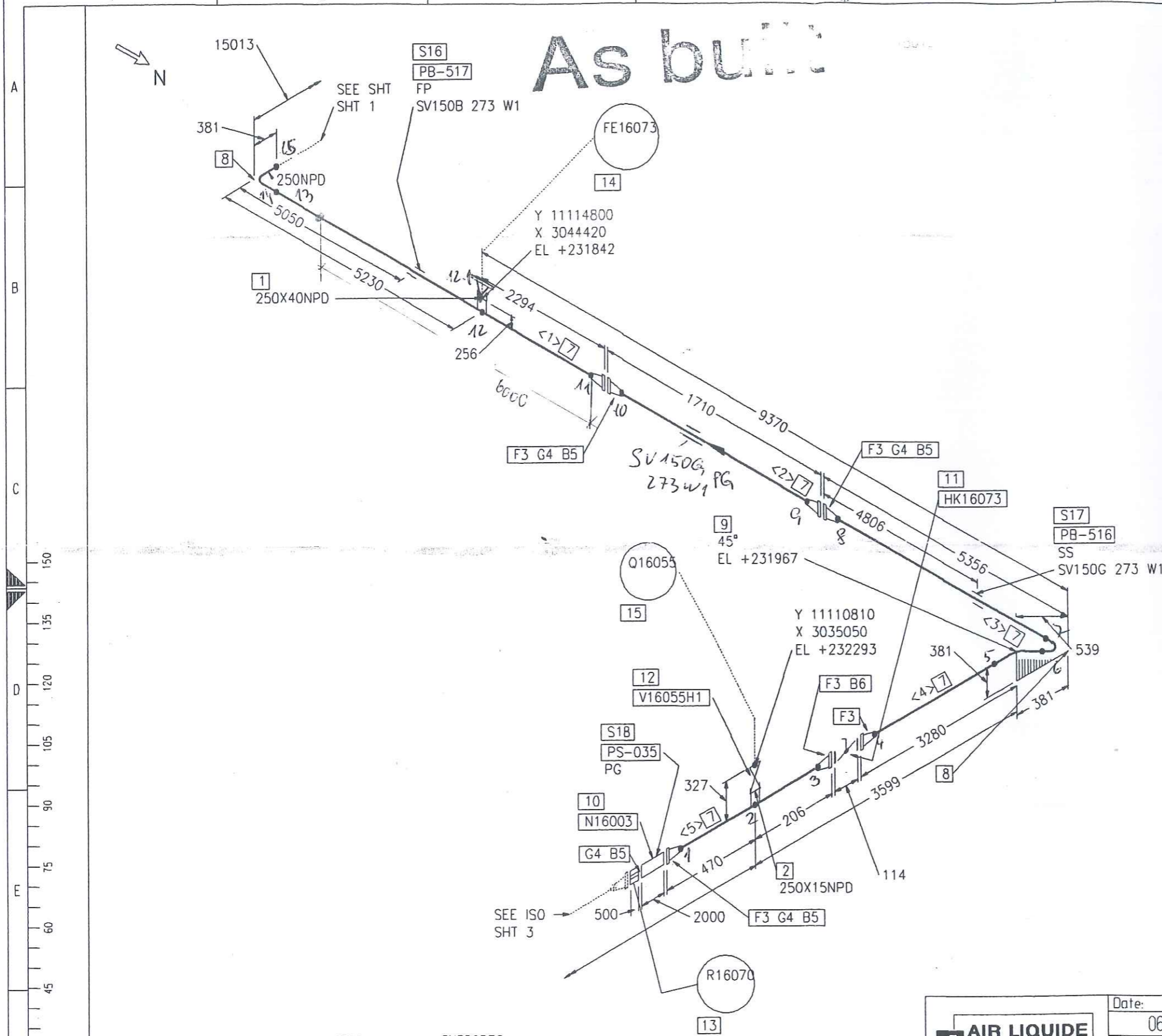
27 JUL 1955



Archives Rev No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

REVISIONS

1 2 3 4 5 6 7 8



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	250X40	WELDING NOZZLE FOR FLOWMETER, SUPPLIED BY MFR.
2	1	250X15	WELDING NOZZLE FOR SAMPLE LINE, DRAWING NO. 792.55981
3	7	250	WELDING-NECK-FLANGE PN63, S235JRG2, DIN EN 1092-1
4	4	250	GROOVED METAL GASKET
5	48	33	STUD BOLT 5.6 WITH 2 NUTS 5-2, 170.0MM LANG
6	12	33	STUD BOLT 5.6 WITH 2 NUTS 5-2, 290.0MM LANG
7	16890 MM	250	PIPE, WELDED 273*8.8, ST37.0, DIN EN 10220
8	2	250	ELBOW, WELDED, 1,5D 273*12.5-90, B-ART 3,DIN 2605-1
9	1	250	ELBOW, WELDED, 1,5D 273*12.5-45, B-ART 3,DIN 2605-1
10	1	250	N16003
11	1	250	HK16073
12	1	15	V16055H1
13	1	250	R16070 R16070
14	1	40	FE16073 FE16073
15	1	15	Q16055 Q16055
16	1	250	FIX POINT PSUPPORT
17	1	250	SLIDE SUPPORT PSUPPORT
18	1	250	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	7038	250		BEVEL	BEVEL	RG
<2>	1500	250		BEVEL	BEVEL	RG
<3>	4870	250		BEVEL	BEVEL	RG
<4>	3017	250		BEVEL	BEVEL	RG
<5>	465	250		BEVEL	BEVEL	RG

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

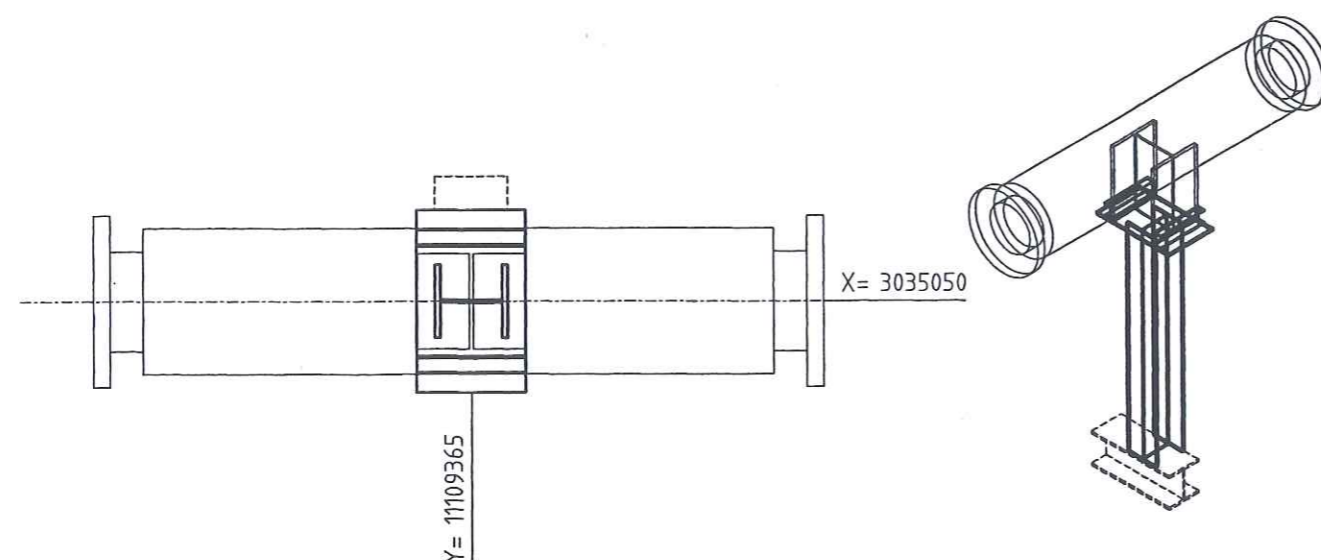
RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.)- PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.)- PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

	Date: 06-SEP-2005	Name: Lesum / HGH	Checked: 05-09-15	History file.	
	Job Code: K70101			Scale: ---	Original format: DIN A3
	Reference: ASU No. 9, Kosice			Sheet: 2	Sheets: 4
	Title: 250 A 16001 AA63C1792.8782601			Drawing No.	Rev.

01	General Rev	15.09.2005	Les	Zul
Rev.	Revisions	Date	Name	checked

1 2 3 4 5 6 7 8



REVISIONS

LEGEND:

- ```

-PIPE- PIPE GUIDE
-FP- FIX POINT
-SS- SLIDE SUPPORT
-HN- HANGER
-SSAX- SLIDE SUPPORT WITH AXIAL STOP
-AXLS- AXIAL STOP WITH LIFTING STOP
-SPS- SPRING SUPPORT
-SPGS- SPRING SUPPORT GUIDED
-GSAX- GUIDE SUPPORT WITH AXIAL STOP
-SPAX- SPRING SUPPORT WITH AXIAL STOP
-SH- SPRING HANGER
-AX- AXIAL STOP

```

### RESPONSIBILITY OF ERECTION COMPANY

- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

- ALL SURFACES FOR COATING MUST BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS  $a=4\text{mm}$  ROUND

MARKING:

- THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER RESISTANT PAINT AND WHITE COLOR

|               |           |
|---------------|-----------|
| Total Weight: | 105.11 kg |
|---------------|-----------|

[illegible]

|                  |             |      |                    |
|------------------|-------------|------|--------------------|
|                  | Date        | Name | Signature          |
| Approved by      |             |      |                    |
| Checked by       |             | Gans |                    |
| Checked by       | 25 JUL 2005 | Zut  | <i>[Signature]</i> |
| Drawn checked by |             |      |                    |



**AIR LIQUIDE**

Air Liquide AGS GmbH

|           |                                  |        |        |                 |           |
|-----------|----------------------------------|--------|--------|-----------------|-----------|
|           | Date                             | Name   | Check. | History File    |           |
|           | 19.05.2005                       | MG     | Zut    |                 |           |
|           | Job Code: K70101 ASU No.9 Kosice |        |        | Scale:          | 1:20      |
|           | Reference: PIPING SUPPORT        |        |        | Original Format | DIN A3    |
| Replaces: | Title                            | PS-035 |        | Sheet:          | 1 of:     |
|           |                                  |        |        | Drawing-No.     | 792.87926 |



# As built

SEE ISO  
150 A 16002  
Y 11109836  
X 3031400  
EL +231773

SEE SHT  
SHT 2

HYDRA LRN63.0250.050.0 L=920MM

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE

PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

| Rev. | Revisions   | Date       | Name | checked |
|------|-------------|------------|------|---------|
| 01   | General Rev | 15.09.2005 | Les  | Zul     |

|                                            |                    |             |       |                  |             |          |               |
|--------------------------------------------|--------------------|-------------|-------|------------------|-------------|----------|---------------|
| <b>AIR LIQUIDE</b><br>Air Liquide AGS GmbH | Date:              | 06-SEP-2005 | Name: | Lesum / HGH      | Checked:    | 05-09-15 | History file: |
|                                            | Job Code:          | K70101      |       |                  | Scale:      | ---      |               |
| Reference:                                 | ASU No. 9. Kosice  |             |       | Original format: | DIN A3      |          |               |
| Title:                                     | 250 A 16001 AA63C1 |             |       | Sheet:           | 3           | Sheets:  | 4             |
| Replaces:                                  | 79_-----           |             |       |                  |             |          |               |
| Replaced by:                               | 79_-----           |             |       |                  |             |          |               |
|                                            |                    |             |       | Drawing No.      | 792.8782601 |          |               |
|                                            |                    |             |       | Rev.             |             |          |               |

LEVELS:

TOP OF INTERNAL ROADS: 225.00m n.m.

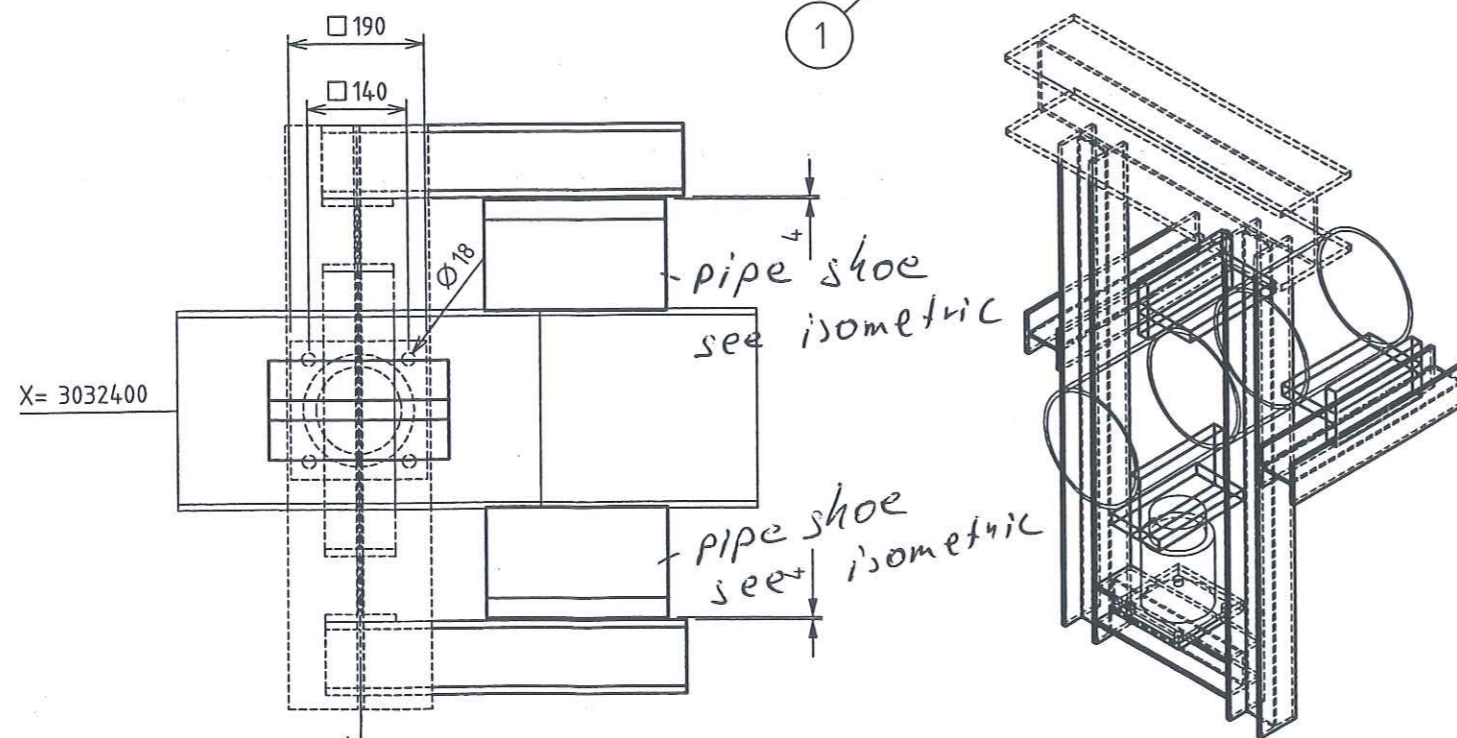
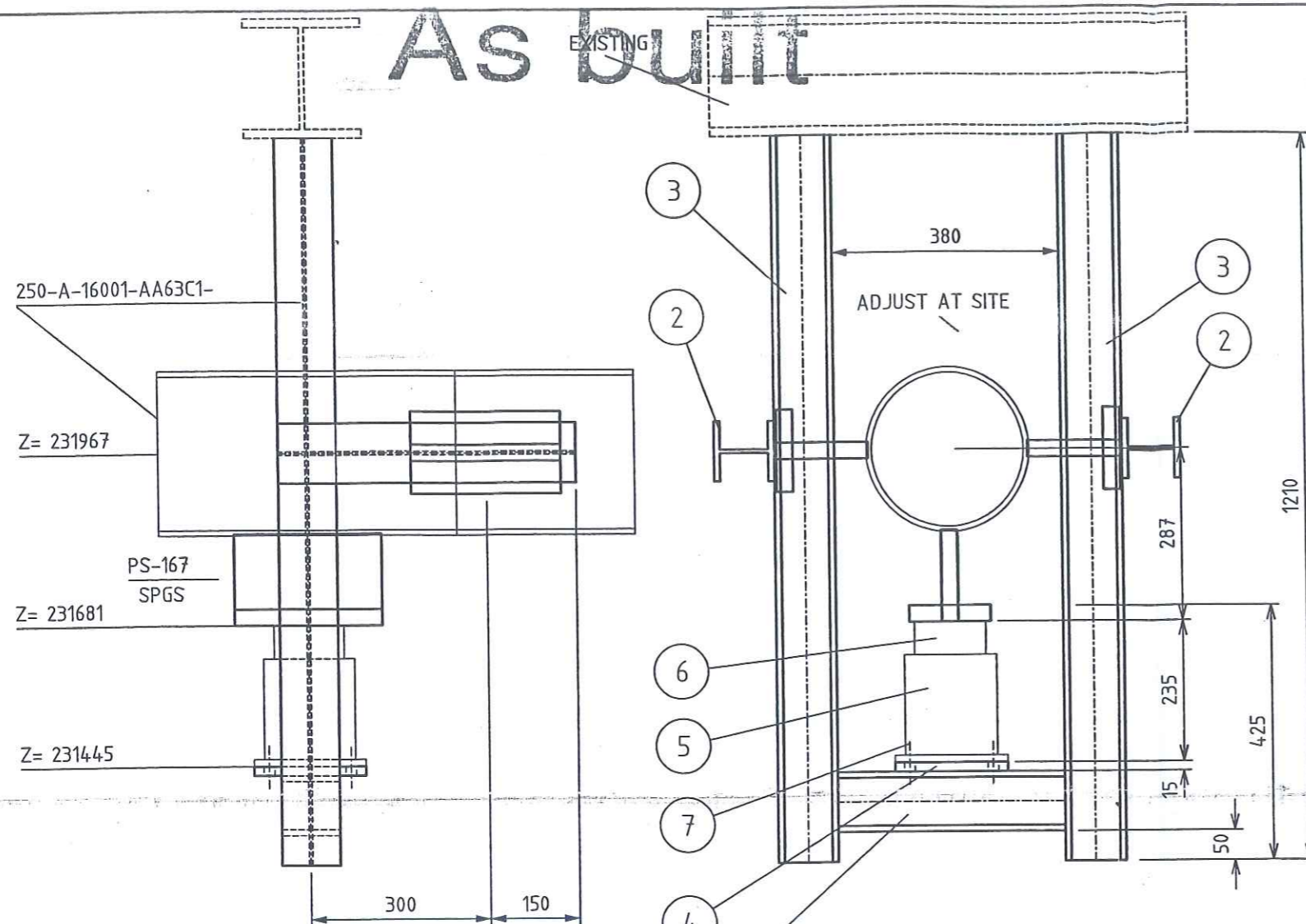
TOP OF FOUNDATION: 225.10m

BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

\*\*\*\*\*  
\* SEE ISO SHT 4 \*  
\*\*\*\*\*

| Part No. | Qty [PCS/MM] | NPD [Size] | Component Description                                                         |
|----------|--------------|------------|-------------------------------------------------------------------------------|
| 1        | 1            | 250        | 250X200 REDUCER, CONCENTRIC, SEAMLESS 273*14.2/219.1*12.5, ST37.0, DIN 2616-1 |
| 2        | 1            | 250        | 250X150 TEE, SEAMLESS 273*14.2/168.3*11.0, ST37.0, DIN 2615-1                 |
| 3        | 1            | 150        | 150X100 REDUCER, CONCENTRIC, SEAMLESS 168.3*4.5/114.3*3.6, ST37.0, DIN 2616-1 |
| 4        | 1            | 250        | WELDING-NECK-FLANGE PN63, S235JRG2, DIN EN 1092-1                             |
| 5        | 1            | 100        | WELDING-NECK-FLANGE PN40, S235JRG2, DIN EN 1092-1                             |
| 6        | 1            | 80         | WELDING-NECK-FLANGE PN63, S235JRG2, DIN EN 1092-1                             |
| 7        | 1            | 250        | GROOVED METAL GASKET                                                          |
| 8        | 1            | 100        | FLAT GASKET                                                                   |
| 9        | 1            | 80         | GROOVED METAL GASKET                                                          |
| 10       | 12           | 33         | STUD BOLT 5.6 WITH 2 NUTS 5-2, 170.0MM LANG                                   |
| 11       | 8            | 20         | STUD BOLT 5.6 WITH 2 NUTS 5-2, 110.0MM LANG                                   |
| 12       | 8            | 20         | HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 80.0MM LANG                               |
| 13       | 8196 MM      | 250        | PIPE, WELDED 273*8.8, ST37.0, DIN EN 10220                                    |
| 14       | 600 MM       | 150        | PIPE, SEAMLESS 168.3*4.5, ST37.0, DIN EN 10220                                |
| 15       | 1300 MM      | 80         | PIPE, SEAMLESS 88.9*5.6, ST37.0, DIN EN 10220                                 |
| 16       | 3            | 250        | ELBOW, WELDED, 1.5D 273*12.5-90, B-ART 3, DIN 2605-1                          |
| 17       | 3            | 80         | ELBOW, SEAMLESS, 1.5D 88.9*5.6-90, B-ART 3, DIN 2605-1                        |
| 18       | 1            | 100X80     | Z16074                                                                        |
| 19       | 1            | 250        | EXP16001 EXP16001                                                             |
| 20       | 3            | 250        | SPRING SUPPORT GUIDED PSUPPORT                                                |
| 21       | 1            | 150        | FIX POINT PSUPPORT                                                            |

As **EXISTING** built



|                     |      |         |             |       |      |
|---------------------|------|---------|-------------|-------|------|
| Archives<br>Rev No. | Rev. | Job No. | Description | Sign. | Date |
| R E V I S I O N S   |      |         |             |       |      |

LEGEND:

- |        |                                |
|--------|--------------------------------|
| -PG-   | PIPE GUIDE                     |
| -FP-   | FIX POINT                      |
| -SS-   | SLIDE SUPPORT                  |
| -HN-   | HANGER                         |
| -SSAX- | SLIDE SUPPORT WITH AXIAL STOP  |
| -AXLS- | AXIAL STOP WITH LIFTING STOP   |
| -SPS-  | SPRING SUPPORT                 |
| -SPGS- | SPRING SUPPORT GUIDED          |
| -GSAX- | GUIDE SUPPORT WITH AXIAL STOP  |
| -SPAX- | SPRING SUPPORT WITH AXIAL STOP |
| -SH-   | SPRING HANGER                  |
| -AX-   | AXIAL STOP                     |

-ALL SHARP EDGES REMOVED

- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP
- INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:

- MARKING:  
-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER  
RESISTANT PAINT AND WHITE COLOR

### RESPONSIBILITY OF ERECTION COMPANY

- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

- ALL SURFACES FOR COATING **MUST** BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED

WELDING DATA ACC. TO DIN 1912 T5

a  $\geq 0,7 \times f$   
a min = 4 mm





|               |          |
|---------------|----------|
| Total Weight: | 81.79 kg |
|---------------|----------|

| Item | No. Off | Unit | Description           | Dimension          | Material | Weight kg | Remark |
|------|---------|------|-----------------------|--------------------|----------|-----------|--------|
| 1    | 1       | pcs  | PROFILE               | HE100B, L=0.380    | RST37-2  | 7.756     |        |
| 2    | 2       | pcs  | PROFILE               | HE100B, L=0.500    | RST37-2  | 20.410    |        |
| 3    | 2       | pcs  | PROFILE               | HE100B, L=1.210    | RST37-2  | 49.372    |        |
| 4    | 1       | pcs  | PLATE 15x190x190      | PLATE 15x190x190   | RST37-2  | 4.251     |        |
| 5    | 1       | pcs  | SPRING SUPPORT        | LISEGA TYP: 294118 | NN       | 0.000     |        |
| 6    | 1       | pcs  | SPR. SUPP. PLATE      | LISEGA TYP: 704916 | NN       | 0.000     |        |
| 7    | 1       | pcs  | SET OF + BOLTS + NUTS | M16x50, M16        | NN       | 0.000     |        |

**FREIGABE  
FÜR CONSTRUCTION**

27. Juli 2005

|                  | Date         | Name | Signature                                                                             |
|------------------|--------------|------|---------------------------------------------------------------------------------------|
| Approved by      |              |      |                                                                                       |
| Checked by       |              | Gans |                                                                                       |
| Checked by       | 27. JUL 2005 | Zut  |  |
| Drawn checked by |              |      |                                                                                       |




**AIR LIQUIDE**™

Air Liquide AGS GmbH

|           |            |                        |           |                           |
|-----------|------------|------------------------|-----------|---------------------------|
|           | Date       | Name                   | Check     | History File              |
|           | 01.07.2005 | SWA                    | Zut       |                           |
|           | Job Code:  | K70101 ASU No.9 Kosice |           |                           |
|           | Reference: | PIPING SUPPORT         |           |                           |
|           |            | Scale:                 | 1:10      | Original Format<br>DIN A3 |
|           |            | Sheet:                 | 1         | of: -                     |
| Replaces: | Title      | PS-167                 |           |                           |
|           |            | Drawing-No.            | 792.87926 |                           |



As built

| Part No.          | Qty [PCS/MM] | NPD [Size] | Component Description |
|-------------------|--------------|------------|-----------------------|
| *****             |              |            |                       |
| * SEE SHT SHT 3 * |              |            |                       |
| *****             |              |            |                       |

CUT PIPE LENGTH

| PIECE NO | LENGTH (MM) | NPD (MM) | REMARKS | END ONE | END TWO | ITEM CODE |
|----------|-------------|----------|---------|---------|---------|-----------|
| <1>      | 200         | 250      |         | BEVEL   | BEVEL   | RG        |
| <2>      | 2888        | 250      |         | BEVEL   | BEVEL   | RG        |
| <3>      | 2100        | 250      |         | BEVEL   | BEVEL   | RG        |
| <4>      | 1658        | 250      |         | BEVEL   | BEVEL   | RG        |
| <5>      | 200         | 80       |         | SHAPED  | BEVEL   | RN        |
| <6>      | 906         | 80       |         | BEVEL   | BEVEL   | RN        |
| <7>      | 194         | 80       |         | BEVEL   | BEVEL   | RN        |
| <8>      | 600         | 150      |         | BEVEL   | SQ.CUT  | RN        |
| <9>      | 1340        | 250      |         | BEVEL   | SQ.CUT  | RG        |

LEVELS:  
TOP OF INTERNAL ROADS: 225.00m n.m.  
TOP OF FOUNDATION: 225.10m  
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:  
- Situation of mounting seams  
- Situation off pass- length  
- Check of measure details and pipe courses on the construction site  
- Situation of the spindle at valve  
- All components for Oxygen use free of oil and grease

SUPPORTS:  
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE  
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT

|                                                                                                               |                              |                   |                   |                |                         |
|---------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-------------------|----------------|-------------------------|
| <br>Air Liquide AGS GmbH | Date: 06-SEP-2005            | Name: Lesum / HGH | Checked: 05-09-15 | History file.  |                         |
|                                                                                                               | Job Code: K70101             |                   |                   | Scale: ---:--- | Original format: DIN A3 |
|                                                                                                               | Reference: ASU No. 9, Kosice |                   |                   | Sheet: 4       | Sheets: 4               |
| Title: 250 A 16001 AA63C1792.8782601                                                                          |                              |                   | Drawing No.       |                | Rev.                    |

| Rev. | Revisions   | Date       | Name | checked |
|------|-------------|------------|------|---------|
| 01   | General Rev | 15.09.2005 | Les  | Zul     |

Preis-Stückliste 0 150A16002AA63C1 0 150 A 16002 AA63C1 Revision:

| Teilenummer | NW1 | NW2 | Teilebezeichnung                                                            | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|-------------|-----|-----|-----------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| B0189       | 24  | 120 | Screw bolts<br>5.6 DIN 267-13                                               | 0,53 kg    | 16,00 |           |         |       | 0,00   |
| B0202       | 33  | 170 | Screw bolts<br>5.6 DIN 267-13                                               | 1,41 kg    | 12,00 |           |         |       | 0,00   |
| B0519       | 24  | 0   | Hexagon nuts<br>5-2 DIN EN ISO 898-2 / DIN EN ISO 4032                      | 0,11 kg    | 32,00 |           |         |       | 0,00   |
| B0521       | 33  | 0   | HEXAGON NUTS<br>5.6                                                         |            | 24,00 |           |         |       | 0,00   |
| G0038       | 100 | 0   | Comb defined seals<br>1.4541 ( X 6 CrNiTi 18 10 - Graphite ) S<br>174x5x138 |            | 2,00  |           |         |       | 0,00   |
| G0048       | 200 | 0   | COMB DEFINED SEALS<br>1.4541 ( X 6 CrNiTi 18 10-Graphite) S                 |            | 1,00  |           |         |       | 0,00   |
| GW20        | 100 | 0   | girth weld<br>1.0254 ( St 37.0 )<br>114,3x3,6                               |            | 3,00  |           |         |       | 0,00   |
| GW25        | 150 | 0   | girth weld<br>1.0254 ( St 37.0 )<br>168,3x7,1                               |            | 5,00  |           |         |       | 0,00   |
| GW26        | 200 | 0   | girth weld<br>1.0254 ( St 37.0 )<br>219,1x4,5                               |            | 2,00  |           |         |       | 0,00   |
| IHV16071    | 100 | 0   | HV16071<br>supplied by AGS                                                  |            | 1,00  |           |         |       | 0,00   |
| P0031       | 150 | 0   | pipe, seamless<br>1.0254 ( St 37.0 ) DIN 1629<br>168,3x7,1                  | 28,20 kg   | 4,20  |           |         |       | 0,00   |
| P0064       | 200 | 0   | PIPE, SEAMLESS<br>1.0305 (St 35.8 l) DIN 17175<br>219,1 x 8,0               | 47,50 kg   | 0,80  |           |         |       | 0,00   |

## Preis-Stückliste 0 150A16002AA63C1 0 150 A 16002 AA63C1 Revision:

(Fortsetzung)

| Teilenummer                | NW1 | NW2 | Teilebezeichnung                                                                    | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|----------------------------|-----|-----|-------------------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| P0198                      | 150 | 0   | Elbow 90° R=1,5 DA, seamless<br>1.0254 ( St 37.0 ) DIN 2609<br>168,3x7,1            | 10,14 kg   | 2,00  |           |         |       | 0,00   |
| P1307                      | 200 | 100 | Reducer, concentric, seamless<br>1.0254 ( St 37.0 ) DIN 2609<br>219,1x4,5x114,3x3,6 | 2,74 kg    | 1,00  |           |         |       | 0,00   |
| P1476                      | 150 | 100 | Reducer, concentric, seamless<br>1.0254 ( St 37.0 ) DIN 2609<br>168,3x7,1x114,3x6,3 | 3,30 kg    | 1,00  |           |         |       | 0,00   |
| P2914                      | 100 | 0   | Welding neck flanges; PN 63<br>1.0038 ( S235JRG2 ) DIN EN 1092-1<br>114,3           | 9,50 kg    | 2,00  |           |         |       | 0,00   |
| P2915                      | 200 | 0   | WELDING NECK FLANGES; PN 63<br>C22.8 /DIN 2636/                                     |            | 1,00  |           |         |       | 0,00   |
| S0023                      | 150 | 0   | T-support TA 120G 169 W1 OZN<br>1.0 Hesterberg<br>169                               | 11,60 kg   | 1,00  |           |         |       | 0,00   |
| SC10                       | 200 | 0   | Segment cut<br>219,1                                                                |            | 1,00  |           |         |       | 0,00   |
| SC9                        | 150 | 0   | Segment cut<br>168,3                                                                |            | 2,00  |           |         |       | 0,00   |
| SPS168                     | 0   | 0   | SUPPORT PS-168                                                                      | 39,66 kg   | 1,00  |           |         |       | 0,00   |
| Summe: 0 150A16002AA63C1 0 |     |     |                                                                                     | 281,94 kg  |       | 0,00      | 0,00    |       | 0,00   |

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

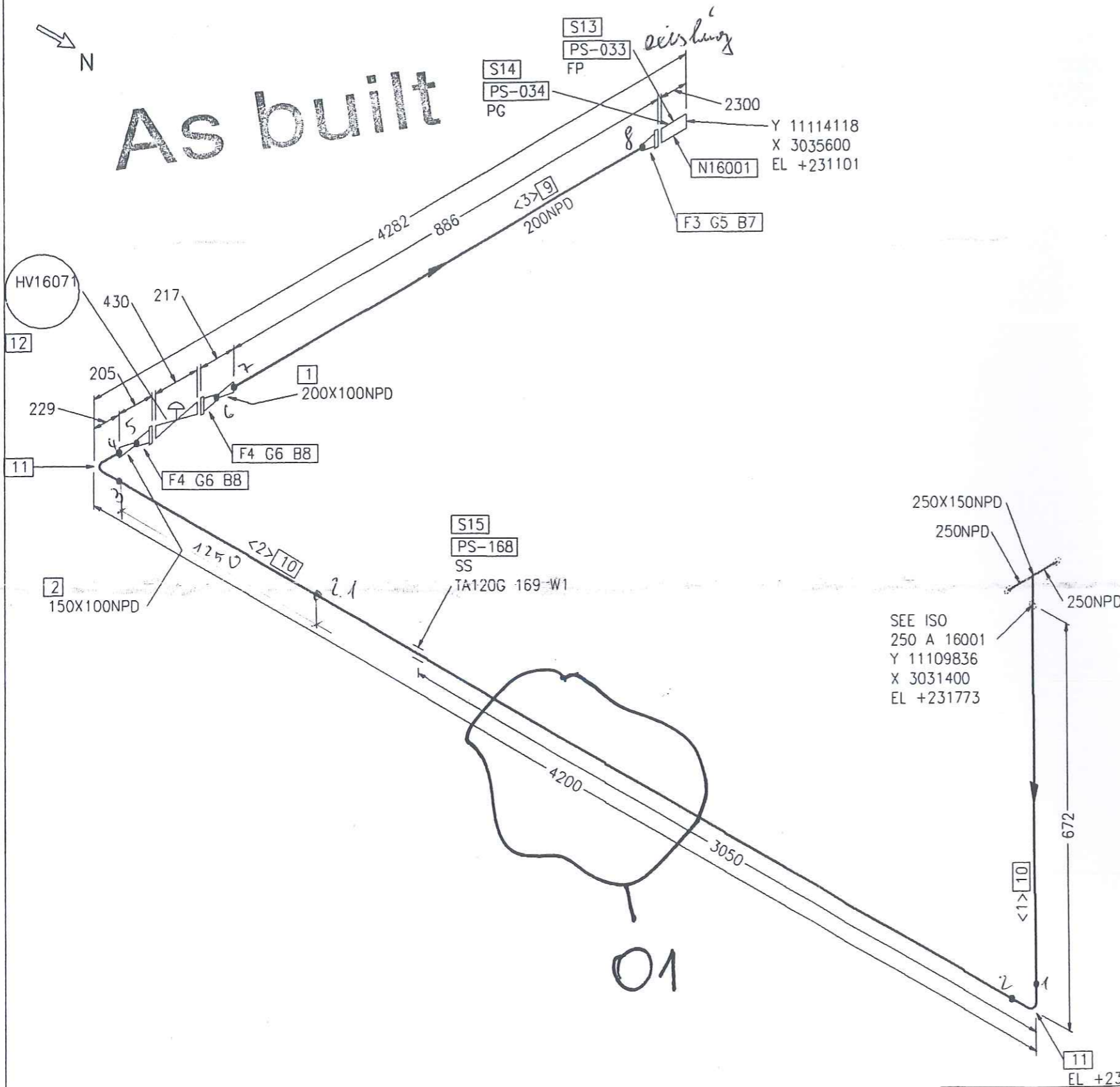
\*\* Ende der Ausgabe

281,94 kg

AS BUILT



As built



| Part No. | Qty [PCS/MM] | NPD [Size] | Component Description                                                          |
|----------|--------------|------------|--------------------------------------------------------------------------------|
| 1        | 1            |            | 200X100 REDUCER, CONCENTRIC, SEAMLESS 219.1*12.5/114.3*8.8, ST37.0, DIN 2616-1 |
| 2        | 1            |            | 150X100 REDUCER, CONCENTRIC, SEAMLESS 168.3*7.1/114.3*6.3, ST37.0, DIN 2616-1  |
| 3        | 1            | 200        | WELDING-NECK-FLANGE PN63, S235JRG2, DIN EN 1092-1                              |
| 4        | 2            | 100        | WELDING-NECK-FLANGE PN63, S235JRG2, DIN EN 1092-1                              |
| 5        | 1            | 200        | GROOVED METAL GASKET                                                           |
| 6        | 2            | 100        | GROOVED METAL GASKET                                                           |
| 7        | 12           | 33         | STUD BOLT 5.6 WITH 2 NUTS 5-2, 170.0MM LANG                                    |
| 8        | 16           | 24         | STUD BOLT 5.6 WITH 2 NUTS 5-2, 120.0MM LANG                                    |
| 9        | 798 MM       | 200        | PIPE, WELDED 219.1*8.0, ST37.0, DIN EN 10220                                   |
| 10       | 4185 MM      | 150        | PIPE, SEAMLESS 168.3*7.1, ST37.0, DIN EN 10220                                 |
| 11       | 2            | 150        | ELBOW, SEAMLESS, 1,5D 168.3*7.1-90, B-ART 3, DIN 2605-1                        |
| 12       | 1            | 100        | HV16071 HV16071                                                                |
| 13       | 1            | 200        | FIX POINT PSUPPORT                                                             |
| 14       | 1            | 200        | PIPE GUIDE PSUPPORT                                                            |
| 15       | 1            | 150        | SLIDE SUPPORT PSUPPORT                                                         |

CUT PIPE LENGTH

| PIECE NO | LENGTH (MM) | NPD (MM) | REMARKS | END ONE | END TWO | ITEM CODE |
|----------|-------------|----------|---------|---------|---------|-----------|
| <1>      | 443         | 150      |         | BEVEL   | BEVEL   | RN        |
| <2>      | 3742        | 150      |         | BEVEL   | BEVEL   | RN        |
| <3>      | 798         | 200      |         | BEVEL   | BEVEL   | RG        |

LEVELS:  
TOP OF INTERNAL ROADS: 225.00m n.m.  
TOP OF FOUNDATION: 225.10m  
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:  
- Situation of mounting seams  
- Situation off pass- length  
- Check of measure details and pipe courses on the construction site  
- Situation of the spindle at valve  
- All components for Oxygen use free of oil and grease

SUPPORTS:  
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE  
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT

|                       |                              |             |       |                               |             |          |                        |
|-----------------------|------------------------------|-------------|-------|-------------------------------|-------------|----------|------------------------|
|                       | Date:                        | 06-SEP-2005 | Name: | Lesum / HGH                   | Checked:    | 05-09-15 | History file.          |
|                       | Job Code: K70101             |             |       |                               | Scale:      | 1        | Original format DIN A3 |
|                       | Reference: ASU No. 9, Kosice |             |       |                               | Sheet:      | 1        | Sheets: 1              |
|                       | Title:                       |             |       |                               | Drawing No. |          |                        |
| Replaces: 79_-----    |                              |             |       | 150 A 16002 AA63C1792.8782601 |             |          |                        |
| Replaced by: 79_----- |                              |             |       |                               |             |          |                        |

| Rev. | Revisions   | Date       | Name | checked |
|------|-------------|------------|------|---------|
| 01   | General Rev | 15.09.2005 | Les  | Zul     |

|                     |      |         |             |       |      |
|---------------------|------|---------|-------------|-------|------|
|                     |      |         |             |       |      |
| Archives<br>Rev No. | Rev. | Job No. | Description | Sign. | Date |
| R E V I S I O N S   |      |         |             |       |      |

Preis-Stückliste 0 300WC16003AA10C2 0 300 WC 16003 AA10C2 Revision:

| Teilenummer | NW1 | NW2 | Teilebezeichnung                                                                | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|-------------|-----|-----|---------------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| B0026       | 20  | 160 | Hexagon head screws<br>5.6 DIN EN ISO 898-1 / DIN EN ISO 4014                   | 0,45 kg    | 12,00 |           |         |       | 0,00   |
| B0508       | 20  | 0   | Hexagon nuts<br>5-2 DIN EN ISO 898-2 / DIN EN ISO 4032                          | 0,06 kg    | 12,00 |           |         |       | 0,00   |
| G0163       | 300 | 0   | Fibrous packings<br>asbestos-free laminate made of aramide f<br>378x2x325       |            | 3,00  |           |         |       | 0,00   |
| GW22        | 150 | 0   | girth weld<br>1.0254 ( St 37.0 )<br>168,3x4,5                                   |            | 1,00  |           |         |       | 0,00   |
| GW31        | 300 | 0   | girth weld<br>1.0254 ( St 37.0 )<br>323,9x5,6                                   |            | 8,00  |           |         |       | 0,00   |
| IK16632     | 300 | 0   | K16632<br>supplied by AGS                                                       |            | 1,00  |           |         |       | 0,00   |
| P0071       | 300 | 0   | PIPE, WELDED<br>St37.0 /DIN 2458/<br>323,9x5,6                                  | 44,00 kg   | 1,70  |           |         |       | 0,00   |
| P0227       | 300 | 0   | Elbow 90° R=1,5 DA, welded<br>1.0254 ( St 37.0 ) DIN 2609<br>323,9x5,6          | 31,59 kg   | 2,00  |           |         |       | 0,00   |
| P0530       | 300 | 150 | Tee made of seamless pipe<br>1.0254 ( St 37.0 ) DIN 2609<br>323,9x7,1x168,3x4,5 | 30,65 kg   | 1,00  |           |         |       | 0,00   |
| P2883       | 150 | 0   | WELDING NECK FLANGES; PN 16<br>C22.8 /DIN 2633/<br>168,3                        | 7,75 kg    | 1,00  |           |         |       | 0,00   |
| P2886       | 300 | 0   | Welding neck flanges; PN 10<br>1.0038 ( S235JRG2 ) DIN EN 1092-1<br>323,9       | 18,00 kg   | 2,00  |           |         |       | 0,00   |
| P2886_A     | 300 | 0   | WELDING NECK FLANGES; PN 10<br>1.0038                                           | 18,00 kg   | 1,00  |           |         |       | 0,00   |

Preis-Stückliste 0 300WC16003AA10C2 0 300 WC 16003 AA10C2 Revision:

| (Fortsetzung)               |     |     |                      |            |       |           |         |       |        |
|-----------------------------|-----|-----|----------------------|------------|-------|-----------|---------|-------|--------|
| Teilenummer                 | NW1 | NW2 | Teilebezeichnung     | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
| SC12                        | 300 | 0   | Segment cut<br>323,9 |            | 5,00  |           |         |       | 0,00   |
| Summe: 0 300WC16003AA10C2 0 |     |     |                      | 236,50 kg  |       | 0,00      | 0,00    |       | 0,00   |

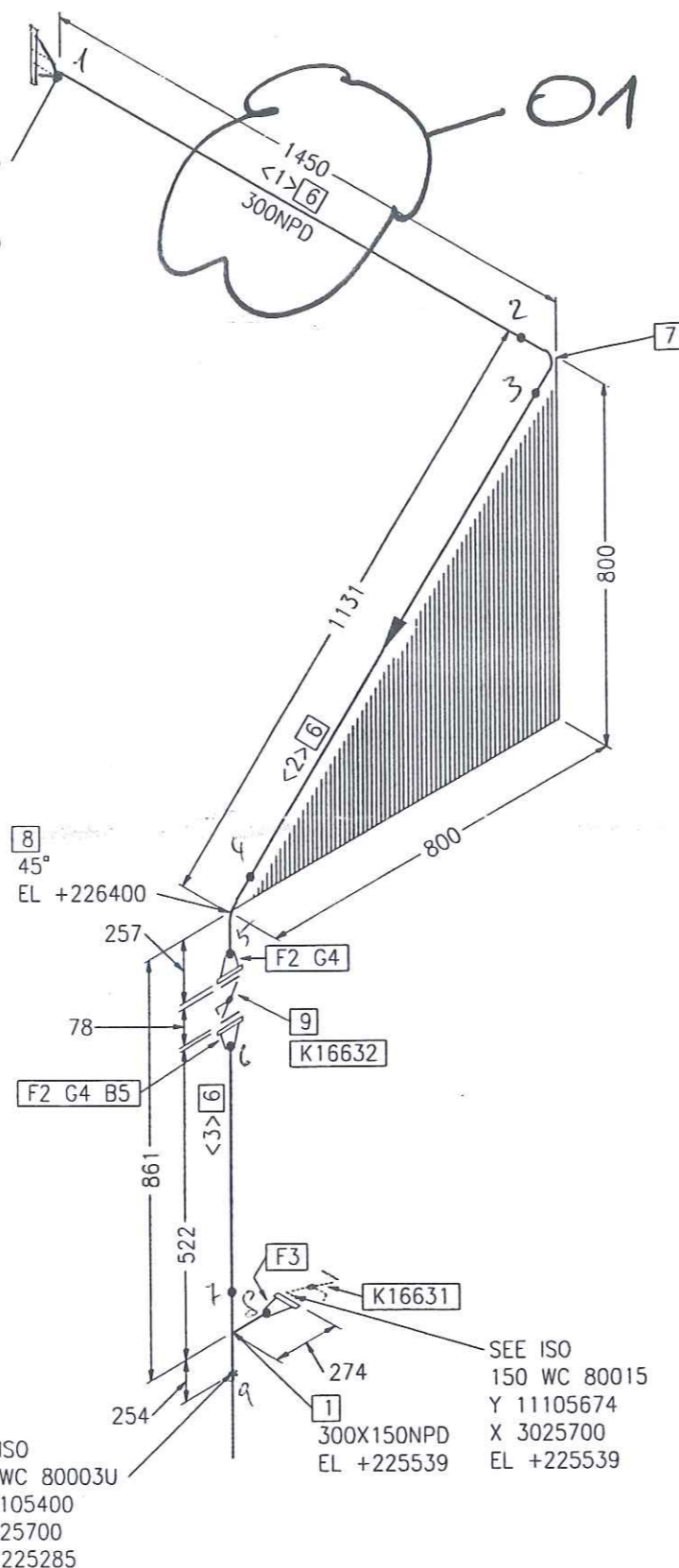
|                     |           |
|---------------------|-----------|
| Liefersumme:        |           |
| Montagesumme:       |           |
| Gesamtsumme:        | 236,50 kg |
| Gesamtgewicht:      |           |
| ** Ende der Ausgabe |           |

AS BUILT



As built

CONN TO  
V16010/ N3  
Y 11106200  
X 3027150  
EL +227200



RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

- PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
- PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE
- SS = SLIDING SUPPORT
- PG = PIPE GUIDE
- FP = FIX POINT

| Rev. | Revisions    | Date       | Name | checked |
|------|--------------|------------|------|---------|
| 01   | General Rev. | 15.09.2005 | Les  | Zul     |



Air Liquide AGS GmbH

Replaces: 79\_-----  
Replaced by: 79\_-----

|                              |             |       |             |             |          |                  |        |
|------------------------------|-------------|-------|-------------|-------------|----------|------------------|--------|
| Date:                        | 22-SEP-2005 | Name: | Lesum / HGH | Checked:    | 05-09-15 | History file:    |        |
| Job Code: K70101             |             |       |             | Scale:      | 1        | Original format: | DIN A3 |
| Reference: ASU No. 9, Kosice |             |       |             | Sheet:      | 1        | Sheets:          | 1      |
| Title:                       |             |       |             | Drawing No: |          |                  |        |
| 300 WC 16003 AA10C2          |             |       |             | 792.8782601 |          |                  |        |

| Part No. | Qty [PCS/MM] | NPD [Size] | Component Description                                 |
|----------|--------------|------------|-------------------------------------------------------|
| 1        | 1            | 300X150    | TEE, SEAMLESS 323.9*7.1/168.3*4.5, ST37.0, DIN 2615-1 |
| 2        | 2            | 300        | WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1     |
| 3        | 1            | 150        | WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1     |
| 4        | 2            | 300        | FIBROUS PACKINGS                                      |
| 5        | 12           | 20         | HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 160.0MM LANG      |
| 6        | 1678 MM      | 300        | PIPE, WELDED 323.9*5.6, ST37.0, DIN EN 10220          |
| 7        | 1            | 300        | ELBOW, WELDED, 1,5D 323.9*5.6-90, B-ART 3,DIN 2605-1  |
| 8        | 1            | 300        | ELBOW, WELDED, 1,5D 323.9*5.6-45, B-ART 3,DIN 2605-1  |
| 9        | 1            | 300        | K16632                                                |

CUT PIPE LENGTH

| PIECE NO | LENGTH (MM) | NPD (MM) | REMARKS | END ONE | END TWO | ITEM CODE |
|----------|-------------|----------|---------|---------|---------|-----------|
| <1>      | 993         | 300      |         | SO.CUT  | BEVEL   | RG        |
| <2>      | 485         | 300      |         | BEVEL   | BEVEL   | RG        |
| <3>      | 200         | 300      |         | BEVEL   | BEVEL   | RG        |

LEVELS:  
TOP OF INTERNAL ROADS: 225.00m n.m.  
TOP OF FOUNDATION: 225.10m  
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

Preis-Stückliste 0 25A16004AA63C1 0 25 A 16004 AA63C1 Revision:

| Teilenummer | NW1 | NW2 | Teilebezeichnung                                                              | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|-------------|-----|-----|-------------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| B0009       | 16  | 70  | Hexagon head screws<br>5.6 DIN EN ISO 898-1 / DIN EN ISO 4014                 | 0,14 kg    | 16,00 |           |         |       | 0,00   |
| B0507       | 16  | 0   | Hexagon nuts<br>5-2 DIN EN ISO 898-2 / DIN EN ISO 4032                        | 0,03 kg    | 16,00 |           |         |       | 0,00   |
| G0019       | 25  | 0   | Comb defined seals<br>1.4541 ( X 6 CrNiTi 18 10 - Graphite ) S<br>82x5x52     |            | 4,00  |           |         |       | 0,00   |
| GW10        | 40  | 0   | girth weld<br>1.0254 ( St 37.0 )<br>48,3x4                                    |            | 1,00  |           |         |       | 0,00   |
| GW5         | 25  | 0   | girth weld<br>1.0254 ( St 37.0 )<br>33,7x2,6                                  |            | 29,00 |           |         |       | 0,00   |
| IF24155     | 25  | 0   | F24155                                                                        |            | 1,00  |           |         |       | 0,00   |
| IPV24010    | 25  | 0   | PV24010<br>supplied by AGS                                                    |            | 1,00  |           |         |       | 0,00   |
| IR24155     | 25  | 0   | R24155                                                                        |            | 1,00  |           |         |       | 0,00   |
| IV11106     | 25  | 0   | V11106<br>supplied by AGS                                                     |            | 1,00  |           |         |       | 0,00   |
| IV24155     | 25  | 0   | V24155                                                                        |            | 1,00  |           |         |       | 0,00   |
| P0014       | 25  | 0   | pipe, seamless<br>1.0254 ( St 37.0 ) DIN 1629<br>33,7x2,6                     | 1,99 kg    | 15,04 |           |         |       | 0,00   |
| P0018       | 40  | 0   | pipe, seamless<br>1.0254 ( St 37.0 ) DIN 1629<br>48,3x4                       | 4,37 kg    | 0,30  |           |         |       | 0,00   |
| P0174       | 25  | 0   | Elbow 90° R=1,5 DA, seamless<br>1.0254 ( St 37.0 ) DIN 2609<br>33,7x2,6       | 0,12 kg    | 8,00  |           |         |       | 0,00   |
| P0555       | 25  | 25  | Tee made of seamless pipe<br>1.0254 ( St 37.0 ) DIN 2609<br>33,7x2,6x33,7x2,6 | 0,23 kg    | 1,00  |           |         |       | 0,00   |

Preis-Stückliste 0 25A16004AA63C1 0 25 A 16004 AA63C1 Revision:

(Fortsetzung)

| Teilenummer               | NW1 | NW2 | Teilebezeichnung                                                            | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|---------------------------|-----|-----|-----------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| P1284                     | 40  | 25  | REDUCER, CONCENTRIC, SEAMLESS<br>S135.81 / DIN 2616-1/<br>48,3x2,6/33,7x2,6 | 0,10 kg    | 1,00  |           |         |       | 0,00   |
| P2899                     | 25  | 0   | Welding neck flanges, PN 100<br>1.0038 ( S235JRG2 ) DIN EN 1092-1<br>33,7   | 2,50 kg    | 4,00  |           |         |       | 0,00   |
| S0015                     | 25  | 0   | T-support TA 120G 34 W1 OZN<br>1.0 Hesterberg<br>34                         | 7,60 kg    | 1,00  |           |         |       | 0,00   |
| SC3                       | 25  | 0   | Segment cut<br>33,7                                                         |            | 14,00 |           |         |       | 0,00   |
| SC4                       | 40  | 0   | Segment cut<br>48,3                                                         |            | 1,00  |           |         |       | 0,00   |
| SCP03                     | 25  | 0   | PIPE CLAMP, RB10A 34 W3<br>HESTERBERG<br>33,7                               |            | 4,00  |           |         |       | 0,00   |
| SPG01                     | 0   | 0   | PIPE GUIDE<br>1.0 HESTERBERG                                                |            | 1,00  |           |         |       | 0,00   |
| SPS263                    | 0   | 0   | SUPPORT PS-263, L 40, L=300                                                 | 0,89 kg    | 1,00  |           |         |       | 0,00   |
| SPS264                    | 0   | 0   | SUPPORT PS-264, L 40, L=200                                                 | 0,59 kg    | 2,00  |           |         |       | 0,00   |
| SPS265                    | 0   | 0   | SUPPORT PS-265, L 50, L=200                                                 | 0,75 kg    | 1,00  |           |         |       | 0,00   |
| Summe: 0 25A16004AA63C1 0 |     |     |                                                                             | 55,67 kg   |       | 0,00      | 0,00    |       | 0,00   |

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

\*\* Ende der Ausgabe

55,67 kg

AS BUILT



# As built

ADJUSTED SITE-TO 25 N-81026

ADJUSTED SITE; TO 25 N-81025

SEE ISO  
25 A 16005  
Y 11132087  
X 3051980  
EL +225614

Y 11135850  
X 3051980  
EL +226076

| Part No. | Qty [PCS/MM] | NPD [Size] | Component Description                                 |
|----------|--------------|------------|-------------------------------------------------------|
| 1        | 1            | 25X25      | TEE, SEAMLESS 33.7*3.2/33.7*3.2, ST37.0, DIN 2615-1   |
| 2        | 1            | 25         | WELDING-NECK-FLANGE PN63, S235JRG2, DIN EN 1092-1     |
| 3        | 1            | 25         | GROOVED METAL GASKET                                  |
| 4        | 4            | 16         | STUD BOLT 5.6 WITH 2 NUTS 5-2, 90.0MM LANG            |
| 5        | 8996 MM      | 25         | PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220         |
| 6        | 4            | 25         | ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1 |
| 7        | 1            | 25         | ELBOW, SEAMLESS, 1,5D 33.7*2.6-45, B-ART 3,DIN 2605-1 |
| 8        | 1            | 25         | FIX POINT PSUPPORT                                    |
| 9        | 2            | 25         | PIPE GUIDE PSUPPORT                                   |

## CUT PIPE LENGTH

| PIECE NO | LENGTH (MM) | NPD (MM) | REMARKS | END ONE | END TWO | ITEM CODE |
|----------|-------------|----------|---------|---------|---------|-----------|
| <1>      | 462         | 25       |         | SQ.CUT  | BEVEL   | RN        |
| <2>      | 3687        | 25       |         | BEVEL   | BEVEL   | RN        |
| <3>      | 1324        | 25       |         | BEVEL   | BEVEL   | RN        |
| <4>      | 2583        | 25       |         | BEVEL   | BEVEL   | RN        |
| <5>      | 530         | 25       |         | BEVEL   | BEVEL   | RN        |
| <6>      | 310         | 25       |         | BEVEL   | BEVEL   | RN        |
| <7>      | 100         | 25       |         | BEVEL   | BEVEL   | RN        |

NUR ZUR INFORMATION

FOR INFORMATION ONLY

21. OKT. 2005

LEVELS:  
TOP OF INTERNAL ROADS: 225.00m n.m.  
TOP OF FOUNDATION: 225.10m  
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:  
- Situation of mounting seams  
- Situation off pass- length  
- Check of measure details and pipe courses on the construction site  
- Situation of the spindle at valve  
- All components for Oxygen use free of oil and grease

SUPPORTS:  
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE  
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT

| Rev. | Revisions | Date | Name | checked |
|------|-----------|------|------|---------|
|      |           |      |      |         |

**AIR LIQUIDE**  
Air Liquide AGS GmbH

Replaces: 79-----  
Replaced by: 79-----

|           |                             |            |                   |          |          |                  |        |
|-----------|-----------------------------|------------|-------------------|----------|----------|------------------|--------|
| Date:     | 17-OCT-2005                 | Name:      | Lesum / HGH       | Checked: | 05-10-20 | History file:    |        |
| Job Code: | K70101                      | Reference: | ASU No. 9, Kosice | Scale:   | 1:1      | Original format: | DIN A3 |
| Title:    | 25 A 16004 AA63C1792.878260 | Sheet:     | 1                 | Sheets:  | 2        | Drawing No:      |        |
|           |                             |            |                   |          |          | Rev.             |        |



Job Code: K70101 ASU No. 9, Kosice Order No.:

Title: 25 A 16004

**Drawing No.:**

792.87826 - 00

Maker's No.:

---

Welder  
No.:

## Material

Dimension

Wärme-  
behandlung

RT

15

MT/F

05

1

Pelzeder Erich, 10.02.06

10.02.06

7

Kosice

As built

SEE ISO  
250 A 16001  
Y 11130430  
X 3049650  
EL +233059

250X40NPD  
EL +233059

SEALGAS

40X25NPD

TA 120G 34W1  
PG 64

PS 265  
502=200  
+RB

SEE SHT  
SHT 1

PV24010

EL +227708

V11106

F2 G3 B4

S10

PS

FP

TA120B 34 W1

RESPONSIBILITY OF ERECTION COMPANY:  
- Situation of mounting seams  
- Situation off pass- length  
- Check of measure details and pipe courses on the construction site  
- Situation of the spindle at valve  
- All components for Oxygen use free of oil and grease

SUPPORTS:  
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE  
PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT

| Rev. | Revisions | Date | Name | checked |
|------|-----------|------|------|---------|
|      |           |      |      |         |
|      |           |      |      |         |
|      |           |      |      |         |



Air Liquide AGS GmbH

Replaces: 79\_---  
Replaced by: 79\_---

|           |             |              |                   |                  |                   |               |   |
|-----------|-------------|--------------|-------------------|------------------|-------------------|---------------|---|
| Date:     | 17-OCT-2005 | Name:        | Lesum / HGH       | Checked:         | 05-10-20          | History file: |   |
| Job Code: | K70101      | Reference:   | ASU No. 9, Kosice | Title:           | 25 A 16004 AA63C1 | Sheet:        | 2 |
| Replaces: | 79_---      | Replaced by: | 79_---            | Original format: | DIN A3            | Sheets:       | 2 |
|           |             |              |                   | Drawing No:      | 792.878260        | Rev.          |   |

| Part No. | Qty [PCS/MM] | NPD [Size] | Component Description                                               |
|----------|--------------|------------|---------------------------------------------------------------------|
| 1        | 1            | 40X25      | REDUCER, CONCENTRIC, SEAMLESS 48.3*4.0/33.7*3.2, ST37.0, DIN 2616-1 |
| 2        | 1            | 25         | WELDING-NECK-FLANGE PN63, S235JRG2, DIN EN 1092-1                   |
| 3        | 1            | 25         | GROOVED METAL GASKET                                                |
| 4        | 4            | 16         | STUD BOLT 5.6 WITH 2 NUTS 5-2, 90.0MM LANG                          |
| 5        | 201 MM       | 40         | PIPE, SEAMLESS 48.3*4.0, ST37.0, DIN EN 10220                       |
| 6        | 8068 MM      | 25         | PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220                       |
| 7        | 3            | 25         | ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1               |
| 8        | 1            | 25         | PV24010                                                             |
| 9        | 1            | 25         | V11106                                                              |
| 10       | 1            | 25         | FIX POINT PSUPPORT                                                  |

CUT PIPE LENGTH

| PIECE NO | LENGTH (MM) | NPD (MM) | REMARKS | END ONE | END TWO | ITEM CODE |
|----------|-------------|----------|---------|---------|---------|-----------|
| <1>      | 230         | 25       |         | BEVEL   | BEVEL   | RN        |
| <2>      | 100         | 25       |         | SQ.CUT  | BEVEL   | RN        |
| <3>      | 1450        | 25       |         | BEVEL   | BEVEL   | RN        |
| <4>      | 1374        | 25       |         | BEVEL   | BEVEL   | RN        |
| <5>      | 4914        | 25       |         | BEVEL   | BEVEL   | RN        |
| <6>      | 201         | 40       |         | BEVEL   | SHAPED  | RN        |

NUR ZUR INFORMATION  
FOR INFORMATION ONLY

21.10.2005

LEVELS:  
TOP OF INTERNAL ROADS: 225.00m n.m.  
TOP OF FOUNDATION: 225.10m  
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

**Preis-Stückliste 0 25A16005AA63C1 0 25 A 16005 AA63C1 Revision:**

| Teilenummer               | NW1 | NW2 | Teilebezeichnung                                                          | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|---------------------------|-----|-----|---------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| B0009                     | 16  | 70  | Hexagon head screws<br>5.6 DIN EN ISO 898-1 / DIN EN ISO 4014             | 0,14 kg    | 8,00  |           |         |       | 0,00   |
| B0507                     | 16  | 0   | Hexagon nuts<br>5-2 DIN EN ISO 898-2 / DIN EN ISO 4032                    | 0,03 kg    | 8,00  |           |         |       | 0,00   |
| G0019                     | 25  | 0   | Comb defined seals<br>1.4541 ( X 6 CrNiTi 18 10 - Graphite ) S<br>82x5x52 |            | 2,00  |           |         |       | 0,00   |
| GW5                       | 25  | 0   | girth weld<br>1.0254 ( St 37.0 )<br>33,7x2,6                              |            | 9,00  |           |         |       | 0,00   |
| IF24255                   | 25  | 0   | F24255                                                                    |            | 1,00  |           |         |       | 0,00   |
| IR24255                   | 25  | 0   | R24255                                                                    |            | 1,00  |           |         |       | 0,00   |
| IV24255                   | 25  | 0   | V24255                                                                    |            | 1,00  |           |         |       | 0,00   |
| P0014                     | 25  | 0   | pipe, seamless<br>1.0254 ( St 37.0 ) DIN 1629<br>33,7x2,6                 | 1,99 kg    | 0,85  |           |         |       | 0,00   |
| P0174                     | 25  | 0   | Elbow 90° R=1,5 DA, seamless<br>1.0254 ( St 37.0 ) DIN 2609<br>33,7x2,6   | 0,12 kg    | 2,00  |           |         |       | 0,00   |
| P2899                     | 25  | 0   | Welding neck flanges; PN 100<br>1.0038 ( S235JRG2 ) DIN EN 1092-1<br>33,7 | 2,50 kg    | 2,00  |           |         |       | 0,00   |
| SC3                       | 25  | 0   | Segment cut<br>33,7                                                       |            | 5,00  |           |         |       | 0,00   |
| Summe: 0 25A16005AA63C1 0 |     |     |                                                                           | 8,29 kg    |       | 0,00      | 0,00    |       | 0,00   |

AS BUILT

|                |         |
|----------------|---------|
| Liefersumme:   |         |
| Montagesumme:  |         |
| Gesamtsumme:   |         |
| Gesamtgewicht: | 8,29 kg |

| Teilenummer         | NW1 | NW2 | Teilebezeichnung | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|---------------------|-----|-----|------------------|------------|-------|-----------|---------|-------|--------|
| ** Ende der Ausgabe |     |     |                  |            |       |           |         |       |        |

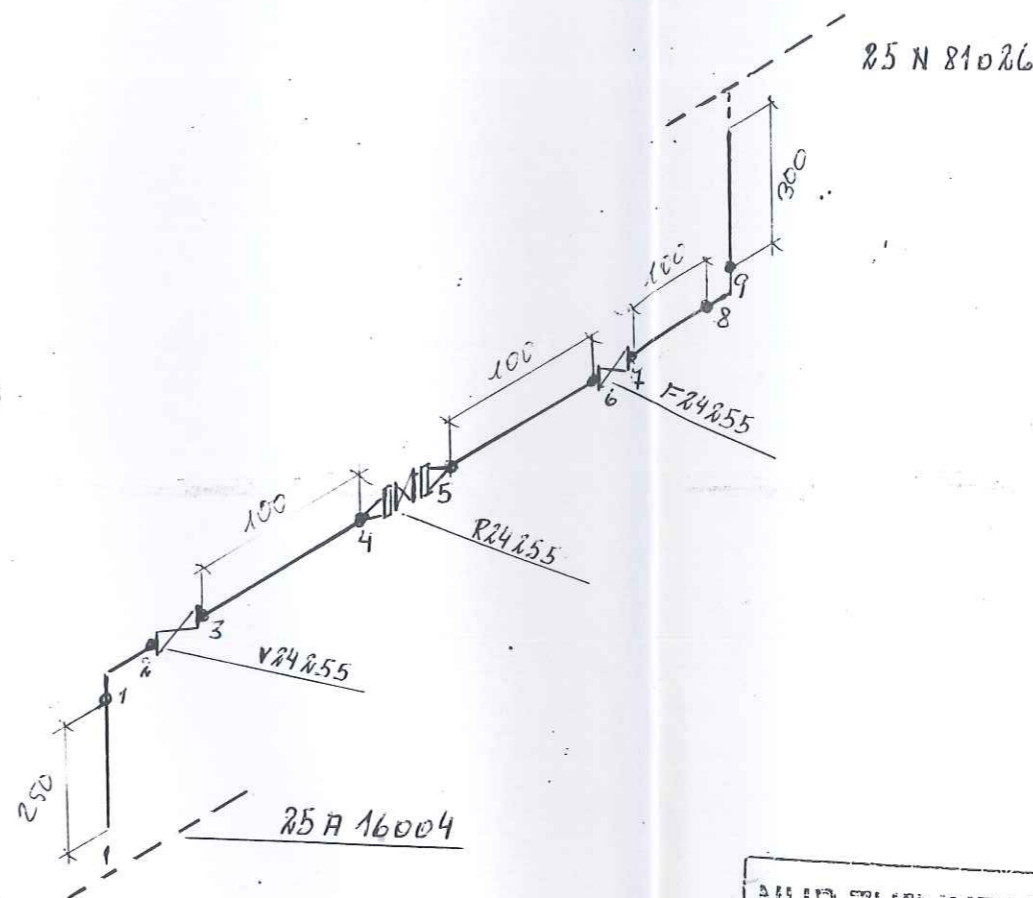
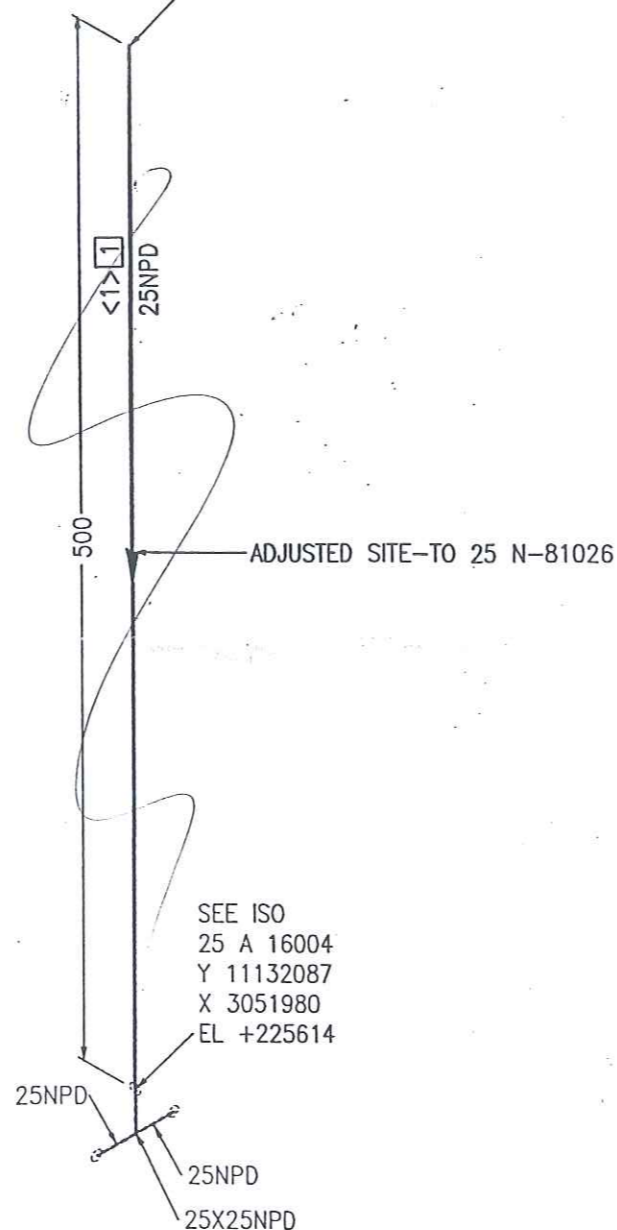
AS BUILT

[illegible]



As built

Y 11132087  
X 3051980  
EL +226114



NUR ZUR INFORMATION  
FOR INFORMATION ONLY

21.01.2005

LEVELS:  
TOP OF INTERNAL ROADS: 225.00m n.m.  
TOP OF FOUNDATION: 225.10m  
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:  
- Situation of mounting seams  
- Situation off pass- length  
- Check of measure details and pipe courses on the construction site  
- Situation of the spindle at valve  
- All components for Oxygen use free of oil and grease

SUPPORTS:  
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE  
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT

|                                                                                                                              |                      |                      |                      |                           |
|------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|---------------------------|
| <br>AIR LIQUIDE<br>Air Liquide AGS GmbH | Date:<br>17-OCT-2005 | Name:<br>Lesum / HGH | Checked:<br>05-10-20 | History file:             |
|                                                                                                                              | Job Code: K70101     |                      | Scale:<br>1:1        | Original format<br>DIN A3 |
| Reference: ASU No. 9, Kosice                                                                                                 |                      | Sheet: 1             |                      | Sheets: 1                 |
| Title:<br>25 A 16005 AA63C1792.878260                                                                                        |                      | Drawing No:          |                      | Rev.                      |

| Rev. | Revisions | Date | Name | checked |
|------|-----------|------|------|---------|
|      |           |      |      |         |
|      |           |      |      |         |
|      |           |      |      |         |

Preis-Stückliste 0 80LV16505AA16C1 0 80 LV 16505 AA16C1 Revision:

| Teilenummer                | NW1 | NW2 | Teilebezeichnung                                                         | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|----------------------------|-----|-----|--------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| B0008                      | 16  | 65  | Hexagon head screws<br>5.6 DIN EN ISO 898-1 / DIN EN ISO 4014            | 0,13 kg    | 8,00  |           |         |       | 0,00   |
| B0507                      | 16  | 0   | Hexagon nuts<br>5-2 DIN EN ISO 898-2 / DIN EN ISO 4032                   | 0,03 kg    | 8,00  |           |         |       | 0,00   |
| G0103                      | 80  | 0   | Flat packings<br>Graphite with CrNi-insert Standard 40002<br>142x2x90    |            | 1,00  |           |         |       | 0,00   |
| GW16                       | 80  | 0   | girth weld<br>1.0254 ( St 37.0 )<br>88,9x3,2                             |            | 5,00  |           |         |       | 0,00   |
| P0008                      | 80  | 0   | pipe, seamless<br>1.0254 ( St 37.0 ) DIN 1629<br>88,9x3,2                | 6,76 kg    | 7,20  |           |         |       | 0,00   |
| P0166                      | 80  | 0   | Elbow 90° R=1,5 DA, seamless<br>1.0254 ( St 37.0 ) DIN 2609<br>88,9x3,2  | 1,21 kg    | 2,00  |           |         |       | 0,00   |
| P2880                      | 80  | 0   | Welding neck flanges; PN 16<br>1.0038 ( S235JRG2 ) DIN EN 1092-1<br>88,9 | 4,00 kg    | 1,00  |           |         |       | 0,00   |
| SC6                        | 80  | 0   | Segment cut<br>88,9                                                      |            | 3,00  |           |         |       | 0,00   |
| SCP05                      | 80  | 0   | PIPE CLAMP, RB10A 89 W3<br>HESTERBERG                                    |            | 2,00  |           |         |       | 0,00   |
| SPS406                     | 0   | 0   | SUPPORT PS-406, L 50, L=400                                              | 2,07 kg    | 1,00  |           |         |       | 0,00   |
| SPS407                     | 0   | 0   | SUPPORT PS-407, L 50, L=250                                              | 1,81 kg    | 1,00  |           |         |       | 0,00   |
| Summe: 0 80LV16505AA16C1 0 |     |     |                                                                          | 60,25 kg   |       | 0,00      | 0,00    |       | 0,00   |

Liefersumme:

Montagesumme:

Gesamtsumme:

AS BUILT

Preis-Stückliste 0 80LV16505AA16C1 0 80 LV 16505 AA16C1 Revision:

| Teilenummer         | NW1 | NW2 | Teilebezeichnung | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|---------------------|-----|-----|------------------|------------|-------|-----------|---------|-------|--------|
| Gesamtgewicht:      |     |     |                  | 60,25 kg   |       |           |         |       |        |
| ** Ende der Ausgabe |     |     |                  |            |       |           |         |       |        |

AS BUILT



**Jop Code:** K70101 ASU No. 9, Kosice

Title: 80 LV 16505

**Drawing No.:**

Maker's No.:

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Dimension

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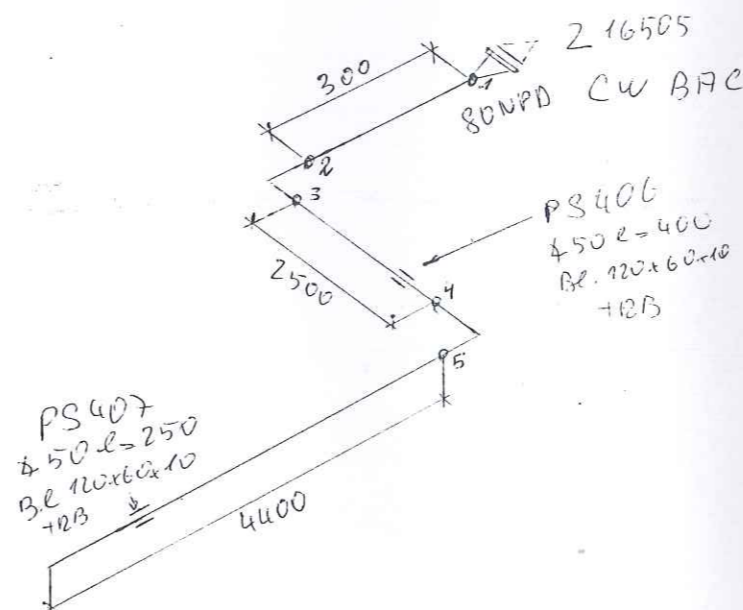
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Kosice



As built



LEVELS:  
TOP OF INTERNAL ROADS: 225.00m n.m.  
TOP OF FOUNDATION: 225.10m  
BOTTOM OF STEEL STRUCTURE: 225.15m =  $\pm 0.00$


RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting soams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE  
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT

| Rev | Revisions | Date | Name | checked |
|-----|-----------|------|------|---------|
| C   |           |      |      |         |
| B   |           |      |      |         |
| A   |           |      |      |         |

|                                                                                                                                  |                              |                 |                   |                         |                         |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------|-------------------|-------------------------|-------------------------|
|  <b>AIR LIQUIDE</b><br>Air Liquide AGS GmbH | Date: 23-JUN-2005            | Name: Lesum/HGH | Checked: 05-07-11 | History file:           |                         |
|                                                                                                                                  | Job Code: K70101             |                 |                   | Scale: ---:---          | Original format: DIN A3 |
|                                                                                                                                  | Reference: ASU No. 9, Kosice |                 |                   | Sheet:                  | Sheets:                 |
|                                                                                                                                  | Title: 80LV. 16505. AA.16C4  |                 |                   | Drawing No: 792.8782600 | Rev.                    |

Preis-Stückliste 0 150LV16801AA10C1 0 150 LV 16801 AA10C1 Revision:

| Teilenummer | NW1 | NW2 | Teilebezeichnung                                                                  | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|-------------|-----|-----|-----------------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| G0099       | 40  | 0   | Flat packings<br>Graphite with CrNi-insert Standard 40002<br>92x2x49              |            | 1,00  |           |         |       | 0,00   |
| GW12        | 50  | 0   | girth weld<br>1.0254 ( St 37.0 )<br>60,3x2,9                                      |            | 2,00  |           |         |       | 0,00   |
| GW9         | 40  | 0   | girth weld<br>1.0254 ( St 37.0 )<br>48,3x2,6                                      |            | 1,00  |           |         |       | 0,00   |
| P0006       | 50  | 0   | pipe, seamless<br>1.0254 ( St 37.0 ) DIN 1629<br>60,3x2,9                         | 4,11 kg    | 3,15  |           |         |       | 0,00   |
| P0205       | 50  | 0   | Elbow 90° R=1,5 DA, seamless<br>1.0254 ( St 37.0 ) DIN 2609<br>60,3x2,9           | 0,49 kg    | 1,00  |           |         |       | 0,00   |
| P1285       | 50  | 40  | Reducer, concentric, seamless<br>1.0254 ( St 37.0 ) DIN 2609<br>60,3x2,9x48,3x2,6 | 0,28 kg    | 1,00  |           |         |       | 0,00   |
| P2937_A     | 40  | 0   | WELDING NECK FLANGES, PN 40<br>1.0038                                             |            | 1,00  |           |         |       | 0,00   |
| SC5         | 50  | 0   | Segment cut<br>60,3                                                               |            | 1,00  |           |         |       | 0,00   |
| SCP02       | 50  | 0   | PIPE CLAMP, RB10A 61 W3<br>HESTERBERG<br>60,3                                     |            | 1,00  |           |         |       | 0,00   |
| SPS310      | 0   | 0   | SUPPORT PS-310, L 50, L=400                                                       | 1,50 kg    | 1,00  |           |         |       | 0,00   |
|             |     |     | Summe: 0 150LV16801AA10C1 0                                                       | 15,22 kg   |       | 0,00      | 0,00    |       | 0,00   |

Liefersumme:  
Montagesumme:  
Gesamtsumme:


AS BUILT

Preis-Stückliste 0 150LV16801AA10C1 0 150 LV 16801 AA10C1 Revision:

| Teilenummer         | NW1 | NW2 | Teilebezeichnung | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|---------------------|-----|-----|------------------|------------|-------|-----------|---------|-------|--------|
| Gesamtgewicht:      |     |     | 15,22 kg         |            |       |           |         |       |        |
| ** Ende der Ausgabe |     |     |                  |            |       |           |         |       |        |

AS BUILT

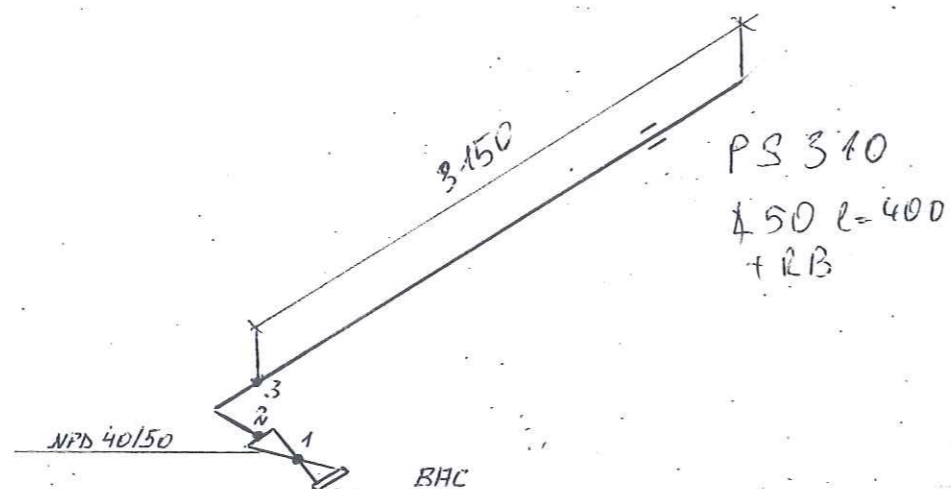


|                     |                                                       |                 |          |                                                                                  |  |                                                                |                                                                                                         |
|---------------------|-------------------------------------------------------|-----------------|----------|----------------------------------------------------------------------------------|--|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>VAM</b>          | <b>SCHWEISSDOKUMENTATION</b><br>WELDING DOCUMENTATION |                 | Prot Nr. | erstellt:<br><i>11.02.06</i> <i>RL</i><br>Pelzeder Erich<br>Datum / Unterschrift |  | geprüft<br><br>Schweisstechnologie VAM<br>Datum / Unterschrift | (Kunde / TÜV, ...)<br> |
|                     | Jop Code: K70101 ASU No. 9, Kosice                    |                 |          | Order No.:                                                                       |  |                                                                |                                                                                                         |
| Client: AIR LIQUIDE |                                                       | Title: LV 16801 |          | Drawing No.:                                                                     |  | Maker's No.:                                                   |                                                                                                         |
|                     |                                                       | Sheet 1         |          | 792.87826 - 00                                                                   |  |                                                                |                                                                                                         |

[illegible]



As built



LEVELS:  
TOP OF INTERNAL ROADS: 225.00m n.m.  
TOP OF FOUNDATION: 225.10m  
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE

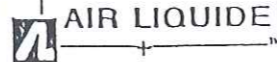
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

| Rev. | Revisions | Date | Name | checked |
|------|-----------|------|------|---------|
| C    |           |      |      |         |
| B    |           |      |      |         |
| A    |           |      |      |         |

|                                                                                                               |                              |                   |                   |                         |                        |
|---------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-------------------|-------------------------|------------------------|
| <br>Air Liquide AGS GmbH | Date: 23-JUN-2005            | Name: Lesum / HGH | Checked: 05-07-11 | History file:           |                        |
|                                                                                                               | Job Code: K70101             |                   |                   | Scale: 1                | Original format: DN A3 |
|                                                                                                               | Reference: ASU No. 9. Kosice |                   |                   | Sheet:                  | Sheets:                |
|                                                                                                               | Title: 150 LV 1680.1         |                   |                   | Drawing No: 792.8782600 | Rev.                   |

Preis-Stückliste 0 100N20004ZB40C1 0 100 N 20004 ZB40C1 Revision:

| Teilenummer | NW1 | NW2 | Teilebezeichnung                                                            | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|-------------|-----|-----|-----------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| B0044       | 24  | 190 | Hexagon head screws<br>5.6 DIN EN ISO 898-1 / DIN EN ISO 4014               | 0,78 kg    | 8,00  |           |         |       | 0,00   |
| B0110       | 16  | 70  | HEXAGON HEAD SCREWS<br>A2-70                                                | 0,14 kg    | 8,00  |           |         |       | 0,00   |
| B0123       | 20  | 80  | Hexagon head screws<br>A2-70 resp. A2-50 DIN EN ISO 3506                    | 0,26 kg    | 16,00 |           |         |       | 0,00   |
| B0132       | 20  | 140 | Hexagon head screws<br>A2-70 resp. A2-50 DIN EN ISO 3506                    | 0,42 kg    | 8,00  |           |         |       | 0,00   |
| B0509       | 24  | 0   | Hexagon nuts<br>5-2 DIN EN ISO 898-2 / DIN EN ISO 4032                      | 0,11 kg    | 8,00  |           |         |       | 0,00   |
| B0534       | 16  | 0   | Hexagon nuts<br>A2-70 resp. A2-50 DIN EN ISO 3506                           | 0,03 kg    | 8,00  |           |         |       | 0,00   |
| B0536       | 20  | 0   | Hexagon nuts<br>A2-70 resp. A2-50 DIN EN ISO 3506                           | 0,06 kg    | 24,00 |           |         |       | 0,00   |
| G0038       | 100 | 0   | Comb defined seals<br>1.4541 ( X 6 CrNiTi 18 10 - Graphite ) S<br>174x5x138 |            | 2,00  |           |         |       | 0,00   |
| G0093       | 32  | 0   | FLAT PACKINGS<br>Graphite with CrNi-insert Standard 40002<br>42,4           |            | 1,00  |           |         |       | 0,00   |
| G0100       | 50  | 0   | Flat packings<br>Graphite with CrNi-insert Standard 40002<br>107x2x61       |            | 1,00  |           |         |       | 0,00   |
| G0105       | 100 | 0   | Flat packings<br>Graphite with CrNi-insert Standard 40002<br>168x2x115      |            | 5,00  |           |         |       | 0,00   |
| GW11        | 50  | 0   | girth weld<br>1.4541 ( X 6 CrNiTi 18 10 )<br>60,3x2                         |            | 1,00  |           |         |       | 0,00   |
| GW17        | 100 | 0   | girth weld<br>1.4541 ( X 6 CrNiTi 18 10 )<br>114,3x2,6                      |            | 39,00 |           |         |       | 0,00   |

Preis-Stückliste 0 100N20004ZB40C1 0 100 N 20004 ZB40C1 Revision:

(Fortsetzung)

| Teilenummer | NW1 | NW2 | Teilebezeichnung                                           | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|-------------|-----|-----|------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| GW18        | 100 | 0   | girth weld<br>1.0254 ( St 37.0 )<br>114,3x3,6              |            | 3,00  |           |         |       | 0,00   |
| GW7         | 32  | 0   | girth weld<br>1.4541 ( X 6 CrNiTi 18 10 )<br>42,4x2        |            | 5,00  |           |         |       | 0,00   |
| IFE20001    | 100 | 0   | FE20001<br>supplied by AGS                                 |            | 1,00  |           |         |       | 0,00   |
| IFV20001    | 100 | 0   | FV20001<br>supplied by AGS                                 |            | 1,00  |           |         |       | 0,00   |
| IP20001     | 15  | 0   | P20001<br>supplied by AGS                                  |            | 1,00  |           |         |       | 0,00   |
| IQE20001    | 15  | 0   | QE20001<br>supplied by AGS                                 |            | 1,00  |           |         |       | 0,00   |
| IR20001     | 100 | 0   | R20001<br>supplied by AGS                                  |            | 1,00  |           |         |       | 0,00   |
| ITE20001    | 15  | 0   | TE20001<br>supplied by AGS                                 |            | 1,00  |           |         |       | 0,00   |
| ITE20025    | 15  | 0   | TE20025<br>supplied by AGS                                 |            | 1,00  |           |         |       | 0,00   |
| ITE20026    | 15  | 0   | TE20026<br>supplied by AGS                                 |            | 1,00  |           |         |       | 0,00   |
| IV20001H2   | 15  | 0   | V20001H2<br>supplied by AGS                                |            | 1,00  |           |         |       | 0,00   |
| IV20001H3   | 15  | 0   | V20001H3<br>supplied by AGS                                |            | 1,00  |           |         |       | 0,00   |
| IZ20026     | 50  | 32  | Z20026<br>supplied by AGS                                  |            | 1,00  |           |         |       | 0,00   |
| P0025       | 100 | 0   | pipe, seamless<br>1.0254 ( St 37.0 ) DIN 1629<br>114,3x3,6 | 9,83 kg    | 0,70  |           |         |       | 0,00   |

Preis-Stückliste 0 100N20004ZB40C1 0 100 N 20004 ZB40C1 Revision:

(Fortsetzung)

| Teilenummer | NW1 | NW2 | Teilebezeichnung                                                                       | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|-------------|-----|-----|----------------------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| P0134       | 50  | 0   | pipe, welded<br>1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457<br>60,3x2                        | 2,92 kg    | 0,25  |           |         |       | 0,00   |
| P0137       | 100 | 0   | pipe, welded<br>1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457<br>114,3x2,6                     | 7,27 kg    | 62,00 |           |         |       | 0,00   |
| P0149       | 32  | 0   | PIPE, WELDED<br>1.4541<br>42,4                                                         | 1,53 kg    | 1,00  |           |         |       | 0,00   |
| P0285       | 32  | 0   | ELBOW 90 -BA3-<br>1.4571<br>42,4x2                                                     | 0,16 kg    | 2,00  |           |         |       | 0,00   |
| P0290       | 100 | 0   | Elbow 90° R=1,5 DA, welded<br>1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609<br>114,3x2,6        | 1,74 kg    | 13,00 |           |         |       | 0,00   |
| P1086       | 100 | 100 | Tee made of welded pipe<br>1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609<br>114,3x6,3x114,3x6,3 | 4,41 kg    | 1,00  |           |         |       | 0,00   |
| P2912       | 100 | 0   | Welding neck flanges; PN 40<br>1.0038 ( S235JRG2 ) DIN EN 1092-1<br>114,3              | 6,50 kg    | 1,00  |           |         |       | 0,00   |
| P2914       | 100 | 0   | Welding neck flanges; PN 63<br>1.0038 ( S235JRG2 ) DIN EN 1092-1<br>114,3              | 9,50 kg    | 2,00  |           |         |       | 0,00   |
| P2997       | 50  | 0   | Welding neck flanges; PN 40<br>1.4541 ( X 6 CrNiTi 18 10 ) DIN EN 1092-<br>60,3        | 3,00 kg    | 1,00  |           |         |       | 0,00   |
| P3003       | 100 | 0   | Welding neck flanges; PN 40<br>1.4541 ( X 6 CrNiTi 18 10 ) DIN EN 1092-<br>114,3       | 6,50 kg    | 3,00  |           |         |       | 0,00   |
| P3003_A     | 100 | 0   | WELDING NECK FLANGES, PN 40<br>1.4541                                                  | 6,50 kg    | 1,00  |           |         |       | 0,00   |

Preis-Stückliste 0 100N20004ZB40C1 0 100 N 20004 ZB40C1 Revision:

(Fortsetzung)

| Teilenummer | NW1 | NW2 | Teilebezeichnung                                           | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|-------------|-----|-----|------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| P3020       | 32  | 0   | WELDING NECK FLANGES, PN 16<br>1.4571<br>42,4              |            | 1,00  |           |         |       | 0,00   |
| PWI46       | 100 | 15  | PIPE WELD-IN<br>1.4541                                     |            | 5,00  |           |         |       | 0,00   |
| PWI6        | 100 | 32  | Pipe weld-in<br>1.4541 ( X 6 CrNiTi 18 10 )                |            | 1,00  |           |         |       | 0,00   |
| S0021       | 100 | 0   | T-support TA 120G 115 W1 OZN<br>1.0 Hesterberg<br>115      | 10,70 kg   | 2,00  |           |         |       | 0,00   |
| S0033       | 100 | 0   | T-support, 1.4541, TA 120B 115 W3<br>1.4 Hesterberg<br>115 | 4,50 kg    | 1,00  |           |         |       | 0,00   |
| S0045       | 100 | 0   | T-support, 1.4541, TA 120G 115 W3<br>1.4 Hesterberg<br>115 | 10,70 kg   | 9,00  |           |         |       | 0,00   |
| SC19        | 32  | 0   | SEGMENT CUT<br>42,4                                        |            | 3,00  |           |         |       | 0,00   |
| SC5         | 50  | 0   | Segment cut<br>60,3                                        |            | 1,00  |           |         |       | 0,00   |
| SC7         | 100 | 0   | Segment cut<br>114,3                                       |            | 19,00 |           |         |       | 0,00   |
| SPG01       | 0   | 0   | PIPE GUIDE<br>1.0 HESTERBERG                               |            | 3,00  |           |         |       | 0,00   |
| SPS142      | 0   | 0   | SUPPORT PS-142<br>pipe support                             | 19,93 kg   | 1,00  |           |         |       | 0,00   |
| SPS267      | 0   | 0   | SUPPORT PS-267, L 50, L=200                                | 0,75 kg    | 1,00  |           |         |       | 0,00   |
| SPS268      | 0   | 0   | SUPPORT PS-268, H 100, L=700                               | 14,28 kg   | 1,00  |           |         |       | 0,00   |
| SPS269      | 0   | 0   | SUPPORT PS-269, H 100, L=600                               | 12,24 kg   | 1,00  |           |         |       | 0,00   |

Preis-Stückliste 0 100N20004ZB40C1 0 100 N 20004 ZB40C1 Revision:

(Fortsetzung)

| Teilenummer                | NW1 | NW2 | Teilebezeichnung                                         | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|----------------------------|-----|-----|----------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| XZB02                      | 100 | 15  | welding nozzle for pressure gauge, drawi<br>1.4541<br>22 |            | 1,00  |           |         |       | 0,00   |
| XZB03                      | 100 | 15  | welding nozzle for sample line, drawing<br>1.4541<br>22  |            | 1,00  |           |         |       | 0,00   |
| XZB04                      | 100 | 15  | welding nozzle for thermowell, drawing N<br>1.4541<br>22 |            | 3,00  |           |         |       | 0,00   |
| Summe: 0 100N20004ZB40C1 0 |     |     |                                                          | 728,57 kg  |       | 0,00      | 0,00    |       | 0,00   |

|                     |           |
|---------------------|-----------|
| Liefersumme:        |           |
| Montagesumme:       |           |
| Gesamtsumme:        | 728,57 kg |
| Gesamtgewicht:      |           |
| ** Ende der Ausgabe |           |

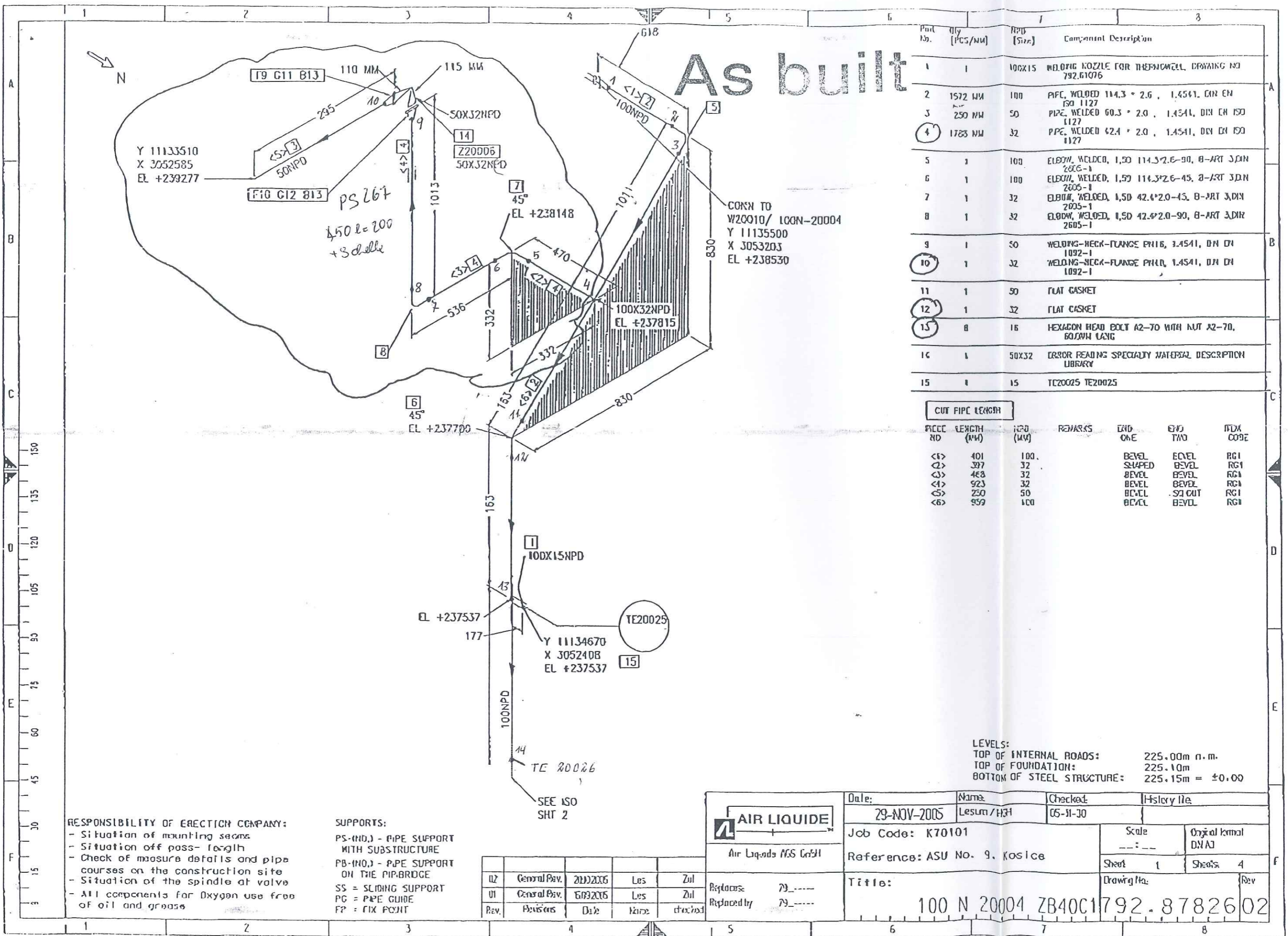
AS BUILT



מס. 100.20004

מס. 100.20004

מס. 100.20004



| Part No. | Qty (PCS/MM) | Size   | Component Description                                |
|----------|--------------|--------|------------------------------------------------------|
| 1        | 1            | 100X15 | WELDING NOZZLE FOR THERMOWELL, DRAWING NO 792.61076  |
| 2        | 1572 MM      | 100    | PFC, WELDED 114.3 * 2.6 , 1.4541, DIN EN ISO 1127    |
| 3        | 250 MM       | 50     | PIPE, WELDED 60.3 * 2.0 , 1.4541, DIN EN ISO 1127    |
| 4        | 1783 MM      | 32     | PFC, WELDED 62.4 * 2.0 , 1.4541, DIN EN ISO 1127     |
| 5        | 1            | 100    | ELBOW, WELDED, 1.50 114.3*2.6-90, B-ART 3 DIN 2605-1 |
| 6        | 1            | 100    | ELBOW, WELDED, 1.50 114.3*2.6-45, B-ART 3 DIN 2605-1 |
| 7        | 1            | 32     | ELBOW, WELDED, 1.50 42.4*2.0-45, B-ART 3 DIN 2605-1  |
| 8        | 1            | 32     | ELBOW, WELDED, 1.50 42.4*2.0-90, B-ART 3 DIN 2605-1  |
| 9        | 1            | 50     | WELDING-NECK-FLANGE PH16, 1.4541, DIN EN 1092-1      |
| 10       | 1            | 32     | WELDING-NECK-FLANGE PH16, 1.4541, DIN EN 1092-1      |
| 11       | 1            | 50     | FLAT GASKET                                          |
| 12       | 1            | 32     | FLAT GASKET                                          |
| 13       | 8            | 16     | HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 60/34MM LONG |
| 14       | 1            | 50X32  | ERROR READING SPECIALTY MATERIAL DESCRIPTION LIBRARY |
| 15       | 1            | 15     | TE20025 TE20025                                      |

| CUT PIPE LENGTH |             |          |         |         |         |            |
|-----------------|-------------|----------|---------|---------|---------|------------|
| PIPE NO         | LENGTH (MM) | ISO (MM) | REMARKS | END ONE | END TWO | INDEX CODE |
| <1>             | 401         | 100      |         | BEVEL   | BEVEL   | RC1        |
| <2>             | 387         | 32       |         | SHAPED  | BEVEL   | RC1        |
| <3>             | 468         | 32       |         | BEVEL   | BEVEL   | RC1        |
| <4>             | 923         | 32       |         | BEVEL   | BEVEL   | RC1        |
| <5>             | 250         | 50       |         | BEVEL   | SC CUT  | RC1        |
| <6>             | 959         | 100      |         | BEVEL   | BEVEL   | RC1        |

LEVELS:  
TOP OF INTERNAL ROADS: 225.00m n.m.  
TOP OF FOUNDATION: 225.10m  
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:  
- Situation of mounting seats  
- Situation off pass- length  
- Check of measure details and pipe courses on the construction site  
- Situation of the spindle at valve  
- All components for Oxygen use free of oil and grease

SUPPORTS:  
PS-(INO.) - PIPE SUPPORT WITH SUBSTRUCTURE  
PB-(INO.) - PIPE SUPPORT ON THE PIPE BRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT

| Rev. | Revisions    | Date       | Name | checked |
|------|--------------|------------|------|---------|
| 02   | General Rev. | 20/12/2005 | Les  | Zul     |
| 01   | General Rev. | 16/03/2005 | Les  | Zul     |

Air Liquide MCS GmbH

Date: 29-NOV-2005

Name: Lesum/H31

Checked: 05-11-10

History file

Job Code: K70101

Reference: ASU No. 9. Kosice

Title: 100 N 20004 ZB40C1792.8782602

Scale: ---

Original format: DWA3

Sheet: 1

Sheets: 4

Drawing No:

Rev:



Job Code: K70101 ASU No. 9, Kosice Order No.:

**Title:** 100 N 20004

**Drawing No.:**

**792.87826 - 01**

**Maker's No.:**

(Kunde / TÜV, ...)

geprüft

erstellt:

Schweisstechnologie VAM

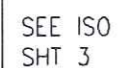
**Datum / Unterschrift**

**Datum / Unterschrift**

1

Kosice

 N



SUPPORTS:

PS-(NO.) - PIPE SUPPORT  
WITH SUBSTRUCTURE

PB-(NO.) - PIPE SUPPORT  
ON THE PIPIBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT



**AIR LIQUIDE**

Replaces: 79\_-----  
Replaced by: 79\_-----

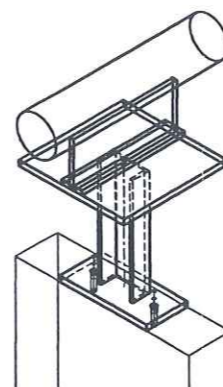
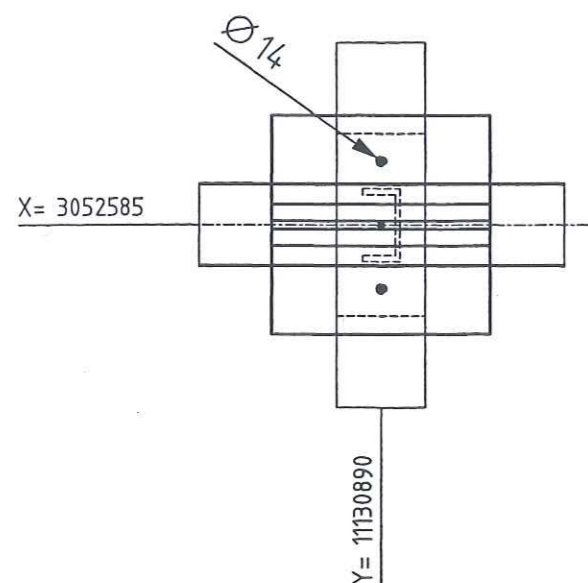
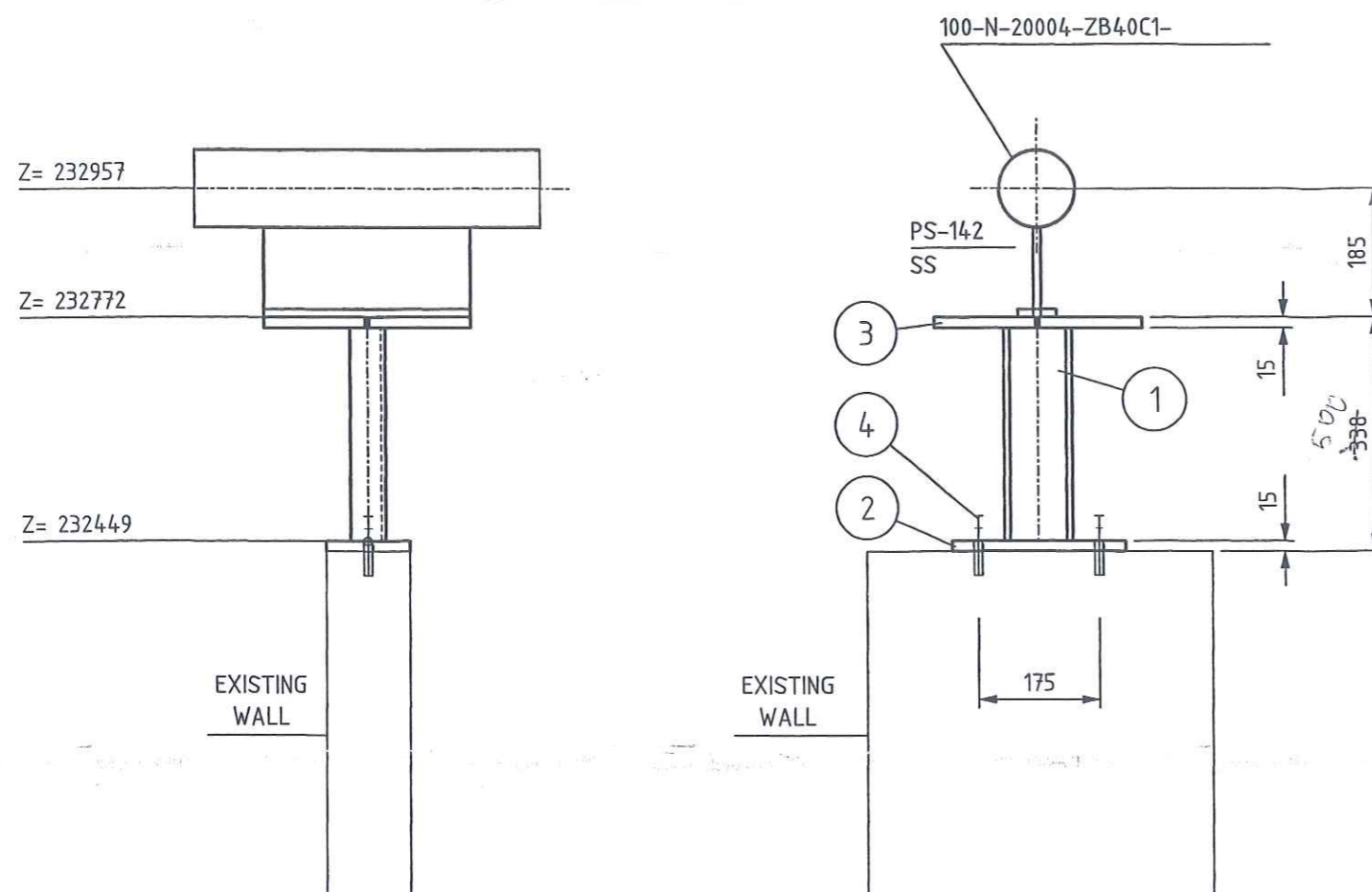
LEVELS:

|                            |                      |
|----------------------------|----------------------|
| TOP OF INTERNAL ROADS:     | 225,00m n.m.         |
| TOP OF FOUNDATION:         | 225,10m              |
| BOTTOM OF STEEL STRUCTURE: | 225,15m = $\pm 0,00$ |

CUT PIPE LENGTH

| PIECE NO | LENGTH (MM) | NPD (MM) | REMARKS | END ONE | END TWO | ITEM CODE |
|----------|-------------|----------|---------|---------|---------|-----------|
| <1>      | 4528        | 100      |         | BEVEL   | BEVEL   | RG1       |
| <2>      | 6767        | 100      |         | BEVEL   | BEVEL   | RG1       |
| <3>      | 1168        | 100      |         | BEVEL   | BEVEL   | RG1       |
| <4>      | 1196        | 100      |         | BEVEL   | BEVEL   | RG1       |
| <5>      | 6383        | 100      |         | BEVEL   | BEVEL   | RG1       |

# As built



|                     |      |         |             |       |      |
|---------------------|------|---------|-------------|-------|------|
| Archives<br>Rev.No. | Rev. | Job No. | Description | Sign. | Date |
| R E V I S I O N S   |      |         |             |       |      |

LEGEND:

- ```

-EG-      PIPE GUIDE
-FP-      FIX POINT
-SS-      SLIDE SUPPORT
-HN-      HANGER
-SSAX-    SLIDE SUPPORT WITH AXIAL STOP
-AXLS-    AXIAL STOP WITH LIFTING STOP
-SPS-     SPRING SUPPORT
-SPGS-    SPRING SUPPORT GUIDED
-GSAX-    GUIDE SUPPORT WITH AXIAL STOP
-SPAX-    SPRING SUPPORT WITH AXIAL STOP
-SH-      SPRING HANGER
-AX-      AXIAL STOP

```

-ALL SHARP EDGES REMOVED

-MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M

-FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP
INSIDE WITH PTFE-BAND

-NOT MARKING WELDED SEAMS $a=4\text{mm}$ ROUND

MARKING:

MARKING:
-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER
RESISTANT PAINT AND WHITE COLOR

RESPONSIBILITY OF ERECTION COMPANY

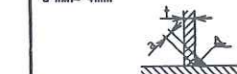
- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

- ALL SURFACES FOR COATING MUST BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED

WELDING DATA ACC. TO DIN 1912 T5

$$a \geq 0,7 \times t$$

$$a_{\min} = 4 \text{ mm}$$


Total Weight:	17.39 kg
---------------	----------

[illegible]

27. Juli 200

Date _____

Name _____

Signature _____

Approved by

Checked by

Checked by _____

Drawn checked by



Air Liquide AGS GmbH

	Date	Name	Check	History File	
	19.07.2005	GU	Zut		
	Job Code:	K70101 ASU No.9 Kosice			Scale:
	Reference:	PIPING SUPPORT			1:10
					Original Format DIN A3
					Sheet: 1 of:
Replaces:	Title	PS-142			Drawing-No. 792.87926

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot. Nr.

Jop Code: K70101 ASU No. 9, Kosice Order No.:

Client: AIR LIQUIDE Title: 100 N 20004

Sheet 3

Drawing No.: 792.87826 - 01

Maker's No.:

(Kunde / TÜV, ...)

geprüft

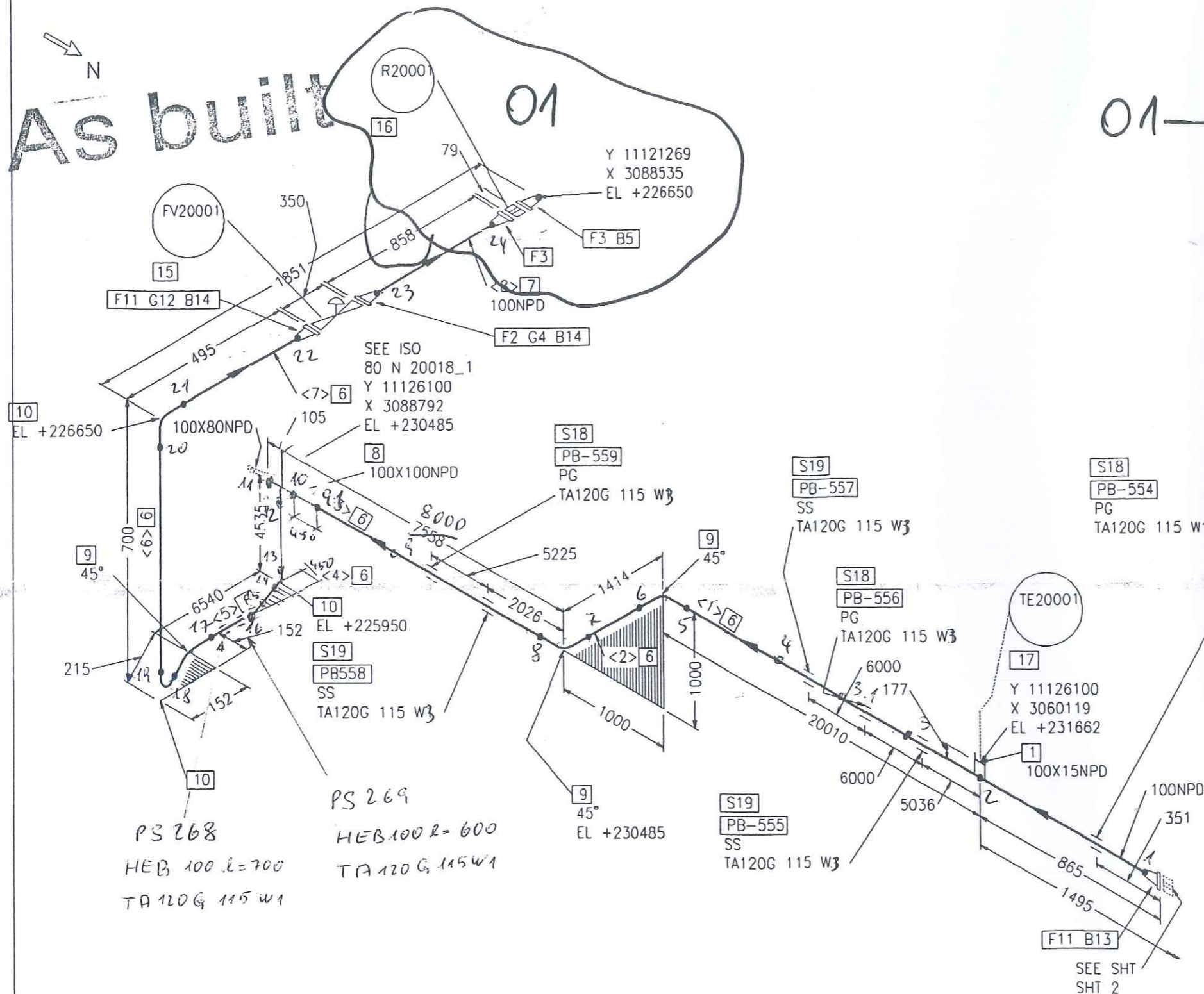
erstellt:

10.02.06
Pelzeder Erich
Datum / UnterschriftSchweisstechnologie VAM
Datum / Unterschrift

Datum / Unterschrift

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:			Wärme- behandlung	RT	UT	MT/PT	SP	Remerk
1	V2	1.4541	114,3*2,6									
2	V2	1.4541	NP15									
3	V9	1.4541	114,3*2,6									
3,1	V9	1.4541	114,3*2,6									
4	V9	1.4541	114,3*2,6									
5	V9	1.4541	114,3*2,6									
6	V2	1.4541	114,3*2,6									
7	V2	1.4541	114,3*2,6									
8	V2	1.4541	114,3*2,6									
9	V9	1.4541	114,3*2,6									
9,1	V9	1.4541	114,3*2,6									
10	V9	1.4541	114,3*2,6									
11	V2	1.4541	114,3*2,6									
12	V2	1.4541	114,3*2,6									
13	V9	1.4541	114,3*2,6									
14	V9	1.4541	114,3*2,6					R0112				
15	V9	1.4541	114,3*2,6					R0113				
16	V9	1.4541	114,3*2,6									
17	V2	1.4541	114,3*2,6									
18	V2	1.4541	114,3*2,6									
19	V2	1.4541	114,3*2,6									
20	V9	1.4541	114,3*2,6									
21	V2	1.4541	114,3*2,6									
22	V2	1.4541	114,3*2,6									
23	V2	ST37.0	114,3*3,6									
24	V2	ST37.0	114,3*3,6									

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	100X15	WELDING NOZZLE FOR THERMOWELL, DRAWING NO. 792.61076
2	1	100	WELDING-NECK-FLANGE PN40, S235JRG2, DIN EN 1092-1
3	2	100	WELDING-NECK-FLANGE PN63, S235JRG2, DIN EN 1092-1
4	1	100	FLAT GASKET
5	8	24	STUD BOLT 5.6 WITH 2 NUTS 5-2, 210.0MM LANG
6	40702 MM	100	PIPE, WELDED 114.3 * 2.6, 1.4541, DIN EN ISO 1127
7	728 MM	100	PIPE, SEAMLESS 114.3*3.6, ST37.0, DIN EN 10220
8	1	100X100	TEE, WELDED 114.3*6.3/114.3*6.3, 1.4541, DIN 2615-1
9	3	100	ELBOW, WELDED, 1.5D 114.3*2.6-45, B-ART 3,DIN 2605-1
10	3	100	ELBOW, WELDED, 1.5D 114.3*2.6-90, B-ART 3,DIN 2605-1
11	2	100	WELDING-NECK-FLANGE PN40, 1.4541, DIN EN 1092-1
12	1	100	FLAT GASKET
13	8	20	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 140.0MM LANG
14	16	20	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 80.0MM LANG
15	1	100	FV20001 FV20001
16	1	100	R20001 R20001
17	1	15	TE20001 TE20001
18	3	100	PIPE GUIDE PSUPPORT
19	3	100	SLIDE SUPPORT PSUPPORT

* SEE ISO SHT 4 *

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation of pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

AIR LIQUIDE Air Liquide AGS GmbH	Date:	16-SEP-2005	Name:	Lesum / HGH	Checked:	05-09-15	History file:
	Job Code:	K70101	Reference:	ASU No. 9, Kosice	Scale:	1:1	Original format:
	Replaces:	79_-----	Replaced by:	79_-----	Sheet:	3	Sheets:
	Title:				100 N 20004 ZB40C1792.8782601		

Rev.	Revisions	Date	Name	checked
01	General Rev	15.09.2005	Les	Zul



As built

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
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* SEE SHT SHT 3 *

CUT PIPE LENGTH


PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	20747	100		BEVEL	BEVEL	RG1
<2>	1288	100		BEVEL	BEVEL	RG1
<3>	7390	100		BEVEL	BEVEL	RG1
<4>	4278	100		BEVEL	BEVEL	RG1
<5>	6325	100		BEVEL	BEVEL	RG1
<6>	396	100		BEVEL	BEVEL	RG1
<7>	278	100		BEVEL	BEVEL	RG1
<8>	728	100		BEVEL	BEVEL	RN

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
01	General Rev	15.09.2005	Les	Zul

 Air Liquide AGS GmbH	Date: 16-SEP-2005	Name: Lesum / HCH	Checked: 05-09-15	History file.	
	Job Code: K70101			Scale: ---:---	Original format: DIN A3
	Reference: ASU No. 9. Kosice			Sheet: 4	Sheets: 4
	Title: 100 N 20004 ZB40C1792.8782601			Drawing No.	Rev.

Preis-Stückliste 0 250O20006ZB40C1 1 250 O 20006 ZB40C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0088	30	120	HEXAGON HEAD SCREWS A2-70 resp. A2-50 DIN EN ISO 3506	0,88 kg	24,00				0,00
B0091	30	180	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	1,20 kg	12,00				0,00
B0092	30	190	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	1,40 kg	12,00				0,00
B0527	30	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,22 kg	48,00				0,00
G0117	250	0	Flat packings Graphite with CrNi-insert Standard 40002 353x2x274		7,00				0,00
GW17	100	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 114,3x2,6		4,00				0,00
GW23	150	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 168,3x4,5		2,00				0,00
GW29	250	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 273x6,3		40,00				0,00
IFE20011	250	0	FE20011 supplied by AGS		1,00				0,00
IFV20011	250	0	FV20011 supplied by AGS		1,00				0,00
IPT20011	15	0	PT20011 supplied by AGS		1,00				0,00
IQE20011	15	0	QE20011 supplied by AGS		1,00				0,00
IQE20012	15	0	QE20012 supplied by AGS		1,00				0,00
IR20011	250	0	R20011 supplied by AGS		1,00				0,00

Preis-Stückliste 0 250O20006ZB40C1 1 250 O 20006 ZB40C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
ITE20011	15	0	TE20011 supplied by AGS		1,00				0,00
ITE20027	15	0	TE20027 supplied by AGS		1,00				0,00
ITE20028	15	0	TE20028 supplied by AGS		1,00				0,00
IV20011H2	15	0	V20011H2 supplied by AGS		1,00				0,00
IV20011H3	15	0	V20011H3 supplied by AGS		1,00				0,00
IV20012H1	15	0	V20012H1 supplied by AGS		1,00				0,00
IZ20027	100	150	Z20027 supplied by AGS		1,00				0,00
P0137	100	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 114,3x2,6	7,27 kg	1,05				0,00
P0144	250	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 273x5	33,50 kg	62,60				0,00
P0290	100	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 114,3x2,6	1,74 kg	1,00				0,00
P0300	250	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 273x6,3	25,14 kg	12,00				0,00
P1158	250	150	Tee made of welded pipe 1.4541 (X 6 CrNiTi 18 10) DIN 2609 273x14,2x168,3x11	44,50 kg	1,00				0,00
P1160	250	100	TEE MADE OF WELDED PIPE 1.4541	21,00 kg	1,00				0,00

Preis-Stückliste 0 250O20006ZB40C1 1 250 O 20006 ZB40C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P3013	250	0	Welding neck flanges; PN 40 1.4541 (X 6 CrNiTi 18 10) DIN EN 1092-273	34,00 kg	6,00				0,00
P3013_A	250	0	WELDING NECK FLANGES, PN 40 1.4541		1,00				0,00
PWI29	250	15	PIPE WELD-IN 1.4541		6,00				0,00
S0045	100	0	T-support, 1.4541, TA 120G 115 W3 1.4 Hesterberg 115	10,70 kg	1,00				0,00
S0072	250	0	Web-support, 1.4541, SV 150B 273 W3 1.4 Hesterberg 273	30,90 kg	1,00				0,00
S0083	250	0	Web-support, 1.4541, SV 150G 273 W3 1.4 Hesterberg 273	49,60 kg	10,00				0,00
SC11	250	0	Segment cut 273		22,00				0,00
SC7	100	0	Segment cut 114,3		2,00				0,00
SC9	150	0	Segment cut 168,3		1,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		5,00				0,00
SPS107	0	0	SUPPORT PS-107 pipe support	212,32 kg	1,00				0,00
SPS115	0	0	SUPPORT PS-115 pipe support	19,28 kg	1,00				0,00
SPS141	0	0	SUPPORT PS-141 pipe support	19,93 kg	1,00				0,00
SPS270	0	0	SUPPORT PS-270, H 100, L=100	19,28 kg	1,00				0,00

Preis-Stückliste 0 250O20006ZB40C1 1 250 O 20006 ZB40C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SPS429	0	0	SUPPORT PS-429, H 100, L=400	8,16 kg	1,00				0,00
XZB02	250	15	welding nozzle for pressure gauge, drawi 1.4541 22		1,00				0,00
XZB03	250	15	welding nozzle for sample line, drawing 1.4541 22		2,00				0,00
XZB04	250	15	welding nozzle for thermowell, drawing N 1.4541 22		3,00				0,00
Summe: 0 250O20006ZB40C1 1				3.557,10 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	3.557,10 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Prot Nr.

Jop Code: K70101 ASU No. 9, Kosice

Client:	AIR LIQUIDE	Title:	250 O 20006
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Sheet 1

Drawing No.:

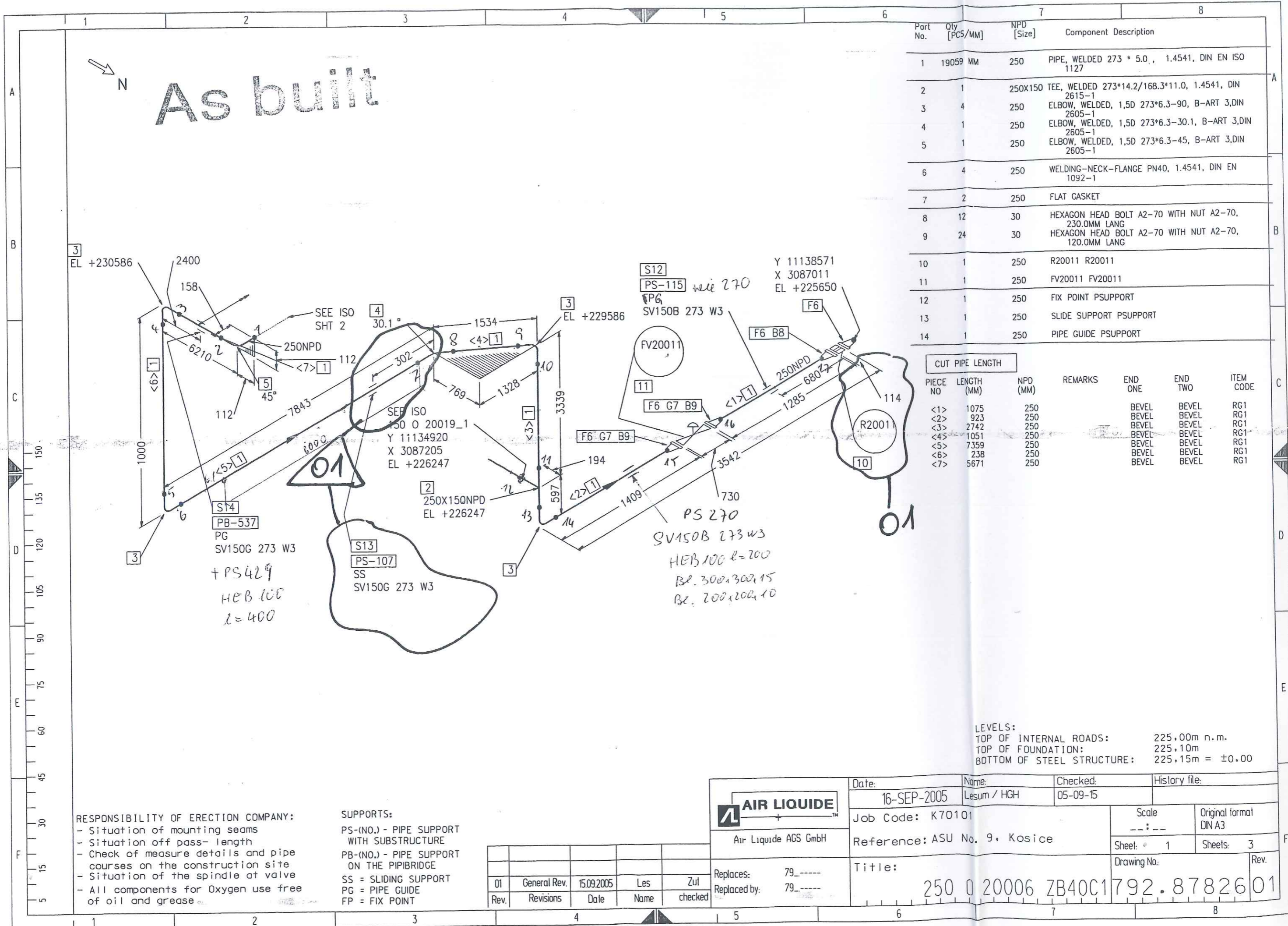
792.87826 - 01	Maker's No.:
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(Kunde / TÜV, ...)

geprüft

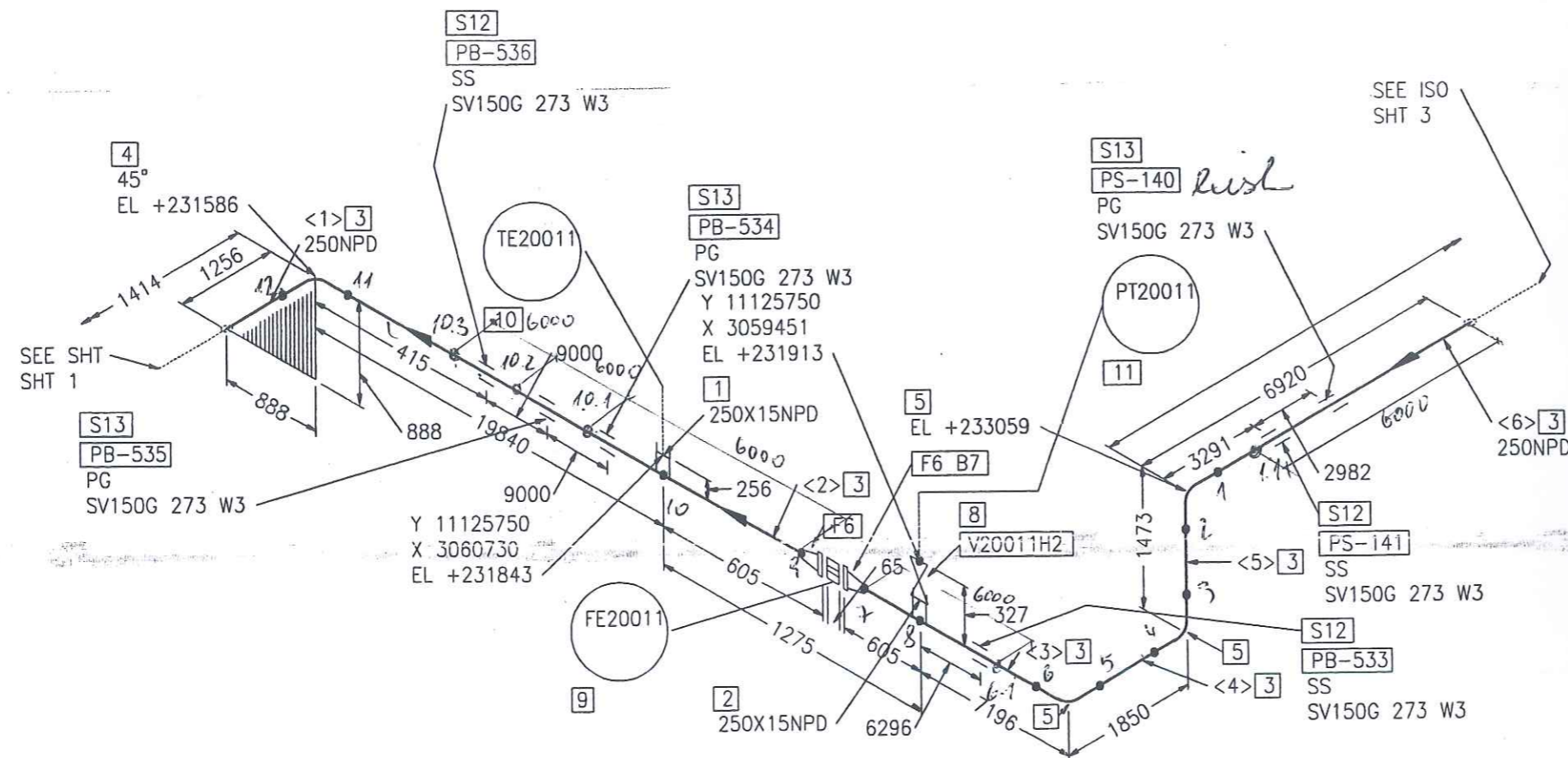
Mo. 07.06.2021
Pelzeder Enich
Datum / Unterschrift

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N



CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	1098	250		BEVEL	BEVEL	RG1
<2>	20182	250		BEVEL	BEVEL	RG1
<3>	7315	250		BEVEL	BEVEL	RG1
<4>	1088	250		BEVEL	RFL	RG1
<5>	710	250		BEVEL	BEVEL	RG1
<6>	6539	250		BEVEL	BEVEL	RG1

LEVELS:	
TOP OF INTERNAL ROADS:	225,00m n.m.
TOP OF FOUNDATION:	225,10m
BOTTOM OF STEEL STRUCTURE:	225,15m = $\pm 0,00$

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT
WITH SUBSTRUCTURE


PB-(NO.) - PIPE SUPPORT
ON THE PIPEBRIDGE

SS = SLIDING SUPPORT

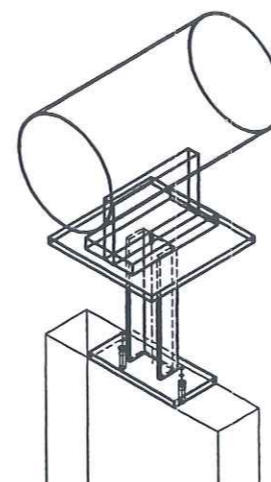
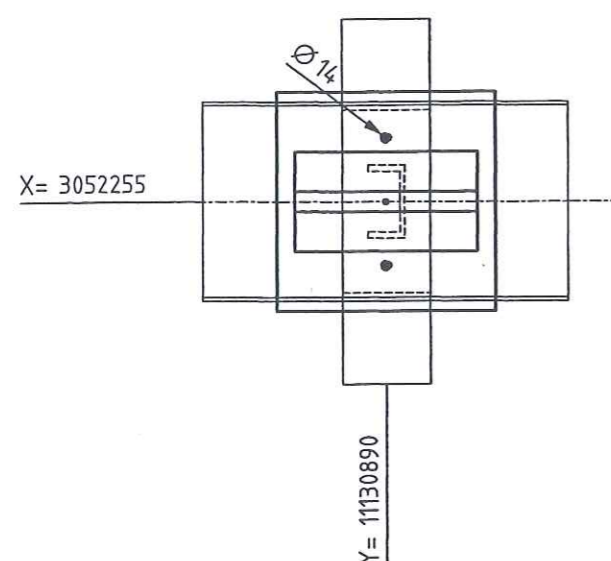
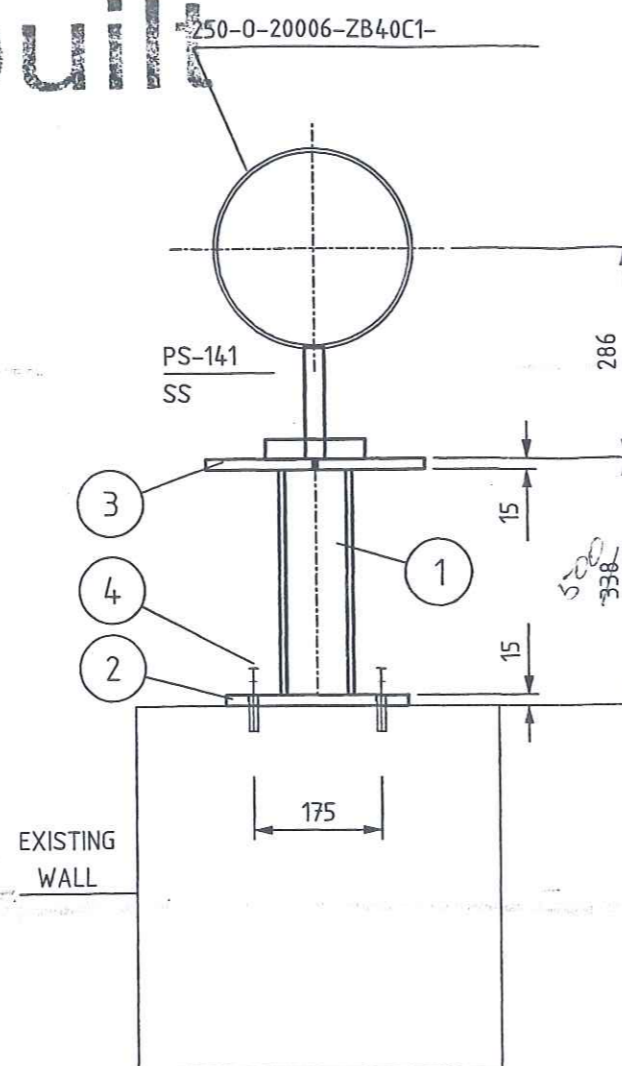
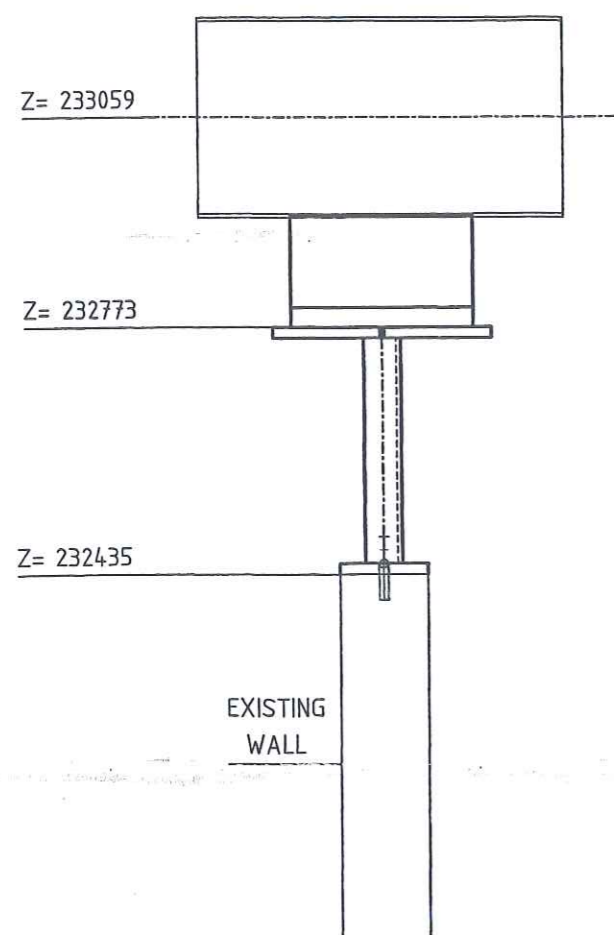
PG = PIPE GUIDE

FP = FIX POINT

01	General Rev.	15.09.2005	Les	Zul
Rev	Revisions	Date	Name	checker

 AIR LIQUIDE <small>TM</small>		Date:	Name:	Checked:	History file:
		16-SEP-2005	Lesum / HGH	05-09-15	
Air Liquide AGS GmbH		Job Code: K70101	Scale ---:---		Original format DIN A3
		Reference: ASU No. 9, Kosice	Sheet: 2		Sheets: 3
Replaces: 79_-----	Title:			Drawing No.	
Replaced by: 79_-----	250 0 20006 ZB40C1			792.8782601	

As built



LEGEND:

- | | |
|--------|--------------------------------|
| -PG- | PIPE GUIDE |
| -FP- | FIX POINT |
| -SS- | SLIDE SUPPORT |
| -HN- | HANGER |
| -SSAX- | SLIDE SUPPORT WITH AXIAL STOP |
| -AXLS- | AXIAL STOP WITH LIFTING STOP |
| -SPS- | SPRING SUPPORT |
| -SPGS- | SPRING SUPPORT GUIDED |
| -GSAX- | GUIDE SUPPORT WITH AXIAL STOP |
| -SPAX- | SPRING SUPPORT WITH AXIAL STOP |
| -SH- | SPRING HANGER |
| -AX- | AXIAL STOP |

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS $a=4\text{mm}$ ROUND

MARKING:

- MARKING:
-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER
RESISTANT PAINT AND WHITE COLOR

RESPONSIBILITY OF ERECTION COMPANY

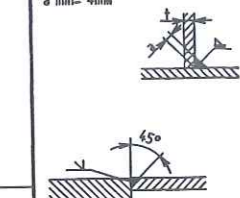
- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

- ALL SURFACES FOR COATING **MUST** BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX **AND** DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE **REMOVED**
- THE SUPPORT NEEDS TO BE PRIME COATED

WELDING DATA ACC. TO DIN 1912 T5

$$a \geq 0,7 \times t$$


$$a_{\min} = 4 \text{ mm}$$


Total Weight:	17.39 kg
---------------	----------

[illegible]

27. Juli 2005

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by		Zut	<i>[Signature]</i>
Drawn checked by			





AIR LIQUIDE™

Air Liquide AGS GmbH

	Date	Name	Check	History File
	19.07.2005	GU	Zuf	
	Job Code:	K70101 ASU No.9 Kosice		
	Reference:	PIPING SUPPORT		
		Scale:	1:10	Original Format DIN A3
		Sheet:	1	of:
Replaces:	Title	PS-141		
		Drawing-No.	792.87926	

Archives Rev No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

NR. 525 S.4

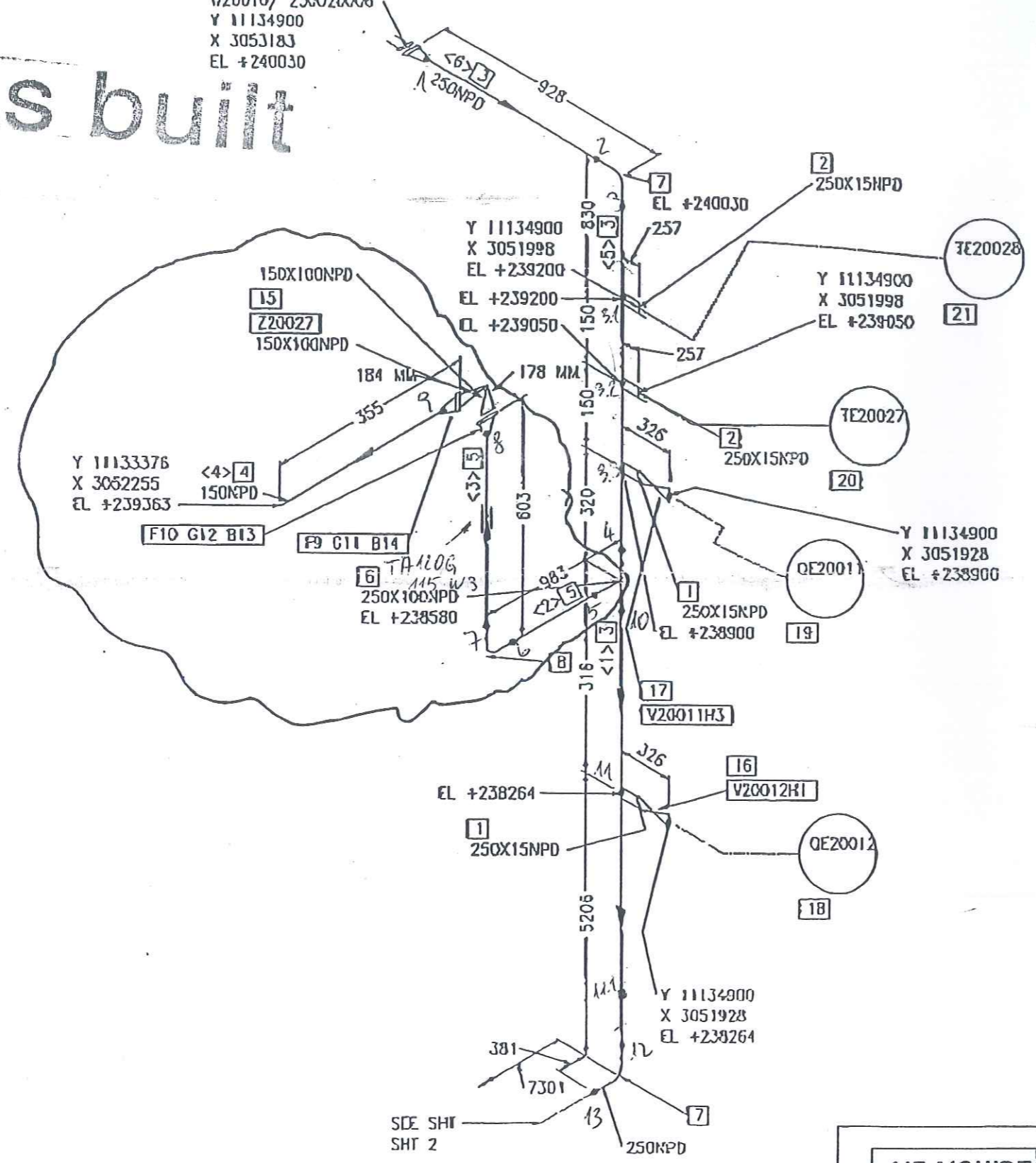
11.000.000 10.000

11.000.000 10.000



As built

CONN TO
W20010/ 250020006
Y 11134900
X 3053183
EL +240030



Part No.	Qty [PCS/MM]	WPD [Size]	Component Description
1	2	250X15	WELDING NOZZLE FOR PRESSURE GAUGE, DRAWING NO. 792.55381
2	2	250X15	WELDING NOZZLE FOR THERMOWELL, DRAWING NO. 792.61076
3	6219 MM	250	RPE, WELDED 273 * 5.0 , 1.4541, CIN EN ISO 1127
4	303 MM	150	RPE, WELDED 163.3 * 2.6 , 1.4541, CIN EN ISO 1127
5	1033 MM	100	RPE, WELDED 114.3 * 2.6 , 1.4541, CIN EN ISO 1127
6	1	250X100	TEE, WELDED 273*8.8/114.3*6.3, 1.6541, DIN 2615-1
7	2	250	ELBOW, WELDED, 150 273*6.3-90, B-ART 3.0M 2605-1
8	1	100	ELBOW, WELDED, 150 114.3*2.6-90, B-ART 3.0M 2605-1
9	1	150	WELDING-NECK-FLANGE PN16, 1.4541, CIN EN 1092-1
10	1	100	WELDING-NECK-FLANGE PN40, 1.4541, CIN EN 1092-1
11	1	150	FLAT GASKET
12	1	100	FLAT GASKET
13	8	20	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 80MM LONG
14	8	20	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 70MM LONG
15	1	150X100	TEE 26027
16	1	15	V20012H1
17	1	15	V20011H3
18	1	15	OE20012 OE20012
19	1	15	OE20011 OE20011
20	1	15	TE20027 TE20027
21	1	15	TE20028 TE20028


SEE ISO SHIT 4

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation of pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle of valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(ND)- PIPE SUPPORT WITH SUBSTRUCTURE
PB-(ND)- PIPE SUPPORT ON THE BRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
02	General Rev	20/11/2005	Les	Z-l
01	General Rev	10/09/2005	Les	Z-l

 Air Liquide PDS Crb11	Date:	30-NOV-2005	Name:	Lesum / HQT	Checked:	05-11-00	History file:
	Job Code: K70101				Scale:	---	Original format:
	Reference: ASU No. 9, Kosice				Sheet:	3	Sheet:
	Title:				Drawing No:		
Replaces: 79----				250 0 20006 ZB40C1792.8782602			
Replaced by: 79----							

Preis-Stückliste 0 600N20008AA10C1 0 600 N 20008 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0008	16	65	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,13 kg	4,00				0,00
B0065	27	250	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	1,35 kg	20,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	4,00				0,00
B0520	27	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,17 kg	20,00				0,00
G0099	40	0	Flat packings Graphite with CrNi-insert Standard 40002 92x2x49		1,00				0,00
G0140	600	0	Flat packings Graphite with CrNi-insert Standard 40002 695x2x620		3,00				0,00
GW34	400	0	girth weld 1.0254 (St 37.0) 406,4x6,3		3,00				0,00
GW36	600	0	girth weld 1.0254 (St 37.0) 610x6,3		20,00				0,00
GW9	40	0	girth weld 1.0254 (St 37.0) 48,3x2,6		1,00				0,00
IEXP20008	600	0	EXP20008 supplied by AGS		1,00				0,00
IFE20005	40	0	FE20005 supplied by AGS		1,00				0,00
IFK20005	600	0	FK20005 supplied by AGS		1,00				0,00
IPICAH200	15	0	PICAH20005 supplied by AGS		1,00				0,00

Preis-Stückliste 0 600N20008AA10C1 0 600 N 20008 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
IQE20005	15	0	QE20005 supplied by AGS		1,00				0,00
ITE20005	15	0	TE20005 supplied by AGS		1,00				0,00
ITE20023	15	0	TE20023 supplied by AGS		1,00				0,00
IV20005H2	15	0	V20005H2 supplied by AGS		1,00				0,00
IV20005H3	15	0	V20005H3 supplied by AGS		1,00				0,00
P0105	600	0	pipe, welded 1.0254 (St 37.0) DIN 1626 610x6,3	93,80 kg	41,80				0,00
P0261	600	0	Elbow 90° R=1,5 DA, welded 1.0254 (St 37.0) DIN 2609 610x6,3	134,67 kg	5,00				0,00
P0911	600	400	Tee made of welded pipe 1.0254 (St 37.0) DIN 2609 610x12,5x406,4x8,8	176,48 kg	2,00				0,00
P1644	600	400	Reducer, concentric, welded 1.0254 (St 37.0) DIN 2609 610x6,3x406,4x6,3	39,61 kg	1,00				0,00
P2877	40	0	Welding neck flanges; PN 40 1.0038 (S235JRG2) DIN EN 1092-1 48,3	2,00 kg	1,00				0,00
P2955	600	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 610	56,00 kg	2,00				0,00
P2955_A	600	0	WELDING NECK FLANGES, PN 10 1.0038 610	56,00 kg	1,00				0,00

Preis-Stückliste 0 600N20008AA10C1 0 600 N 20008 AA10C1 Revision:

(Fortsetzung)

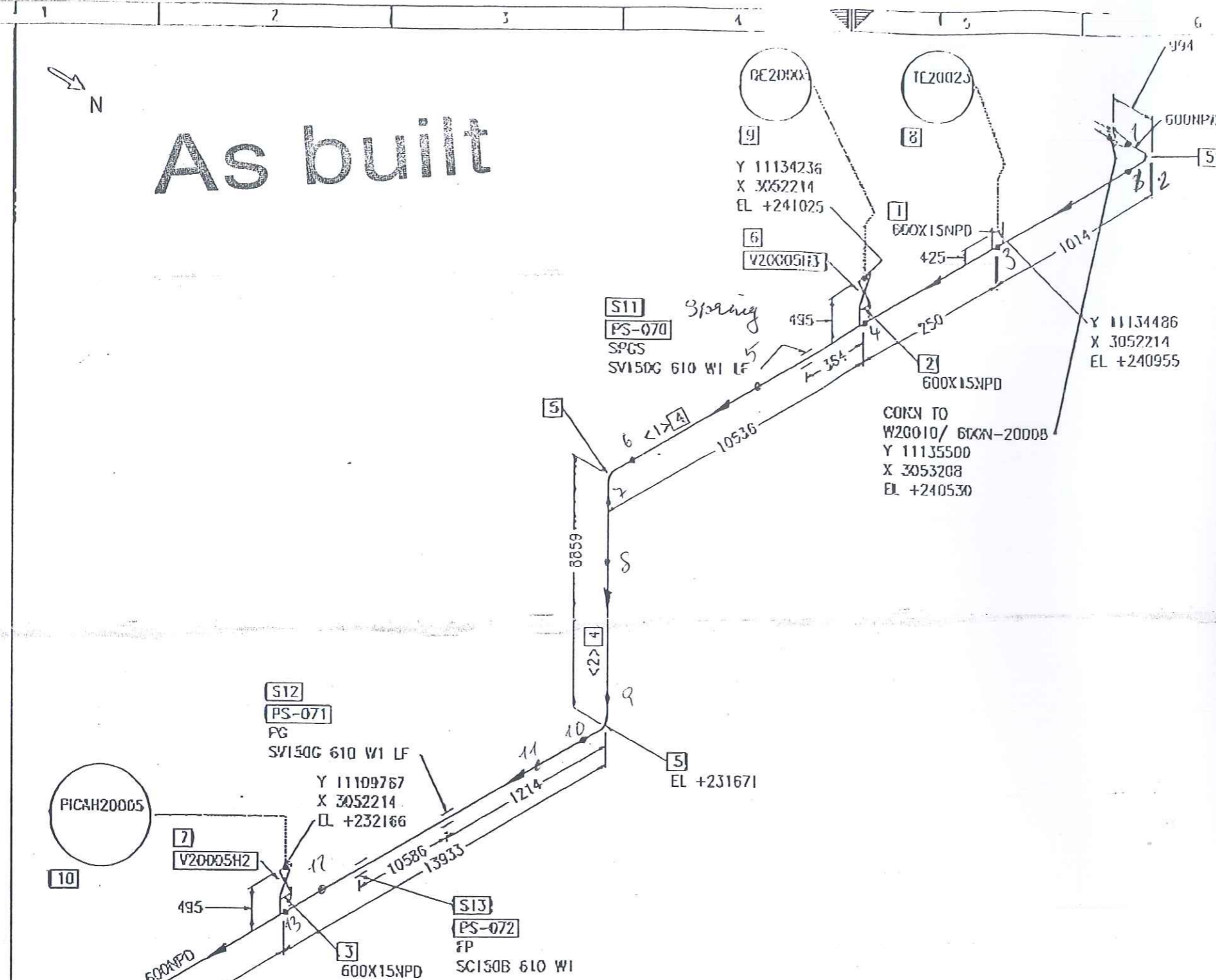
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
PWI26	600	15	PIPE WELD-IN 1.4541		4,00				0,00
PWI42	600	40	PIPE WELD-IN 1.0254		1,00				0,00
S0066	600	0	Web-support, SV 150G 610 W1 OZN LF 1.0 Hesterberg 610	173,30 kg	4,00				0,00
S0202	700	0	SLIDING PLATE 1.0 HESTERBERG		2,00				0,00
SC16	600	0	Segment cut 610		6,00				0,00
SPS070	0	0	SUPPORT PS-070 pipe support	11,10 kg	1,00				0,00
SPS071	0	0	SUPPORT PS-071 pipe support	462,29 kg	1,00				0,00
SPS072	0	0	SUPPORT PS-072 pipe support	825,72 kg	1,00				0,00
SPS073	0	0	SUPPORT PS-073 pipe support	345,06 kg	1,00				0,00
SPS271	0	0	SUPPORT PS-271, L 50, L=250	1,34 kg	2,00				0,00
XZB01	600	40	welding nozzle for flowmeter, supplied b acc. to Mfr. supplied by Mfr. 40		1,00				0,00
XZB02	600	15	welding nozzle for pressure gauge, drawi 1.4541 22		1,00				0,00
XZB03	600	15	welding nozzle for sample line, drawing 1.4541 22		1,00				0,00
XZB04	600	15	welding nozzle for thermowell, drawing N 1.4541 22		2,00				0,00

Preis-Stückliste 0 600N20008AA10C1 0 600 N 20008 AA10C1 Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Summe: 0 600N20008AA10C1 0				7.527,85 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	7.527,85 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

As built



Part No.	Qty [PCS/NO]	NPD [Size]	Component Description
1	1	600X15	WELDING NOZZLE FOR THERMOWELL, DRAWING NO. 792.61026
2	1	600X15	WELDING NOZZLE FOR SAMPLE LINE, DRAWING NO. 792.55981
3	1	600X15	WELDING NOZZLE FOR PRESSURE GAUGE, DRAWING NO. 792.55981
4	30772 W1	600	PPE, WELDED 610X6.3, ST37.0, DN DN 10220
5	5	600	ELBOW, WELDED, 1.5D 610X6.3-90, B-ART 3,071 2005-1
6	1	15	V2000513
7	1	15	V2000512
8	1	15	TE20023 TE20023
9	1	15	TE20015
10	1	15	PCN20005
11	1	600	SPRING SUPPORT GUIDED PSUPPORT
12	1	600	PIPE GUIDE PSUPPORT
13	1	600	FIX POINT PSUPPORT

CUT PIPE LENGTH

PIPE NO	LENGTH (MM)	NPD (MM)	REMARKS	2ND TIME	3RD TIME	ITEM CODE
<1>	9972	600		BENEL	BENEL	RC
<2>	7031	600		BENEL	BENEL	RC

LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.n.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
 - Situation of mounting seams
 - Situation of pass- length
 - Check of measure details and pipe courses on the construction site
 - Situation of the spindle of valve
 - All components for Oxygen use free of oil and grease

SUPPORTS:
 PS-MQ.1 - PIPE SUPPORT WITH SUBSTRUCTURE
 PG-MQ.1 - PIPE SUPPORT ON THE PIPEBRIDGE
 SS = SLIDING SUPPORT
 PG = PIPE GUIDE
 FP = FIX POINT

Rev.	General Rev.	Date	Name	checked
01	General Rev.	20.10.2005	Les	DL
02	General Rev.	05.09.2005	Les	DL
03	Revisions			

AIR LIQUIDE Air Liquide AGS GmbH		Date:	06-SEP-2005	Name:	Lesum / RSH	Checked:	05-09-05	History file:
		Job Code:	K70101	Reference:	ASU No. 9, Kosice	Scale:	1:1	Original format:
Title: 600 N 20008 AA10C1792.8782602		Sheet: 1		Sheets: 2		Drawing No.:		Rev.

As built

The image contains two technical drawings of vertical structures, likely chimneys or towers, showing dimensions and callouts.

Left Structure:

- Overall height: 6062
- Top section height: 459
- Top section width: 1914
- Top section label: PIPE BRIDGE
- Callouts: 1, 3, 4, 7, 8
- Bottom section width: 300
- Bottom section height: 20

Right Structure:

- Overall height: 225150
- Top section height: 12
- Top section width: 1014
- Top section label: PIPE BRIDGE
- Callouts: 2, 5, 6
- Bottom section width: 300
- Bottom section height: 20
- Top section labels: PS-071, PG
- Top section elevation: Z= 231671, Z= 231200

Ø 18

X = 3052214

X = 3051100

Y = 11122486

CONNECT TO
PIPE BRIDGE

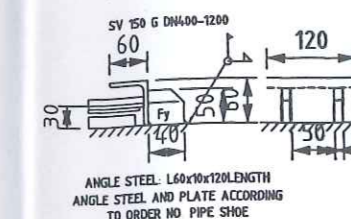
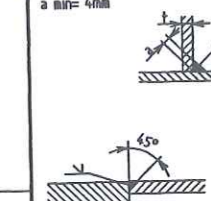
Y = 11124504

A technical drawing of a lamp post. It features a tall, slender, fluted pole with a square base. A single arm extends horizontally from the top of the pole, supporting a single globe. The drawing is a line illustration with no shading.

- PG- PIPE GUIDE
- FP- FIX POINT
- SS- SLIDE SUPPORT
- HN- HANGER
- SSAX- SLIDE SUPPORT WITH AXIAL STOP
- AXLS- AXIAL STOP WITH LIFTING STOP
- SPS- SPRING SUPPORT
- SPGS- SPRING SUPPORT GUIDED
- GSAX- GUIDE SUPPORT WITH AXIAL STOP
- SPAX- SPRING SUPPORT WITH AXIAL STOP
- SH- SPRING HANGER
- AX- AXIAL STOP

MARKING:
-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER
RESISTANT PAINT AND WHITE COLOR


COATING:
-ALL SURFACES FOR COATING MUST BE FREE OF
CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
-THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED
SUPPORT NEEDS TO BE REMOVED
-THE SUPPORT NEEDS TO BE PRIME COATED


 $a \geq 0,7 \times t$ 

Total Weight:	461.08 kg
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[illegible]

27. Juli 2005

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by	25 JUL 2005	Zut	
Drawn checked by			

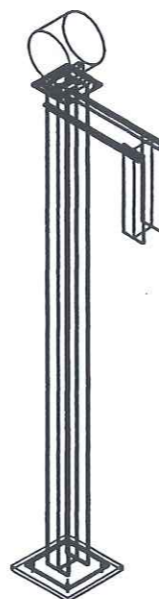
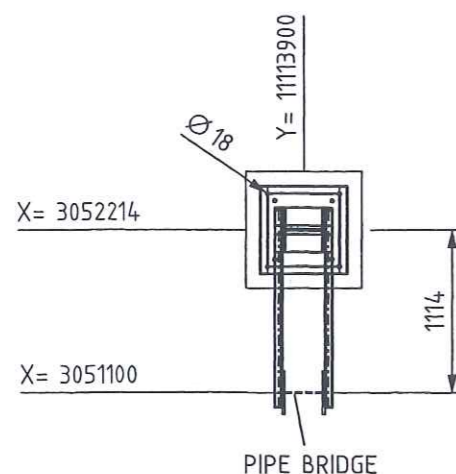

AIR LIQUIDE™

Air Liquide AGS GmbH

	Date	Name	Check.	History File
	15.07.2005	GU	Zut	
	Job Code:	K70101 ASU No.9 Kosice		
	Reference:	PIPING SUPPORT		
		Scale:	1:50	Original Format DIN A3
		Sheet:	1	of:
Replaces:	Title	PS-071		
		Drawing-No.	792.87926	Rev a

Archives Rev. No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

As built

PS-072
FP

CONNECT TO
PIPE BRIDGE

- PG- PIPE GUIDE
- FP- FIX POINT
- SS- SLIDE SUPPORT
- HN- HANGER
- SSAX- SLIDE SUPPORT WITH AXIAL STOP
- AXLS- AXIAL STOP WITH LIFTING STOP
- SPS- SPRING SUPPORT
- SPGS- SPRING SUPPORT GUIDED
- GSAX- GUIDE SUPPORT WITH AXIAL STOP
- SPAX- SPRING SUPPORT WITH AXIAL STOP
- SH- SPRING HANGER
- AX- AXIAL STOP

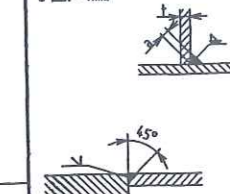
- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND


-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER RESISTANT PAINT AND WHITE COLOR


- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

- ALL SURFACES FOR COATING **MUST** BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX **AND** DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE **REMOVED**
- THE SUPPORT NEEDS TO BE **PRIME COATED**

$a \approx 0,7 \times t$
 $a_{\min} = 4 \text{ mm}$

[illegible]

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by	25 JUL. 2005	Zut	
Drawn checked by			

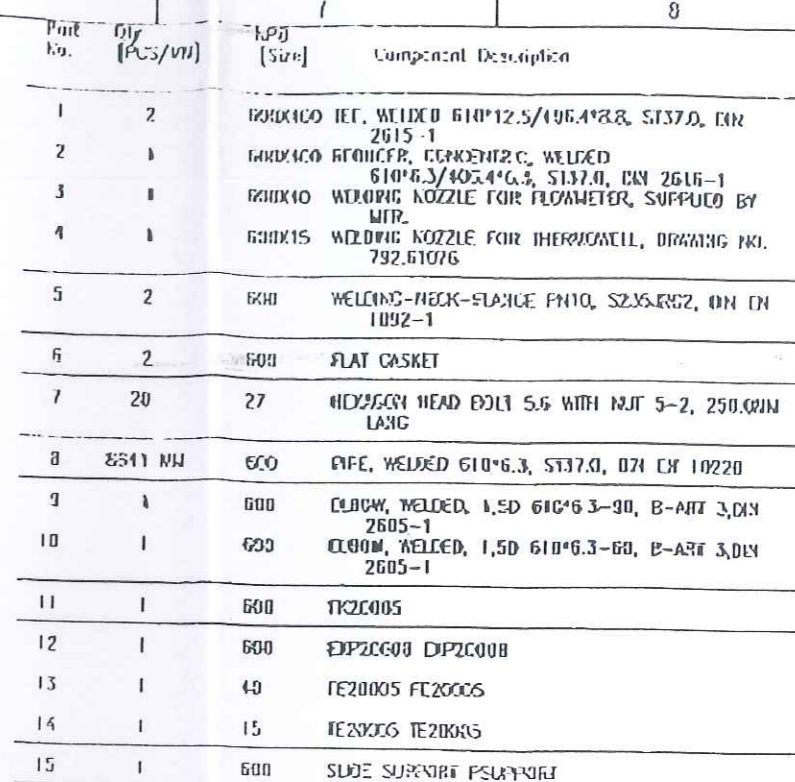

AIR LIQUIDE™

Air Liquide AGS GmbH

Archives Rev. No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

	Date	Name	Check	History File			
	15.07.2005	GU	Zut				
	Job Code:	K70101 ASU No.9 Kosice			Scale:	1:50	Original Format
	Reference:	PIPING SUPPORT			Sheet:	1	of:
Replaces:	Title	PS-072			Drawing-No.	792.87926	Re a

↓



CUT PIPE LENGTH						
PIECE NO.	LENGTH (IN)	NFO (IN)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	116601	600		BCVCL	BCVCL	RG
<2>	4019	600		BCVCL	BCVCL	RG
<3>	441	600		BCVCL	BCVCL	RG
<4>	1349	600		BCVCL	SA CUT	RG

LEVELS:

TOP OF INTERNAL ROADS:	225.00m a.m.
TOP OF FOUNDATION:	225.10m
BOTTOM OF STEEL STRUCTURE:	225.15m = ± 0.00

SUPPORTS:

PS-(NO.) - PIPE SUPPORT
WITH SUBSTRUCTURE

FB-(NO.) - PIPE SUPPORT
ON THE PIPERAGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

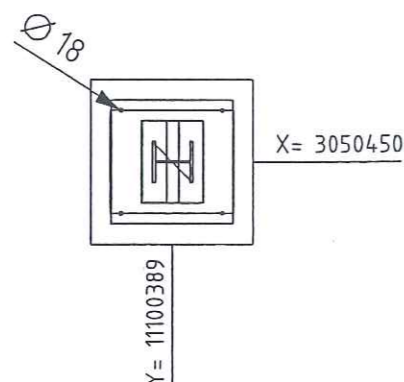
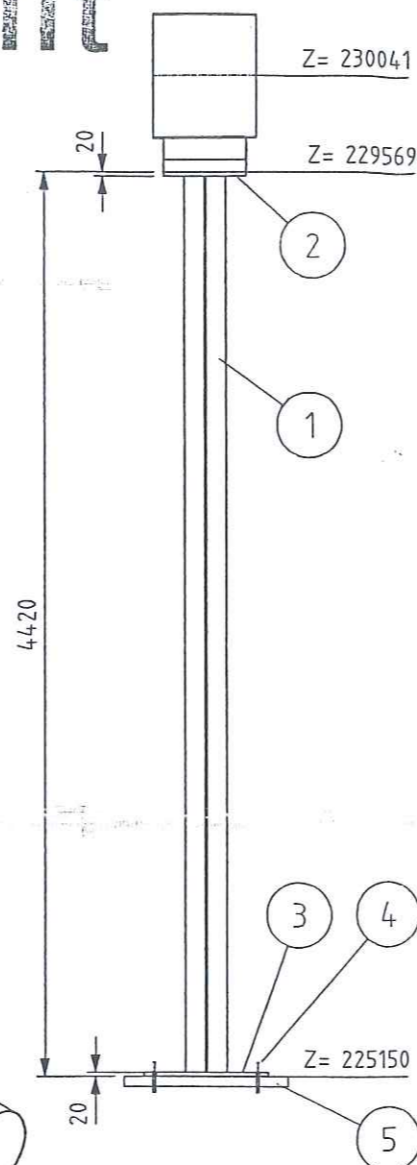
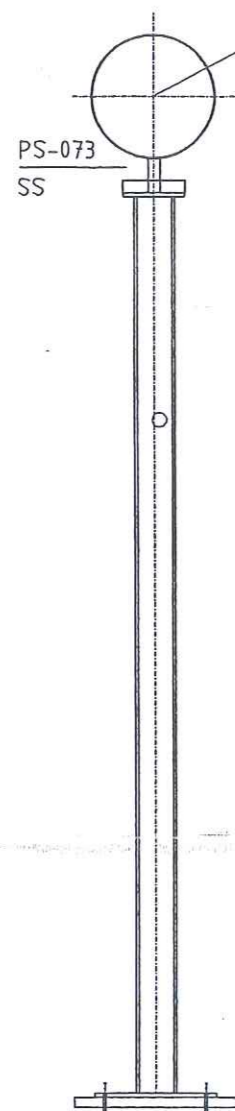
02	General Rev.	20/02/2005	Les	Zul
01	General Rev.	15/09/2005	Les	Zul
Rev	Revisions	Date	Nome	checkbox

Air Liquide AGS GmbH

Replaces	73_---
Replaced by	73_---

Date:	Name:	Checked:	History file:
06-SEP-2005	Lesum / HGH	05-09-15	
Job Code: K70101		Scale ---	Original format DIN A3
Reference: ASU No. 9, Kosice		Sheet 2	Sheets 2
Title:		Drawing No:	
600 N 20008 AA10C1		792-87826	

As built



THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE COPIED OR TRANSFERRED TO THIRD PARTIES WITHOUT PERMISSION OF THE PROPRIETOR.

LEGEND:

-PG-	PIPE GUIDE
-FP-	FIX POINT
-SS-	SLIDE SUPPORT
-HN-	HANGER
-SSAX-	SLIDE SUPPORT WITH AXIAL STOP
-AXLS-	AXIAL STOP WITH LIFTING STOP
-SPS-	SPRING SUPPORT
-SPGS-	SPRING SUPPORT GUIDED
-GSAX-	GUIDE SUPPORT WITH AXIAL STOP
-SPAX-	SPRING SUPPORT WITH AXIAL STOP
-SH-	SPRING HANGER
-AX-	AXIAL STOP

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:
-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER
RESISTANT PAINT AND WHITE COLOR

RESPONSIBILITY OF ERECTION COMPANY.

- LOCATION OF FIELD WELDS
- FITTING LENGHTS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

- ALL SURFACES FOR COATING MUST BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED

RECEIVED

2005 NOV 10

VAN

FREE OF OFFICE

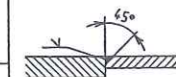
~~LOOSE DUST~~
M THE COMPLETED

RT FROM THE COMPLETED

E COATED

WELDING DATA ACC. TO DIN 1912 T5


a $\geq 0,7 \times t$
a min = 4mm



Total Weight:	343.86 kg
---------------	-----------

[illegible]

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by		Zut	
Drawn checked by			


AIR LIQUIDE

Air Liquide AGS GmbH

	Date	Name	Check.	History File	
	30.09.2005	MG	Zut		
	Job Code:	K70101 ASU No.9 Kosice			Scale
	Reference:	PIPING SUPPORT			1:35
					Original Format DIN A3
					Sheet
					1 of:
Replaces:	Title	PS-073			Drawing-No.
					792.87926

Archives Rev.No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 400N20008_1AA10C1 0 400 N 20008_1 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0018	20	80	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,26 kg	16,00				0,00
B0034	24	90	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,43 kg	52,00				0,00
B0035	24	100	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,48 kg	20,00				0,00
B0044	24	190	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,78 kg	16,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	16,00				0,00
B0519	24	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,11 kg	88,00				0,00
G0128	400	0	FLAT PACKING, PN 6 406,4		1,00				0,00
G0129	400	0	FLAT PACKINGS Graphite with CrNi-insert Standard 40002 490x2x420		4,00				0,00
G0136	500	0	Flat packings Graphite with CrNi-insert Standard 40002 595x2x520		3,00				0,00
GW32	300	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 323,9x7,1		1,00				0,00
GW34	400	0	girth weld 1.0254 (St 37.0) 406,4x6,3		12,00				0,00
GW35	500	0	GIRTH WELD 1.0254 (St 37.0) 508x6,3		8,00				0,00
GW36	600	0	girth weld 1.0254 (St 37.0) 610x6,3		2,00				0,00

Preis-Stückliste 0 400N20008_1AA10C1 0 400 N 20008_1 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
IEXP20020	400	0	EXP20020 supplied by AGS		1,00				0,00
IEXP20030	400	0	EXP20030 supplied by AGS		1,00				0,00
IF77001	500	0	F77001 supplied by AGS		1,00				0,00
IHK70001	400	0	HK70001 supplied by AGS		1,00				0,00
IP170001	15	0	PI70001 supplied by AGS		1,00				0,00
ITE70001	15	0	TE70001 supplied by AGS		1,00				0,00
IV70001H1	15	0	V70001H1 supplied by AGS		1,00				0,00
IX70001	400	0	X70001		1,00				0,00
P0074	500	0	pipe, welded 1.0254 (St 37.0) DIN 1626 508x6,3	77,90 kg	1,18				0,00
P0097	300	0	pipe, welded 1.0254 (St 37.0) DIN 1626 323,9x5,6	44,00 kg	0,25				0,00
P0101	400	0	pipe, welded 1.0254 (St 37.0) DIN 1626 406,4x6,3	62,20 kg	4,16				0,00
P0105	600	0	pipe, welded 1.0254 (St 37.0) DIN 1626 610x6,3	93,80 kg	0,56				0,00
P0230	500	0	Elbow 90° R=1,5 DA, welded 1.0254 (St 37.0) DIN 2609 508x6,3	93,24 kg	3,00				0,00

Preis-Stückliste 0 400N20008_1AA10C1 0 400 N 20008_1 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0257	400	0	Elbow 90° R=1,5 DA, welded 1.0254 (St 37.0) DIN 2609 406,4x6,3	59,60 kg	2,00				0,00
P0910	600	300	TEE MADE OF WELDED PIPE 1.0254	89,00 kg	1,00				0,00
P1643	500	400	REDUCER, CONCENTRIC, WELDED /St 37.0/ DIN 2616-1 508x6,3/406,4x6,3		2,00				0,00
P2889	500	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 508	39,50 kg	4,00				0,00
P2952	400	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 406,4	29,50 kg	4,00				0,00
P3221	400	0	WELDING NECK FLANGES, PN 6 1.0038 406,3		1,00				0,00
PW139	400	15	PIPE WELD-IN 1.4541		2,00				0,00
PW140	600	300	PIPE WELD-IN 1.0254		1,00				0,00
PW141	400	250	PIPE WELD-IN 1.0254		1,00				0,00
SC11	250	0	Segment cut 273		1,00				0,00
SC12	300	0	Segment cut 323,9		1,00				0,00
SC14	400	0	Segment cut 406,4		5,00				0,00
SC15	500	0	Segment cut 508		2,00				0,00

Preis-Stückliste 0 400N20008_1AA10C1 0 400 N 20008_1 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SC16	600	0	Segment cut 610		1,00				0,00
SPS039	0	0	SUPPORT PS-039 pipe support	287,25 kg	1,00				0,00
SPS080	0	0	SUPPORT PS-080 pipe support	319,07 kg	1,00				0,00
XZB02	400	15	welding nozzle for pressure gauge, drawi 1.4541 22		1,00				0,00
XZB04	400	15	welding nozzle for thermowell, drawing N 1.4541 22		1,00				0,00
Summe: 0 400N20008_1AA10C1 0				1.843,68 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	1.843,68 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Jop Code: K70101 ASU No. 9, Kosice

Title: 400 N 20008-1

Drawing No.:

792.87826 - 02

Maker's No.:

(Kunde / TÜV, ...)

geprüft

erstellt:

Pelzeder Erich

Schweisstechnologie VAM

Datum / Unterschrift

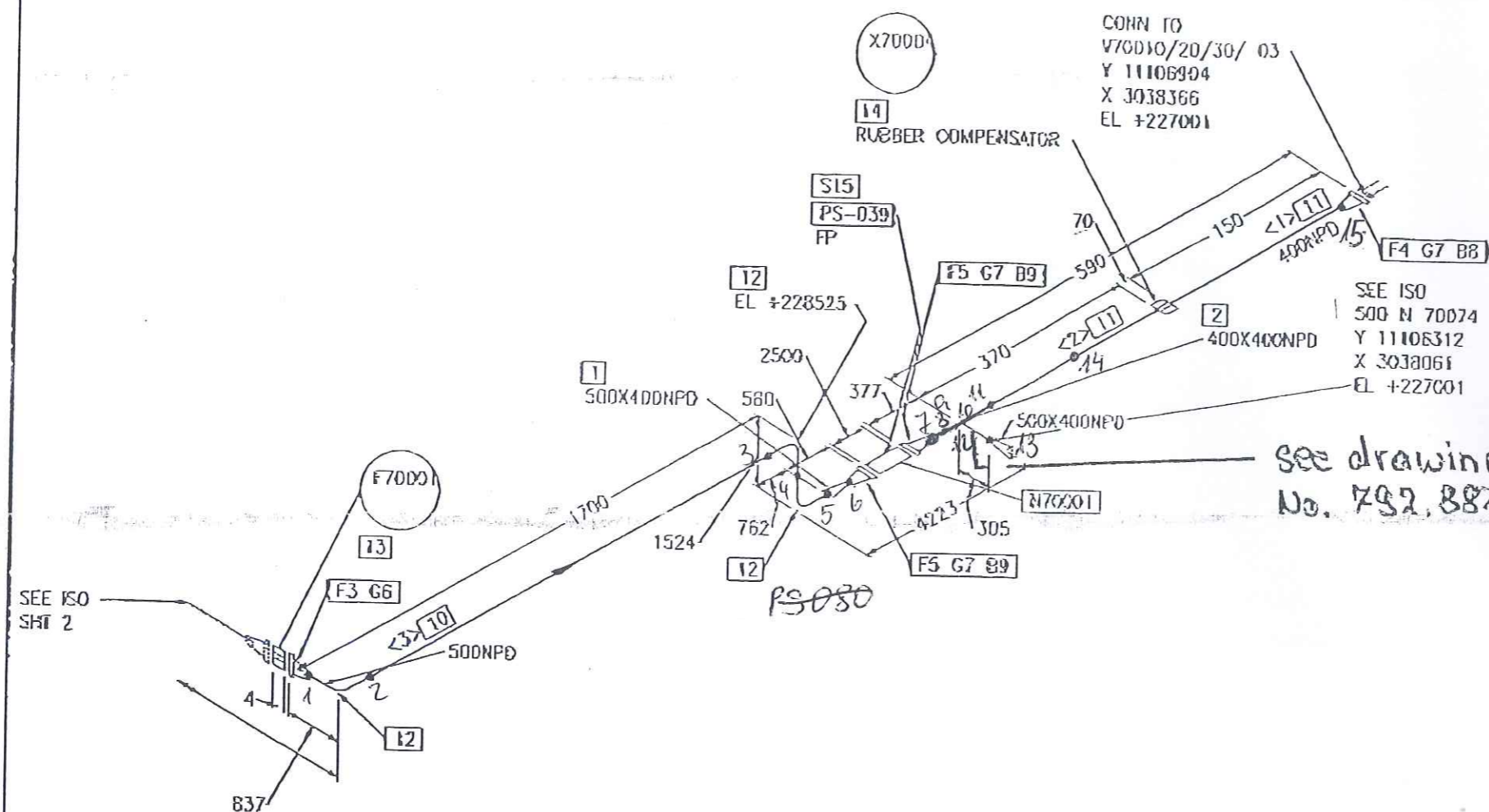
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CUT PIPE LENGTH					
PIECE NO	LENGTH (IN)	NFO (MM)	REMARKS	END ONE	END TWO
<1>	65	400		BEVEL	SQ.CUT
<2>	65	400		SQ.CUT	BEVEL
<3>	176	500		BEVEL	BEVEL

see drawing
No. 792, 88742

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-IND.) - PIPE SUPPORT
WITH SUBSTRUCTURE


PB-IND.) - PIPE SUPPORT
ON THE PIPE ROGE

SS = SLUING SUPPORT

PG = PIPE GLIDE

FP - FIX POINT

02	General Rez	20/02/2005	Les	Zul
01	General Rez	16/02/2006	Les	Zul
Rez.	Resons	05/	None	Unes



AIR LIQUIDE

For Liquids AGS GIB

Replaced	79_---
Replaced by	79_---

Date:	Name:	Checked:	History No.
05-SEP-2005	Lesum / HGH	05-03-5	

Jcb Code: K70101

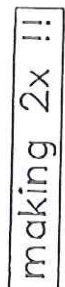
Reference: ASU No. 9, Kosice

Title:

400 N 20008_1_AA10C1792.8782602

LEVELS:	
TOP OF INTERNAL ROADS:	225.00m a.m.s.l.
TOP OF FOUNDATION:	225.10m
BOTTOM OF STEEL STRUCTURE:	225.15m = ± 0.00

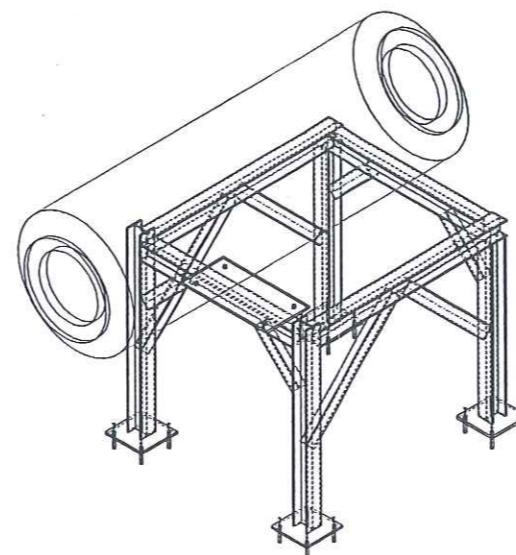
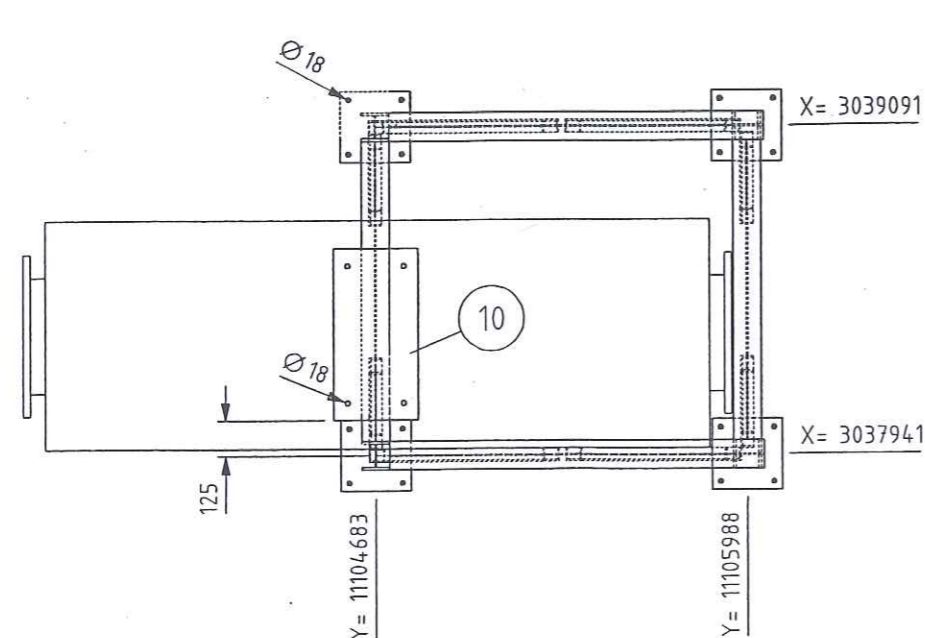
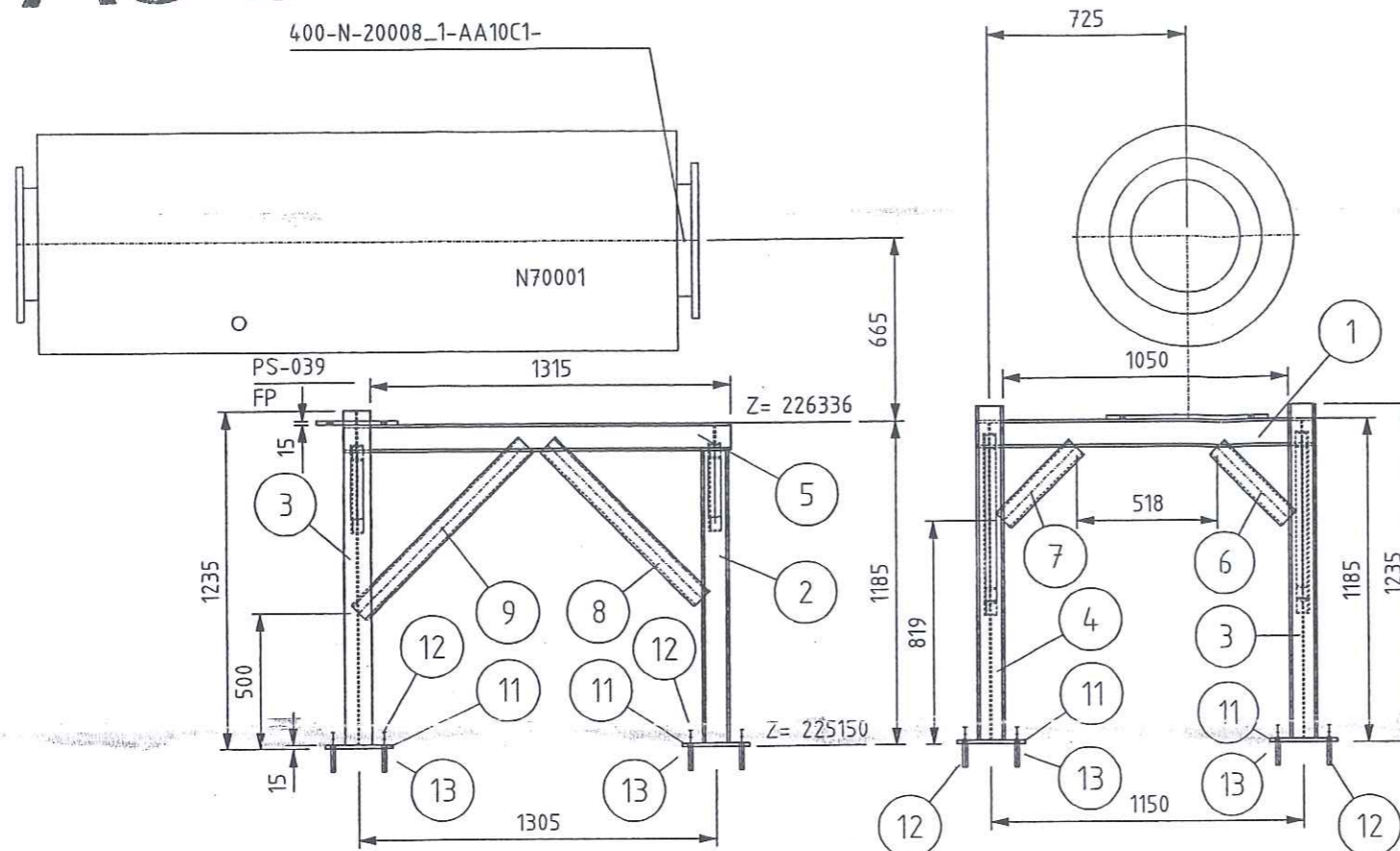
RECEIVED
[2005 OKT 25]
10 AM
SITE OFFICE

[illegible]

PART OF BYPASS DISCHARGE

As built

400-N-20008_1-AA10C1-



LEGEND:

- PG- PIPE GUIDE
- FP- FIX POINT
- SS- SLIDE SUPPORT
- HN- HANGER
- SSAX- SLIDE SUPPORT WITH AXIAL STOP
- AXLS- AXIAL STOP WITH LIFTING STOP
- SPS- SPRING SUPPORT
- SPGS- SPRING SUPPORT GUIDED
- GSAX- GUIDE SUPPORT WITH AXIAL STOP
- SPAX- SPRING SUPPORT WITH AXIAL STOP
- SH- SPRING HANGER
- AX- AXIAL STOP

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:

- THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER RESISTANT PAINT AND WHITE COLOR

RESPONSIBILITY OF ERECTION COMPANY

-LOCATION OF FIELD WELDS

-FITTING LENGTHS

-DIMENSIONAL CHECK AT SITE

STARTING SPOOL MANUFACTURE

COATING:

- ALL SURFACES FOR COATING MUST BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED

RECEIVED

2009 NOV 10

VAM SITE OFFICE

WELDING DATA ACC. TO DIN 1912 TS

a >= 0,7 x l
a min= 4mm



Total Weight: 282.44 kg

Item	No. off	Unit	Description	Dimension	Material	Weight kg	Remark
1	2	pcs	PROFILE	HE100B, L=1.050	RST37-2	42.862	
2	2	pcs	PROFILE	HE100B, L=1.070	RST37-2	43.698	
3	1	pcs	PROFILE	HE100B, L=1.220	RST37-2	24.910	
4	1	pcs	PROFILE	HE100B, L=1.221	RST37-2	24.910	
5	2	pcs	PROFILE	HE100B, L=1.315	RST37-2	53.678	
6	2	pcs	PROFILE	U80, L=0.375	RST37-2	6.506	
7	2	pcs	PROFILE	U80, L=0.377	RST37-2	6.530	
8	2	pcs	PROFILE	U80, L=0.794	RST37-2	13.764	
9	2	pcs	PROFILE	U80, L=0.865	RST37-2	14.950	
10	1	pcs	PLATE 600x300x15	PLATE 15x600x300	RST37-2	21.195	
11	4	pcs	PLATE 250	PLATE 250x250x15	RST37-2	29.436	
12	16	pcs	ANCHOR BOLT HST(-R)16-0-M16	HST-(-R) 16-0-M16	1.4401	0.000	
13	4	pcs	BASE	300x300x50	CONCRETE	0.000	

Approved by	Date	Name	Signature
Checked by		Gans	
Checked by		Zut	
Drawn checked by			

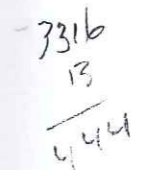
HEGMANN'S

AIR LIQUIDE

Air Liquide AGS GmbH

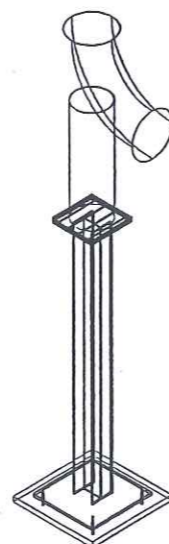
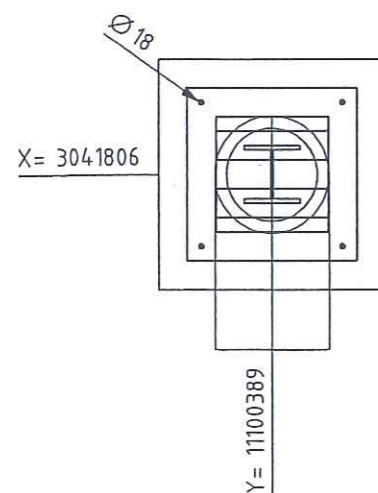
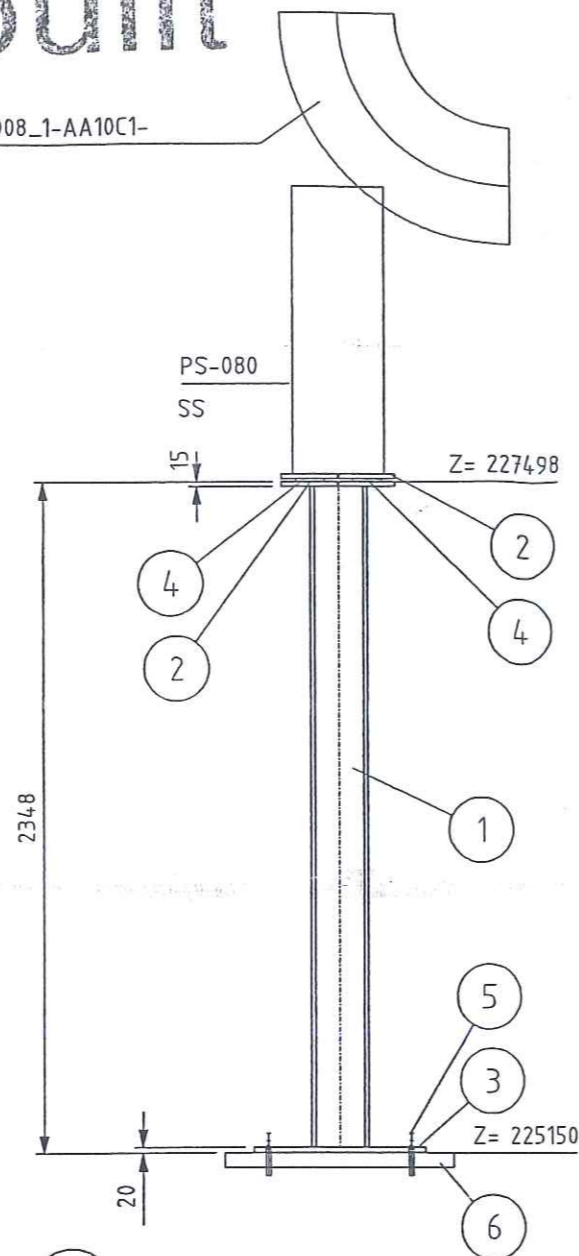
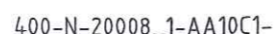
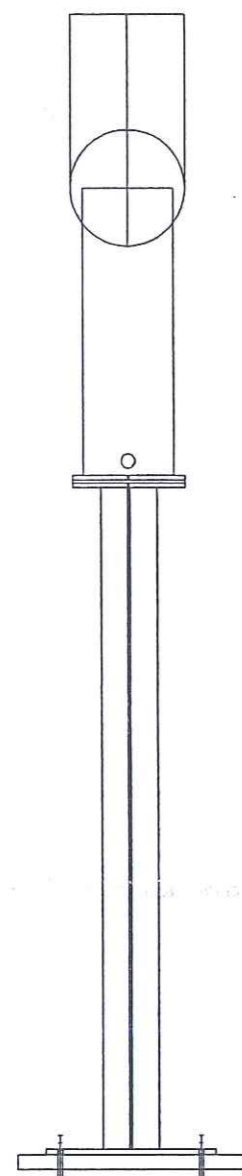
Date	Name	Check.	History File
30.09.2005	MG	Zut	
Job Code:	K70101 ASU No.9 Kosice		
Reference:	PIPING SUPPORT		
Replaces:	Title	PS-039	
Scale:	1:25	Original Format	DIN A3
Sheet:	1 of:	1	
Drawing-No	792.87926	Rev.	b

Archives	Rev.	Job No.	Description	Sign.	Date
Rev.No.					
REVISIONS					



OUT FILE LENGTH						
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	DND TWO	ITEM CODE
<1>	1000	500				
<2>	296	400		BEVEL	BEVEL	RG
<3>	3020	400		BEVEL SQ.CUT	BEVEL SQ.CUT	RG RG

As built



Archives Rev.No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

REVISIONS

- PG- PIPE GUIDE
- FP- FIX POINT
- SS- SLIDE SUPPORT
- HN- HANGER
- SSAX- SLIDE SUPPORT WITH AXIAL STOP
- AXLS- AXIAL STOP WITH LIFTING STOP
- SPS- SPRING SUPPORT
- SPGS- SPRING SUPPORT GUIDED
- GSAX- GUIDE SUPPORT WITH AXIAL STOP
- SPAX- SPRING SUPPORT WITH AXIAL STOP
- SH- SPRING HANGER
- AX- AXIAL STOP

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:

-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER RESISTANT PAINT AND WHITE COLOR

RESPONSIBILITY OF ERECTION COMPANY

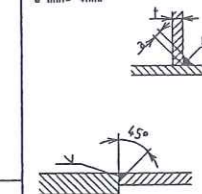
- LOCATION OF FIELD WELDS
- FITTING LENGHTS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:
-ALL SURFACES FOR COATING MUST BE FREE OF
CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
-THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED
SUPPORT NEEDS TO BE REMOVED
-THE SUPPORT NEEDS TO BE PRIME COATED

RECEIVED
2005 NOV 10
VAM
SITE OFFICE

WELDING DATA ACC. TO DIN 1912 T5

a $\geq 0,7 \times t$
a min = 4mm



Total Weight:	243.51 kg
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31907

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by		Zut	
Drawn checked by			


AIR LIQUIDE

Air Liquide AGS GmbH

Date	Name	Check:	History File
30.09.2005	MG	Zut	
Job Code:	K70101 ASU No.9 Kosice		Scale:
Reference:	PIPING SUPPORT		1:25
			Original Format DIN A3
Replaces:	Title	Sheet:	1 of:
	PS-080	Drawing-No	792.87926
			Rev

Preis-Stückliste 0 400N20009AA10C1 0 400 N 20009 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0018	20	80	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,26 kg	16,00				0,00
B0034	24	90	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,43 kg	52,00				0,00
B0035	24	100	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,48 kg	20,00				0,00
B0044	24	190	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,78 kg	16,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	16,00				0,00
B0519	24	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,11 kg	88,00				0,00
G0128	400	0	FLAT PACKING, PN 6 406,4		1,00				0,00
G0129	400	0	FLAT PACKINGS Graphite with CrNi-insert Standard 40002 490x2x420		4,00				0,00
G0136	500	0	Flat packings Graphite with CrNi-insert Standard 40002 595x2x520		3,00				0,00
GW31	300	0	girth weld 1.0254 (St 37.0) 323,9x5,6		1,00				0,00
GW34	400	0	girth weld 1.0254 (St 37.0) 406,4x6,3		9,00				0,00
GW35	500	0	GIRTH WELD 1.0254 (St 37.0) 508x6,3		8,00				0,00
GW36	600	0	girth weld 1.0254 (St 37.0) 610x6,3		2,00				0,00

AS BUILT

Preis-Stückliste 0 400N20009AA10C1 0 400 N 20009 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
IF77001	500	0	F77001 supplied by AGS		1,00				0,00
IHK77001	400	0	HK77001 supplied by AGS		1,00				0,00
IP177001	15	0	PI77001 supplied by AGS		1,00				0,00
ITE77001	15	0	TE77001 supplied by AGS		1,00				0,00
IV77001H1	15	0	V77001H1 supplied by AGS		1,00				0,00
IX77004	400	0	X77004 supplied by AGS		1,00				0,00
P0097	300	0	pipe, welded 1.0254 (St 37.0) DIN 1626 323,9x5,6	44,00 kg	0,25				0,00
P0101	400	0	pipe, welded 1.0254 (St 37.0) DIN 1626 406,4x6,3	62,20 kg	1,31				0,00
P0103	500	0	pipe, welded 1.0254 (St 37.0) DIN 1626 508x6,3	77,90 kg	1,68				0,00
P0105	600	0	pipe, welded 1.0254 (St 37.0) DIN 1626 610x6,3	93,80 kg	0,56				0,00
P0257	400	0	Elbow 90° R=1,5 DA, welded 1.0254 (St 37.0) DIN 2609 406,4x6,3	59,60 kg	1,00				0,00
P0259	500	0	ELBOW 90° R=1,5 DA, WELDED St35.8l /DIN 2605-1/ 508x6,3	93,24 kg	3,00				0,00
P0910	600	300	TEE MADE OF WELDED PIPE 1.0254	89,00 kg	1,00				0,00

Preis-Stückliste 0 400N20009AA10C1 0 400 N 20009 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P2952	400	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 406,4	29,50 kg	4,00				0,00
P2954	500	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 508	39,50 kg	4,00				0,00
P3021	400	0	WELDING NECK FLANGES, PN 6		1,00				0,00
PWI24	400	15	PIPE WELD-IN 1.4541		2,00				0,00
PWI40	600	300	PIPE WELD-IN 1.0254		1,00				0,00
PWI41	400	250	PIPE WELD-IN 1.0254		1,00				0,00
SC11	250	0	Segment cut 273		1,00				0,00
SC12	300	0	Segment cut 323,9		1,00				0,00
SC14	400	0	Segment cut 406,4		3,00				0,00
SC15	500	0	Segment cut 508		2,00				0,00
SC16	600	0	Segment cut 610		1,00				0,00
SPS040	0	0	SUPPORT PS-040 pipe support	287,24 kg	1,00				0,00
SPS079	0	0	SUPPORT PS-079 pipe support	319,07 kg	1,00				0,00
XZB02	400	15	welding nozzle for pressure gauge, drawi 1.4541 22		1,00				0,00

Preis-Stückliste 0 400N20009AA10C1 0 400 N 20009 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
XZB04	400	15	welding nozzle for thermowell, drawing N 1.4541 22		1,00				0,00
Summe: 0 400N20009AA10C1 0				1.645,75 kg		0,00	0,00		0,00

Liefersumme:
Montagesumme:
Gesamtsumme:
Gesamtgewicht: 1.645,75 kg
** Ende der Ausgabe

AS BUILT

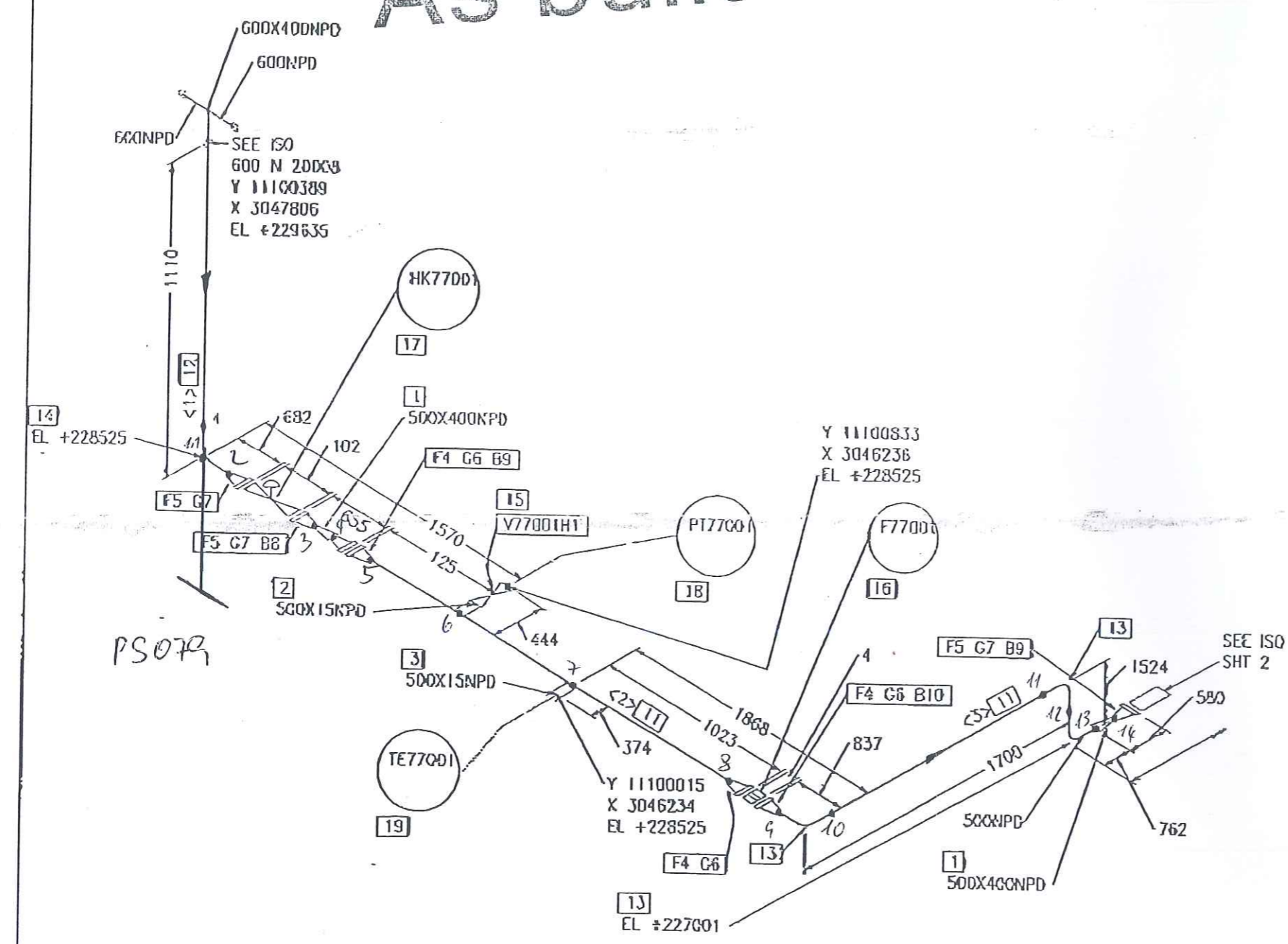
NR. 878

MESSER HIGGS GIBBS

DOE

CO. UN. 20009

As built



RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seems
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(ND)- PIPE SUPPORT WITH SUBSTRUCTURE
PB-(ND)- PIPE SUPPORT ON THE RPIBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
02	General Rev.	20102005	Les	2.8
01	General Rev.	01/01/2005	Les	2.6

AIR LIQUIDE
Air Liquide AGS GmbH

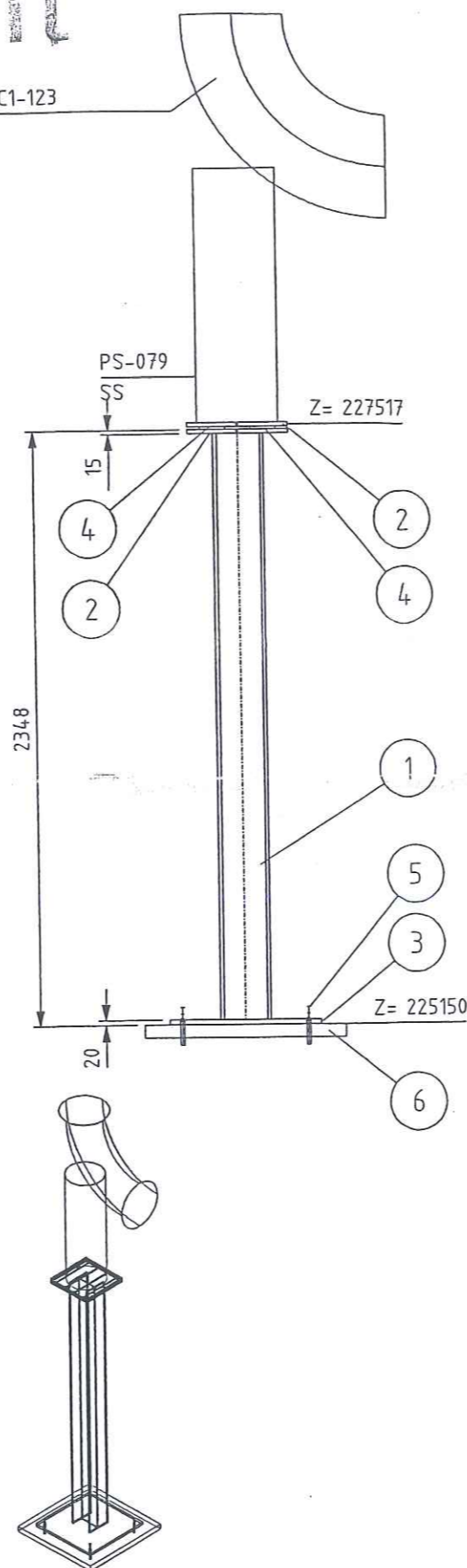
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Job Code:	K70101	Scale:	1:1	Original format:	DIN A3	
Reference:	ASU No. 9, Kosice	Sheet:	1	Sheets:	2	
Title:	400 N 20009 AA10C1792.8782602					

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	2	500X400	WELDING NOZZLE CONCERNING, WELDING 500X400/100.1X6.3, ST37.0, DIN 2616-1
2	1	500X15	WELDING NOZZLE FOR PRESSURE GAUGE, DRAWING NO. 792.56931
3	1	500X15	WELDING NOZZLE FOR THERMOMETER, DRAWING NO. 792.61076
4	4	500	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 10220-1
5	3	400	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 10220-1
6	3	500	FLAT GASKET
7	3	400	FLAT GASKET
8	16	24	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 190.0MM LONG
9	26	24	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 90.0MM LONG
10	20	24	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 100.0MM LONG
11	1176 MM	500	PIPE, WELDED 500X6.3, ST37.0, DIN EN 10220
12	500 MM	400	PIPE, WELDED 400X6.3, ST37.0, DIN EN 10220
13	3	500	ELBOW, WELDED, 1.50 500X6.3-50, 0-ART 300N 2005-1
14	1	400	ELBOW, WELDED, 1.50 400X6.3-50, 0-ART 300N 2005-1
15	1	15	V77001H1
16	1	500	F77001
17	1	400	HK77001 HK77001
18	1	15	PT77001
19	1	15	TE77001 TE77001

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	500	400		BEVEL	BEVEL	RG
<2>	1000	500		BEVEL	BEVEL	RG
<3>	176	500		BEVEL	BEVEL	RG

Asbut

[illegible]
$$X = 3047806$$

Y- 11100389

Archives Rev.No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

LEGEND:

-PG-	PIPE GUIDE
-FP-	FIX POINT
-SS-	SLIDE SUPPORT
-HN-	HANGER
-SSAX-	SLIDE SUPPORT WITH AXIAL STOP
-AXLS-	AXIAL STOP WITH LIFTING STOP
-SPS-	SPRING SUPPORT
-SPGS-	SPRING SUPPORT GUIDED
-GSAX-	GUIDE SUPPORT WITH AXIAL STOP
-SPAX-	SPRING SUPPORT WITH AXIAL STOP
-SH-	SPRING HANGER
-AX-	AXIAL STOP

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:

MARKING:
-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER
RESISTANT PAINT AND WHITE COLOR

- LOCATION OF FIELD WELDS
- FITTING LENGHTS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

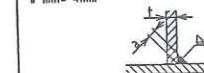
COATING:
-ALL SURFACES FOR COATING MUST BE FREE OF OIL, GREASE AND ALL LOOSE DUST
CONTAMINANTS
-THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
-THE SUPPORT NEEDS TO BE PRIME COATED

RECEIVED

2005 NOV 10.

WEIDING DATA ACC. TO DIN 1912 TS

a $\geq 0,7 \times l$
a min = 4mm



Total Weight:	243.51 kg
---------------	-----------

Item	No. Off	Unit	Description	Dimension	Material	Weight kg	Remark
1	1	pcs	PROFILE	HE200B, L=2.313	RST37-2	141.776	
2	2	pcs	PLATE 400x400x15	PLATE 15x400x400	RST37-2	37.680	
3	1	pcs	PLATE 500x500x20	PLATE 20x600x600	RST37-2	56.520	
4	2	pcs	HESTERBERG SP12 W1 OZN	SLIDE PLATE SP12	RST37-2	7.536	
5	4	pcs	ANCHOR BOLT HST(-R)M16/100	HST-(-R) 16-0-M16	1.4401	0.000	
6	1	pcs	BASE	800x800x50	CONCRETE	0.000	
			P42C 275,6x8.8	L=1300		74.40	
							3-19, 07

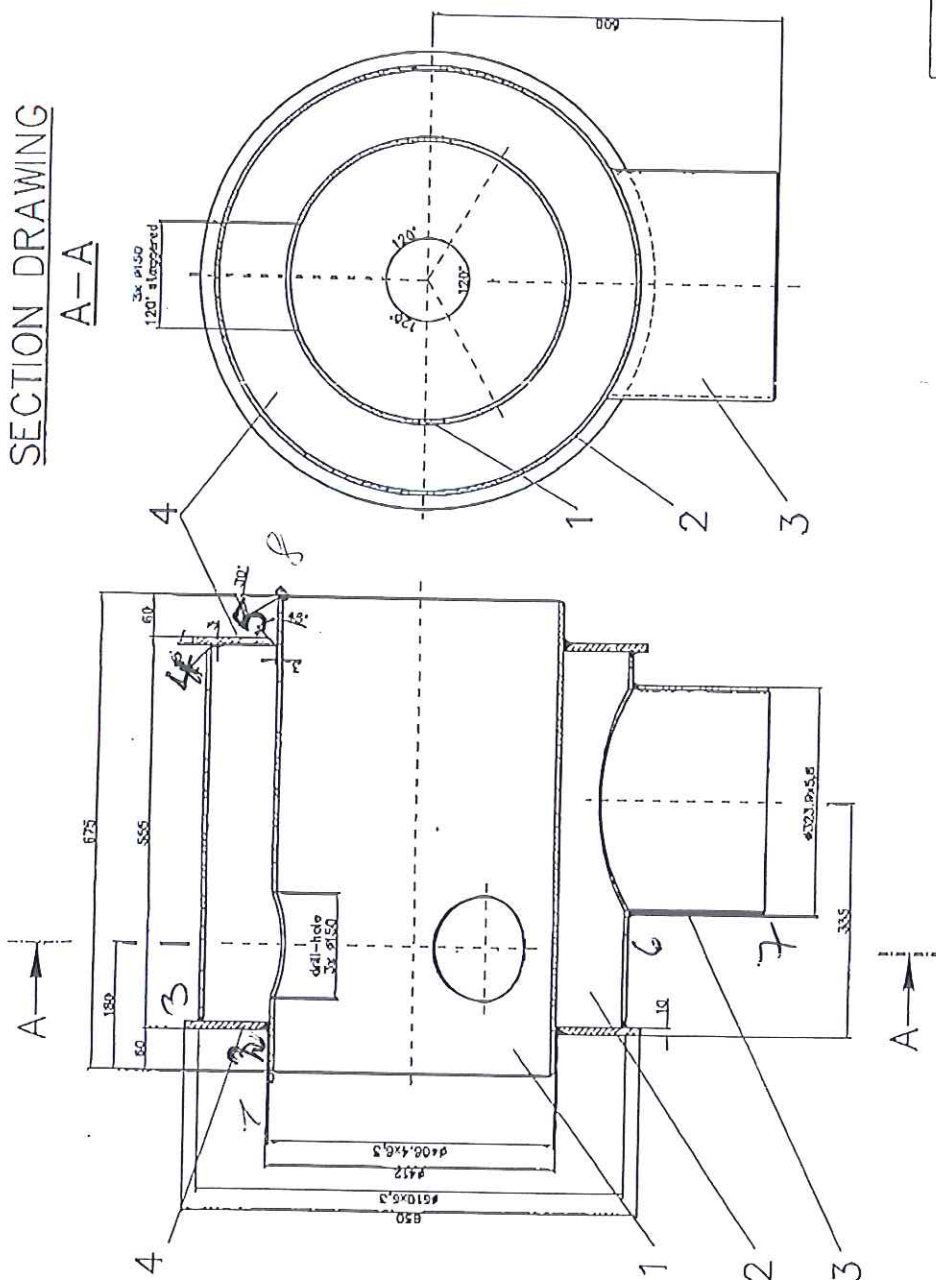
	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by		Zuf	
Drawn checked by			


AIR LIQUIDE

Air Liquide AGS GmbH

	Date	Name	Check.	History File	
	30.09.2005	MG	Zut		
	Job Code: K70101 ASU No.9 Kosice			Scale: 1:25	Original Format DIN A3
	Reference: PIPING SUPPORT			Sheet: 1	of:
Replaces:	Title PS-079			Drawing-No. 792.87926	Rev b

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$$\frac{A-A}{A-A}$$


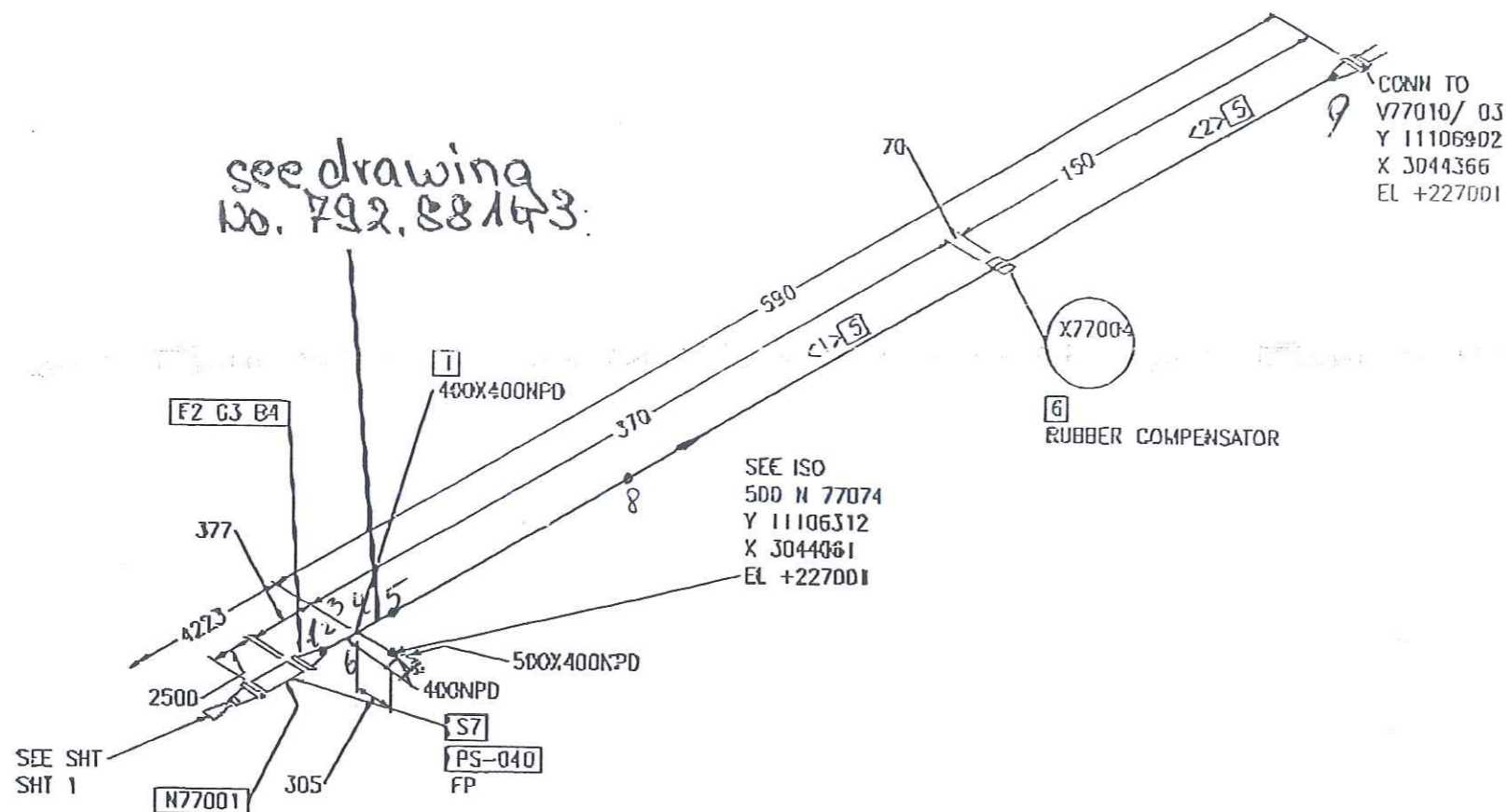
making $2 \times ii$

[illegible][illegible]

PART OF BYPASS DISCHARGE

[illegible][illegible]

As built



Part No.	Qty [PCS/NUM]	Ref [Size]	Component Description
1	1	400X400	PIPE, WELDED 406.4X6.8/406.4X6.8, S137.0, C1K 2615-1
2	1	400	WELDING-NECK-FLANGE PR10, S235JRG2, C1K EN 1092-1
3	1	400	FLAT GASKET
4	16	21	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 90, C1K EN 1092-1
5	1.30 NM	400	PIPE, WELDED 406.4X6.8, S137.0, C1K EN 1092-1
6	1	400	Compensator X77004
7	1	400	FIX POINT PSUPP001

CUT PIPE LENGTH					
PIECE NO	LENGTH (MM)	HEAD (MM)	REMARKS	END ONE	END TWO
<1>	65	400		BEVEL	SD CUT
<2>	65	600		SD CUT	BEVEL
					ITEM CODE
					RG

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation of pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

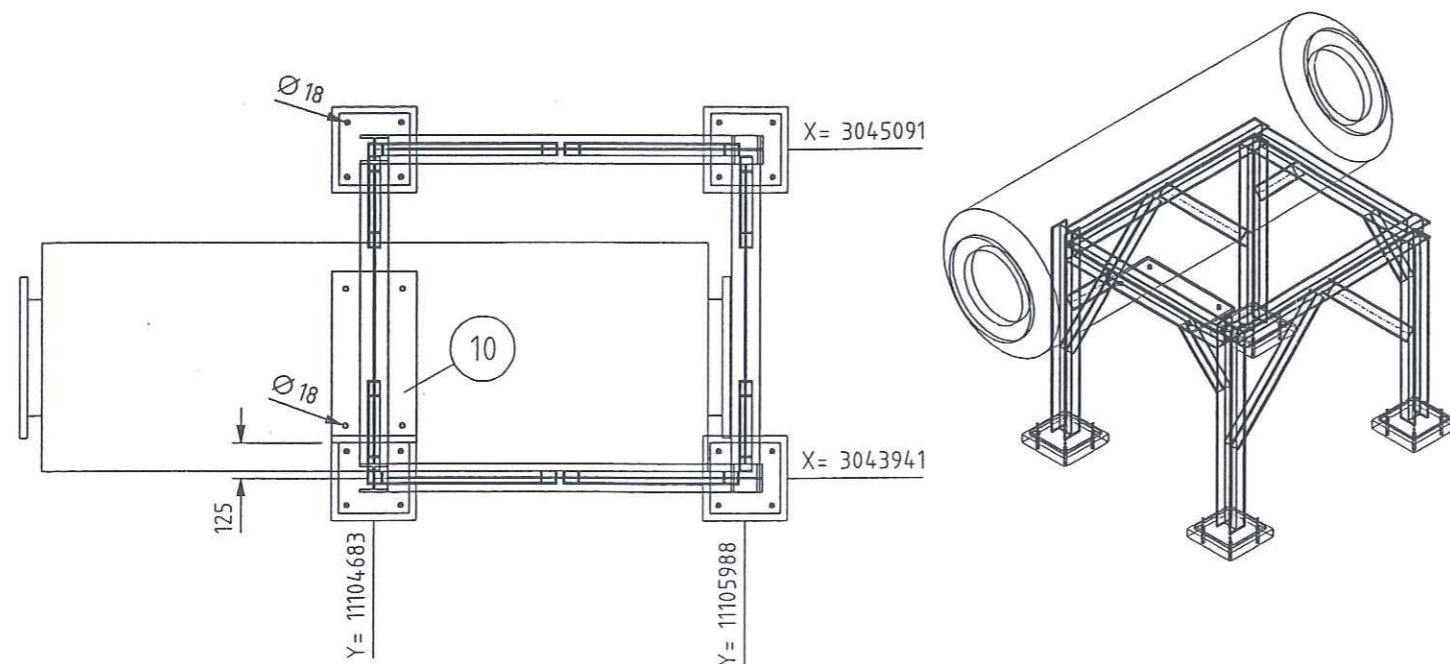
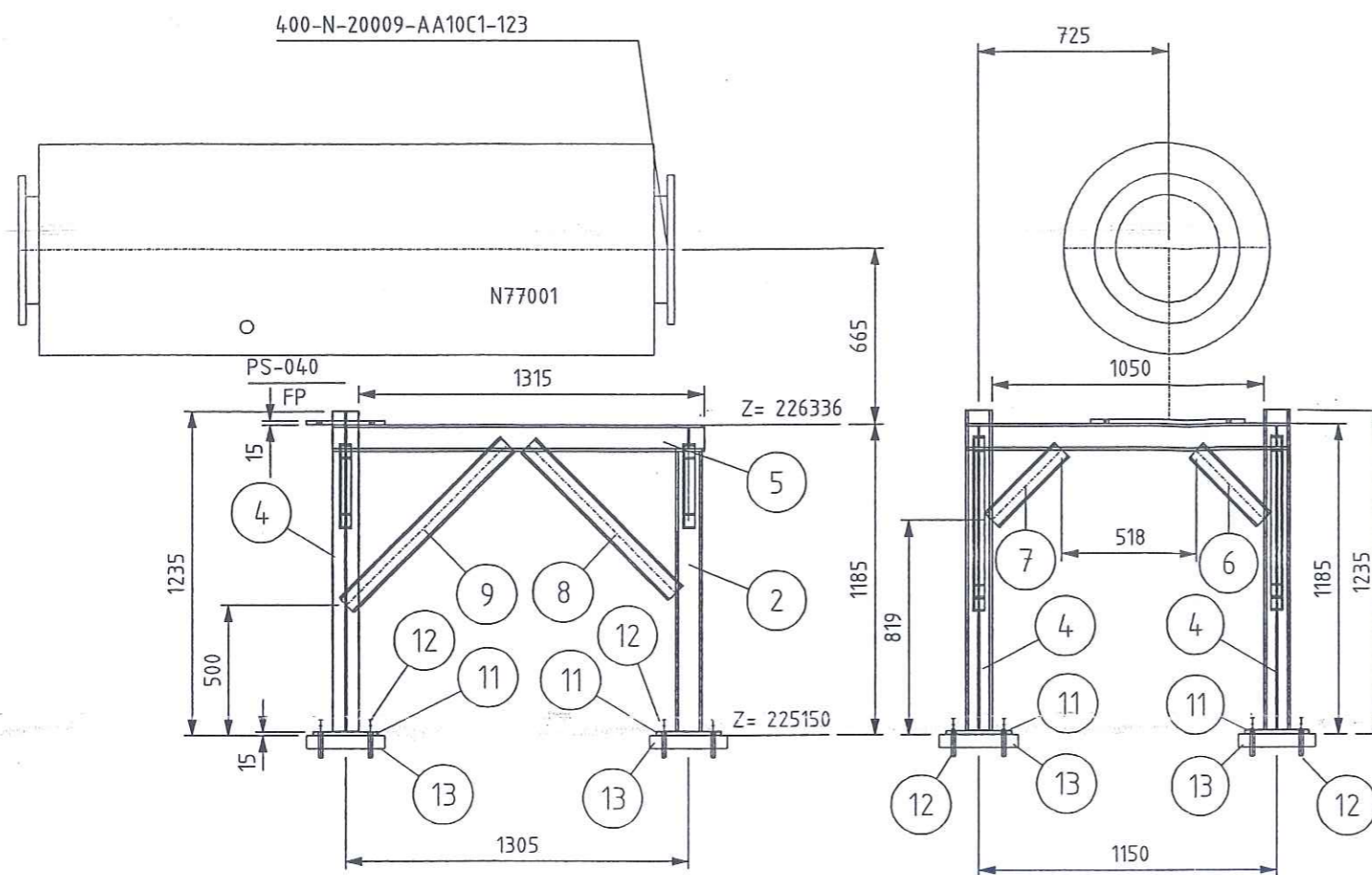
- PS-INOJ - PIPE SUPPORT WITH SUBSTRUCTURE
- PB-INOJ - PIPE SUPPORT ON THE PIPE/RODGE
- SS = SLIDING SUPPORT
- PG = PIPE GUIDE
- FP = FIX POINT

Rev	Revisions	Date	By	Check
02	General Rev	20102005	Lus	Zul
01	General Rev	15022005	Lus	Zul

AIR LIQUIDE Air Liquide AGS Grbl	Date:	05-SEP-2005	Name:	Lesun / HGH	Checked:	05-09-05	History file:
	Job Code:	K70101			Scale:	1:1	
Reference:	ASU No. 9. Kosice			Sheet:	2	Original kernal:	DN A3
Title:	400 N 20009 AA10C1792.8782602			Drawing No:	Rac		

LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE COPIED OR TRANSFERRED TO THIRD PARTIES WITHOUT PERMISSION OF THE PROPRIETER.



LEGEND:

- PG- PIPE GUIDE
- FP- FIX POINT
- SS- SLIDE SUPPORT
- HN- HANGER
- SSAX- SLIDE SUPPORT WITH AXIAL STOP
- AXLS- AXIAL STOP WITH LIFTING STOP
- SPS- SPRING SUPPORT
- SPGS- SPRING SUPPORT GUIDED
- GSAX- GUIDE SUPPORT WITH AXIAL STOP
- SPAX- SPRING SUPPORT WITH AXIAL STOP
- SH- SPRING HANGER
- AX- AXIAL STOP

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:

- THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER RESISTANT PAINT AND WHITE COLOR

RESPONSIBILITY OF ERECTION COMPANY

- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

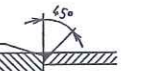
- ALL SURFACES FOR COATING MUST BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED

RECEIVED

2005 NOV 10

WELDING DATA ACC. TO DIN 1912 TS

a >= 0,7 x l
a min= 4mm



Total Weight: 282.44 kg

Item	No. Off	Unit	Description	Dimension	Material	Weight kg	Remark
1	2	pcs	PROFILE	HE100B, L=1.050	RST37-2	42.862	
2	1	pcs	PROFILE	HE100B, L=1.070	RST37-2	21.849	
3	1	pcs	PROFILE	HE100B, L=1.071	RST37-2	21.849	
4	2	pcs	PROFILE	HE100B, L=1.221	RST37-2	49.820	
5	2	pcs	PROFILE	HE100B, L=1.315	RST37-2	53.678	
6	2	pcs	PROFILE	U80, L=0.375	RST37-2	6.506	
7	2	pcs	PROFILE	U80, L=0.377	RST37-2	6.530	
8	2	pcs	PROFILE	U80, L=0.794	RST37-2	13.764	
9	2	pcs	PROFILE	U80, L=0.863	RST37-2	14.950	
10	1	pcs	PLATE 600x300x15	PLATE 15x600x300	RST37-2	21.195	
11	4	pcs	PLATE 250	PLATE 250x250x15	RST37-2	29.436	
12	16	pcs	ANCHOR BOLT HST(-RIM16/100	HST-(-R) 16-0-M16	1.4401	0.000	48
13	4	pcs	BASE	300x300x50	CONCRETE	0.000	
							287,24

Approved by	Date	Name	Signature
Checked by		Gans	
Checked by		Zuf	
Drawn checked by			

H G H
HEGMANN'S

AIR LIQUIDE
Air Liquide AGS GmbH

Date	Name	Check	History File
30.09.2005	MG	Zuf	
Job Code:	K70101 ASU No.9 Kosice		
Reference:	PIPING SUPPORT		
Replaces:	Title PS-040		
Scale:	1:25	Original Format	DIN A3
Sheet:	1 of:	1	
Drawing-No.	792.87926	Rev.	b

Archives	Rev.	Job No.	Description	Sign.	Date
Rev.No.					
REVISIONS					

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 500N20010AA10C1-W 0 500 N 20010 AA10C1-W Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0008	16	65	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,13 kg	4,00				0,00
B0047	24	220	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,90 kg	20,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	4,00				0,00
B0519	24	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,11 kg	20,00				0,00
G0099	40	0	Flat packings Graphite with CrNi-insert Standard 40002 92x2x49		1,00				0,00
G0136	500	0	Flat packings Graphite with CrNi-insert Standard 40002 595x2x520		2,00				0,00
GW34	400	0	girth weld 1.0254 (St 37.0) 406,4x6,3		1,00				0,00
GW35	500	0	GIRTH WELD 1.0254 (St 37.0) 508x6,3		11,00				0,00
GW9	40	0	girth weld 1.0254 (St 37.0) 48,3x2,6		1,00				0,00
IFT15041	40	0	FT15041 supplied by AGS		1,00				0,00
IPT15041	15	0	PT15041 supplied by AGS		1,00				0,00
IUK15042	500	0	UK15042 supplied by AGS		1,00				0,00
IV15041H1	15	0	V15041H1 supplied by AGS		1,00				0,00

Preis-Stückliste 0 500N20010AA10C1-W 0 500 N 20010 AA10C1-W Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0103	500	0	pipe, welded 1.0254 (St 37.0) DIN 1626 508x6,3	77,90 kg	14,90				0,00
P0259	500	0	ELBOW 90° R=1.5 DA, WELDED St35.8I /DIN 2605-1/ 508x6,3	93,24 kg	2,00				0,00
P0906	500	400	Tee made of welded pipe 1.0254 (St 37.0) DIN 2609 508x11x406,4x8,8	116,06 kg	1,00				0,00
P0907	500	500	Tee made of welded pipe 1.0254 (St 37.0) DIN 2609 508x11x508x11	120,02 kg	1,00				0,00
P1651	700	500	Reducer, concentric, welded 1.0254 (St 37.0) DIN 2609 711x7,1x508x6,3	64,38 kg	1,00				0,00
P2877	40	0	Welding neck flanges; PN 40 1.0038 (S235JRG2) DIN EN 1092-1 48,3	2,00 kg	1,00				0,00
P2954	500	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 508	39,50 kg	3,00				0,00
PWI31	500	15	PIPE WELD-IN 1.4541		1,00				0,00
PWI43	500	40	PIPE WELD-IN 1.0254		1,00				0,00
S0054	500	0	Web-support, SV 150B 508 W1 OZN 1.0 Hesterberg 508	51,70 kg	1,00				0,00
S0065	500	0	Web-support, SV 150G 508 W1 OZN LF 1.0 Hesterberg 508	99,50 kg	2,00				0,00

Preis-Stückliste 0 500N20010AA10C1-W 0 500 N 20010 AA10C1-W Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
S0201	500	0	SLIDING PLATE 1.0 HESTERBERG		2,00				0,00
SC15	500	0	Segment cut 508		4,00				0,00
SPS020	0	0	SUPPORT PS-020 pipe support	1.065,71 kg	1,00				0,00
SPS021	0	0	SUPPORT PS-021 pipe support	217,67 kg	1,00				0,00
SPS022	0	0	SUPPORT PS-022 pipe support	221,31 kg	1,00				0,00
XZB01	500	40	welding nozzle for flowmeter, supplied b acc. to Mfr. supplied by Mfr. 40		1,00				0,00
XZB02	500	15	welding nozzle for pressure gauge, drawi 1.4541 22		1,00				0,00
Summe: 0 500N20010AA10C1-W 0				3.544,38 kg		0,00			0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

** Ende der Ausgabe

3.544,38 kg

AS BUILT

 N



CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	758	500		BEVEL	BEVEL	RG
<2>	500	500		BEVEL	BEVEL	RG
<3>	2525	500		BEVEL	BEVEL	RG
<4>	11103	500		BEVEL	BEVEL	RG

FOR CONSTRUCTION

LEVELS:	
TOP OF INTERNAL ROADS:	225,00m n.m.
TOP OF FOUNDATION:	225,10m
BOTTOM OF STEEL STRUCTURE:	225,15m = $\pm 0,00$

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT
WITH SUBSTRUCTURE

PB-(NO.) - PIPE SUPPORT
ON THE PIPIBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

C				
B				
A				
Rev	Revisions	Date	Name	checked

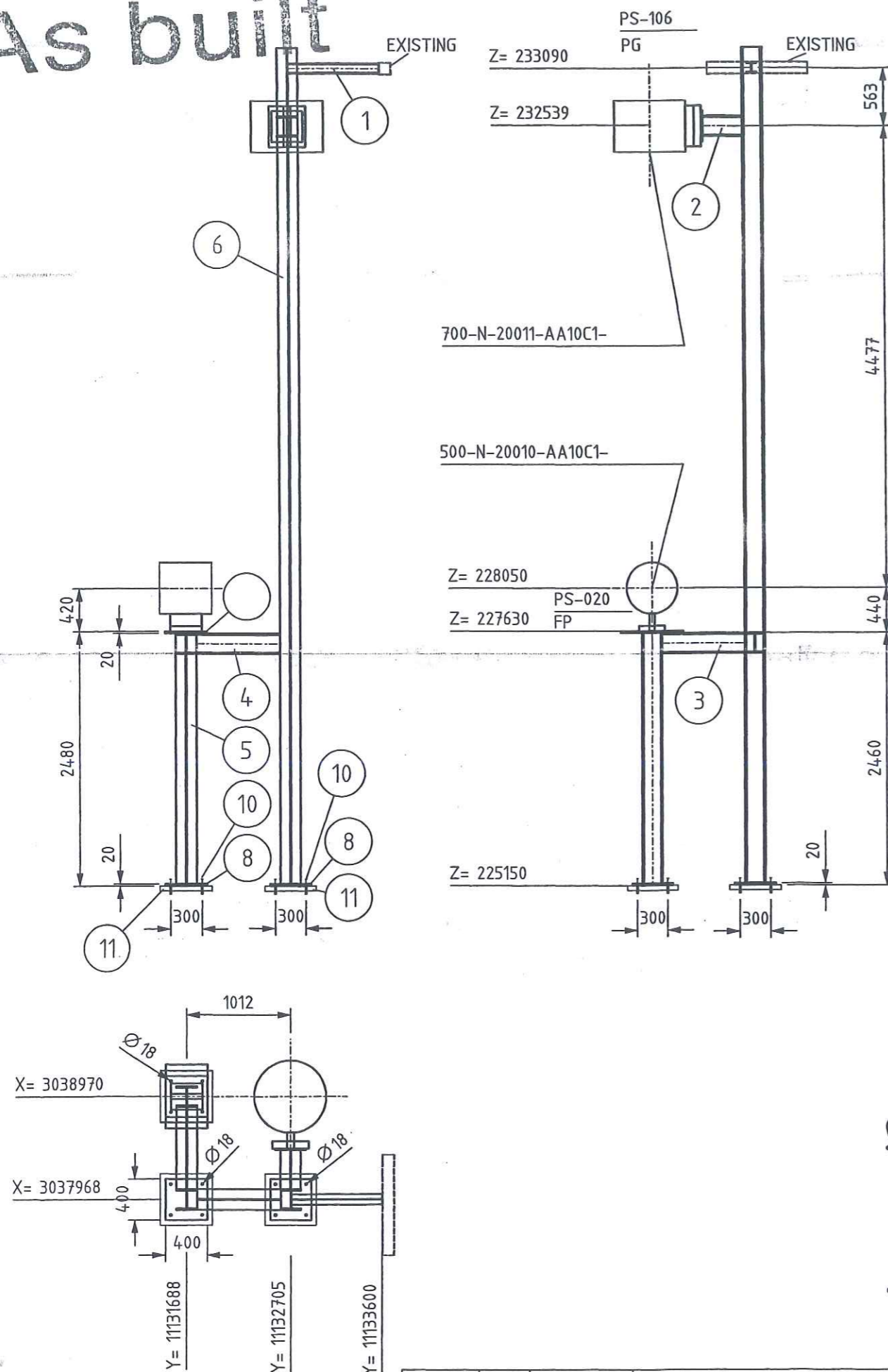


Air Liquide AGS GmbH

Replaces: 79_-----
Replaced by: 79_-----

Date:	Name:	Checked:	History file:
23-JUN-2005	Lesum / HGH	05-07-12 <i>HL</i>	
Job Code: K70101		Scale --:--	Original format DIN A3
Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 1
Title:		Drawing No:	Rev.
500 N 20010 AA10C1		1792.87826	00

As built

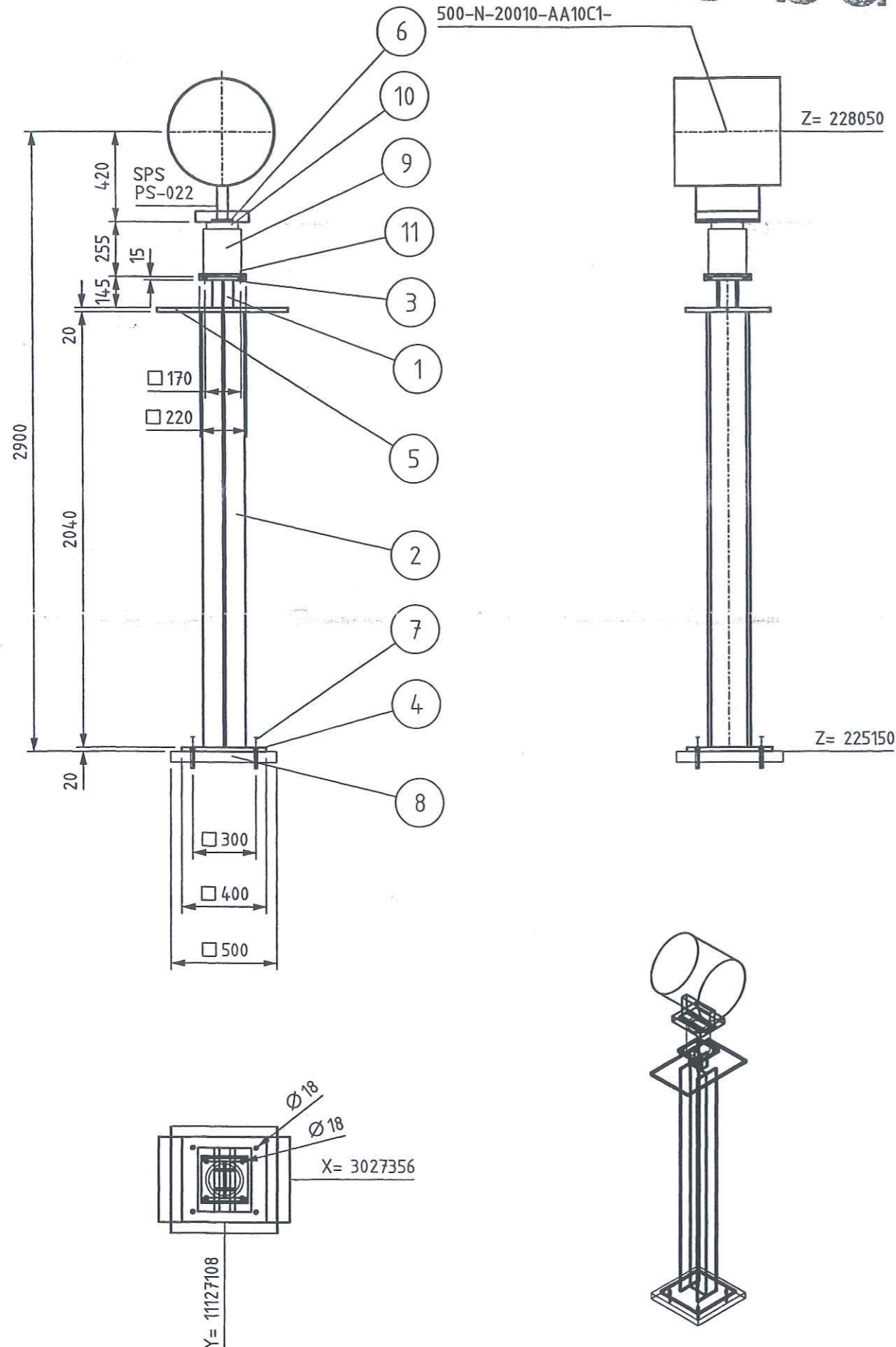


Archives Rev No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

	Date	Name	Check:	History File		
	13.05.2005	MG	Zut			
	Job Code: K70101 ASU No.9 Kosice					
	Reference: PIPING SUPPORT					
	Scale: 1:50				Original Format DIN A3	
	Sheet: 1				of:	
Replaces:	Title PS-020				Drawing-No. 792.87926	Re a

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As built



LEGEND:

- PG- PIPE GUIDE
- FP- FIX POINT
- SS- SLIDE SUPPORT
- HN- HANGER
- SSAX- SLIDE SUPPORT WITH AXIAL STOP
- AXLS- AXIAL STOP WITH LIFTING STOP
- SPS- SPRING SUPPORT
- SPGS- SPRING SUPPORT GUIDED
- GSAX- GUIDE SUPPORT WITH AXIAL STOP
- SPAX- SPRING SUPPORT WITH AXIAL STOP
- SH- SPRING HANGER
- AX- AXIAL STOP

RESPONSIBILITY OF ERECTION COMPANY

- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

- ALL SURFACES FOR COATING MUST BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:

- THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER RESISTANT PAINT AND WHITE COLOR

WELDING DATA ACC. TO DIN 1912 TS

a >= 0,7 x t
a min= 4mm



Total Weight: 200.31 kg

Item	No. Off	Unit	Description	Dimension	Material	Weight kg	Remark
1	1	pcs	PROFILE	HE100B, L=0.130	RST37-2	2.653	
2	1	pcs	PROFILE	HE200B, L=2.040	RST37-2	125.071	
3	1	pcs	PLATE 220x220x15	PLATE 15x220x220	RST37-2	5.699	
4	1	pcs	PLATE 400x400x20	PLATE 20x400x400	RST37-2	25.120	
5	1	pcs	PLATE 620x400x20	PLATE 20x400x620	RST37-2	38.936	
6	1	pcs	HESTERBERG SP11 W1 OZN	SLIDE PLATE SP11	RST37-2	2.826	
7	4	pcs	ANCHOR BOLT HST(-R)M16/100	HST(-R) 16-0-M16	1.4401	0.000	1,2
8	1	pcs	BASE	500x500x50	CONCRETE	0.000	
9	1	pcs	SPRING SUPPORT	LISEGA TYP: 295118	NN	0.000	14,8
10	1	pcs	SPR. SUPP. PLATE	LISEGA TYP: 705916	NN	0.000	
11	1	pcs	SET OF 4 BOLTS AND NUTS	M16x50, M16	NN	0.000	221,3-1

FREIGABE

FÜR CONSTRUCTION

27. Juli 2005

Approved by	Date	Name	Signature
Checked by		Gans	
Checked by	25. JUL. 2005	Zut	
Drawn checked by			

HGH
HEGMANN'S

AIR LIQUIDE

Air Liquide AGS GmbH

Date	Name	Check	History File
13.05.2005	MG	Zut	
Job Code:	K70101 ASU No.9 Kosice		
Reference:	PIPING SUPPORT		
Replaces:	Title		
	PS-022		
Scale:	1:25		
Original Format	DIN A3		
Sheet:	1 of 1		
Drawing-No.	792.87926		
Rev.	a		

Archives	Rev.	Job No.	Description	Sign.	Date
Rev. No.					
REVISIONS					

Preis-Stückliste 0 700N20011AA10C1 0 700 N 20011 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0008	16	65	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,13 kg	8,00				0,00
B0517	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	8,00				0,00
G0104	100	0	Flat packings Graphite with CrNi-insert Standard 40002 162x2x115		1,00				0,00
G0142	700	0	Flat packings Graphite with CrNi-insert Standard 40002 810x2x720		1,00				0,00
GW18	100	0	girth weld 1.0254 (St 37.0) 114,3x3,6		1,00				0,00
GW35	500	0	GIRTH WELD 1.0254 (St 37.0) 508x6,3		1,00				0,00
GW36	600	0	girth weld 1.0254 (St 37.0) 610x6,3		1,00				0,00
GW37	700	0	girth weld 1.0254 (St 37.0) 711x7,1		11,00				0,00
IQ20029	15	0	Q20029 supplied by AGS		1,00				0,00
ITE20029	15	0	TE20029 supplied by AGS		1,00				0,00
IV20029H1	15	0	V20029H1 supplied by AGS		1,00				0,00
P0050	100	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 114,3x3,6	9,83 kg	0,20				0,00

Preis-Stückliste 0 700N20011AA10C1 0 700 N 20011 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0107	700	0	pipe, welded 1.0254 (St 37.0) DIN 1626 711x7,1	123,00 kg	16,70				0,00
P0263	700	0	Elbow 90° R=1,5 DA, welded 1.0254 (St 37.0) DIN 2609 711x7,1	206,15 kg	4,00				0,00
P0921	700	600	Tee made of welded pipe 1.0254 (St 37.0) DIN 2609 711x12,5x610x12,5	261,38 kg	1,00				0,00
P2941	100	0	Welding neck flanges; PN 16 1.0038 (S235JRG2) DIN EN 1092-1 114,3	4,50 kg	1,00				0,00
P2957_A	700	0	WELDING NECK FLANGES, PN 10 1.0038		1,00				0,00
PWI23	700	100	Pipe weld-in 1.0254 (St 37.0) 711x7,1x114,3x3,6		1,00				0,00
PWI25	700	15	PIPE WELD-IN 1.4541		2,00				0,00
S0056	700	0	Web-support, SV 150B 712 W1 OZN 1.0 Hesterberg 712	88,70 kg	2,00				0,00
S0067	700	0	Web-support, SV 150G 712 W1 OZN LF 1.0 Hesterberg 712	187,80 kg	1,00				0,00
SC17	700	0	Segment cut 711		6,00				0,00
SC7	100	0	Segment cut 114,3		1,00				0,00
XZB03	700	15	welding nozzle for sample line, drawing 1.4541 22		1,00				0,00

Preis-Stückliste 0 700N20011AA10C1 0 700 N 20011 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
XZB04	700	15	welding nozzle for thermowell, drawing N 1.4541 22		1,00				0,00
Summe: 0 700N20011AA10C1 0				3.513,03 kg		0,00	0,00		0,00

Liefersumme:
Montagesumme:
Gesamtsumme: 3.513,03 kg
Gesamtgewicht:
** Ende der Ausgabe

AS BUILT

As built

CONN TO
W20010/ 700N-20011
Y 11135500
X 3053208
EL +239480

Y 11135500
X 3048080
EL +236467

EL +239480

SEE ISO
100 N 20013
Y 11134896
X 3047535
EL +236567

Y 11135976
X 3047535
EL +236447

EL +235300

SV150B 712 W1

700X600NPD
EL +230701

SV150G 712 W1 LF

SEE ISO
500 N 20010
Y 11132700
X 3038970
EL +230701

SUPPORT EL: +230180
PS-(NO.) - PIPE SUPPORT
WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT
ON THE PIPIBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe
courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free
of oil and grease

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	700X600	TEE, WELDED 711*12.5/610*12.5, ST37.0, DIN 2615-1
2	1	700X15	WELDING NOZZLE FOR THERMOWELL, DRAWING NO. 792.61076
3	1	700X15	WELDING NOZZLE FOR SAMPLE LINE, DRAWING NO. 792.55981
4	1	100	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
5	1	100	FLAT GASKET
6	8	16	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 65.0MM LANG
7	16680 MM	700	PIPE, WELDED 711*7.1, ST37.0, DIN EN 10220
8	200 MM	100	PIPE, SEAMLESS 114.3*3.6, ST37.0, DIN EN 10220
9	4	700	ELBOW, WELDED, 1.5D 711*7.1-90, B-ART 3,DIN 2605-1
10	1	15	V20029H1
11	1	15	Q20029 Q20029
12	1		TE20029 TE20029
13	2	700	FIX POINT PSUPPORT
14	1	700	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	199	100		SHAPED	BEVEL	RN
<2>	4526	700		BEVEL	BEVEL	RG
<3>	2046	700		BEVEL	BEVEL	RG
<4>	6431	700		BEVEL	BEVEL	RG
<5>	666	700		BEVEL	BEVEL	RG
<6>	3011	700		BEVEL	BEVEL	RG

16680

PREIGABE FOR CONSTRUCTION

12. Juli 2005 *Caan*

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

AIR LIQUIDE Air Liquide AGS GmbH Replaces: 79____ Replaced by: 79____	Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-12	History file:
	Job Code: K70101			Scale: 1:1
	Reference: ASU No. 9, Kosice			Original format: DIN A3
	Title: 700 N 20011 AA10C1			Sheet: 1
			Drawing No:	Rev.
			792.8782600	

Rev.	Revisions	Date	Name	checked
C				
B				
A				

Preis-Stückliste 0 600N20011_1AA10C1 0 600 N 20011_1 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0047	24	220	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,90 kg	20,00				0,00
B0519	24	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,11 kg	20,00				0,00
G0136	500	0	Flat packings Graphite with CrNi-insert Standard 40002 595x2x520		2,00				0,00
GW35	500	0	GIRTH WELD 1.0254 (St 37.0) 508x6,3		2,00				0,00
GW36	600	0	girth weld 1.0254 (St 37.0) 610x6,3		11,00				0,00
IPK15041	500	0	PK15041 supplied by AGS		1,00				0,00
P0105	600	0	pipe, welded 1.0254 (St 37.0) DIN 1626 610x6,3	93,80 kg	18,30				0,00
P0261	600	0	Elbow 90° R=1,5 DA, welded 1.0254 (St 37.0) DIN 2609 610x6,3	134,67 kg	4,00				0,00
P1646	600	500	Reducer, concentric, welded 1.0254 (St 37.0) DIN 2609 610x6,3x508x6,3	43,62 kg	1,00				0,00
P2286	600	500	Reducer, eccentric, welded 1.0254 (St 37.0) DIN 2609 610x6,3x508x6,3	43,62 kg	1,00				0,00
P2954	500	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 508	39,50 kg	2,00				0,00
S0066	600	0	Web-support, SV 150G 610 W1 OZN LF 1.0 Hesterberg 610	173,30 kg	2,00				0,00

Preis-Stückliste 0 600N20011_1AA10C1 0 600 N 20011_1 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SC16	600	0	Segment cut 610		7,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
Summe: 0 600N20011_1AA10C1 0				2.788,26 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht: 2.788,26 kg

** Ende der Ausgabe

AS BUILT



Jop Code:	K70101 ASU No. 9, Kosice	Order No.:
-----------	--------------------------	------------

Title: 600 N 20011-1

Drawing No.:

Maker's No.:

(Kunde / TÜV, ...)

geprüft

erstellt:

Pelzeder Erich
Datum / Unterschrift

Schweisstechnologie VAM
Datum / Unterschrift

Datum / Unterschrift

[illegible]

As built

SEE ISO
700 N 20011
Y 11133208
X 3038970
EL +230701
700NPD
700NPD

S10
PS-018
PG
SV150G 610 W1 LF

S10
PS-019
SS
SV150G 610 W1 LF

CONN TO
W14001/ N1
Y 11128462
X 3021262
EL +228185

INSUL:
OMM
INSUL:
UNDEFINED

9
PK15041

1
600X500NPD
51MM OFFSET
FLAT SIDE D

F3 G4

F3 G4 B5

2
600X500NPD

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
.C				
.B				
.A				



Replaces: 79_-----
Replaced by: 79_-----

Date:	Name:	Checked:	History file:
23-JUN-2005	Lesum / HGH	05-07-12	
Job Code: K70101	Reference: ASU No. 9, Kosice	Scale: 1:1	Original format: DIN A3
Title: 600 N 20011_1 AA10C1	Drawing No: 1792.87826	Rev.:	00

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	600X500	REDUCER, ECCENTRIC, WELDED 610*6.3/508*6.3, ST37.0, DIN 2616-1
2	1	600X500	REDUCER, CONCENTRIC, WELDED 610*6.3/508*6.3, ST37.0, DIN 2616-1
3	2	500	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
4	2	500	FLAT GASKET
5	20	24	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 220.0MM LANG
6	18315 MM	600	PIPE, WELDED 610*6.3, ST37.0, DIN EN 10220
7	3	600	ELBOW, WELDED, 1,5D 610*6.3-90, B-ART 3,DIN 2605-1
8	1	600	ELBOW, WELDED, 1,5D 610*6.3-60.1, B-ART 3,DIN 2605-1
9	1	500	PK15041
10	1	600	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	1378	600		BEVEL	BEVEL	RG
<2>	11227	600		BEVEL	BEVEL	RG
<3>	3973	600		BEVEL	BEVEL	RG
<4>	637	600		BEVEL	BEVEL	RG
<5>	1100	600		BEVEL	BEVEL	RG

PREIGABE
FOR CONSTRUCTION

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

Preis-Stückliste 0 500N20012AA10C1-W 0 500 N 20012 AA10C1-W Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0047	24	220	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,90 kg	20,00				0,00
B0519	24	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,11 kg	20,00				0,00
G0136	500	0	Flat packings Graphite with CrNi-insert Standard 40002 595x2x520		3,00				0,00
GW35	500	0	GIRTH WELD 1.0254 (St 37.0) 508x6,3		2,00				0,00
IUK15044	500	0	UK15044 supplied by AGS		1,00				0,00
P0259	500	0	ELBOW 90° R=1,5 DA, WELDED St35.8l /DIN 2605-1/ 508x6,3	93,24 kg	1,00				0,00
P2954	500	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 508	39,50 kg	1,00				0,00
P2954_A	500	0	WELDING NECK FLANGES, PN 10 1.0038 508	39,50 kg	1,00				0,00
Summe: 0 500N20012AA10C1-W 0				192,44 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	192,44 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Job Code: K70101 ASU No. 9, Kosice Order No.:

Title: 500 N 20012

500 N 20012

Sheet 1

Drawing No.:

792.87826 - 00

Maker's No.:

Welder

Material

Dimension

Wärmebehandlung

Protocol No.:

RT

5

MT/PT

Remerk

2

V7/V8

ST37.0

ST37.0

508*6,3

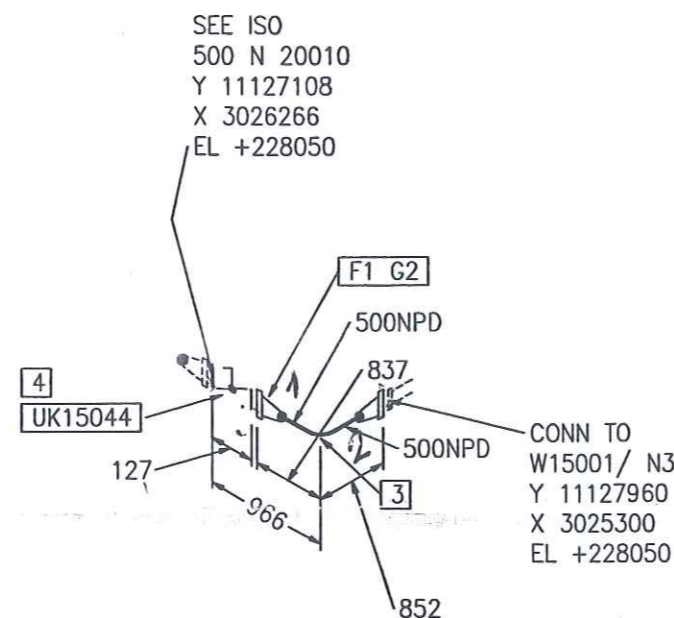
508*6,3

Pelzeder Erich, 10.02.06

1

Kosice

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	500	WELDING-NECK-FLANGE PN10, S235JRG2, D 1092-1
2	1	500	FLAT GASKET
3	1	500	ELBOW, WELDED, 1,5D 508*6.3-90, B-ART 2605-1
4	1	500	UK15044



LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

AIR LIQUIDE Air Liquide AGS GmbH	Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-11 <i>cau</i>	History file:	
	Job Code: K70101		Scale: ---:---	Original format DIN A3	
Reference: ASU No. 9, Kosice		Sheet: 1		Sheets: 1	
Replaces: 79_		Title: 500 N 20012 AA10C1		Drawing No: 1792.87826	
Replaced by: 79_				Rev. 00	

Preis-Stückliste 0 100N20013AA10C1 0 100 N 20013 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0008	16	65	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,13 kg	16,00				0,00
B0009	16	70	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,14 kg	8,00				0,00
B0015	16	130	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,20 kg	8,00				0,00
B0517	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	32,00				0,00
G0104	100	0	Flat packings Graphite with CrNi-insert Standard 40002 162x2x115		6,00				0,00
GW18	100	0	girth weld 1.0254 (St 37.0) 114,3x3,6		17,00				0,00
IFE87010	100	0	FE87010 supplied by AGS		1,00				0,00
IH87010	100	0	H87010 supplied by AGS		1,00				0,00
IH87017	100	0	H87017 supplied by AGS		1,00				0,00
IR87017	100	0	R87017 supplied by AGS		1,00				0,00
P0050	100	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 114,3x3,6	9,83 kg	13,90				0,00
P0208	100	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 114,3x3,6	2,35 kg	6,00				0,00
P2941	100	0	Welding neck flanges; PN 16 1.0038 (S235JRG2) DIN EN 1092-1 114,3	4,50 kg	4,00				0,00

Preis-Stückliste 0 100N20013AA10C1 0 100 N 20013 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
S0009	100	0	T-support TA 120B 115 W1 OZN 1.0 Hesterberg 115	4,50 kg	1,00				0,00
S0021	100	0	T-support TA 120G 115 W1 OZN 1.0 Hesterberg 115	10,70 kg	2,00				0,00
SC7	100	0	Segment cut 114,3		9,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
SPS154	0	0	SUPPORT PS-154	7,13 kg	1,00				0,00
SPS276	0	0	SUPPORT PS-276, H 100, L=670	16,26 kg	1,00				0,00
Summe: 0 100N20013AA10C1 0				223,79 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	223,79 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

 N

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	4	100	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
2	6	100	FLAT GASKET
3	16	16	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 65.0MM LANG
4	8	16	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 130.0MM LANG
5	8	16	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 70.0MM LANG
6	13926 MM	100	PIPE, SEAMLESS 114.3*3.6, ST37.0, DIN EN 10220
7	5	100	ELBOW, SEAMLESS, 1.5D 114.3*3.6-90, B-ART 3,DIN 2605-1
8	1	100	ELBOW, SEAMLESS, 1.5D 114.3*3.6-45, B-ART 3,DIN 2605-1
9	1	100	H87010
10	1	100	H87017
11	1	100	R87017 R87017
12	1	100	FE87010 FE87010
13	1	100	FIX POINT PSUPPORT
14	1	100	SLIDE SUPPORT PSUPPORT

CUT PIPE LENGTH		NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
PIECE NO	LENGTH (MM)					
<1>	835	100		BEVEL	BEVEL	RN
<2>	3305	100		BEVEL	BEVEL	RN
<3>	2569	100		BEVEL	BEVEL	RN
<4>	5196	100		BEVEL	BEVEL	RN
<5>	1615	100		BEVEL	BEVEL	RN
<6>	71	100		BEVEL	BEVEL	RN
<7>	131	100		BEVEL	BEVEL	RN
<8>	204	100		BEVEL	BEVEL	RN

LEVELS:	
TOP OF INTERNAL ROADS:	225.00m n.m.
TOP OF FOUNDATION:	225.10m
BOTTOM OF STEEL STRUCTURE:	225.15m = ± 0.00

SUPPORTS:

PS-(NO.) - PIPE SUPPORT
WITH SUBSTRUCTURE

PB-(NO.) - PIPE SUPPORT
ON THE PIPEBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

01	General Rev	15.09.2005	Les	Zul
Rev.	Revisions	Dale	Name	checke

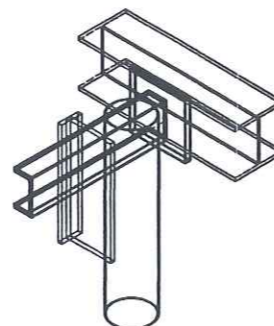
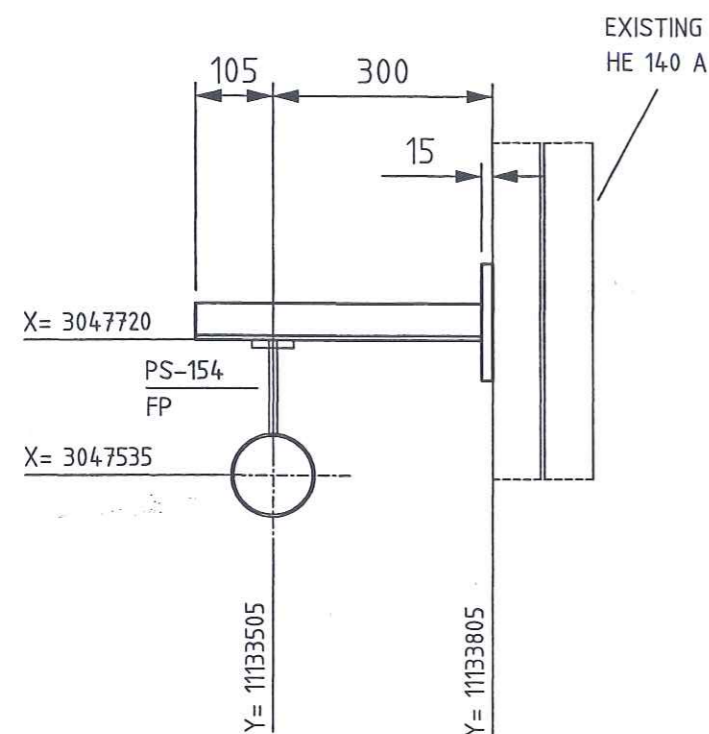
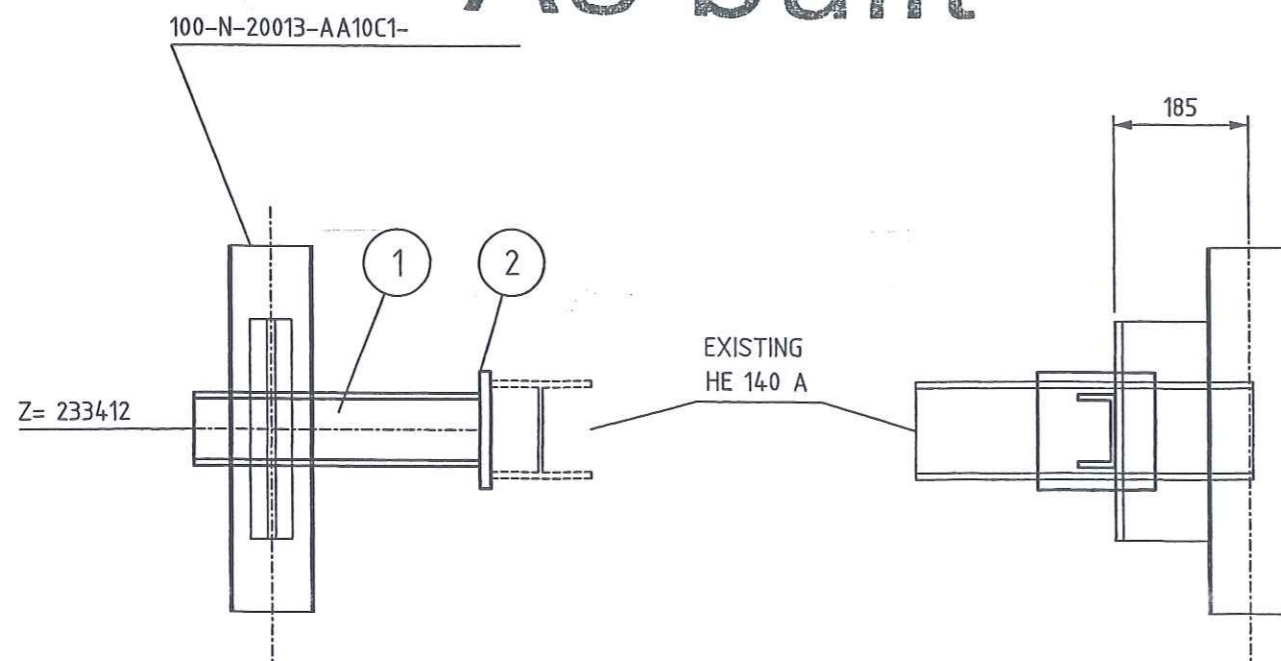


Air Liquide AGS GmbH

Replaces: 79_-----
Replaced by: 79_-----

Date:	Name:	Checked:	History file.	
16-SEP-2005	Lesum / HGH	05-09-15		
Job Code: K70101		Scale	Original format	
Reference: ASU No. 9, Kosice		1 : 1	DIN A3	
		Sheet: 1	Sheets: 1	
Title:		Drawing No.		Rev.
100 N 20013 AA10C1		1792.87826		01

As built



LEGEND:

- PG- PIPE GUIDE
- FP- FIX POINT
- SS- SLIDE SUPPORT
- HN- HANGER
- SSAX- SLIDE SUPPORT WITH AXIAL STOP
- AXLS- AXIAL STOP WITH LIFTING STOP
- SPS- SPRING SUPPORT
- SPGS- SPRING SUPPORT GUIDED
- GSAX- GUIDE SUPPORT WITH AXIAL STOP
- SPAX- SPRING SUPPORT WITH AXIAL STOP
- SH- SPRING HANGER
- AX- AXIAL STOP

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:

- MARKING:
-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER
RESISTANT PAINT AND WHITE COLOR

RESPONSIBILITY OF ERECTION COMPANY

- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:


- ALL SURFACES FOR COATING MUST BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED


WELDING DATA ACC. TO DIN 1912 T5

$a \geq 0,7 \times t$
 $a_{\min} = 4 \text{ mm}$



Total Weight:	7.14 kg
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	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by 25.11.2005		Zut	
Drawn checked by			



HEGMANN


AIR LIQUIDE

Air Liquide AGS GmbH

	Date	Name	Check.	History File
	19.07.2005	GU	Zut	
	Job Code:	K70101 ASU No.9 Kosice		
	Reference:	PIPING SUPPORT		
Replaces:	Title	PS-154		Scale: 1:10 Original Format DIN A3 Sheet: 1 of: Drawing-No. 792.87926

Archives Rev No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

Preis-Stückliste 0 500N20016AA10C1-W 0 500 N 20016 AA10C1-W Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0047	24	220	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,90 kg	20,00				0,00
B0519	24	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,11 kg	20,00				0,00
G0136	500	0	Flat packings Graphite with CrNi-insert Standard 40002 595x2x520		2,00				0,00
GW35	500	0	GIRTH WELD 1.0254 (St 37.0) 508x6,3		9,00				0,00
IUK15045	500	0	UK15045 supplied by AGS		1,00				0,00
P0103	500	0	pipe, welded 1.0254 (St 37.0) DIN 1626 508x6,3	77,90 kg	5,60				0,00
P0259	500	0	ELBOW 90° R=1,5 DA, WELDED St35.8I /DIN 2605-1/ 508x6,3	93,24 kg	4,00				0,00
P2954	500	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 508	39,50 kg	2,00				0,00
S0065	500	0	Web-support, SV 150G 508 W1 OZN LF 1.0 Hesterberg 508	99,50 kg	1,00				0,00
S0201	500	0	SLIDING PLATE 1.0 HESTERBERG		2,00				0,00
SC15	500	0	Segment cut 508		5,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
SPS023	0	0	SUPPORT PS-023	67,05 kg	1,00				0,00
Summe: 0 500N20016AA10C1-W 0				1.074,95 kg		0,00	0,00		0,00

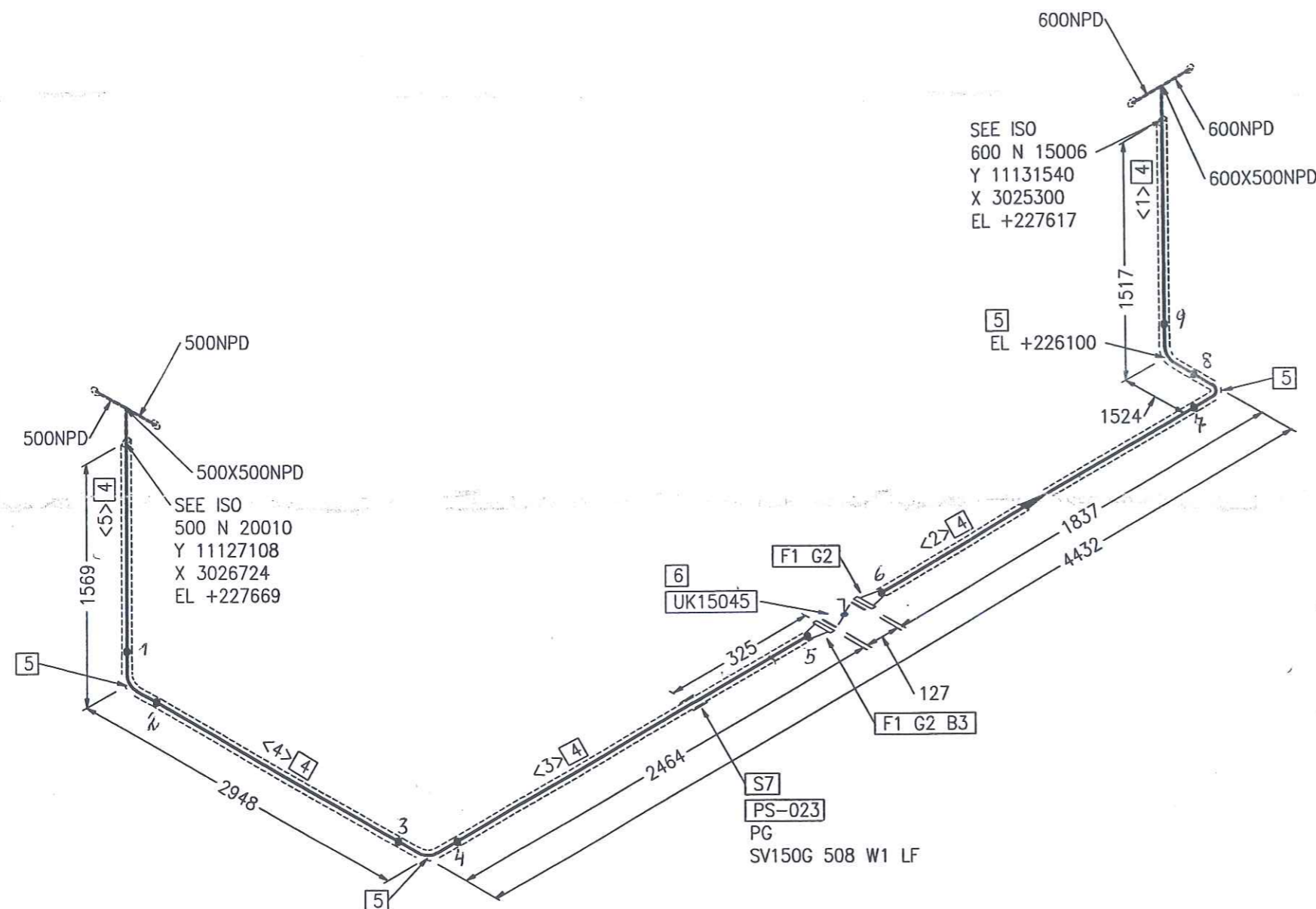
Preis-Stückliste 0 500N20016AA10C1-W 0 500 N 20016 AA10C1-W Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
-------------	-----	-----	------------------	------------	-------	-----------	---------	-------	--------

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	1.074,95 kg
** Ende der Ausgabe	

AS BUILT

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	2	500	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
2	2	500	FLAT GASKET
3	20	24	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 220.0MM LANG
4	5613 MM	500	PIPE, WELDED 508*6.3, ST37.0, DIN EN 10220
5	4	500	ELBOW, WELDED, 1.5D 508*6.3-90, B-ART 3, DIN 2605-1
6	1	500	UK15045
7	1	500	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	755	500		BEVEL	BEVEL	RG
<2>	1000	500		BEVEL	BEVEL	RG
<3>	1627	500		BEVEL	BEVEL	RG
<4>	1424	500		BEVEL	BEVEL	RG
<5>	807	500		BEVEL	BEVEL	RG

FEIGABE
FOR CONSTRUCTION

12. Juli 2005 *Clean*

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

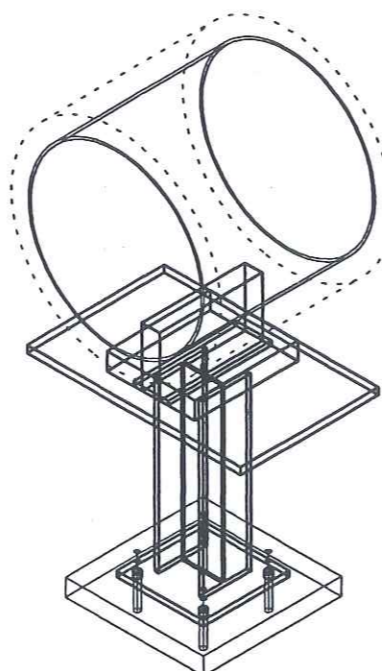
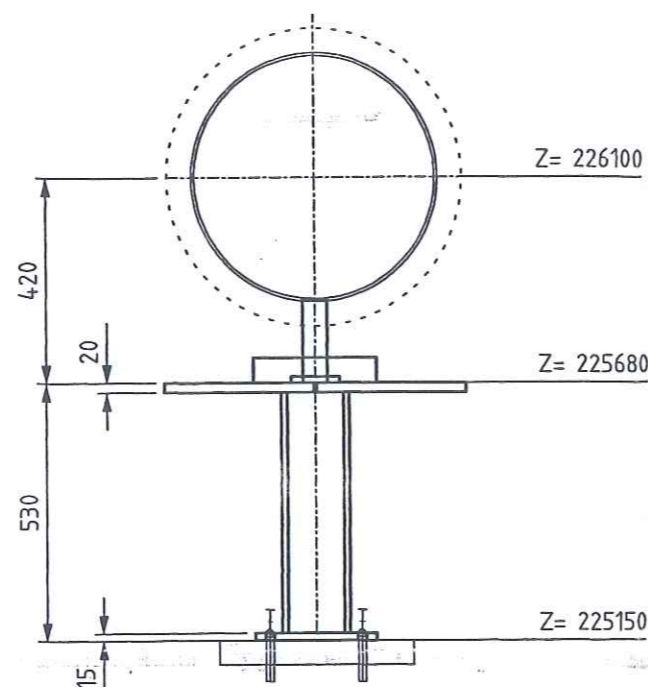
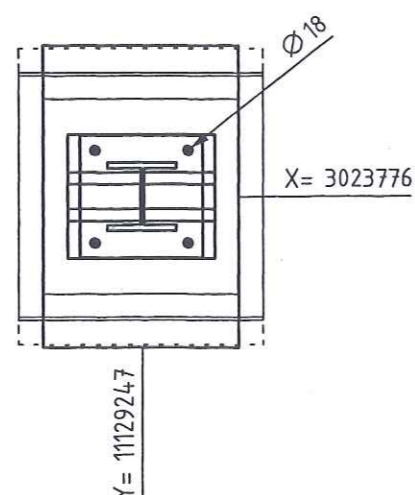
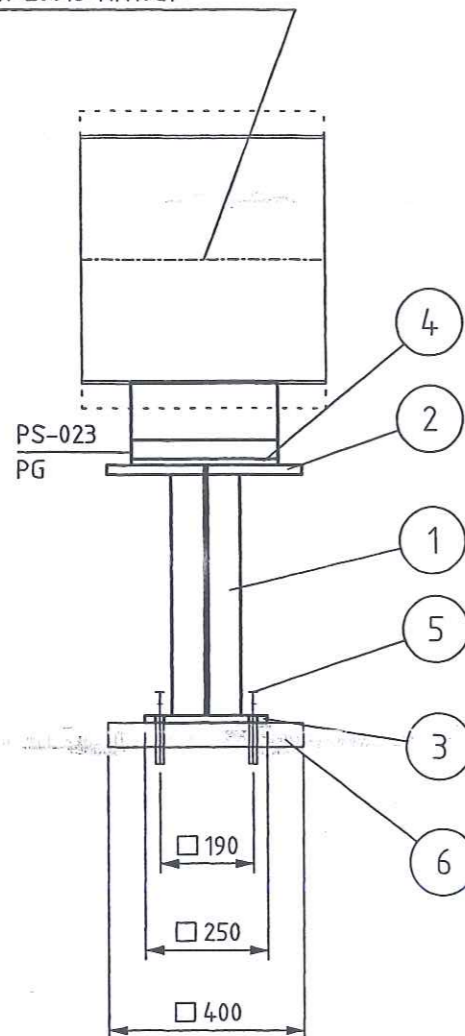
RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

AIR LIQUIDE Air Liquide AGS GmbH	Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-12	History file:
	Job Code: K70101		Scale: ---:---	Original format: DIN A3
Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 1	
Title: 500 N 20016 AA10C1W		Drawing No: 792.87826		Rev. 00

Rev.	Revisions	Date	Name	checked
_C				
_B				
_A				

As built



Archives Rev No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

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LEGEND:
-PP-    PIPE GUIDE
-FP-    FIX POINT
-SS-    SLIDE SUPPORT
-HN-    HANGER
-SSAX-  SLIDE SUPPORT WITH AXIAL STOP
-AXLS-  AXIAL STOP WITH LIFTING STOP
-SPS-   SPRING SUPPORT
-SPGS-  SPRING SUPPORT GUIDED
-GSAX-  GUIDE SUPPORT WITH AXIAL STOP
-SPAX-  SPRING SUPPORT WITH AXIAL STOP
-SH-    SPRING HANGER
-AX-    AXIAL STOP

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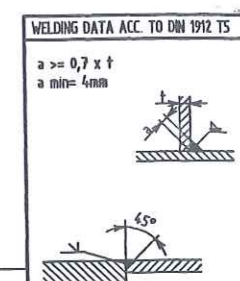
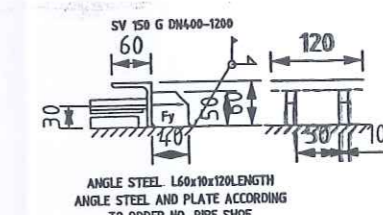
- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:
-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER
RESISTANT PAINT AND WHITE COLOR

RESPONSIBILITY OF ERECTION COMPANY


- LOCATION OF FIELD WELDS
- FITTING LENGHTS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:
-ALL SURFACES FOR COATING **MUST** BE FREE OF
CONTAMINANTS ALL OIL, **GREASE** AND ALL LOOSE DUST
-THE RUST, WELDING FLUX **AND** DIRT FROM THE COMPLETED
SUPPORT NEEDS TO BE **REMOVED**
-THE SUPPORT NEEDS TO BE **PRIME** COATED



Total Weight:	65.84 kg
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[illegible]

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by	25. JUL. 2005	Zut	
Drawn checked by			

 **AIR LIQUIDE**TM
Air Liquide AGS GmbH

	Date	Name	Check.	History File
	17.05.2005	MG	Zut	
	Job Code: K70101 ASU No.9 Kosice			Scale: 1:15
	Reference: PIPING to SUPPORT			Original Format DIN A3
				Sheet: 1 of: 1
Replaces:	Title PS-023			Drawing-No. 792.87926
				Rev. a

Preis-Stückliste 0 400N20017AA10C1 0 400 N 20017 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0018	20	80	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,26 kg	20,00				0,00
B0034	24	90	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,43 kg	16,00				0,00
B0044	24	190	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,78 kg	16,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	20,00				0,00
B0519	24	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,11 kg	32,00				0,00
G0129	400	0	FLAT PACKINGS Graphite with CrNi-insert Standard 40002 490x2x420		3,00				0,00
G0140	600	0	Flat packings Graphite with CrNi-insert Standard 40002 695x2x620		1,00				0,00
GW34	400	0	girth weld 1.0254 (St 37.0) 406,4x6,3		6,00				0,00
GW36	600	0	girth weld 1.0254 (St 37.0) 610x6,3		1,00				0,00
IFK20006	400	0	FK20006 supplied by AGS		1,00				0,00
P0101	400	0	pipe, welded 1.0254 (St 37.0) DIN 1626 406,4x6,3	62,20 kg	4,60				0,00
P0105	600	0	pipe, welded 1.0254 (St 37.0) DIN 1626 610x6,3	93,80 kg	0,70				0,00

AS BUILT

Preis-Stückliste 0 400N20017AA10C1 0 400 N 20017 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0257	400	0	Elbow 90° R=1,5 DA, welded 1.0254 (St 37.0) DIN 2609 406,4x6,3	59,60 kg	2,00				0,00
P2952	400	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 406,4	29,50 kg	3,00				0,00
P2956	600	0	WELDING NECK FLANGES, PN 6 1.0038		1,00				0,00
SC14	400	0	Segment cut 406,4		3,00				0,00
SC16	600	0	Segment cut 610		1,00				0,00
SPS086	0	0	SUPPORT PS-086	406,63 kg	1,00				0,00
Summe: 0 400N20017AA10C1 0				995,39 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	995,39 kg
Gesamtgewicht:	
** Ende der Ausgabe	

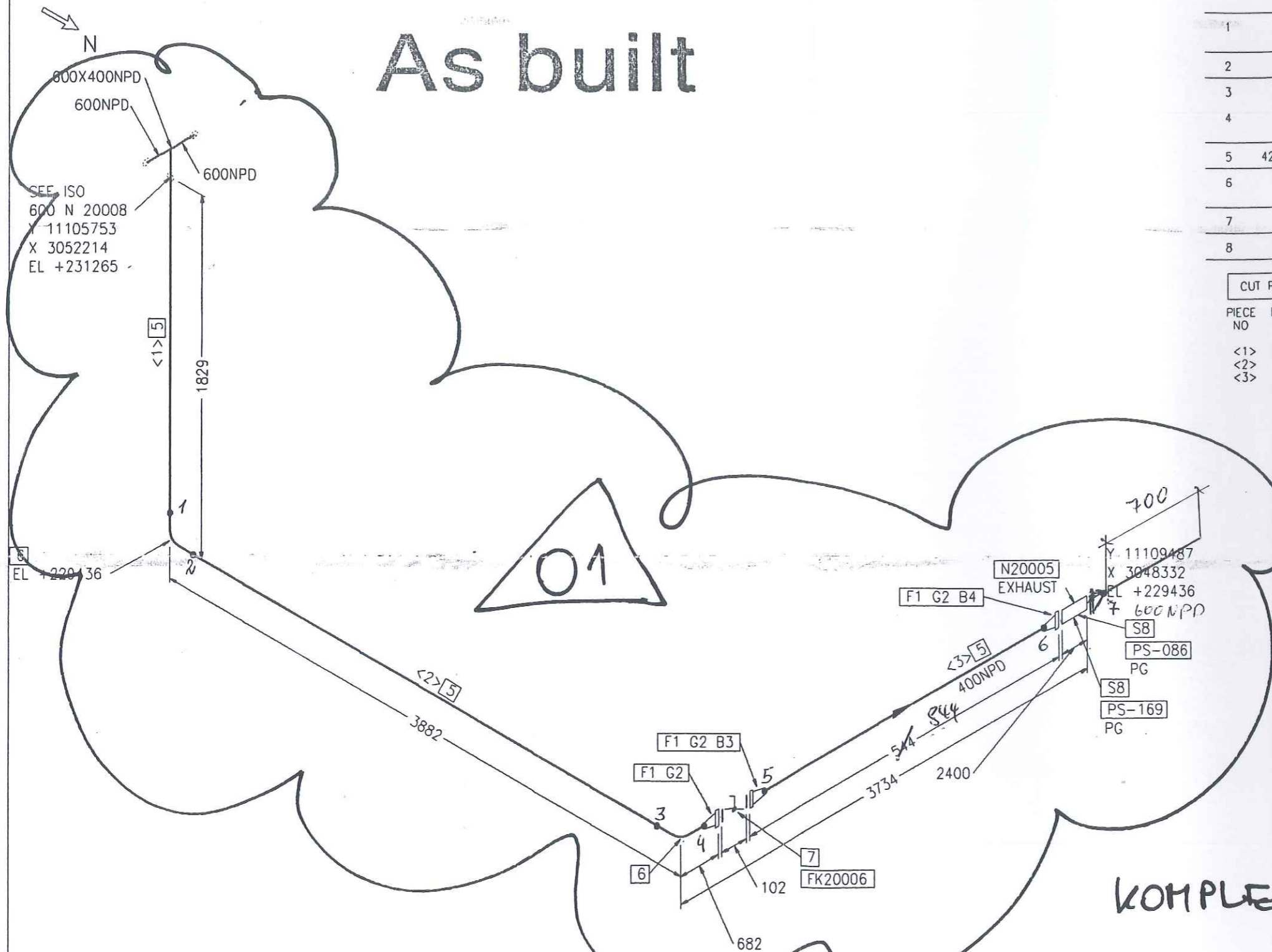
AS BUILT

As built

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	3	400	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
2	3	400	FLAT GASKET
3	16	24	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 190.0MM LANG
4	16	24	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 90.0MM LANG
5	4281 MM	400	PIPE, WELDED 406.4*6.3, ST37.0, DIN EN 10220
6	2	400	ELBOW, WELDED, 1.5D 406.4*6.3-90, B-ART 3,DIN 2605-1
7	1	400	FK20006
8	2	400	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	1219	400		BEVEL	BEVEL	RG
<2>	2662	400		BEVEL	BEVEL	RG
<3>	400	400		BEVEL	BEVEL	RG



KOMPLETT, WEGEN GAN-
VERROHRUNG

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

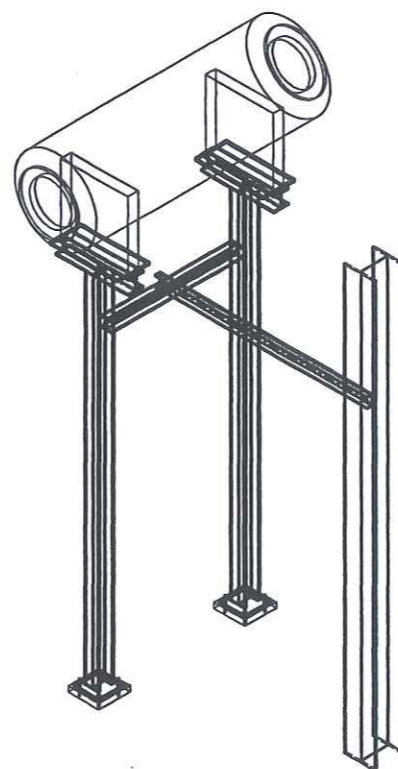
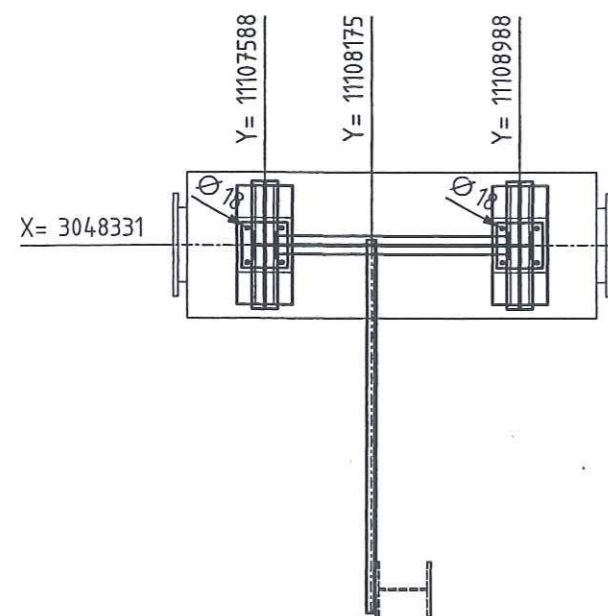
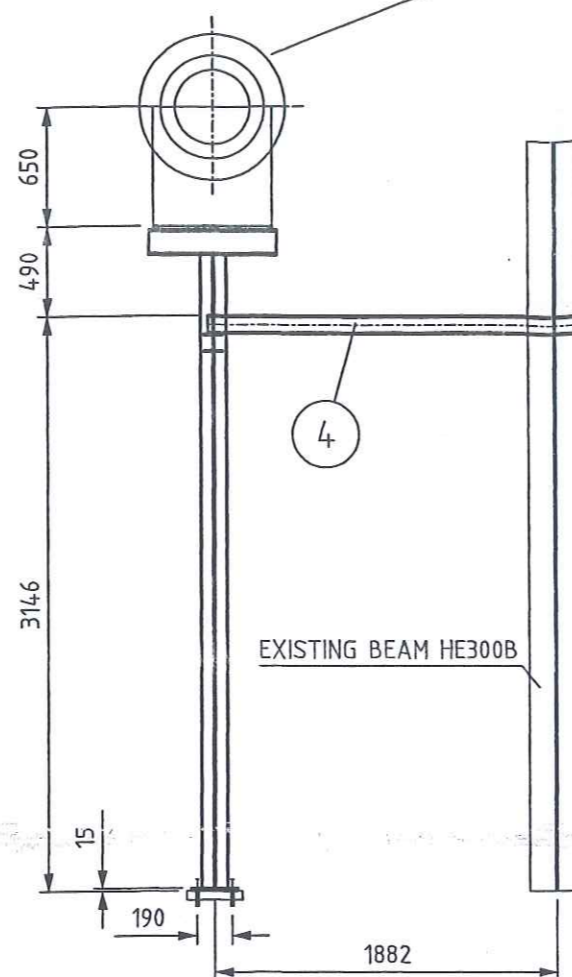
RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

AIR LIQUIDE Air Liquide AGS GmbH	Date: 06-SEP-2005	Name: Lesum / HGH	Checked: 05-09-15	History file.	
	Job Code: K70101			Scale: ---:---	Original format: DIN A3
	Reference: ASU No. 9, Kosice			Sheet: 1	Sheets: 1
	Title: 400 N 20017 AA10C1792.8782601			Drawing No.	Rev.

Rev.	Revisions	Date	Name	checked
01	General Rev	15.09.2005	Les	Zul

As built



- PG- PIPE GUIDE
- FP- FIX POINT
- SS- SLIDE SUPPORT
- HN- HANGER
- SSAX- SLIDE SUPPORT WITH AXIAL STOP
- AXLS- AXIAL STOP WITH LIFTING STOP
- SPS- SPRING SUPPORT
- SPGS- SPRING SUPPORT GUIDED
- GSAX- GUIDE SUPPORT WITH AXIAL STOP
- SPAX- SPRING SUPPORT WITH AXIAL STOP
- SH- SPRING HANGER
- AX- AXIAL STOP

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:
-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER
RESISTANT PAINT AND WHITE COLOR

- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

- ALL SURFACES FOR COATING MUST BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED


a $\geq 0,7 \times t$
a min = 4 mm




Total Weight:	404.22 kg
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27. Juli 2009

FOR CONSTRUCTION

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by	25 JUL 2005	Zut	
Drawn checked by			


AIR LIQUIDE™

Air Liquide AGS GmbH

	Date	Name	Check	History File			
	09.06.2005	GU	Zut				
	Job Code:	K70101 ASU No.9 Kosice			Scale:	1:40	Original Format
	Reference:	PIPING SUPPORT			Sheet:	1	of:
	Replaces:	Title	PS-086			Drawing-No.	792.87926

Archives Rev. No.	Rev.	Job No.	Description	Sign.	Date
R E V I S I O N S					

Preis-Stückliste 0 150N20018ZB40C1 0 150 N 20018 ZB40C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0136	24	90	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	0,43 kg	8,00				0,00
B0538	24	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,11 kg	8,00				0,00
G0108	150	0	Flat packings Graphite with CrNi-insert Standard 40002 218x2x169		1,00				0,00
GW11	50	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 60,3x2		1,00				0,00
GW17	100	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 114,3x2,6		1,00				0,00
GW23	150	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 168,3x4,5		2,00				0,00
P0140	150	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 168,3x4	16,40 kg	0,50				0,00
P1764	100	50	Reducer, concentric, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 114,3x2,6x60,3x2	0,55 kg	1,00				0,00
P1787	150	100	Reducer, concentric, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 168,3x4x114,3x3,6	2,00 kg	1,00				0,00
P2997	50	0	Welding neck flanges; PN 40 1.4541 (X 6 CrNiTi 18 10) DIN EN 1092- 60,3	3,00 kg	1,00				0,00
P3007	150	0	Welding neck flanges; PN 40 1.4541 (X 6 CrNiTi 18 10) DIN EN 1092- 168,3	11,50 kg	1,00				0,00
SC9	150	0	Segment cut 168,3		1,00				0,00

Preis-Stückliste 0 150N20018ZB40C1 0 150 N 20018 ZB40C1 Revision:

(Fortsetzung)						
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung
Summe: 0 150N20018ZB40C1 0				29,57 kg		0,00
					Montage	0,00
					L + M	
					Gesamt	0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

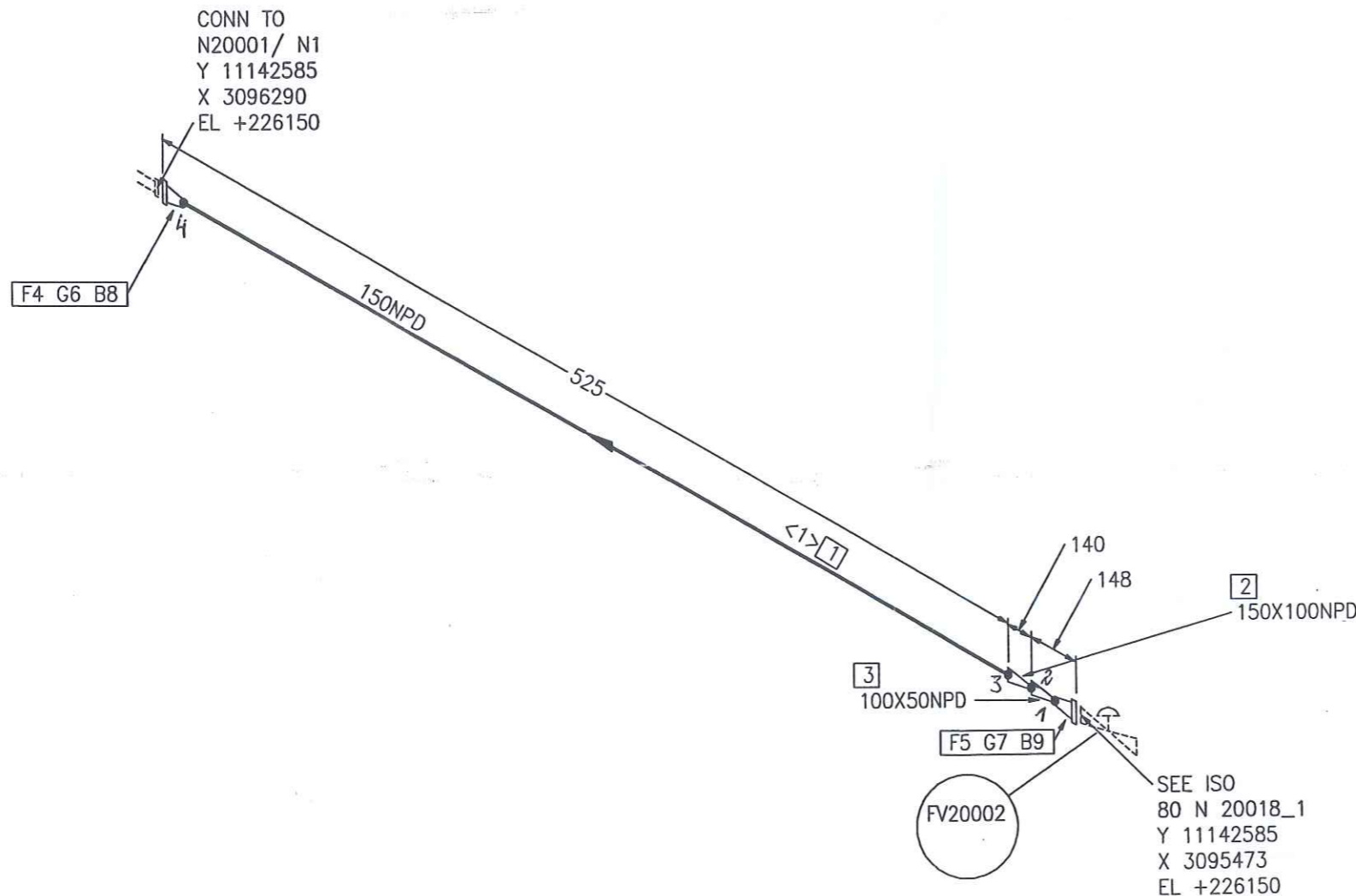
Gesamtgewicht:

** Ende der Ausgabe

29,57 kg

AS BUILT

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	450 MM	150	PIPE, WELDED 168.3 * 4.0 , 1.4541, DIN EN ISO 1127
2	1	150X100	REDUCER, CONCENTRIC, WELDED 168.3*4.0/114.3*3.6, 1.4541, DIN 2616-1
3	1	100X50	REDUCER, CONCENTRIC, WELDED 114.3*2.6/60.3*2.0, 1.4541, DIN 2616-1
4	1	150	WELDING-NECK-FLANGE PN40, 1.4541, DIN EN 1092-1
5	1	50	WELDING-NECK-FLANGE PN40, 1.4541, DIN EN 1092-1
6	1	150	FLAT GASKET
7	1	50	FLAT GASKET
8	8	24	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 90.0MM LANG
9	4	16	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 65.0MM LANG

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	450	150		BEVEL	BEVEL	RG1

FREIGABE
FOR CONSTRUCTION

12.07.05 Ceati

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

AIR LIQUIDE Air Liquide AGS GmbH	Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-11	History file:	
	Job Code: K70101		Scale: ---:---		Original format: DIN A3
Reference: ASU No. 9, Kosice		Sheet: 1		Sheets: 1	
Title: 150 N 20018 ZB40C1		Drawing No: 792.87826		Rev. 00	
Replaces: 79_		Replaced by: 79_			

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 80N20018_1ZB40C1 0 80 N 20018_1 ZB40C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0109	16	65	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	0,13 kg	8,00				0,00
B0534	16	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,03 kg	8,00				0,00
G0100	50	0	Flat packings Graphite with CrNi-insert Standard 40002 107x2x61		2,00				0,00
GW11	50	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 60,3x2		1,00				0,00
GW15	80	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 88,9x2,3		21,00				0,00
IFV20002	50	0	FV20002 supplied by AGS		1,00				0,00
P0136	80	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 88,9x2,3	4,98 kg	26,95				0,00
P0289	80	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 88,9x2,3	0,89 kg	9,00				0,00
P1756	80	50	Reducer, concentric, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 88,9x2,3x60,3x2	0,38 kg	1,00				0,00
P1768	100	80	Reducer, concentric, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 114,3x2,6x88,9x2,3	0,65 kg	1,00				0,00
P2997	50	0	Welding neck flanges; PN 40 1.4541 (X 6 CrNiTi 18 10) DIN EN 1092- 60,3	3,00 kg	1,00				0,00
S0032	80	0	T-support, 1.4541, TA 120B 89 W3 1.4 Hesterberg 89	4,10 kg	6,00				0,00

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 80N20018_1ZB40C1 0 80 N 20018_1 ZB40C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
S0044250	80	0	T-support, 1.4541, TA 120G 89 W3, H2 = 2 1.4 Hesterberg	8,70 kg	1,00				0,00
SC6	80	0	Segment cut 88,9		10,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		3,00				0,00
SPS272	0	0	SUPPORT PS-272, HEB 100, L=250 200x200x10	15,62 kg	1,00				0,00
Summe: 0 80N20018_1ZB40C1 0				196,45 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	196,45 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Jop Code: K70101 ASU No. 9, Kosice

Jop Code: K70101 ASU No. 9, Kosice

Client: AIR LIQUIDE

Title:

80 N 20018-1

Sheet 1

Drawing No.:

792 87826 - 00

Maker's No.:

(Kunde / TÜV, ...)

geprüft

10.12.1961 Pelzeder Erich
Datum / Unterschrift

Schweisstechnologie VAM
Datum / Unterschrift



Datum / Unterschrift

[illegible]



As built

4
EL +230300

SEE ISO
150 N 20018
Y 11142585
X 3095473
EL +226150

FV20002

F6 G7 B8

9

80X50NPD

TA120G 89W3
H 250
PG
<1> 1

PS 172

HEB 100 L=550
BR. 200x200x10

TA120G 89W3
PG
<4> 1

4
EL +230485

SEE ISO
100 N 20004
Y 11126100
X 3088792
EL +230485

100X80NPD

100X100NPD

100NPD

100NPD

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT
WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT
ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				



Air Liquide AGS GmbH

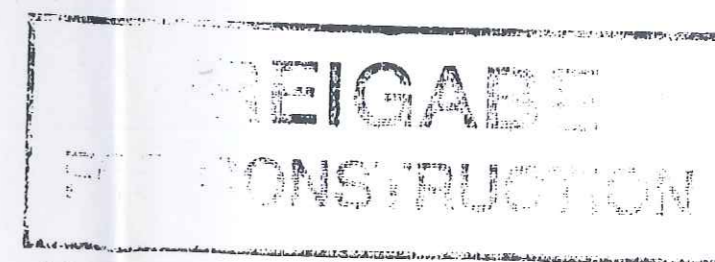
Replaces: 79____
Replaced by: 79____

Date:	23-JUN-2005	Name:	Lesum / HGH	Checked:	05-07-11	History file:	
Job Code:	K70101	Reference:	ASU No. 9, Kosice	Title:	80 N 20018_1 ZB40C1792.8782600	Scale:	1:1
Sheet:	1	Sheets:	1	Drawing No:		Rev.	

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	25917	MM	PIPE, WELDED 88.9 * 2.3 , 1.4541, DIN EN ISO 1127
2	1	100X80	REDUCER, CONCENTRIC, WELDED 114.3*2.6/88.9*2.3, 1.4541, DIN 2616-1
3	1	80X50	REDUCER, CONCENTRIC, WELDED 88.9*2.3/60.3*2.0, 1.4541, DIN 2616-1
4	4	80	ELBOW, WELDED, 1,5D 88.9*2.3-90, B-ART 3,DIN 2605-1
5	1	80	ELBOW, WELDED, 1,5D 88.9*2.3-45, B-ART 3,DIN 2605-1
6	1	50	WELDING-NECK-FLANGE PN40, 1.4541, DIN EN 1092-1
7	1	50	FLAT GASKET
8	4	16	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 65.0MM LANG
9	1	50	FV20002 FV20002

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	459	80		BEVEL	BEVEL	RG1
<2>	3922	80		BEVEL	BEVEL	RG1
<3>	3672	80		BEVEL	BEVEL	RG1
<4>	16139	80		BEVEL	BEVEL	RG1
<5>	101	80		BEVEL	BEVEL	RG1
<6>	1624	80		BEVEL	BEVEL	RG1



12. Juli 2005 Gaki

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

Preis-Stückliste 0 200N20018_2AA10C1 0 200 N 20018_2 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0008	16	65	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,13 kg	16,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	16,00				0,00
G0110	200	0	Flat packings Graphite with CrNi-insert Standard 40002 273x2x220		2,00				0,00
GW26	200	0	girth weld 1.0254 (St 37.0) 219,1x4,5		4,00				0,00
P0069	200	0	PIPE, WELDED 1.0254 (St 37.0) DIN 1626 219,1x4,5	23,80 kg	1,05				0,00
P0225	200	0	Elbow 90° R=1,5 DA, welded 1.0254 (St 37.0) DIN 2609 219,1x4,5	11,40 kg	1,00				0,00
P2958	200	0	WELDING NECK FLANGES, PN 6 1.0038		2,00				0,00
SC10	200	0	Segment cut 219,1		2,00				0,00
Summe: 0 200N20018_2AA10C1 0				38,95 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	38,95 kg
** Ende der Ausgabe	

AS BUILT

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot Nr.

Jop Code:

K70101 ASU No. 9, Kosice

Order No.:

Client: AIR LIQUIDE

Title: 200 N 20018-2

Sheet 1

Drawing No.:

Project No.: 9050300

Maker's No.:

erstellt:

geprüft

(Kunde / TÜV, ...)

10.02.06
Pelzeder Erich
Datum / UnterschriftSchweisstechnologie VAM
Datum / Unterschrift

Datum / Unterschrift



Seam No.:

Welder
No.:

Material

Dimension

Wärme-
behandlung

RT

UT

Protocol No.:

MT/PT

SP

Remerk

1

2

3

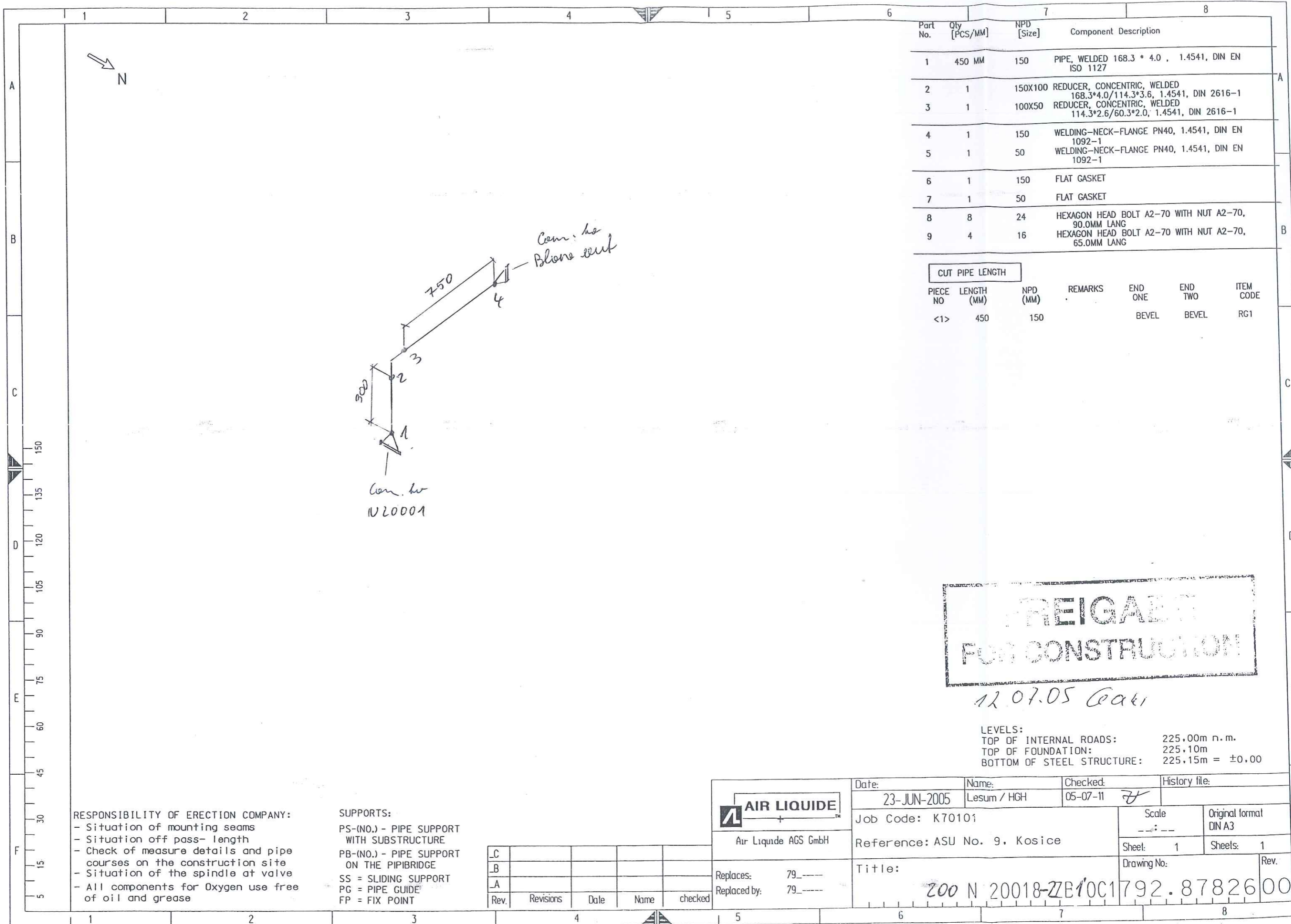
4

219,1*4,5

219,1*4,5

219,1*4,5

219,1*4,5



Preis-Stückliste 0 300O20019ZB40C1 0 300 O 20019 ZB40C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0088	30	120	HEXAGON HEAD SCREWS A2-70 resp. A2-50 DIN EN ISO 3506	0,88 kg	16,00				0,00
B0102	12	55	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	0,06 kg	8,00				0,00
B0135	24	100	HEXAGON HEAD SCREWS A2		24,00				0,00
B0527	30	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,22 kg	16,00				0,00
B0532	12	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,02 kg	8,00				0,00
B0538	24	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,11 kg	24,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
G0118	300	0	Flat packings Graphite with CrNi-insert Standard 40002 378x2x325		1,00				0,00
G0148	800	0	FLAT PACKINGS graphite		1,00				0,00
GW32	300	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 323,9x7,1		13,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		14,00				0,00
P0131	25	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 33,7x2	1,58 kg	11,20				0,00
P0146	300	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 323,9x5,6	44,70 kg	14,33				0,00

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0284	25	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2	0,09 kg	6,00				0,00
P0303	300	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 323,9x7,1	40,40 kg	6,00				0,00
P2989	25	0	WELDING NECK FLANGES, PN 40 1.4541 /DIN 2637/ 33,7		3,00				0,00
PW128	300	25	PIPE WELD-IN 1.4541 323,9x33,7		1,00				0,00
PW150	300	150	PIPE WELD-IN 1.4541		1,00				0,00
S0027	25	0	T-support, 1.4541, TA 120B 34 W3 1.4 Hesterberg 34	3,70 kg	3,00				0,00
S0203	300	0	SC 150G 324 W3 1.4541		1,00				0,00
SC12	300	0	Segment cut 323,9		7,00				0,00
SPS273	0	0	SUPPORT PS-273, P 150, L=600	27,48 kg	1,00				0,00
SPS274	0	0	SUPPORT PS-274, U 140, L=600	9,60 kg	1,00				0,00
Summe: 0 300O20019ZB40C1 0				970,25 kg		0,00	0,00		0,00

AS BUILT

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	970,25 kg
** Ende der Ausgabe	

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot Nr.

Jop Code: K70101 ASU No. 9, Kosice Order No.:

Client: AIR LIQUIDE Title: 300 O 20019

Sheet 1

Drawing No.:

Project No.: 9050300

Maker's No.:

(Kunde / TÜV, ...)

geprüft

Schweißtechnologie VAM

Datum / Unterschrift

erstellt:

04.03.06
Pelzeder Erich
Datum / Unterschrift

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:					Remerk
				Wärme- behandlung	RT	UT	MT/PT	SP	
1	V2	1.4541	323,9*5,6		R0073				
1,1	V2	1.4541	323,9*5,6						
2	V2	1.4541	323,9*5,6		R0074				
3	V2	1.4541	323,9*5,6		R0075				
4	V1	1.4541	323,9*5,6		R0076				
5	V1	1.4541	323,9*5,6						
6	V2	1.4541	323,9*5,6		R0077				
7	V2	1.4541	323,9*5,6		R0078				
8	V2	1.4541	323,9*5,6		R0079				
8,1	V2	1.4541	323,9*5,6						
9	V2	1.4541	323,9*5,6		R0080				
10	V2	1.4541	323,9*5,6						
11	V2	1.4541	323,9*5,6		R0081				
12	V2	1.4541	NPD25						
13	V1	1.4541	33,7*3						
14	V1	1.4541	33,7*3						
15	V1	1.4541	33,7*2						
16	V1	1.4541	33,7*2						
17	V1	1.4541	33,7*2						
18	V1	1.4541	33,7*2						
19	V1	1.4541	33,7*2						
20	V1	1.4541	33,7*2						
21	V1	1.4541	33,7*2						
22	V1	1.4541	33,7*2						
23	V1	1.4541	33,7*2						
24	V1	1.4541	33,7*2						
25	V1	1.4541	33,7*2						



Prot Nr.

Jop Code: K70101 ASU No. 9, Kosice **Order No.:**

Client:	AIR LIQUIDE	Title:	300 O 20019
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Sheet 1

Drawing No.:

Project No.: 9050300

Maker's No.:

(Kunde / TÜV, ...)

geprüft

4.03.06 211

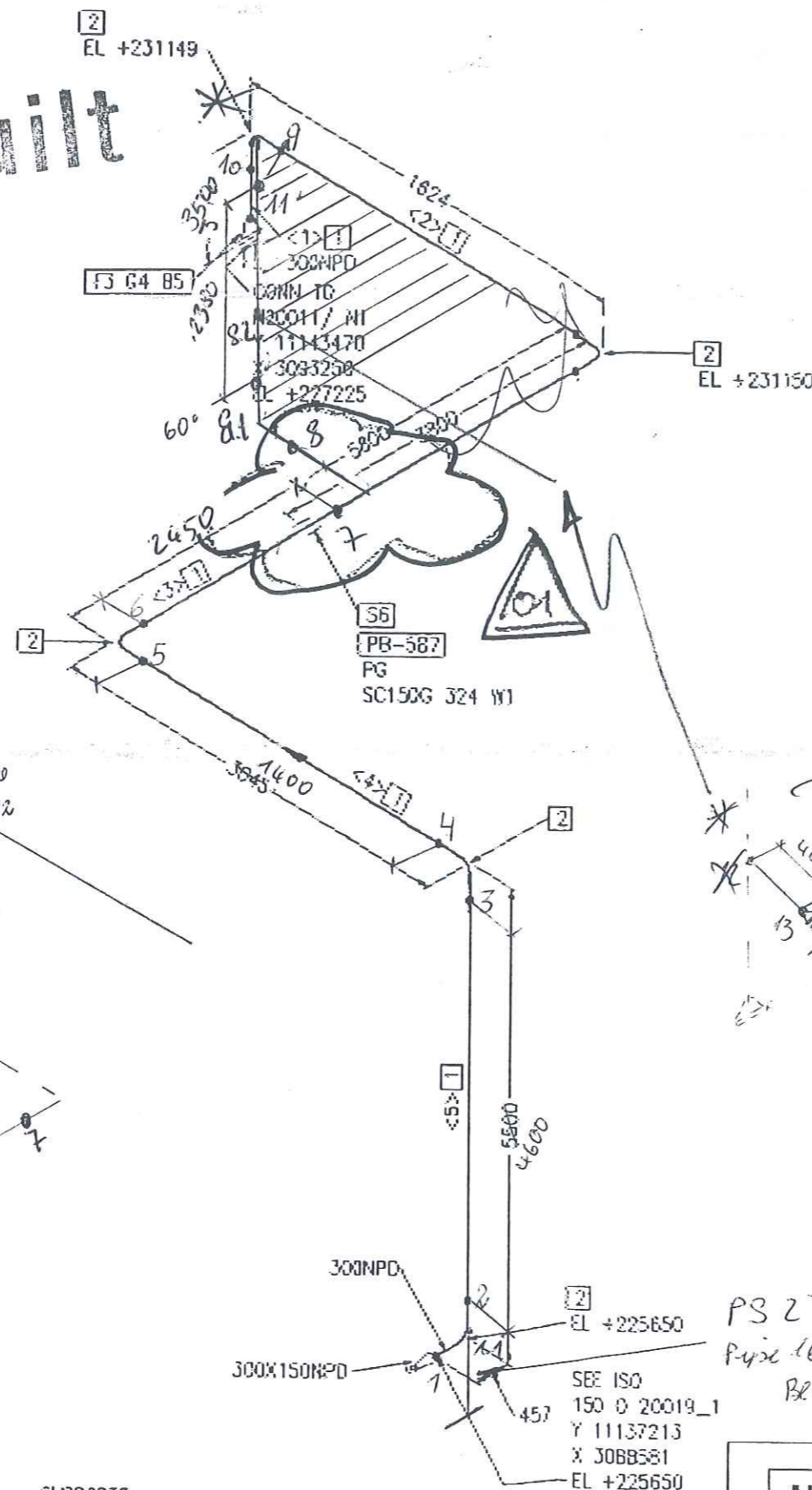
Polzeder Erich

Schweisstechnologie VAM

Datum / Unterschrift

[illegible]

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	15654 MM	300	PIPE, WELDED 323.9 * 5.6, 1.4541, DN EN ISO 1127
2	5	300	ELBOW, WELDED, 1.50 323.9*7.1-90, B-ART 3, DN 2605-1
3	1	300	WELDING-NECK-FLANGE PW40, 1.4541, DN EN 1092-1
4	1	300	FLAT GASKET
5	16	30	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 129.0MM LONG
6	1	300	PIPE CLIDE FSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	3351	300		BEVEL	BEVEL	RG1
<2>	710	300		BEVEL	BEVEL	RG1
<3>	4866	300		BEVEL	BEVEL	RG1
<4>	2131	300		BEVEL	BEVEL	RG1
<5>	4566	300		BEVEL	BEVEL	RG1

GOK 25 Depressurising line

DN 25

15654
25
131

PS 273

Pipe 168,3x9,5 l=600
Bl. 300x300x10 A2

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-INQJ - PIPE SUPPORT WITH SUBSTRUCTURE
PS-INQJ - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE CLIDE
EP = FIX POINT

Rev.	General Rev	Date	Les	Aut	checked
01	General Rev	08.02.05	Les	Aut	

		Date:	22-SEP-2005		Name:	Lesum/HGH		Checked:	05-09-05		History file
		Job Code:	K70101		Reference:	ASU No. 9, Kasice		Scale:	1:1		Original format (DIN A3)
Title:		300 0 20019 ZB40C1792.87826101		Drawing No:				Sheet:		1	

Preis-Stückliste 0 150O20019_1ZB40C1 0 150 O 20019_1 ZB40C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0136	24	90	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	0,43 kg	16,00				0,00
B0538	24	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,11 kg	16,00				0,00
G0109	150	0	Flat packings Graphite with CrNi-insert Standard 40002 225x2x169		2,00				0,00
GW23	150	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 168,3x4,5		6,00				0,00
IFV20012	150	0	FV20012 supplied by AGS		1,00				0,00
P0140	150	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 168,3x4	16,40 kg	2,53				0,00
P0294	150	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 168,3x4	5,90 kg	2,00				0,00
P1829	300	150	Reducer, concentric, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 323,9x10x168,3x7,1	12,10 kg	1,00				0,00
P3007	150	0	Welding neck flanges; PN 40 1.4541 (X 6 CrNiTi 18 10) DIN EN 1092- 168,3	11,50 kg	2,00				0,00
S0023	150	0	T-support TA 120G 169 W1 OZN 1.0 Hesterberg 169	11,60 kg	1,00				0,00
SC9	150	0	Segment cut 168,3		3,00				0,00
SPS275	0	0	SUPPORT PS-275, H 100, L=230	19,29 kg	1,00				0,00
Summe: 0 150O20019_1ZB40C1 0				127,92 kg		0,00	0,00		0,00

Preis-Stückliste 0 150O20019_1ZB40C1 0 150 O 20019_1 ZB40C1 Revision:

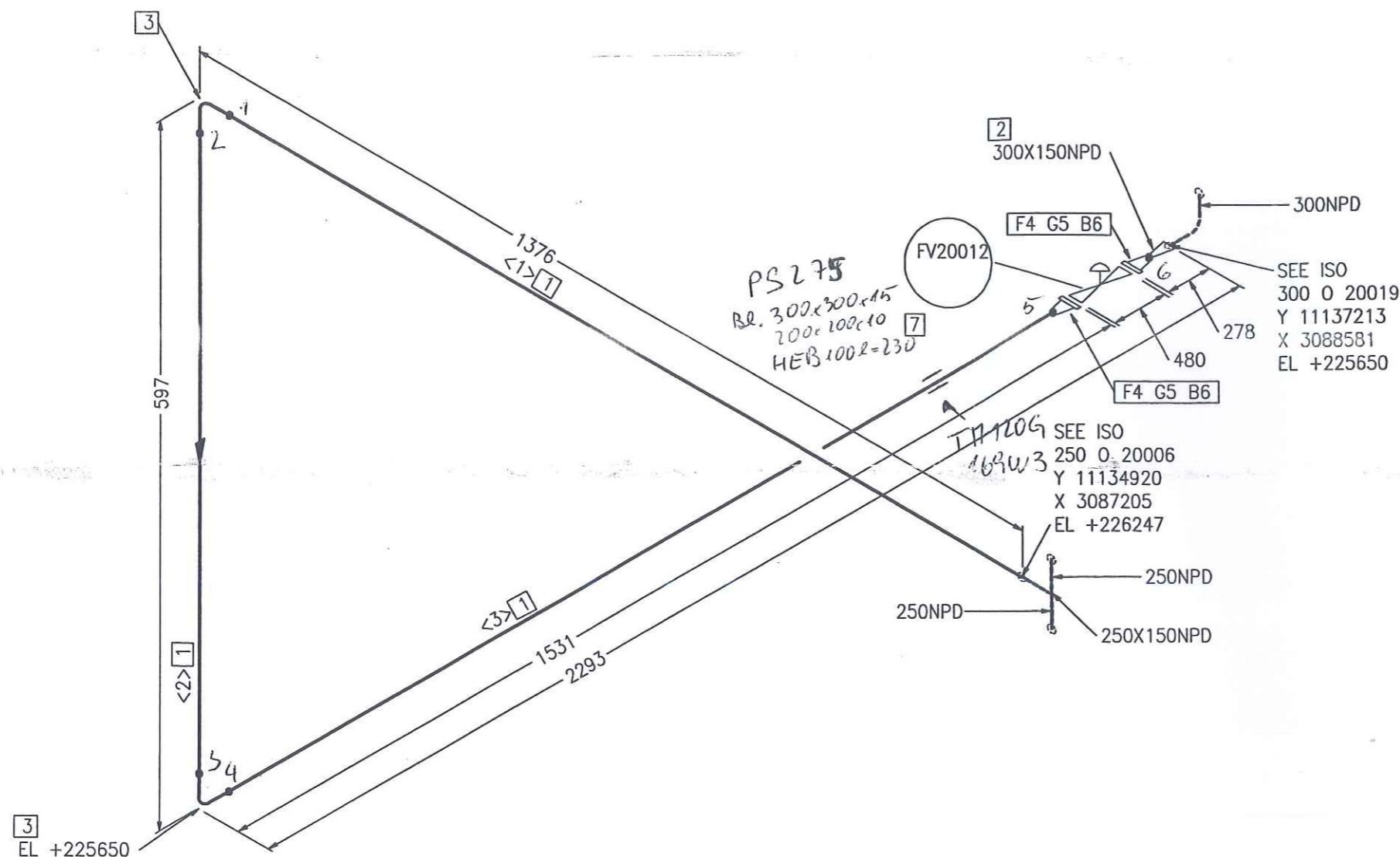
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
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Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	127,92 kg
** Ende der Ausgabe	

AS BUILT



As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	2513 MM	150	PIPE, WELDED 168.3 * 4.0 , 1.4541, DIN EN ISO 1127
2	1	300X150	REDUCER, CONCENTRIC, WELDED 323.9*10.0/168.3*7.1, 1.4541, DIN 2616-1
3	2	150	ELBOW, WELDED, 1,5D 168.3*4.0-90, B-ART 3,DIN 2605-1
4	2	150	WELDING-NECK-FLANGE PN40, 1.4541, DIN EN 1092-1
5	2	150	FLAT GASKET
6	16	24	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 90.0MM LANG
7	1	150	FV20012 FV20012

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	1147	150		BEVEL	BEVEL	RG1
<2>	139	150		BEVEL	BEVEL	RG1
<3>	1227	150		BEVEL	BEVEL	RG1

REIGABE
FOR CONSTRUCTION

12. Juli 2005 GAK

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

	Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-11	History file:
	Job Code: K70101		Scale: 1:1	Original format: DIN A3
Reference: ASU No. 9, Kosice		Sheet: 1		Sheets: 1
Title: 150 0 20019_1 ZB40C1792.8782600		Drawing No:		Rev.

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 15N20028AA40C1 0 15 N 20028 AA40C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GEV	12	0	Straight screw in connection		2,00				0,00
GEV2	6	0	STRAIGHT SCREW IN CONNECTION		2,00				0,00
GW2	15	0	girth weld 1.0254 (St 37.0) 21,3x2		64,00				0,00
GW40	12	0	GRITH WELD 1.4541		2,00				0,00
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		1,00				0,00
IPV71180	15	0	PV71180		1,00				0,00
IZ71180	15	0	Z71180		1,00				0,00
P0012	15	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 21,3x2	0,95 kg	67,68				0,00
P0150	12	0	PIPE, SEAMLESS, ERMETO 1.4541	0,28 kg	0,10				0,00
P0170	15	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 21,3x2	0,04 kg	25,00				0,00
P0539	15	15	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 21,3x2x21,3x2	0,06 kg	2,00				0,00
P1282	15	12	REDUCER, CONCENTRIC, SEAMLESS St35.8l	0,19 kg	2,00				0,00
P1524	25	15	Reducer, concentric, seamless 1.0305 (St 35.8 l) DIN 2609 33,7x2,6x21,3x2	0,08 kg	1,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 (1.0460) DIN 2519 33,7	1,00 kg	1,00				0,00

Preis-Stückliste 0 15N20028AA40C1 0 15 N 20028 AA40C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SC1	15	0	Segment cut 21,3		34,00				0,00
SC20	12	0	SEGMENT CUT		2,00				0,00
SCP01	15	0	PIPE CLAMP, RB10A 22 W3 HESTERBERG 21,3		23,00				0,00
SPS288	0	0	SUPPORT PS-288, L 50, L=300	1,13 kg	1,00				0,00
SPS289	0	0	SUPPORT PS-289, U 100, L=600	6,36 kg	5,00				0,00
SPS290	0	0	SUPPORT PS-290, HEB 100, L=300	6,12 kg	1,00				0,00
SPS291	0	0	SUPPORT PS-291, L 50, L=900	3,39 kg	1,00				0,00
SPS292	0	0	SUPPORT PS-292, L 50, L=550	2,07 kg	1,00				0,00
SPS293	0	0	SUPPORT PS-293, L 50, L=100	0,37 kg	2,00				0,00
SPS294	0	0	SUPPORT PS-294, L 50, L=200	0,75 kg	3,00				0,00
Summe: 0 15N20028AA40C1 0				114,40 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

** Ende der Ausgabe

114,40 kg

AS BUILT

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot. Nr.

Jop Code: K70101 ASU No. 9, Kosice Order No.: 15 N 20028

Client: AIR LIQUIDE Title:

Sheet 1

Drawing No.:

Project No.: 9050300

792.87826 - 00

Maker's No.:

erstellt:

11.02.06
Pelzeder Erich
Datum / Unterschrift

geprüft

Schweisstechnologie VAM
Datum / Unterschrift

(Kunde / TÜV, ...)



Datum / Unterschrift

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:				Remerk
				Wärme- behandlung	RT	UT	MT/PT	
1	V3	ST37.0	33,7*2,6					
2	V3	ST37.0	21,3*2					
3	V3	ST37.0	21,3*2					
4	V3	ST37.0	21,3*2					
5	V3	ST37.0	21,3*2					
6	V3	ST37.0	21,3*2					
7	V3	ST37.0	21,3*2					
8	V3	ST37.0	21,3*2					
9	V3	ST37.0	21,3*2					
10	V3	ST37.0	21,3*2					
11	V3	ST37.0	21,3*2					
12	V3	ST37.0	21,3*2					
13	V3	ST37.0	21,3*2					
14	V3	ST37.0	21,3*2					
15	V3	ST37.0	21,3*2					
16	V3	ST37.0	21,3*2					
17	V3	ST37.0	21,3*2					
18	V3	ST37.0	21,3*2					
19	V3	ST37.0	21,3*2					
20	V3	ST37.0	21,3*2					
21	V3	ST37.0	21,3*2					
22	V3	ST37.0	21,3*2					
23	V3	ST37.0	21,3*2					
24	V3	ST37.0	21,3*2					
25	V3	ST37.0	21,3*2					
26	V3	ST37.0	21,3*2					
27	V3	ST37.0	21,3*2					

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot. Nr.

Jop Code: K70101 ASU No. 9, Kosice Order No.: 15 N 20028

Client: AIR LIQUIDE Title:

Sheet 1

Drawing No.:

Project No.: 9050300
792.87826 - 00
Maker's No.:

erstellt:

4.10.2016
Pelzeder Erich
Datum / Unterschrift

geprüft

Schweisstechnologie VAM
Datum / Unterschrift

(Kunde / TÜV, ...)



Datum / Unterschrift

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:					Remerk
				Wärme- behandlung	RT	UT	MT/PT	SP	
28	V3	ST37.0	21,3*2						
29	V3	ST37.0	21,3*2						
30	V3	ST37.0	21,3*2						
31	V3	ST37.0	21,3*2						
32	V3	ST37.0	21,3*2						
33	V3	ST37.0	21,3*2						
34	V3	ST37.0	21,3*2						
35	V3	ST37.0	21,3*2						
36	V3	ST37.0	21,3*2						
37	V3	ST37.0	21,3*2						
38	V3	ST37.0	21,3*2						
39	V3	ST37.0	21,3*2						
40	V3	ST37.0	21,3*2						
41	V3	ST37.0	21,3*2						
42	V3	ST37.0	21,3*2						
43	V3	ST37.0	21,3*2						
44	V3	ST37.0	21,3*2						
45	V3	ST37.0	21,3*2						
46	V3	ST37.0	21,3*2						
47	V3	ST37.0	21,3*2						
48	V3	ST37.0	21,3*2						
49	V3	ST37.0	21,3*2						
50	V3	ST37.0	21,3*2						
51	V3	ST37.0	21,3*2						
52	V3	ST37.0	21,3*2						
53	V3	ST37.0	21,3*2						
54	V3	ST37.0	21,3*2						

Pelzeder Erich, 11.02.06

2

Kosice



Jop Code:	K70101 ASU No. 9, Kosice	Order No.:
Client:	AIR LIQUIDE	Title: 15 N 20028

792.87826 - 00	Maker's No.:
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geprüft

erstellt:

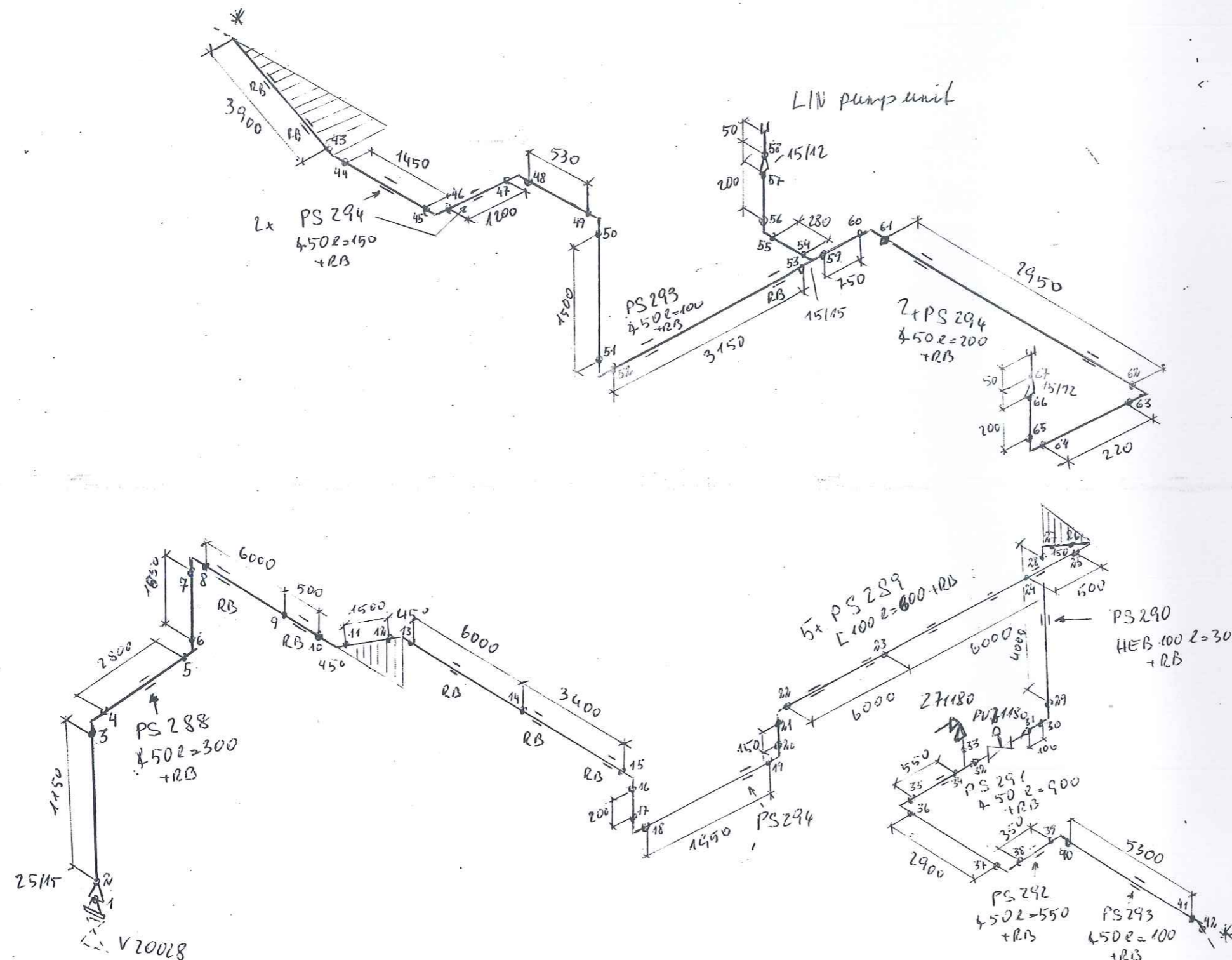
11.02.2011 Pelzeder Erich
Datum / Unterschrift

Schweisstechnologie VAM
Datum / Unterschrift

Datum / Unterschrift

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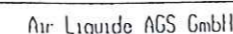


LEVELS:	
TOP OF INTERNAL ROADS:	225.00m n.m.
TOP OF FOUNDATION:	225.10m
BOTTOM OF STEEL STRUCTURE:	225.15m = ± 0.00

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

PS-(NO.) - PIPE SUPPORT
WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT
ON THE PIPIBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

_C				
_B				
_A				
Rev	Revisions	Date	Name	checked



Replaces: 79_-----
Replaced by: 79_-----

Job Code: K70101

Reference: ASU No. 9, Kosice

Title:	
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15 N 20028 AA10G

Scale	Original format DIN A3
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Sheet:	Sheets:
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Drawing No:	Rev.
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792.8782600

Preis-Stückliste 0 50OL21009ZB16C1 0 50 OL 21009 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0099	40	0	Flat packings Graphite with CrNi-insert Standard 40002 92x2x49		1,00				0,00
GW11	50	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 60,3x2		32,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		1,00				0,00
GW8	40	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 48,3x2		2,00				0,00
IV90114	50	0	V90114		1,00				0,00
P0134	50	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 60,3x2	2,92 kg	27,30				0,00
P0287	50	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 60,3x2	0,35 kg	12,00				0,00
P1025	50	25	Tee made of welded pipe 1.4541 (X 6 CrNiTi 18 10) DIN 2609 60,3x2x33,7x2	0,43 kg	1,00				0,00
P1027	50	40	TEE MADE OF WELDED PIPE 1.4541 /DIN 2615-1/ 60,3x2,0/48,3x2,0	1,50 kg	1,00				0,00
P1034	50	50	Tee made of welded pipe 1.4541 (X 6 CrNiTi 18 10) DIN 2609 60,3x2x60,3x2	0,47 kg	1,00				0,00
PW11	50	15	Pipe weld-in 1.4541 (X 6 CrNiTi 18 10) 60,3x2x21,3x1,6		1,00				0,00

Preis-Stückliste 0 50OL21009ZB16C1 0 50 OL 21009 ZB16C1 Revision:										
(Fortsetzung)										
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt	
S0042	50	0	T-support, 1.4541, TA 120G 61 W3 1.4 Hesterberg 61	8,30 kg	8,00					0,00
SC5	50	0	Segment cut 60,3		18,00					0,00
SCP02	50	0	PIPE CLAMP, RB10A 61 W3 HESTERBERG 60,3		2,00					0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		7,00					0,00
SPS277	0	0	SUPPORT PS-277, L 70, L=300	2,21 kg	3,00					0,00
SPS278	0	0	SUPPORT PS-278, L 70, L=750	5,53 kg	1,00					0,00
SPS279	0	0	SUPPORT PS-279, L 70, L=200	1,47 kg	2,00					0,00
SPS280	0	0	SUPPORT PS-280, L 50, L=250	0,94 kg	1,00					0,00
SPS281	0	0	SUPPORT PS-281, H 100, L=750	15,90 kg	1,00					0,00
Summe: 0 50OL21009ZB16C1 0				184,66 kg		0,00	0,00			0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	184,66 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot Nr.

Jop Code: K70101 ASU No. 9, Kosice Order No.:

Client: AIR LIQUIDE Title: 50 OL 21009 Sheet 1

(Kunde / TÜV, ...)

geprüft

erstellt:

M. J. 06

P. J. L.

Pelzeder Erich

Schweisstechnologie VAM

Datum / Unterschrift

Project No.: 9050300

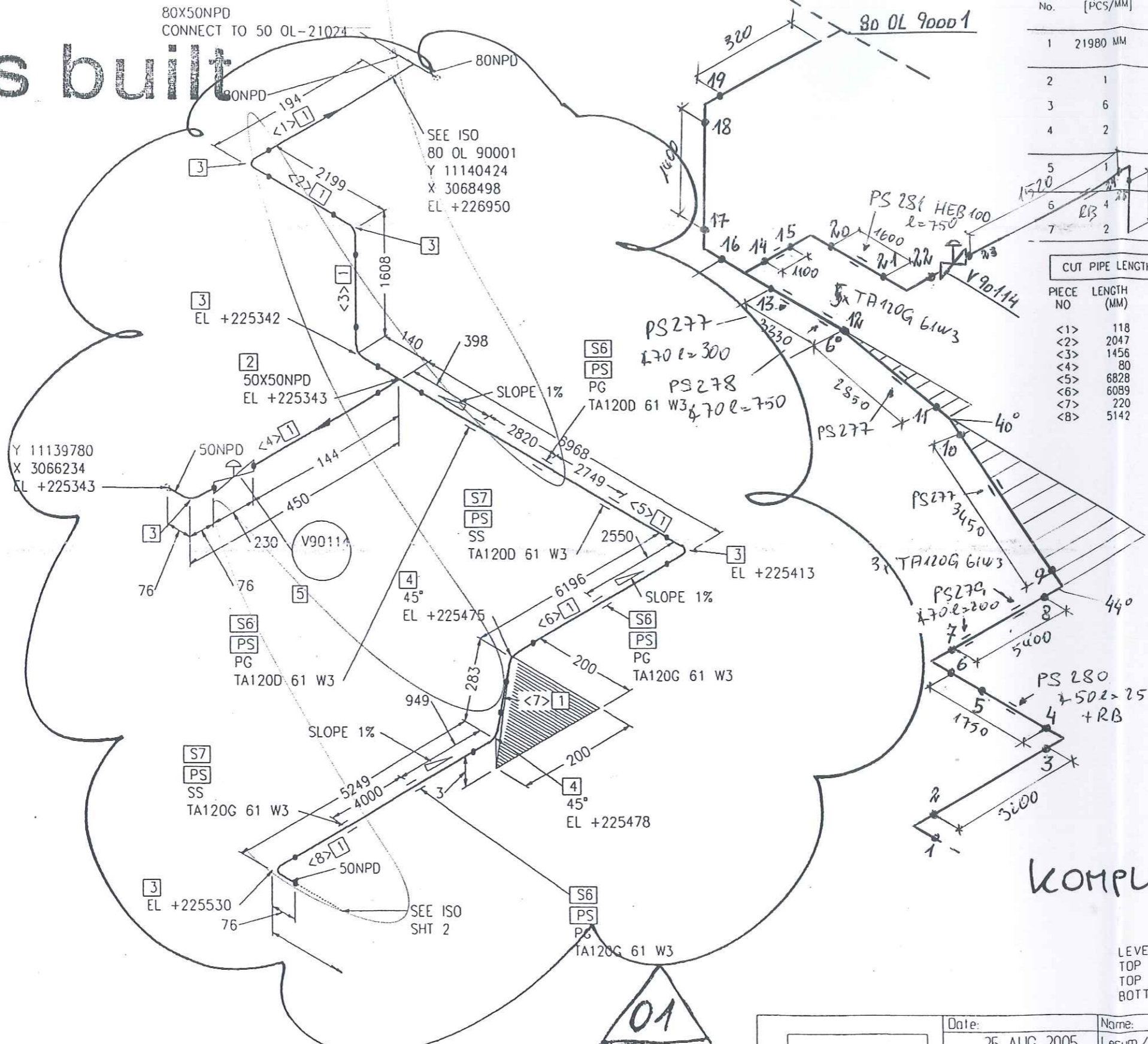
Drawing No.: 792.87826 - 01

Maker's No.:

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:				Remerk
				Wärme- behandlung	RT	UT	MT/PT	SP
1	V9	1.4541	60,3*2		R0295			
2	V9	1.4541	60,3*2		R0296			
3	V9	1.4541	60,3*2		R0297			
4	V9	1.4541	60,3*2		R0298			
5	V9	1.4541	60,3*2		R0299			
6	V9	1.4541	60,3*2		R0300			
7	V9	1.4541	60,3*2		R0301			
8	V9	1.4541	60,3*2		R0302			
9	V9	1.4541	60,3*2		R0303			
10	V9	1.4541	60,3*2		R0304			
11	V9	1.4541	60,3*2		R0305			
12	V9	1.4541	60,3*2		R0306			
13	V9	1.4541	60,3*2		R0307			
14	V9	1.4541	60,3*2		R0308			
15	V9	1.4541	60,3*2		R0309			
16	V9	1.4541	60,3*2		R0310			
17	V9	1.4541	60,3*2		R0311			
18	V9	1.4541	60,3*2		R0312			
19	V9	1.4541	60,3*2		R0313			
20	V2	1.4541	60,3*2		R0550			
21	V2	1.4541	60,3*2		R0551			
22	V2	1.4541	60,3*2		R0552			
23	V2	1.4541	60,3*2					
24	V2	1.4541	60,3*2					
25	V2	1.4541	60,3*2					

As built

80X50NPD
CONNECT TO 50 OL-21024



Port No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	21980 MM	50	PIPE, WELDED 60.3 * 2.0 . 1.4541, DIN EN ISO 1127
2	1	50X50	TEE, WELDED 60.3*2.0/60.3*2.0. 1.4541, DIN 2615-1
3	6	50	ELBOW, WELDED, 1.5D 60.3*2.0-90. B-ART 3,DIN 2605-1
4	2	50	ELBOW, WELDED, 1.5D 60.3*2.0-45. B-ART 3,DIN 2605-1
5	1	50	ERROR READING SPECIALTY MATERIAL DESCRIPTION LIBRARY V90114
6	4	50	PIPE GUIDE PSUPPORT
7	2	50	SLIDE SUPPORT PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	118	50		BEVEL	BEVEL	RG1
<2>	2047	50		BEVEL	BEVEL	RG1
<3>	1456	50		BEVEL	BEVEL	RG1
<4>	80	50		BEVEL	BEVEL	RG1
<5>	6828	50		BEVEL	BEVEL	RG1
<6>	6089	50		BEVEL	BEVEL	RG1
<7>	220	50		BEVEL	BEVEL	RG1
<8>	5142	50		BEVEL	BEVEL	RG1

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE

PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

Rev	General Rev	Date	Les	Zul
01	General Rev	15.09.2005	Les	Zul
	Revisions		Name	checked

AIR LIQUIDE Air Liquide AGS GmbH	Date:	25-AUG-2005	Name:	Lesum / HGH	Checked:	05-09-15	History file:
	Job Code:	K70101			Scale:	Original format DIN A3	
	Reference:	ASU No. 9. Kosice			Sheet:	1	Sheets: 2
	Title:	50 OL 21009 ZB16C1792.8782601			Drawing No.	Rev	

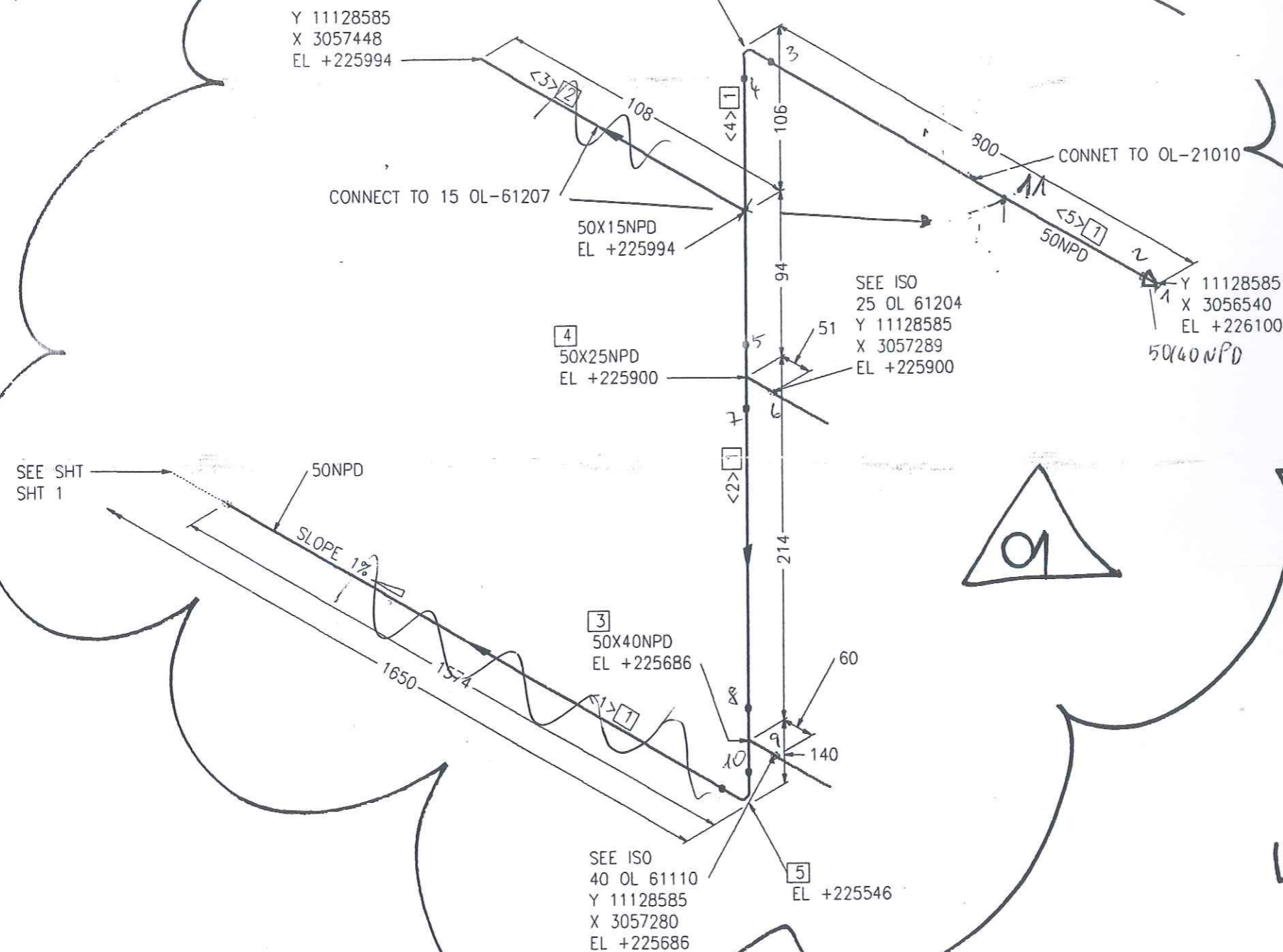
LEVELS:

TOP OF INTERNAL ROADS: 225.00m n.m.

TOP OF FOUNDATION: 225.10m

BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	2368	MM 50	PIPE, WELDED 60.3 * 2.0 , 1.4541, DIN EN ISO 1127
2	80	MM 15	PIPE, WELDED 21.3 * 1.6 , 1.4541, DIN EN ISO 1127
3	1	50X40	TEE, WELDED 60.3*2.0/48.3*2.0, 1.4541, DIN 2615-1
4	1	50X25	TEE, WELDED 60.3*2.0/33.7*2.0, 1.4541, DIN 2615-1
5	2	50	ELBOW, WELDED, 1.5D 60.3*2.0-90, B-ART 3,DIN 2605-1

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	1498	50		BEVEL	BEVEL	RG1
<2>	86	50		BEVEL	BEVEL	RG1
<3>	80	15		SHAPED	SO.CUT	RG1
<4>	60	50		BEVEL	BEVEL	RG1
<5>	724	50		BEVEL	SO.CUT	RG1

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.)- PIPE SUPPORT WITH SUBSTRUCTURE

PB-(NO.)- PIPE SUPPORT ON THE PIPBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

Rev.	Revisions	Date	Name	checked
01	General Rev	15.09.2005	Les	Zul

AIR LIQUIDE Air Liquide AGS GmbH	Date:	25-AUG-2005	Name:	Lesum / HGH	Checked:	05-09-15	History file:
	Job Code:	K70101			Scale:	---	
	Reference:	ASU No. 9, Kosice			Original format:	DIN A3	
	Title:	50 OL 21009 ZB16C1792.8782601			Sheet:	2	Sheets:
Replaces:	79_-----				Drawing No.		
Replaced by:	79_-----				Rev.		

LEVELS:

TOP OF INTERNAL ROADS: 225.00m n.m.

TOP OF FOUNDATION: 225.10m

BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25NL21015ZB16C1 0 25 NL 21015 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0095	20	0	Flat packings Graphite with CrNi-insert Standard 40002 60x2x28		1,00				0,00
GW1	15	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 21,3x1,6		1,00				0,00
GW3	20	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 26,9x1,6		1,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		35,00				0,00
IV90112	25	0	V90112		1,00				0,00
P0131	25	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 33,7x2	1,58 kg	23,27				0,00
P0284	25	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2	0,09 kg	11,00				0,00
P1000	25	15	Tee made of welded pipe 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2x21,3x1,6	0,14 kg	1,00				0,00
P1004	25	25	Tee made of welded pipe 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2x33,7x2	0,15 kg	3,00				0,00
S0027	25	0	T-support, 1.4541, TA 120B 34 W3 1.4 Hesterberg 34	3,70 kg	1,00				0,00
S0039	25	0	T-support, 1.4541, TA 120G 34 W3 1.4 Hesterberg 34	7,60 kg	6,00				0,00
SC3	25	0	Segment cut 33,7		19,00				0,00

Preis-Stückliste 0 25NL21015ZB16C1 0 25 NL 21015 ZB16C1 Revision:

(Fortsetzung)										
Teilenummer	NW1	NW2	Teilebezeichnung		Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7			2,00				0,00
SPS282	0	0	SUPPORT PS-282, L 60, L=100		0,45 kg	1,00				0,00
SPS283	0	0	SUPPORT PS-283, HEB 100, L=550		11,82 kg	1,00				0,00
SPS284	0	0	SUPPORT PS-284, HEB 100, L=400		8,76 kg	1,00				0,00
SPS285	0	0	SUPPORT PS-285, L 80, L=250		1,83 kg	2,00				0,00
Summe: 0 25NL21015ZB16C1 0					112,34 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht: 112,34 kg

** Ende der Ausgabe

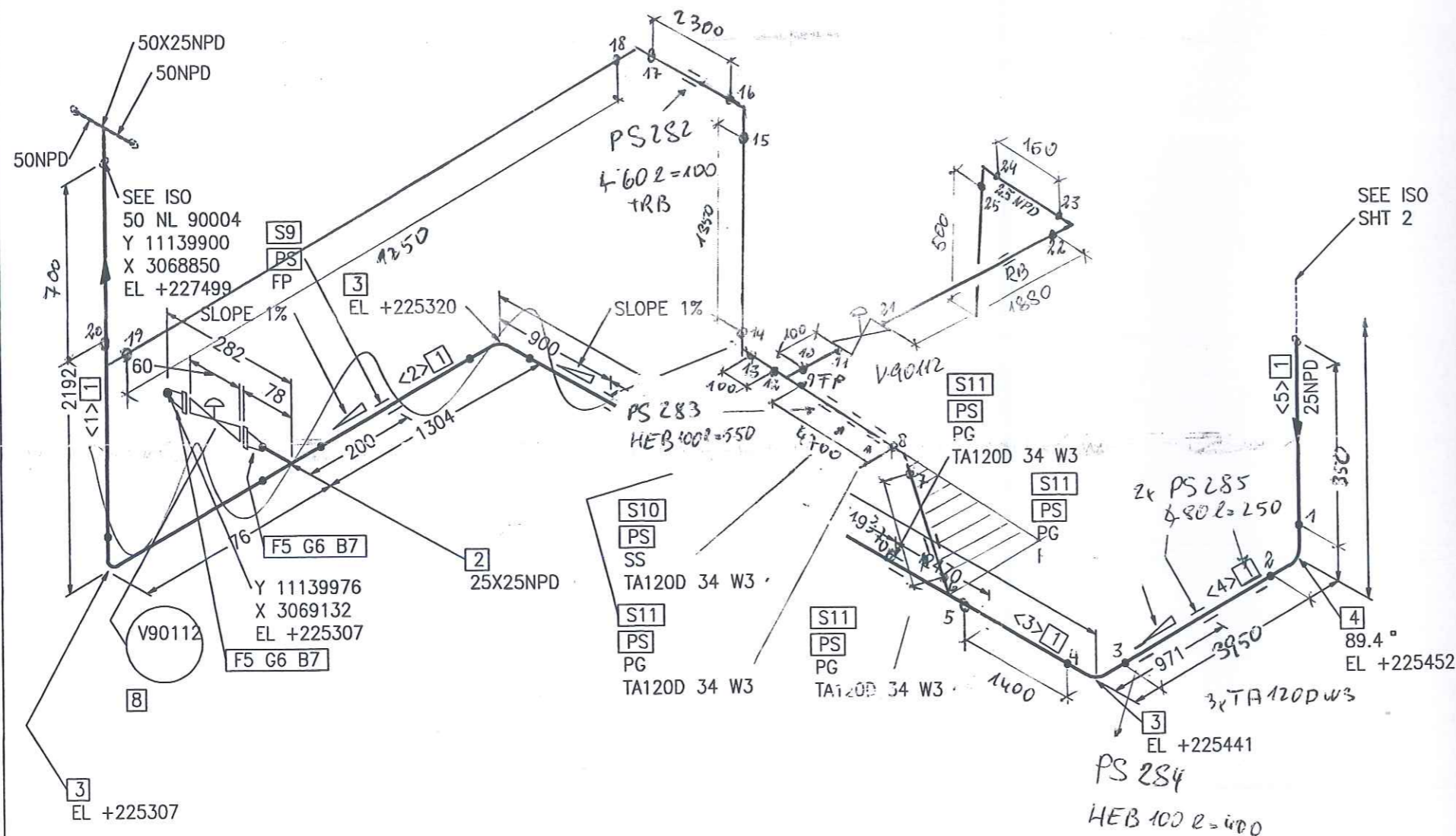
AS BUILT



VAM		SCHWEISSDOKUMENTATION WELDING DOCUMENTATION		erstellt: <i>hoiz. ob</i> Datum / Unterschrift		geprüft <i>RL</i> Pelzeder Erich Datum / Unterschrift		(Kunde / TÜV, ...) 	
Jop Code: K70101 ASU No. 9, Kosice		Order No.: 25 NL 21015		Project No.: 9050300		Maker's No.: 792.87826 - 00			
Client: AIR LIQUIDE		Title: 25 NL 21015		Sheet 1		Drawing No.: 792.87826 - 00		Project No.: 9050300	

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:					Remerk
				Wärme- behandlung	RT	UT	MT/PT	SP	
1	V9	1.4541	33,7*2						
2	V9	1.4541	33,7*2						
3	V9	1.4541	33,7*2						
4	V9	1.4541	33,7*2						
5	V9	1.4541	33,7*2						
6	V9	1.4541	33,7*2						
7	V9	1.4541	33,7*2						
8	V9	1.4541	33,7*2						
9	V9	1.4541	33,7*2						
10	V9	1.4541	33,7*2						
11	V9	1.4541	33,7*2		R0397				
12	V9	1.4541	33,7*2		R0396				
13	V9	1.4541	33,7*2		R0395				
14	V9	1.4541	33,7*2		R0394				
15	V9	1.4541	33,7*2		R0393				
16	V9	1.4541	33,7*2		R0392				
17	V9	1.4541	33,7*2		R0391				
18	V9	1.4541	33,7*2		R0390				
19	V9	1.4541	33,7*2						
20	V9	1.4541	33,7*2						
21	V2	1.4541	33,7*2						
22	V2	1.4541	33,7*2						
23	V2	1.4541	33,7*2						
24	V2	1.4541	33,7*2						
25	V2	1.4541	33,7*2						

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	16867	25	PIPE, WELDED 33.7 * 2.0 , 1.4541, DIN EN ISO 1127
2	1	25X25	TEE, WELDED 33.7*2.0/33.7*2.0, 1.4541, DIN 2615-1
3	3	25	ELBOW, WELDED, 1,5D 33.7*2.0-90, B-ART 3,DIN 2605-1
4	1	25	ELBOW, WELDED, 1,5D 33.7*2.0-89.4, B-ART 3,DIN 2605-1
5	2	25	WELDING-NECK-FLANGE PN16, 1.4541, DIN EN 1092-1
6	2	25	FLAT GASKET
7	8	12	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 50.0MM LANG
8	1	25	ERROR READING SPECIALTY MATERIAL DESCRIPTION LIBRARY V90112
9	1	25	FIX POINT PSUPPORT
10	2	25	SLIDE SUPPORT PSUPPORT
11	4	25	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	2154	25		BEVEL	BEVEL	RG1
<2>	1228	25		BEVEL	BEVEL	RG1
<3>	12054	25		BEVEL	BEVEL	RG1
<4>	1059	25		BEVEL	BEVEL	RG1
<5>	372	25		BEVEL	BEVEL	RG1

NUR ZUR INFORMATION

FÜR INFORMATION GIBT

21. OKT. 2005

LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00


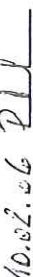
RESPONSIBILITY OF ERECTION COMPANY:
 - Situation of mounting seams
 - Situation off pass- length
 - Check of measure details and pipe courses on the construction site
 - Situation of the spindle at valve
 - All components for Oxygen use free of oil and grease

SUPPORTS:
 PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
 PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
 SS = SLIDING SUPPORT
 PG = PIPE GUIDE
 FP = FIX POINT

Rev.	Revisions	Date	Name	checked

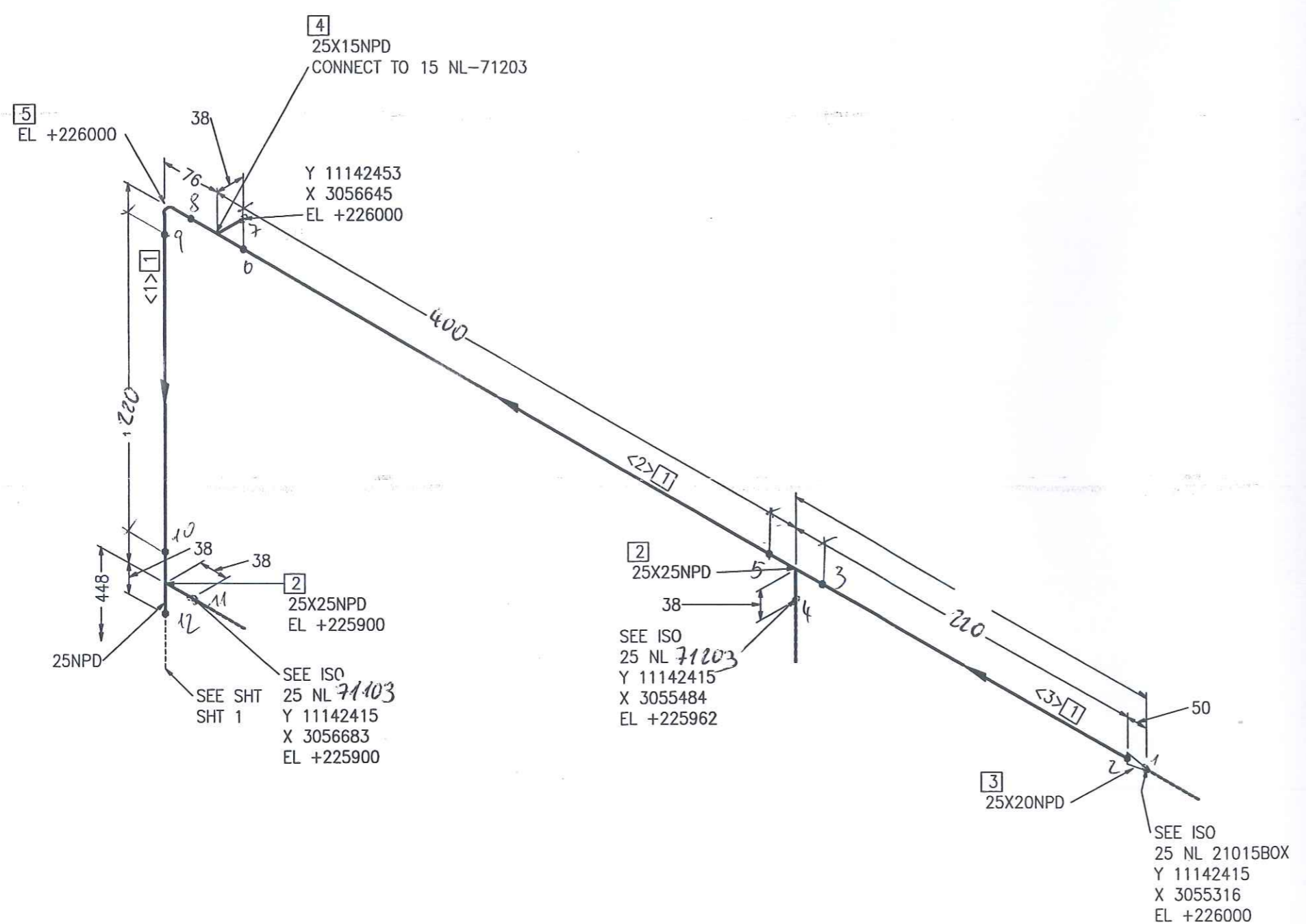
AIR LIQUIDE Air Liquide AGS GmbH	Date: 17-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
	Job Code: K70101		Scale: 1:1	Original format: DIN A3
Replaces: 79_	Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 2
Replaced by: 79_	Title: 25 NL 21015 ZB16C1792.878260		Drawing No:	Rev.



	SCHWEISSDOKUMENTATION WELDING DOCUMENTATION		erstellt:  Pelzeder Erich	geprüft Schweissttechnologie VAM	(Kunde / TÜV, ...)
	Prot. Nr.	Datum / Unterschrift	Datum / Unterschrift	Datum / Unterschrift	Datum / Unterschrift
Jop Code: K70101	ASU No. 9, Kosice	Order No.:	Project No.: 9050300		
Client: AIR LIQUIDE	Title: 25 NL 21015	Sheet 2	Drawing No.:	792.87826 - 00	Maker's No.:

[illegible]

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1189 MM	25	PIPE, WELDED 33.7 * 2.0 , 1.4541, DIN EN ISO 1127
2	2	25X25	TEE, WELDED 33.7*2.0/33.7*2.0, 1.4541, DIN 2615-1
3	1	25X20	REDUCER, CONCENTRIC, WELDED 33.7*2.0/26.9*1.6, 1.4541, DIN 2616-1
4	1	25X15	TEE, WELDED 33.7*2.0/21.3*1.6, 1.4541, DIN 2615-1
5	1	25	ELBOW, WELDED, 1,5D 33.7*2.0-90, B-ART 3,DIN 2605-1

CUT PIPE LENGTH						
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	24	25		BEVEL	BEVEL	RG1
<2>	1085	25		BEVEL	BEVEL	RG1
<3>	80	25		BEVEL	BEVEL	RG1

NUR ZUR INFORMATION
FÜR DEN BETRIEB

2. OKT. 2005

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

	Date: 17-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
	Job Code: K70101		Scale: ---:---	Original format DIN A3
	Reference: ASU No. 9, Kosice		Sheet: 2	Sheets: 2
	Title: 25 NL 21015 ZB16C1792.878260		Drawing No:	Rev.

Replaces: 79_	Replaced by: 79_			
Rev.	Revisions	Date	Name	checked

Preis-Stückliste 0 50OL21024ZB16C1 0 50 OL 21024 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0100	50	0	Flat packings Graphite with CrNi-insert Standard 40002 107x2x61		1,00				0,00
GW11	50	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 60,3x2		19,00				0,00
IV90113	50	0	V90113		1,00				0,00
P0134	50	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 60,3x2	2,92 kg	11,90				0,00
P0287	50	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 60,3x2	0,35 kg	8,00				0,00
P1034	50	50	Tee made of welded pipe 1.4541 (X 6 CrNiTi 18 10) DIN 2609 60,3x2x60,3x2	0,47 kg	1,00				0,00
P2996_A	50	0	WELDING NECK FLANGES, PN 16 1.4541	3,00 kg	1,00				0,00
S0042	50	0	T-support, 1.4541, TA 120G 61 W3 1.4 Hesterberg 61	8,30 kg	4,00				0,00
SC5	50	0	Segment cut 60,3		10,00				0,00
SCP02	50	0	PIPE CLAMP, RB10A 61 W3 HESTERBERG 60,3		1,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		2,00				0,00
SPS286	0	0	SUPPORT PS-286, HEB 100, L=750	24,00 kg	1,00				0,00
SPS287	0	0	SUPPORT PS-287, U 140, L=500	8,00 kg	1,00				0,00
Summe: 0 50OL21024ZB16C1 0				106,22 kg		0,00	0,00		0,00

AS BUILT

Preis-Stückliste 0 50OL21024ZB16C1 0 50 OL 21024 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
-------------	-----	-----	------------------	------------	-------	-----------	---------	-------	--------

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	106,22 kg
** Ende der Ausgabe	

AS BUILT



Prot Nr.

Jop Code:	K70101	ASU No. 9, Kosice	Order No.:
Client:	AIR LIQUIDE	Title:	50 OL 21024

Title:

50 OL 21024

Sheet 1

Drawing No.:

792.87826 - 01

Maker's No.:

(Kunde / TÜV, ...)

geprüft

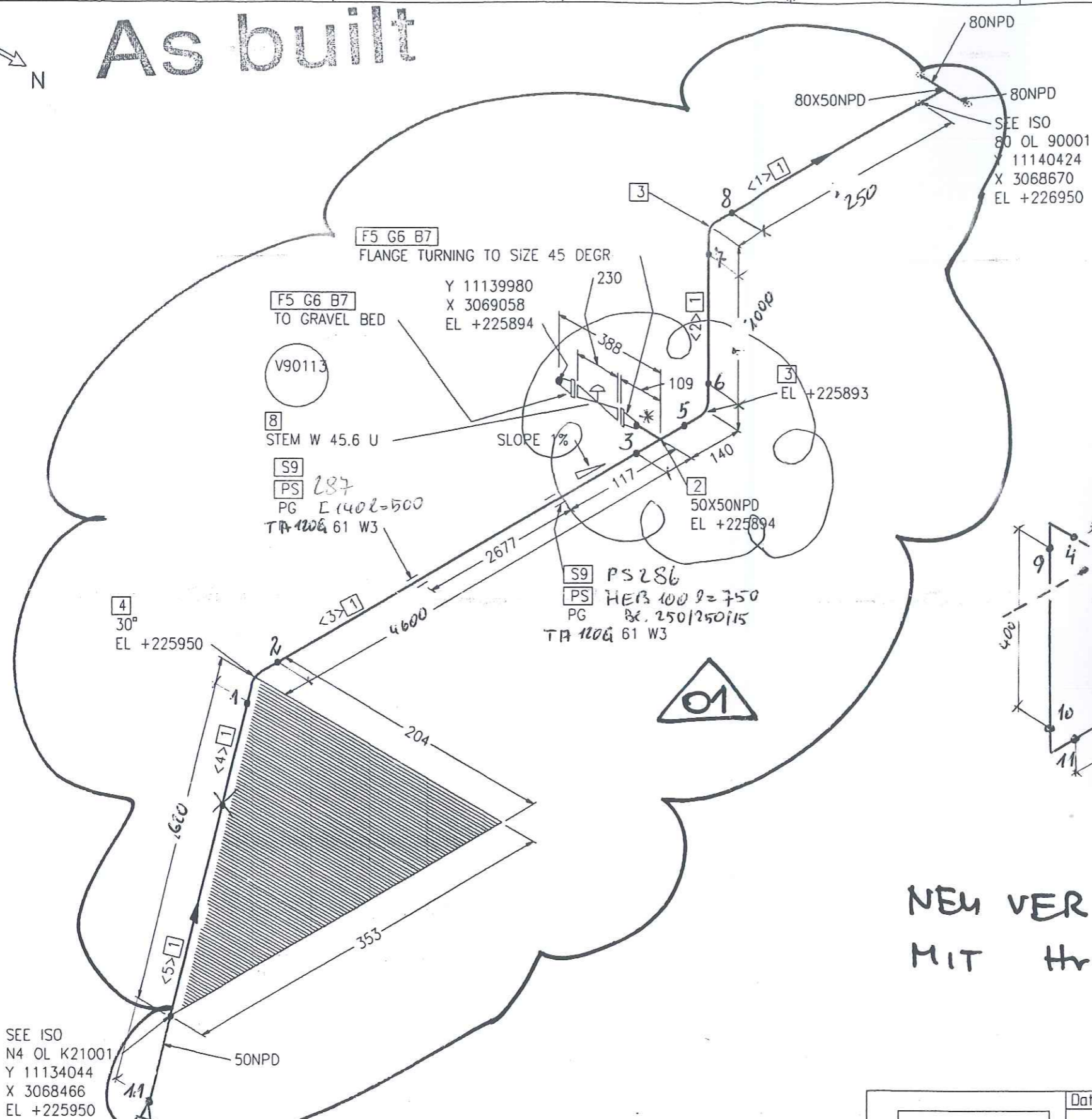
Schweisstechnologie VAM

Datum / Unterschrift

Datum / Unterschrift

[illegible]

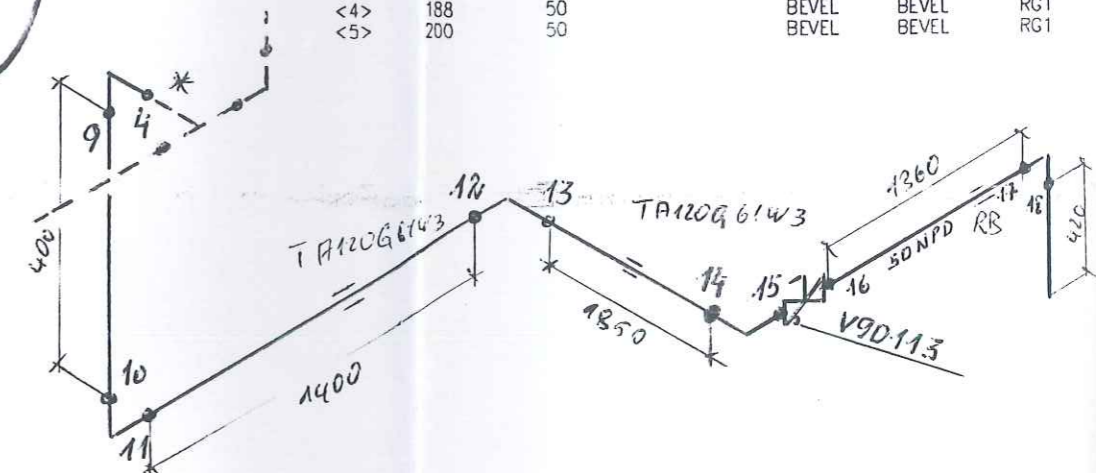
As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	7020	MM	PIPE, WELDED 60.3 * 2.0 , 1.4541, DIN EN ISO 1127
2	1	50X50	TEE, WELDED 60.3*2.0/60.3*2.0, 1.4541, DIN 2615-1
3	2	50	ELBOW, WELDED, 1.5D 60.3*2.0-90, B-ART 3,DIN 2605-1
4	1	50	ELBOW, WELDED, 1.5D 60.3*2.0-30, B-ART 3,DIN 2605-1
5	2	50	WELDING-NECK-FLANGE PN16, 1.4541, DIN EN 1092-1
6	2	50	FLAT GASKET
7	8	16	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 60.0MM LANG
8	1	50	ERROR READING SPECIALTY MATERIAL DESCRIPTION LIBRARY V90113
9	2	50	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	228	50		BEVEL	BEVEL	RG1
<2>	905	50		BEVEL	BEVEL	RG1
<3>	5499	50		BEVEL	BEVEL	RG1
<4>	188	50		BEVEL	BEVEL	RG1
<5>	200	50		BEVEL	BEVEL	RG1



NEU VERLEGT NACH ABSPRACHE
MIT Hr. RIXGENS

RESPONSIBILITY OF ERECTION COMPANY:
 - Situation of mounting seams
 - Situation off pass- length
 - Check of measure details and pipe courses on the construction site
 - Situation of the spindle at valve
 - All components for Oxygen use free of oil and grease

SUPPORTS:
 PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
 PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
 SS = SLIDING SUPPORT
 PG = PIPE GUIDE
 FP = FIX POINT

Rev.	General Rev	Date	Name	checked
01	General Rev	15.09.2005	Les	Zul

AIR LIQUIDE		Date: 25-AUG-2005	Name: Lesum / HGH	Checked: 05-09-15	History file.
Air Liquide AGS GmbH		Job Code: K70101		Scale: ---	Original format DIN A3
Replaces: 79_-----		Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 1
Replaced by: 79_-----		Title: 50 OL 21024 ZB16C1792.8782601		Drawing No.	Rev.

LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

Preis-Stückliste 0 25NL23008ZB10C1 0 25 NL 23008 ZB10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0095	20	0	Flat packings Graphite with CrNi-insert Standard 40002 60x2x28		1,00				0,00
GW3	20	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 26,9x1,6		2,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		7,00				0,00
P0131	25	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 33,7x2	1,58 kg	1,48				0,00
P0283	20	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 26,9x1,6	0,05 kg	1,00				0,00
P0284	25	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2	0,09 kg	3,00				0,00
P1740	25	20	REDUCER, CONCENTRIC, WELDED 1.4541		1,00				0,00
SC3	25	0	Segment cut 33,7		4,00				0,00
Summe: 0 25NL23008ZB10C1 0				2,66 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	2,66 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

VAM

SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot. Nr.

Jop Code: K70101 ASU No. 9, Kosice Order No.:

Client: AIR LIQUIDE Title: 25 NL 23008

Sheet 1

Drawing No.:

Project No.: 9050300

Maker's No.:

erstellt:

02.03.06

Pelzeder Erich
Datum / Unterschrift

geprüft

Schweisstechnologie VAM

Datum / Unterschrift

(Kunde / TÜV, ...)



Seam No.:

Welder
No.:

Material

Dimension

Wärme-
behandlung

RT

UT

MT/PT

SP

Remerk

1

2

3

4

5

6

7

8

9

26,9*1,6

26,9*1,6

33,7*2

33,7*2

33,7*2

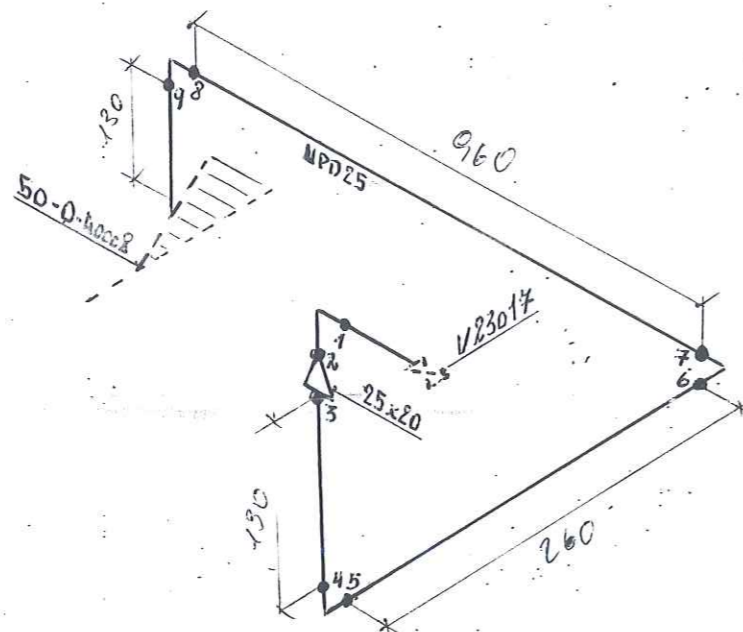
33,7*2

33,7*2

33,7*2

33,7*2

33,7*2



RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting soams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valvo
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE

PD-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

Rev.	Revisions	Date	Name	checked
LC				
LB				
LA				

 AIR LIQUIDE Air Liquide AGS GmbH	Date:	23-JUN-2005	Name:	Lesum / HGH	Checked:	05-07-11	History file:	
	Job Code: K70101		Reference: ASU No. 9. Kosico		Scale: 1:1		Original format: DIN A3	
Replaces: 79_-----		Replaced by: 79_-----		Title: 25 NL 23008 2B 10C1		Drawing No: 792.8782600		Rev.

Preis-Stückliste 0 50NL23011ZB40C1 0 50 NL 23011 ZB40C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0101	12	55	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	0,06 kg	8,00				0,00
B0104	12	65	HEXAGONNHEAD SCREWS A2	0,60 kg	4,00				0,00
B0532	12	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW11	50	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 60,3x2		11,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		10,00				0,00
IFV23073	25	0	FV23073		1,00				0,00
P0131	25	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 33,7x2	1,58 kg	1,45				0,00
P0134	50	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 60,3x2	2,92 kg	9,95				0,00
P0284	25	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2	0,09 kg	4,00				0,00
P0287	50	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 60,3x2	0,35 kg	5,00				0,00
P1739	50	25	Reducer, concentric, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 60,3x2x33,7x2	0,17 kg	1,00				0,00

AS BUILT

Preis-Stückliste 0 50NL23011ZB40C1 0 50 NL 23011 ZB40C1 Revision:

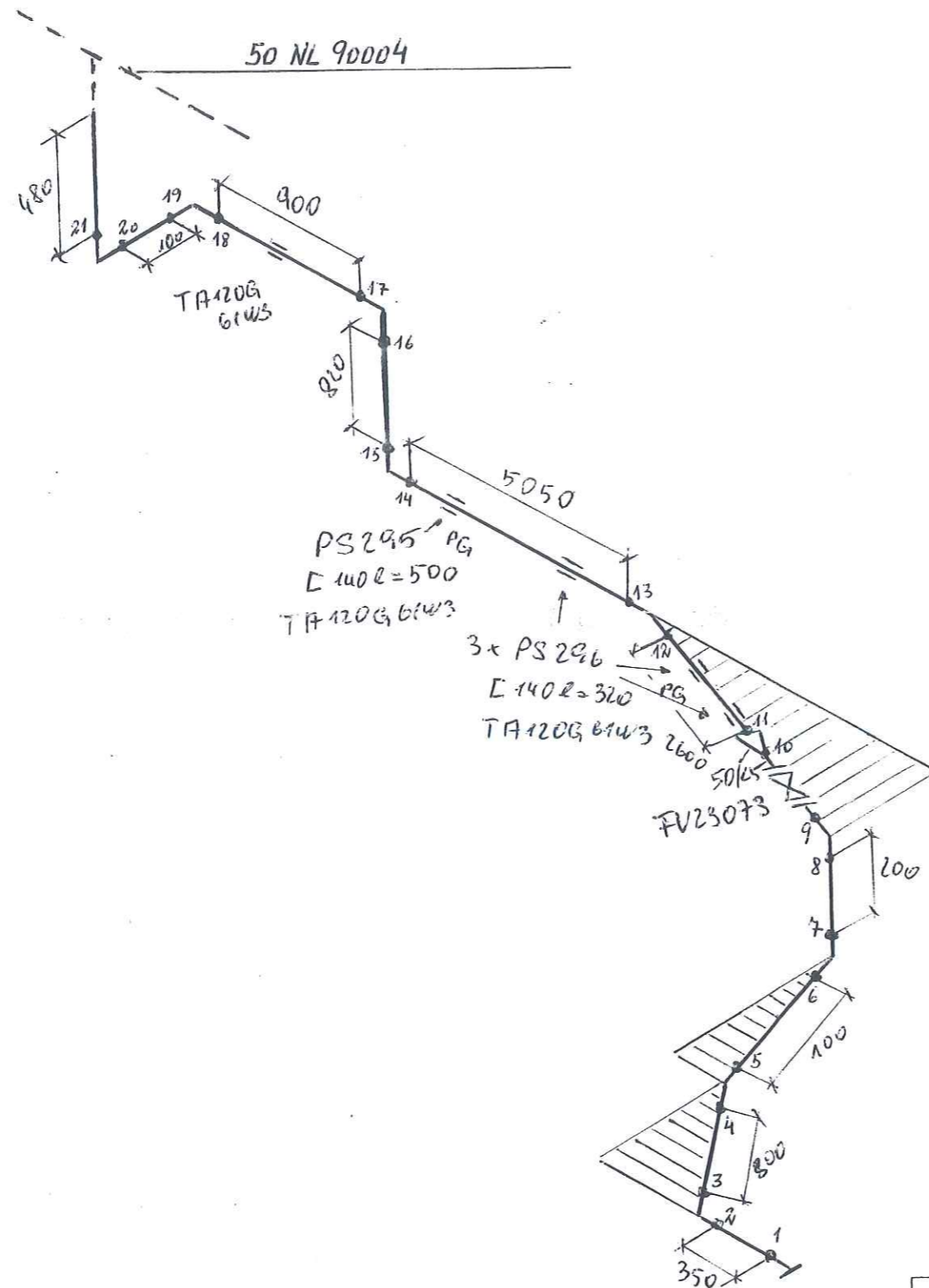
(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P2993	25	0	Welding neck flanges; PN 40 1.4541 (X 6 CrNiTi 18 10) DIN EN 1092- 33,7	1,00 kg	3,00				0,00
S0042	50	0	T-support, 1.4541, TA 120G 61 W3 1.4 Hesterberg 61	8,30 kg	5,00				0,00
SC3	25	0	Segment cut 33,7		6,00				0,00
SC5	50	0	Segment cut 60,3		7,00				0,00
Summe: 0 50NL23011ZB40C1 0				81,25 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	81,25 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

As built



RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE

PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

AIR LIQUIDE Air Liquide AGS GmbH	Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-11	History file:
	Job Code: K70101			Scale: ---:---
Reference: ASU No. 9, Kosice			Sheet:	Sheets:
Title: 50 NL 23011 ZB40C1C 792.8782600			Drawing No:	Rev.

LEVELS:

TOP OF INTERNAL ROADS: 225.00m n.m.

TOP OF FOUNDATION: 225.10m

BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 50WC24101AA10C2 0 50 WC 24101 AA10C2 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0006	16	55	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,12 kg	12,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	12,00				0,00
G0154	40	0	Fibrous packings asbestos-free laminate made of aramide f 92x2x49		3,00				0,00
GW12	50	0	girth weld 1.0254 (St 37.0) 60,3x2,9		4,00				0,00
GW9	40	0	girth weld 1.0254 (St 37.0) 48,3x2,6		6,00				0,00
IV24130	40	0	V24130 supplied by AGS		1,00				0,00
P0005	40	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 48,3x2,6	2,93 kg	1,00				0,00
P0006	50	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 60,3x2,9	4,11 kg	4,20				0,00
P0163	40	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 48,3x2,6	0,26 kg	1,00				0,00
P0164	50	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9	0,49 kg	1,00				0,00
P0492	50	40	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 60,3x2,9x48,3x2,6	0,63 kg	1,00				0,00
P1285	50	40	Reducer, concentric, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9x48,3x2,6	0,28 kg	1,00				0,00

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 50WC24101AA10C2 0 50 WC 24101 AA10C2 Revision:

(Fortsetzung)									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P2877	40	0	Welding neck flanges; PN 40 1.0038 (S235JRG2) DIN EN 1092-1 48,3	2,00 kg	3,00				0,00
S0017	40	0	T-support TA 120G 49 W1 OZN 1.0 Hesterberg 49	7,70 kg	1,00				0,00
S0018	50	0	T-support TA 120G 61 W1 OZN 1.0 Hesterberg 61	8,30 kg	1,00				0,00
SC4	40	0	Segment cut 48,3		3,00				0,00
SC5	50	0	Segment cut 60,3		2,00				0,00
Summe: 0 50WC24101AA10C2 0				45,65 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	45,65 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Job Code: K70101 ASU No. 9, Kosice Order No.:

Order No.:

50 WC 24101

Drawing No.:

10

Maker's No.:

geprüft

erstellt:

11.02.06 Del
Pelzeder Erich

Schweisstechnologie VAM

Datum / Unterschrift[illegible]

As built

SEE ISO
80 WC 24201
Y 11135506
X 3048434
EL +227676

80X50NPD

CONN TO
ET24101/ N4
Y 11139090
X 3048935
EL +225885

SUPPLY LIMIT ETV

[2]
50X40NPD
EL +226876

[1]
50X40NPD

[S7] see 136
[PS-137]
PG
TA120G 48 W1

SEE ISO
40 WC 80016
Y 11139090
X 3048249
EL +226876

V24134

01


RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT
WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT
ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
01	General Rev.	15.09.2005	Les	Zul

		Date:	16-SEP-2005	Name:	Lesum / HGH	Checked:	05-09-15	History file:
		Job Code:	K70101	Reference:	ASU No. 9, Kosice	Title:	50 WC 24101 AA10C2 792.8782601	
Replaces: 79_----- Replaced by: 79_-----		Scale: ---:--- Sheet: 1		Original format: DIN A3 Sheets: 1		Drawing No.:		Rev.

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	50X40	REDUCER, CONCENTRIC, SEAMLESS 60.3*2.9/48.3*2.6, ST37.0, DIN 2616-1
2	1	50X40	TEE, SEAMLESS 60.3*2.9/48.3*2.6, ST37.0, DIN 2615-1
3	4168 MM	50	PIPE, SEAMLESS 60.3*2.9, ST37.0, DIN EN 10220
4	125 MM	40	PIPE, SEAMLESS 48.3*2.6, ST37.0, DIN EN 10220
5	1	50	ELBOW, SEAMLESS, 1,5D 60.3*2.9-90, B-ART 3,DIN 2605-1
6	1	50	SLIDE SUPPORT PSUPPORT
7	1	40	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	125	40		BEVEL	BEVEL	RN
<2>	660	50		BEVEL	BEVEL	RN
<3>	3508	50		BEVEL	BEVEL	RN

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

Preis-Stückliste 0.15WC24101_1AA10C1 0 15 WC 24101_1 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW2	15	0	girth weld 1.0254 (St 37.0) 21,3x2		1,00				0,00
P0001	15	0	PIPE, SEAMLESS 1.0254 (St 37.0) DIN 1629 21,3x2	0,95 kg	0,70				0,00
SC1	15	0	Segment cut 21,3		1,00				0,00
XZB10	15	0	THREAD END 5.6 21,3		1,00				0,00
Summe: 0 15WC24101_1AA10C1 0				0,67 kg		0,00	0,00		0,00

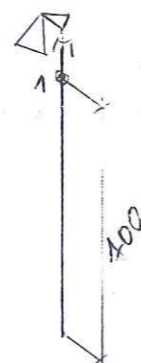
Liefersumme:	
Montagesumme:	
Gesamtsumme:	0,67 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

As built

ET24101

224101



400

LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ± 0.00

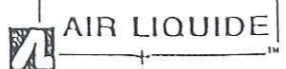
RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting soams
- Situation off pass- length
- Check of measura details and pipe courses on the construction site
- Situation of the spindle at valva
- All components for Oxygen use free of oil and grease

SUPPORTS:

- PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
- PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
- SS = SLIDING SUPPORT
- PG = PIPE GUIDE
- FP = FIX POINT

Rev.	Reviser	Date	Name	checked
C				
B				
A				

		Date:	23-JUN-2005	Name:	Lesum / HGH	Checked:	05-07-11	History file:
Air Liquide AGS GmbH		Job Code: K70101			Reference: ASU No. 9, Kosice		Title:	
Replaces: 79_		Replaced by: 79_		Scale: ---:---		Original format: DIN A3		
				Sheet:		Sheets:		
				Drawing No:		Rev.		
				15. WC 24101-1, AP1001		792.8782600		

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 150LV24102AA10C1 0 150 LV 24102 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0100	50	0	Flat packings Graphite with CrNi-insert Standard 40002 107x2x61		1,00				0,00
GW12	50	0	girth weld 1.0254 (St 37.0) 60,3x2,9		4,00				0,00
GW22	150	0	girth weld 1.0254 (St 37.0) 168,3x4,5		1,00				0,00
P0006	50	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 60,3x2,9	4,11 kg	3,10				0,00
P0011	150	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 168,3x4,5	18,20 kg	4,27				0,00
P0205	50	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9	0,49 kg	2,00				0,00
P1474	150	50	REDUCER, CONCENTRIC, SEAMLESS 1.0254	1,54 kg	1,00				0,00
P2878_A	50	0	WELDING NECK FLANGES, PN 16 1.0038		1,00				0,00
PW144	150	50	PIPE WELD-IN 1.0254		1,00				0,00
PW145	150	25	PIPE WELD-IN 1.0254		2,00				0,00
S0048	150	0	SUPPORT SV 150G 168 W1		1,00				0,00
SC5	50	0	Segment cut 60,3		2,00				0,00
SC9	150	0	Segment cut 168,3		1,00				0,00

AS BUILT

Preis-Stückliste 0 150LV24102AA10C1 0 150 LV 24102 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SCP07	150	0	PIPE CLAMP, RB10A 169 W3 HESTERBERG		1,00				0,00
SPS305	0	0	SUPPORT PS-305, H 100, L=2500	55,79 kg	1,00				0,00
SPS306	0	0	SUPPORT PS-306, H 100, L=2000	40,80 kg	1,00				0,00
XZB21	50	0	THREAD END 5.6		1,00				0,00
Summe: 0 150LV24102AA10C1 0				189,57 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	189,57 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Jop Code: K70101 ASU No. 9, Kosice

Title: 150 LV 24102

Drawing No.:

Maker's No.:

geprüft

erstellt:

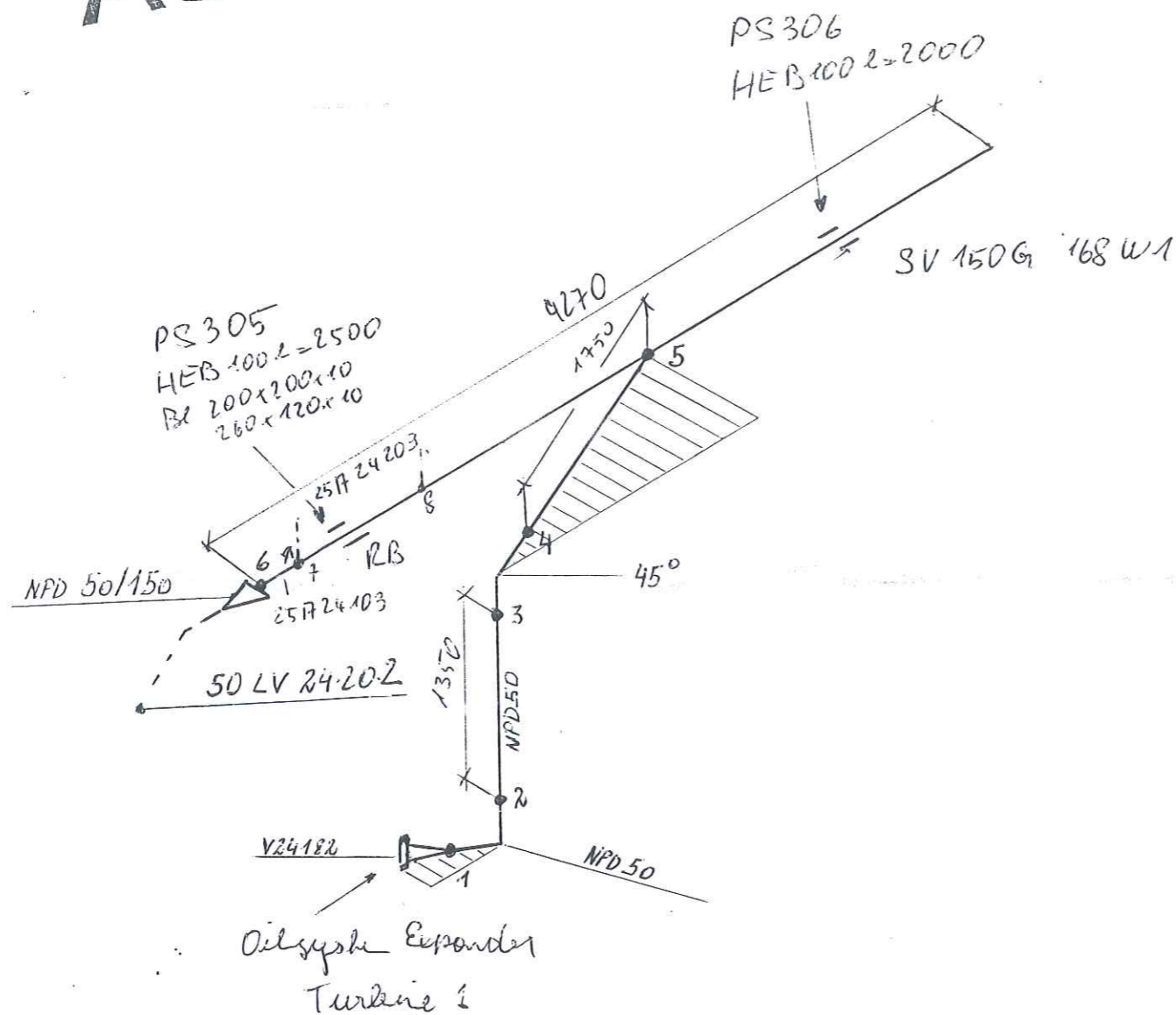
04.03.06
Pelzeder Erich

Schweisstechnologie VAM
Datum / Unterschrift

Datum / Unterschrift

[illegible]

As built



RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

- PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
- PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
- SS = SLIDING SUPPORT
- PG = PIPE GUIDE
- FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

AIR LIQUIDE Air Liquide AGS GmbH	Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-11	History file:
	Job Code: K70101			Scale: ---:---
	Reference: ASU No. 9, Kosice			Original format: DIN A3
	Title: 150 LV 24.10.2			Sheets: 792.8782600
Replaces: 79-----	Replaced by: 79-----			Rev.

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25A24103AA10C1 0 25 A 24103 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0002	12	55	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,06 kg	4,00				0,00
B0506	12	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,02 kg	4,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		3,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	2,16				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	1,00				0,00
P2935	25	0	Welding neck flanges; PN 40 1.0038 (S235JRG2) DIN EN 1092-1 33,7	1,00 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		2,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		1,00				0,00
SPS311	0	0	SUPPORT PS-311, U 80, L=1000	8,64 kg	1,00				0,00
			Summe: 0 25A24103AA10C1 0	14,38 kg		0,00	0,00		0,00

Liefersumme:
Montagesumme:
Gesamtsumme:

AS BUILT




VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25A24103AA10C1 0 25 A 24103 AA10C1 Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt

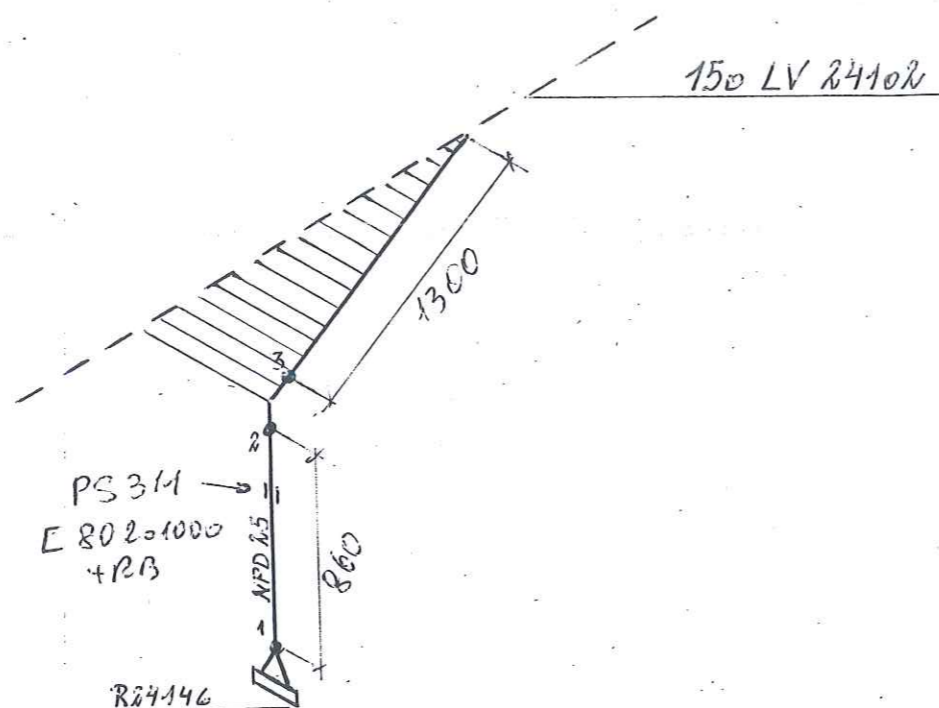
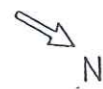
Gesamtgewicht:	14,38 kg
** Ende der Ausgabe	

AS BUILT



	SCHWEISSDOKUMENTATION WELDING DOCUMENTATION		erstellt: 21.02.2006  Pezeder Erich	geprüft Schweisstechnologie VAM	(Kunde / TÜV, ...) 	
	Prot. Nr.					Datum / Unterschrift
Jop Code:	K70101	ASU No. 9, Kosice	Order No.:	Project No.: 9050300		
Client:	AIR LIQUIDE	Title: 25 A 24103	Sheet 1	Drawing No.:	792.87826 - 00	Maker's No.:

[illegible]



LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

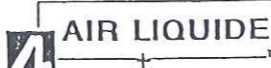
RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT
WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT
ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

 AIR LIQUIDE Air Liquide AGS GmbH	Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-11	History file:	
	Job Code: K70101			Scale: 1:1	Original format: DIN A3
	Reference: ASU No. 9. Kosice			Sheet: 1	Sheets: 1
	Title: 25 A 24103 HAIQCI			Drawing No: 792.8782600	Rev.

Preis-Stückliste 0 150LV24105ZB16C1 0 150 LV 24105 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0103	12	60	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	0,07 kg	4,00				0,00
B0532	12	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,02 kg	4,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
GW15	80	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 88,9x2,3		7,00				0,00
GW23	150	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 168,3x4,5		1,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		9,00				0,00
P0131	25	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 33,7x2	1,58 kg	2,86				0,00
P0136	80	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 88,9x2,3	4,98 kg	1,15				0,00
P0140	150	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 168,3x4	16,40 kg	2,88				0,00
P0284	25	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2	0,09 kg	4,00				0,00
P0289	80	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 88,9x2,3	0,89 kg	3,00				0,00
P1786	150	80	REDUCER, CONCENTRIC, WELDED 1.4541		1,00				0,00

Preis-Stückliste 0 150LV24105ZB16C1 0 150 LV 24105 ZB16C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P2993	25	0	Welding neck flanges; PN 40 1.4541 (X 6 CrNiTi 18 10) DIN EN 1092- 33,7	1,00 kg	1,00				0,00
PWI45	150	25	PIPE WELD-IN 1.0254		1,00				0,00
PWI51	150	80	PIPE WELD-IN 1.4541		1,00				0,00
S0068	150	0	SUPPORT SV 150G 168 W3						0,00
SC3	25	0	Segment cut 33,7		1,00				0,00
SC6	80	0	Segment cut 88,9		7,00				0,00
SC9	150	0	Segment cut 168,3		5,00				0,00
Summe: 0 150LV24105ZB16C1 0				61,87 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

** Ende der Ausgabe

61,87 kg

AS BUILT



Job Code: K70101 ASU No. 9, Kosice Order No.:

Title: 150 LV 24105

Drawing No.:

Project No.: 9050300

Maker's No.:

21.02.06 P. J.
Pelzeder Erich

geprüft

Schweisstechnologie VAM

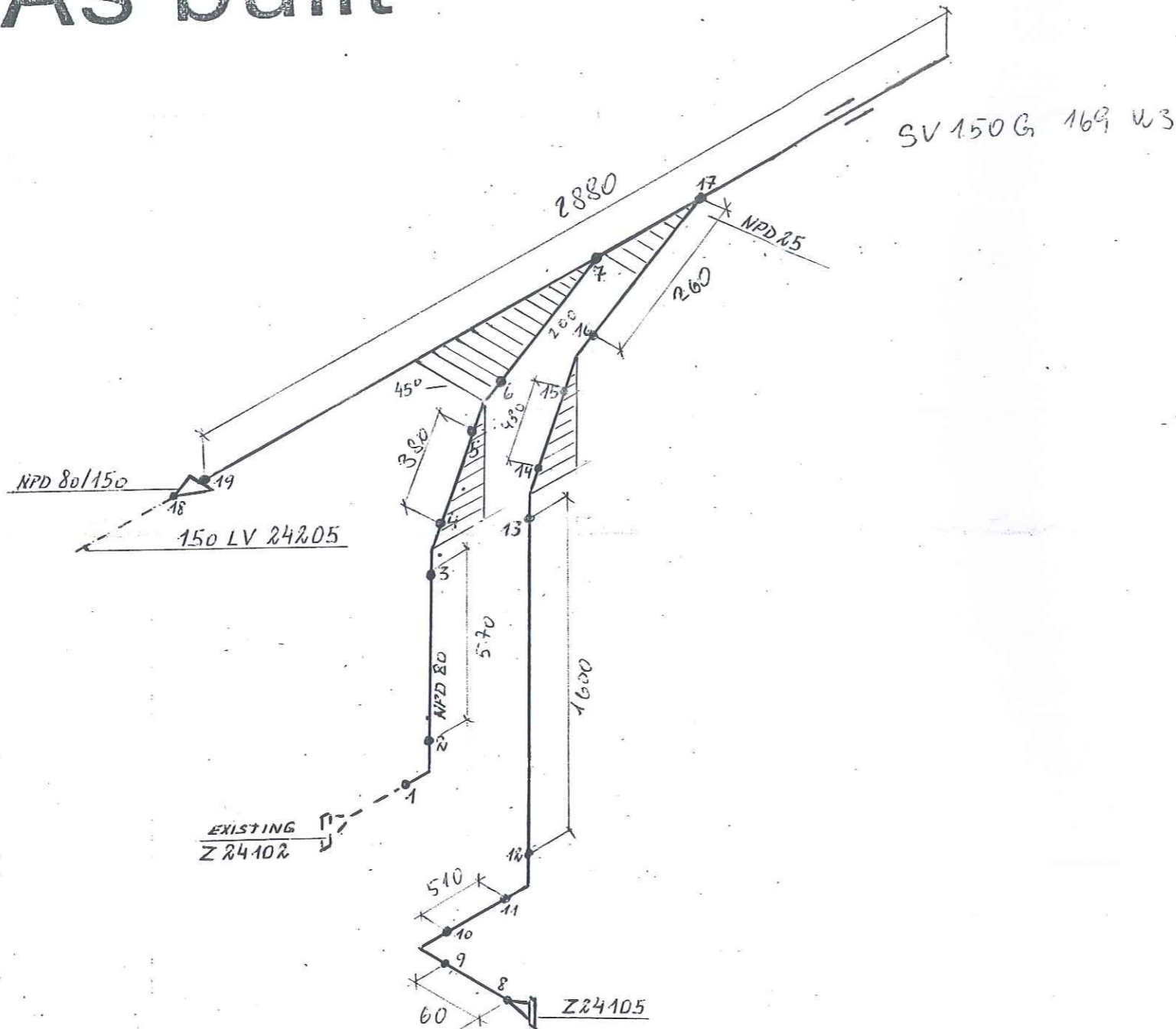
(Kunde / TÜV, ...)



Datum / Unterschrift

[illegible]

As built



LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ± 0.00

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT
 WITH SUBSTRUCTURE
 PB-(NO.) - PIPE SUPPORT
 ON THE PIPEBRIDGE
 SS = SLIDING SUPPORT
 PG = PIPE GUIDE
 FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

AIR LIQUIDE Air Liquide AGS GmbH	Date:	23-JUN-2005	Name:	Lesum / HGH	Checked:	05-07-11	History file:	
	Job Code: K70101				Scale:	1:1	Original format:	DIN A3
	Reference: ASU No. 9. Kosice				Sheet:	1	Sheets:	1
	Title:				Drawing No:		Rev.	
Replaces: 79_----- Replaced by: 79_-----	150 LV 24105 Z-B 16C1				792.8782600			

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25A24106ZB10C1 0 25 A 24106 ZB10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0095	20	0	Flat packings Graphite with CrNi-insert Standard 40002 60x2x28		1,00				0,00
GW3	20	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 26,9x1,6		2,00				0,00
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		5,00				0,00
P0130	20	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 26,9x1,6	1,01 kg	0,10				0,00
P0131	25	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 33,7x2	1,58 kg	2,35				0,00
P0284	25	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2	0,09 kg	3,00				0,00
P1283	25	20	REDUCER, CONCENTRIC, SEAMLESS St35.8I /DIN 2616-1/ 33,7x26,9	0,21 kg	1,00				0,00
SC2	20	0	Segment cut 26,9		1,00				0,00
SC3	25	0	Segment cut 33,7		2,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		1,00				0,00
Summe: 0 25A24106ZB10C1 0				4,29 kg		0,00	0,00		0,00

Liefersumme:

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25A24106ZB10C1 0 25 A 24106 ZB10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Montagesumme:									
Gesamtsumme:									
Gesamtgewicht:									
** Ende der Ausgabe									

4,29 kg

AS BUILT



Prot Nr.

Jop Code: K70101 ASU No. 9, Kosice **Order No.:**

Jop Code: K70101 ASU No. 9, Kosice **Order No.:**

Client: AIR LIQUIDE

Title: 25 A 24106

Sheet 1

Drawing No.:

Maker's No.:

Maker's No.:

Seam No.:

No.:

Material

Dimension

**Wärme-
behandlung**

Protocol No.:

RT

5

 $\frac{MT}{PT}$

Remerk

1

1

1

1

1

1

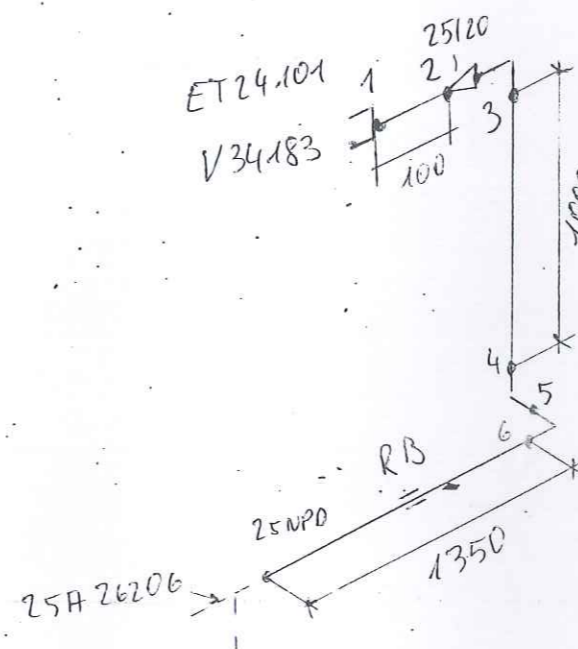
Pelzeder Erich, 24.02.06

1

Kosice



As built



LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ± 0.00

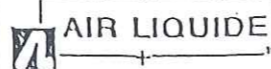
RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting soams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PD-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

 AIR LIQUIDE Air Liquide AGS GmbH	Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-11 <i>z</i>	History file:	
	Job Code: K70101			Scale: ---	Original format DXF A3
Reference: ASU No. 9. Kosice			Sheet: ---		Sheets:
Title: 25 A 26206 2B 10C 792.8782600			Drawing No:		Rev.
Replaces: 79-----					
Replaced by: 79-----					

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 150LV24180ZB16C1 0 150 LV 24180 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0103	80	0	Flat packings Graphite with CrNi-insert Standard 40002 142x2x90		1,00				0,00
GW15	80	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 88,9x2,3		6,00				0,00
GW23	150	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 168,3x4,5		1,00				0,00
P0136	80	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 88,9x2,3	4,98 kg	3,18				0,00
P0140	150	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 168,3x4	16,40 kg	4,97				0,00
P0289	80	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 88,9x2,3	0,89 kg	3,00				0,00
P1786	150	80	REDUCER, CONCENTRIC, WELDED 1.4541		1,00				0,00
PWI51	150	80	PIPE WELD-IN 1.4541		1,00				0,00
S0068	150	0	SUPPORT SV 150G 168 W3		2,00				0,00
SC6	80	0	Segment cut 88,9		4,00				0,00
SC9	150	0	Segment cut 168,3		1,00				0,00
Summe: 0 150LV24180ZB16C1 0				100,01 kg		0,00	0,00		0,00

Liefersumme:
Montagesumme:




AS BUILT

Preis-Stückliste 0 150LV24180ZB16C1 0 150 LV 24180 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Gesamtsumme:									
Gesamtgewicht:									100,01 kg
** Ende der Ausgabe									

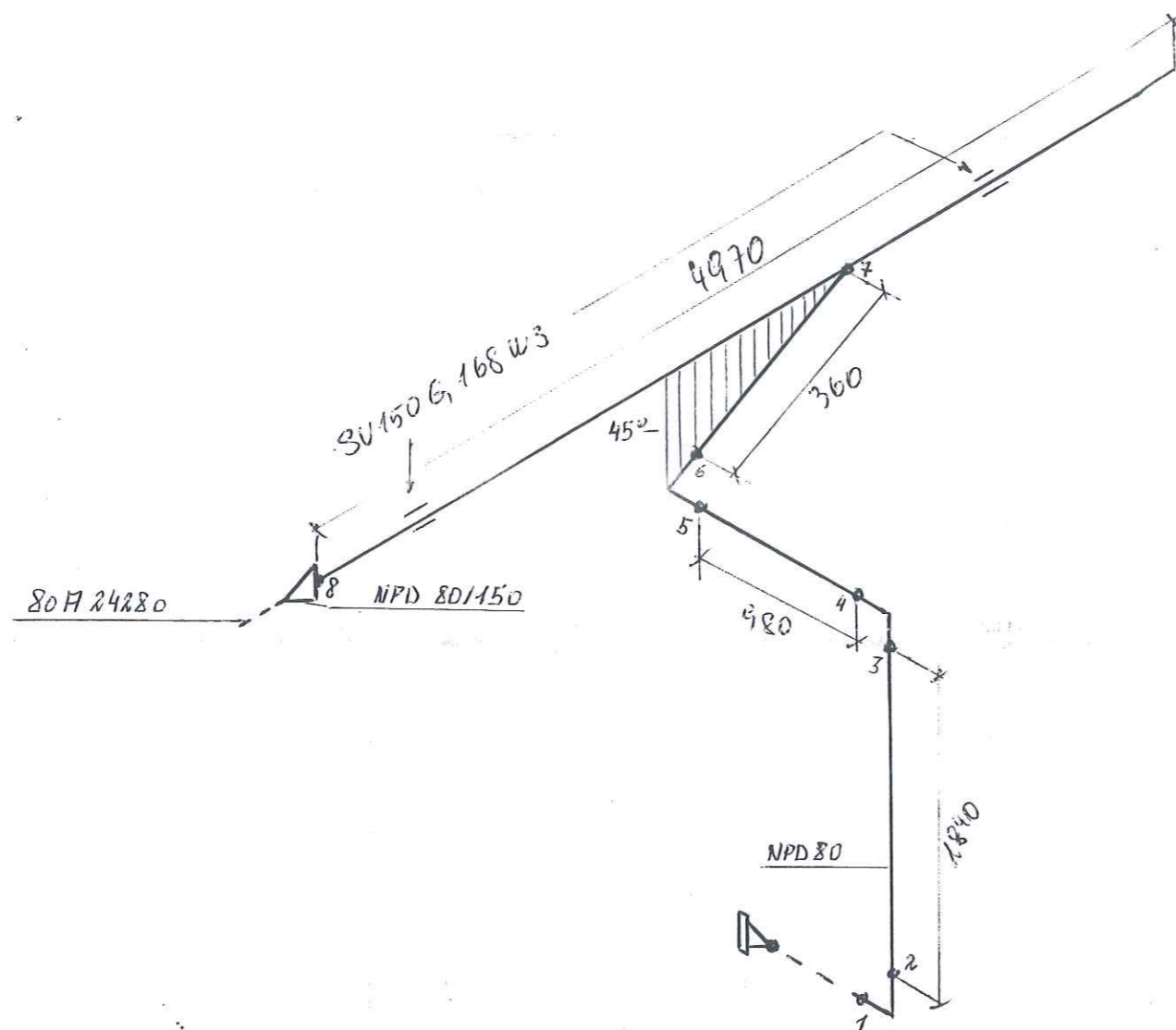
AS BUILT



	SCHWEISSDOKUMENTATION WELDING DOCUMENTATION		erstellt: 21.02.16  Pelzeder Erich Datum / Unterschrift	geprüft Schweisstechnologie VAM Datum / Unterschrift	(Kunde / TÜV, ...) 
	Prot. Nr.	Order No.:			
Jop Code: K70101 ASU No. 9, Kosice	Title: 150 LV 24180	Sheet 1	Project No.: 9050300	Drawing No.: 792.87826 - 00	Maker's No.:

[illegible]

As built



RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE

PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

AIR LIQUIDE Air Liquide AGS GmbH	Date:	Name:	Checked:	History file:
	23-JUN-2005	Lesum / HGH	05-07-11 <i>ZH</i>	
Replaces: 79_	Job Code: K70101		Scale: ---:---	Original format: DIN A3
Replaced by: 79_	Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 1
Title:		Drawing No:		Rev.
150LV 24180		2B.16C1		792.8782600

LEVELS:

TOP OF INTERNAL ROADS: 225.00m n.m.

TOP OF FOUNDATION: 225.10m

BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 80WC24201AA10C2 0 80 WC 24201 AA10C2 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0006	16	55	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,12 kg	12,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	12,00				0,00
G0154	40	0	Fibrous packings asbestos-free laminate made of aramide f 92x2x49		3,00				0,00
GW12	50	0	girth weld 1.0254 (St 37.0) 60,3x2,9		4,00				0,00
GW16	80	0	girth weld 1.0254 (St 37.0) 88,9x3,2		7,00				0,00
GW9	40	0	girth weld 1.0254 (St 37.0) 48,3x2,6		6,00				0,00
IV24230	40	0	V24230 supplied by AGS		1,00				0,00
P0005	40	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 48,3x2,6	2,93 kg	1,00				0,00
P0006	50	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 60,3x2,9	4,11 kg	0,70				0,00
P0008	80	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 88,9x3,2	6,76 kg	7,90				0,00
P0163	40	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 48,3x2,6	0,26 kg	1,00				0,00
P0166	80	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 88,9x3,2	1,21 kg	2,00				0,00

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 80WC24201AA10C2 0 80 WC 24201 AA10C2 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0492	50	40	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 60,3x2,9x48,3x2,6	0,63 kg	1,00				0,00
P0501	80	50	Tee made of seamless pipe 1.0254 (St 37.0) DIN 2609 88,9x3,2x60,3x2,9	1,35 kg	1,00				0,00
P1285	50	40	Reducer, concentric, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9x48,3x2,6	0,28 kg	1,00				0,00
P1292	80	50	Reducer, concentric, seamless 1.0254 (St 37.0) DIN 2609 88,9x3,2x60,3x2,9	0,51 kg	1,00				0,00
P2877	40	0	Welding neck flanges; PN 40 1.0038 (S235JRG2) DIN EN 1092-1 48,3	2,00 kg	3,00				0,00
S0008	80	0	T-support TA 120B 89 W1 OZN 1.0 Hesterberg 89	4,10 kg	2,00				0,00
S0017	40	0	T-support TA 120G 49 W1 OZN 1.0 Hesterberg 49	7,70 kg	1,00				0,00
SC4	40	0	Segment cut 48,3		3,00				0,00
SC5	50	0	Segment cut 60,3		1,00				0,00
SC6	80	0	Segment cut 88,9		4,00				0,00
SPS130	0	0	SUPPORT PS-130	56,95 kg	1,00				0,00
SPS132	0	0	SUPPORT PS-132	15,90 kg	1,00				0,00
Summe: 0 80WC24201AA10C2 0				161,21 kg		0,00	0,00		0,00

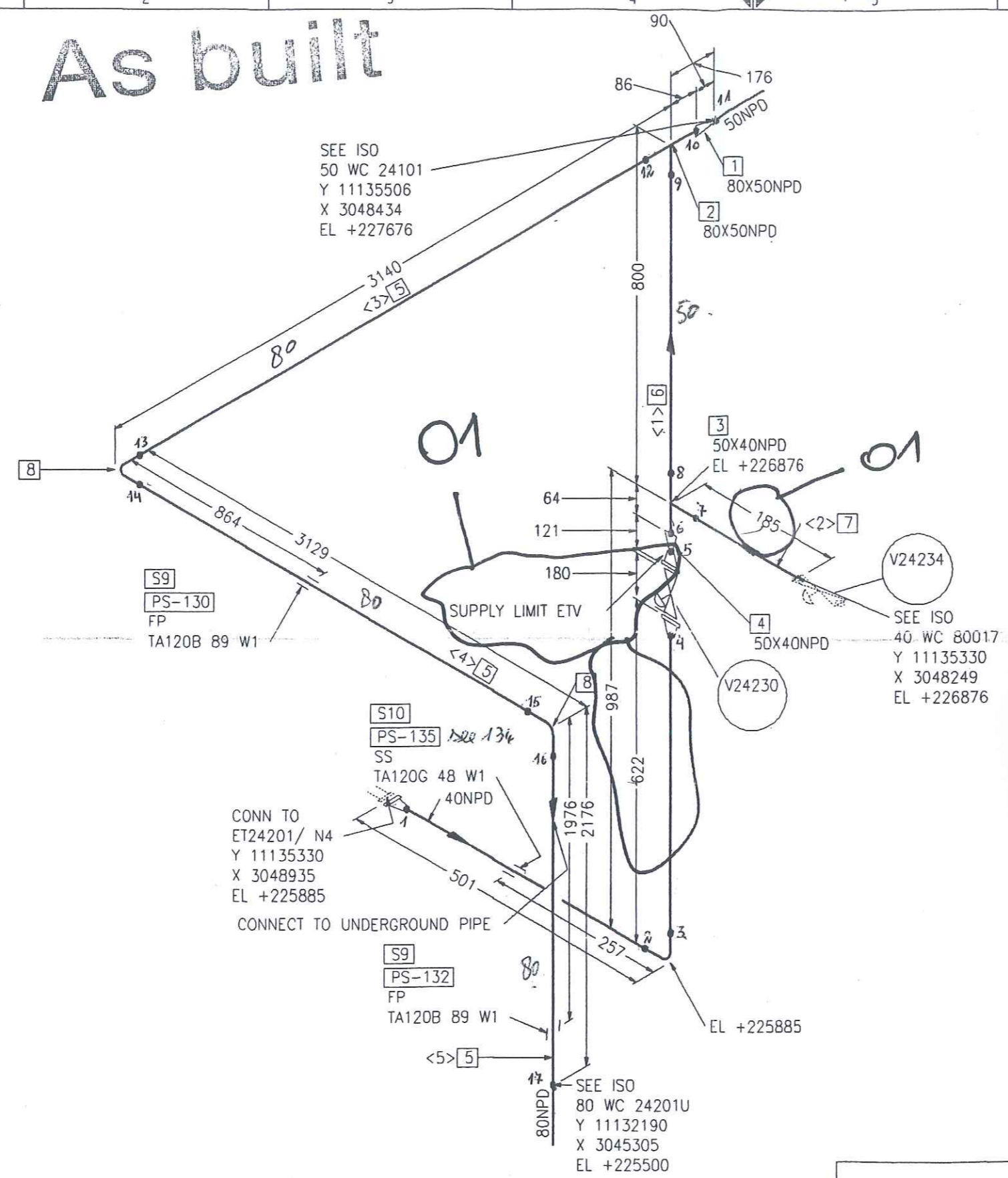
Preis-Stückliste 0 80WC24201AA10C2 0 80 WC 24201 AA10C2 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
-------------	-----	-----	------------------	------------	-------	-----------	---------	-------	--------

Liefersumme:	
Montagesumme:	
Gesamtsumme:	161,21 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

As built




Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	80X50	REDUCER, CONCENTRIC, SEAMLESS 88.9*3.2/60.3*2.9, ST37.0, DIN 2616-1
2	1	80X50	TEE, SEAMLESS 88.9*3.2/60.3*2.9, ST37.0, DIN 2615-1
3	1	50X40	TEE, SEAMLESS 60.3*2.9/48.3*2.6, ST37.0, DIN 2615-1
4	1	50X40	REDUCER, CONCENTRIC, SEAMLESS 60.3*2.9/48.3*2.6, ST37.0, DIN 2616-1
5	7903 MM	80	PIPE, SEAMLESS 88.9*3.2, ST37.0, DIN EN 10220
6	660 MM	50	PIPE, SEAMLESS 60.3*2.9, ST37.0, DIN EN 10220
7	125 MM	40	PIPE, SEAMLESS 48.3*2.6, ST37.0, DIN EN 10220
8	2	80	ELBOW, SEAMLESS, 1,5D 88.9*3.2-90, B-ART 3, DIN 2605-1
9	2	80	FIX POINT PSUPPORT
10	1	40	SLIDE SUPPORT PSUPPORT

CUT PIPE LENGTH					
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO
<1>	660	50		BEVEL	BEVEL
<2>	125	40		BEVEL	BEVEL
<3>	2940	80		BEVEL	BEVEL
<4>	2901	80		BEVEL	BEVEL
<5>	2062	80		BEVEL	BEVEL

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

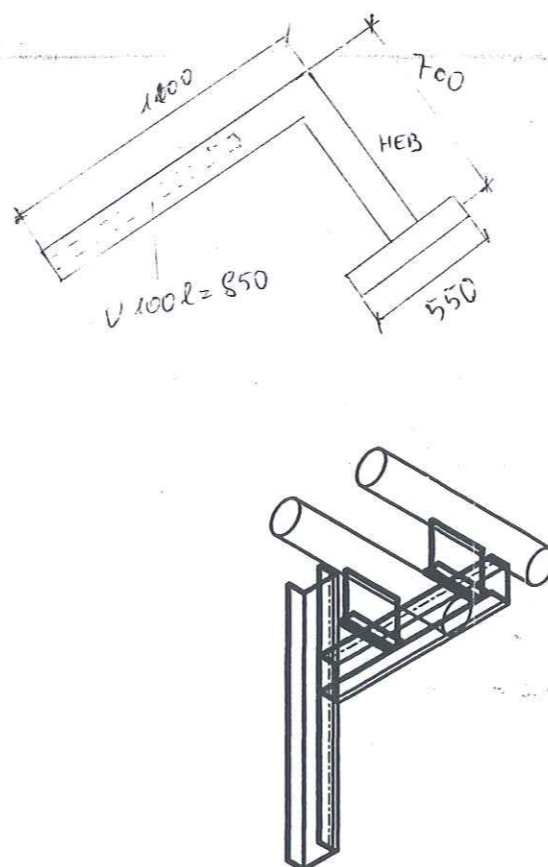
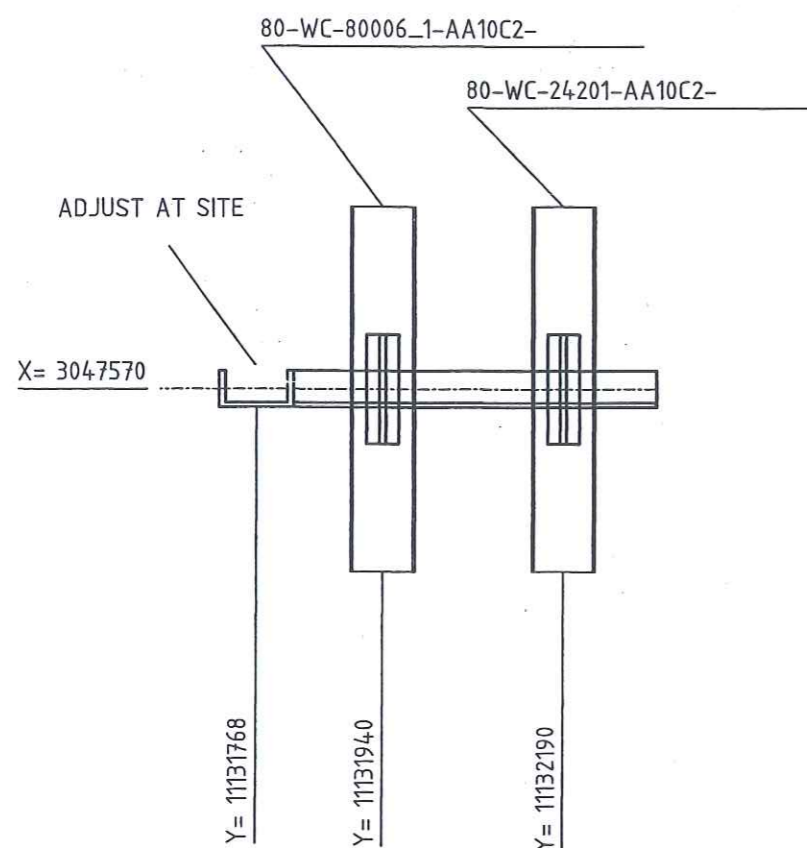
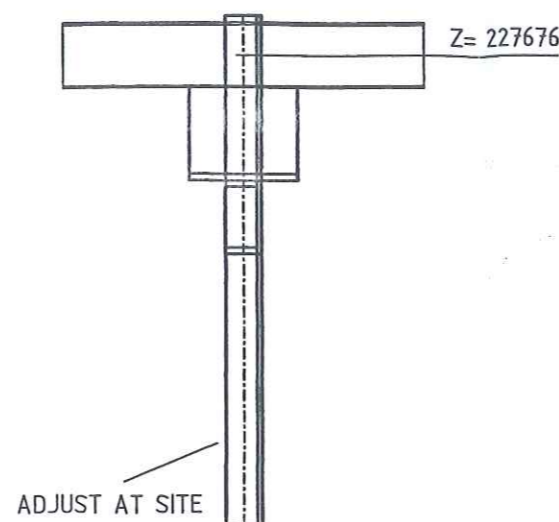
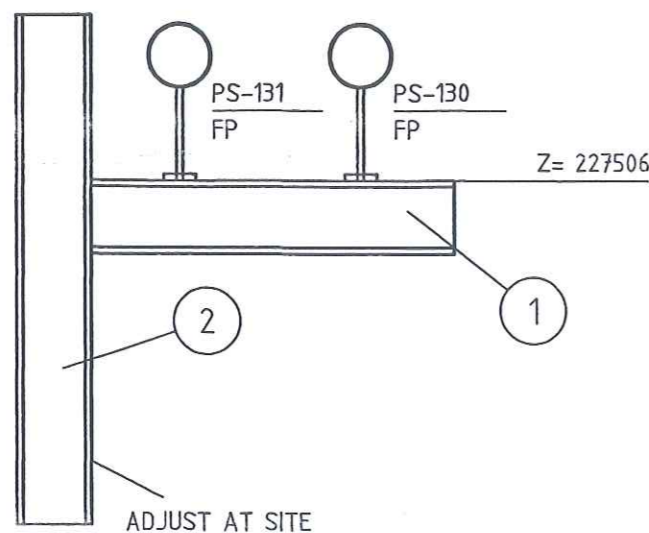
01	General Rev	15.09.2005	Les	Zul
Rev.	Revisions	Date	Name	checked

 Air Liquide AGS GmbH	Date: 16-SEP-2005	Name: Lesum / HGH	Checked: 05-09-15	History file.	
	Job Code: K70101		Scale: 1:1		Original format: DIN A3
Reference: ASU No. 9. Kosice		Title: 80 WC 24201 AA10C2		Sheet: 1	Sheets: 1
Replaces: 79_----- Replaced by: 79_-----		Drawing No. 792.8782601		Rev. 01	

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE COPIED OR TRANSFERRED TO THIRD PARTIES WITHOUT PERMISSION OF THE PROPRIETOR.

As built



LEGEND:

- PG- PIPE GUIDE
- FP- FIX POINT
- SS- SLIDE SUPPORT
- HN- HANGER
- SSAX- SLIDE SUPPORT WITH AXIAL STOP
- AXLS- AXIAL STOP WITH LIFTING STOP
- SPS- SPRING SUPPORT
- SPGS- SPRING SUPPORT GUIDED
- GSAX- GUIDE SUPPORT WITH AXIAL STOP
- SPAX- SPRING SUPPORT WITH AXIAL STOP
- SH- SPRING HANGER
- AX- AXIAL STOP

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:

- THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER RESISTANT PAINT AND WHITE COLOR

RESPONSIBILITY OF ERECTION COMPANY

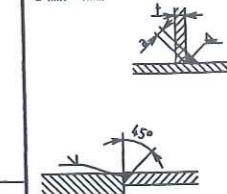
- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

- ALL SURFACES FOR COATING MUST BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED

WELDING DATA ACC. TO DIN 1912 T5

a >= 0,7 x t
a min= 4mm



Total Weight: 12.65 kg

Item	No. Off	Unit	Description	Dimension	Material	Weight kg	Remark
1	1	pcs	PROFILE HEB 100 L= 850	100, L=0.500	RST37-2	5.291	47,94
2	1	pcs	PROFILE U 100 L= 850	U100, L=0.695	RST37-2	7.356	9,01
							56,95
27. Juli 2005							

Approved by	Date	Name	Signature
Checked by		Gans	
Checked by	25. JUL. 2005	Zut	
Drawn checked by			

HEGGMANN

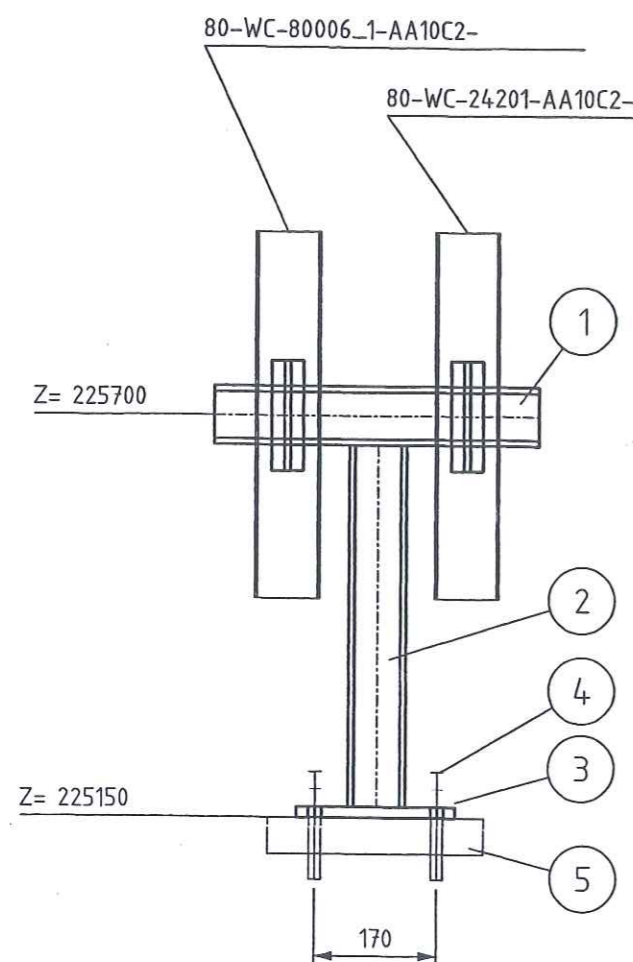
AIR LIQUIDE

Air Liquide AGS GmbH

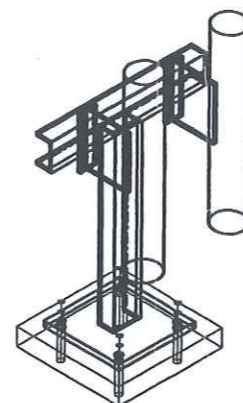
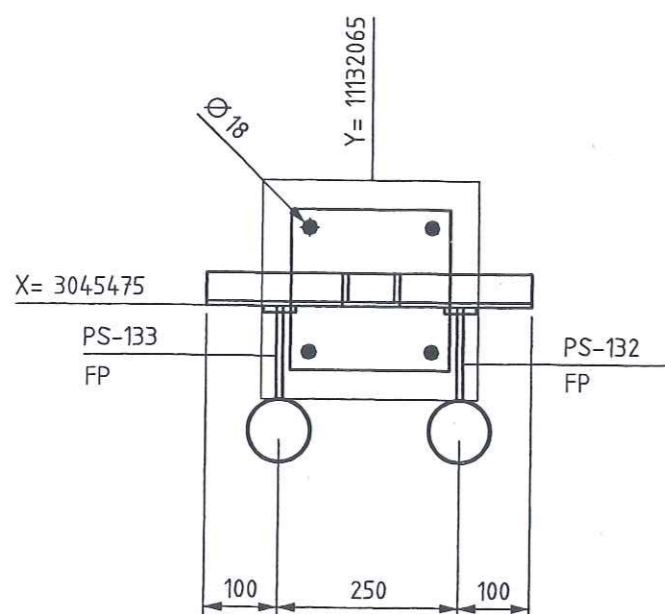
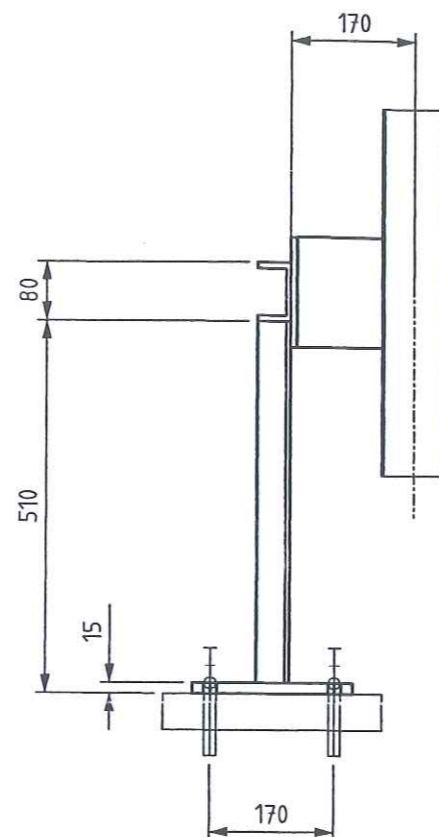
Archives Rev. No.	Rev.	Job No.	Description	Sign.	Date
REVISIONS					

Date	Name	Check	History File
19.07.2005	GU	Zut	
Job Code:	K70101 ASU No.9 Kosice		
Reference:	PIPING SUPPORT		
Replaces:	Title	PS-130	
Scale:	1:10	Original Format	DIN A3
Sheet:	1 of 1	Drawing-No.	792.87926
Rev.	a		

THIS DRAWING AND THE INFORMATION CONTAINED THEREIN MUST NOT BE COPIED OR TRANSFERRED TO THIRD PARTIES WITHOUT PERMISSION OF THE PROPRIETOR.



As built



LEGEND:

- PG- PIPE GUIDE
- FP- FIX POINT
- SS- SLIDE SUPPORT
- HN- HANGER
- SSAX- SLIDE SUPPORT WITH AXIAL STOP
- AXLS- AXIAL STOP WITH LIFTING STOP
- SPS- SPRING SUPPORT
- SPGS- SPRING SUPPORT GUIDED
- GSAX- GUIDE SUPPORT WITH AXIAL STOP
- SPAX- SPRING SUPPORT WITH AXIAL STOP
- SH- SPRING HANGER
- AX- AXIAL STOP

- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:

- THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER RESISTANT PAINT AND WHITE COLOR

RESPONSIBILITY OF ERECTION COMPANY

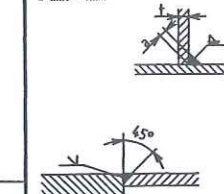
- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

COATING:

- ALL SURFACES FOR COATING MUST BE FREE OF CONTAMINANTS ALL OIL, GREASE AND ALL LOOSE DUST
- THE RUST, WELDING FLUX AND DIRT FROM THE COMPLETED SUPPORT NEEDS TO BE REMOVED
- THE SUPPORT NEEDS TO BE PRIME COATED

WELDING DATA ACC. TO DIN 1912 T5

a >= 0,7 x t
a min= 4mm



Total Weight: 13.89 kg

Item	No. off	Unit	Description	Dimension	Material	Weight kg	Remark
1	1	pcs	PROFILE	U80, L=0.450	RST37-2	3.900	
2	1	pcs	PROFILE	U80, L=0.495	RST37-2	4.290	
3	1	pcs	PLATE 220x220x15		RST37-2	5.699	
4	4	pcs	ANCHOR BOLT HST(-R)M16/100	HST-(-R) 16-0-M16	1.4401	0.000	4,2
5	1	pcs	BASE	300x300x50	CONCRETE	0.000	15,09
							27. Juli 2005

Approved by	Date	Name	Signature
Checked by		Gans	
Checked by	25. JUL. 2005	Zut	
Drawn checked by			

HGH
HEGMANN'S



Air Liquide AGS GmbH

Date	Name	Check	History File
19.07.2005	GU	Zut	
Job Code:	K70101 ASU No.9 Kosice		
Reference:	PIPING SUPPORT		
Replaces:	Title PS-132		
Scale:	1:10	Original Format	DIN A3
Sheet:	1 of:	1	Rev.
Drawing-No.	792.87926		a

Archives	Rev.	Job No.	Description	Sign.	Date
Rev No.					
R E V I S I O N S					

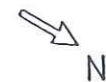
VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 15WC24201_1AA10C1 0 15 WC 24201_1 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW2	15	0	girth weld 1.0254 (St 37.0) 21,3x2		1,00				0,00
P0001	15	0	PIPE, SEAMLESS 1.0254 (St 37.0) DIN 1629 21,3x2	0,95 kg	0,70				0,00
SC1	15	0	Segment cut 21,3		1,00				0,00
XZB10	15	0	THREAD END 5.6 21,3		1,00				0,00
Summe: 0 15WC24201_1AA10C1 0				0,67 kg		0,00	0,00		0,00

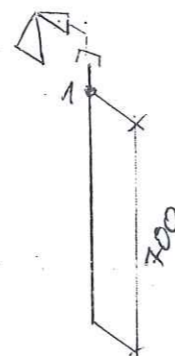
Liefersumme:	
Montagesumme:	
Gesamtsumme:	0,67 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



ET 24201

224201



RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting soams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE

PD-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				



Air Liquide AGS GmbH

Replaces: 79_-----
Replaced by: 79_-----

Date:	23-JUN-2005	Name:	Lesum / HGH	Checked:	05-07-11	History file:	
Job Code: K70101				Scale: 1:1		Original format: DIN A3	
Reference: ASU No. 9, Kosice				Sheet:		Sheets:	
Title:				Drawing No:		Rev.	
15 MC 24201-1 AA10G1				792.8782600			

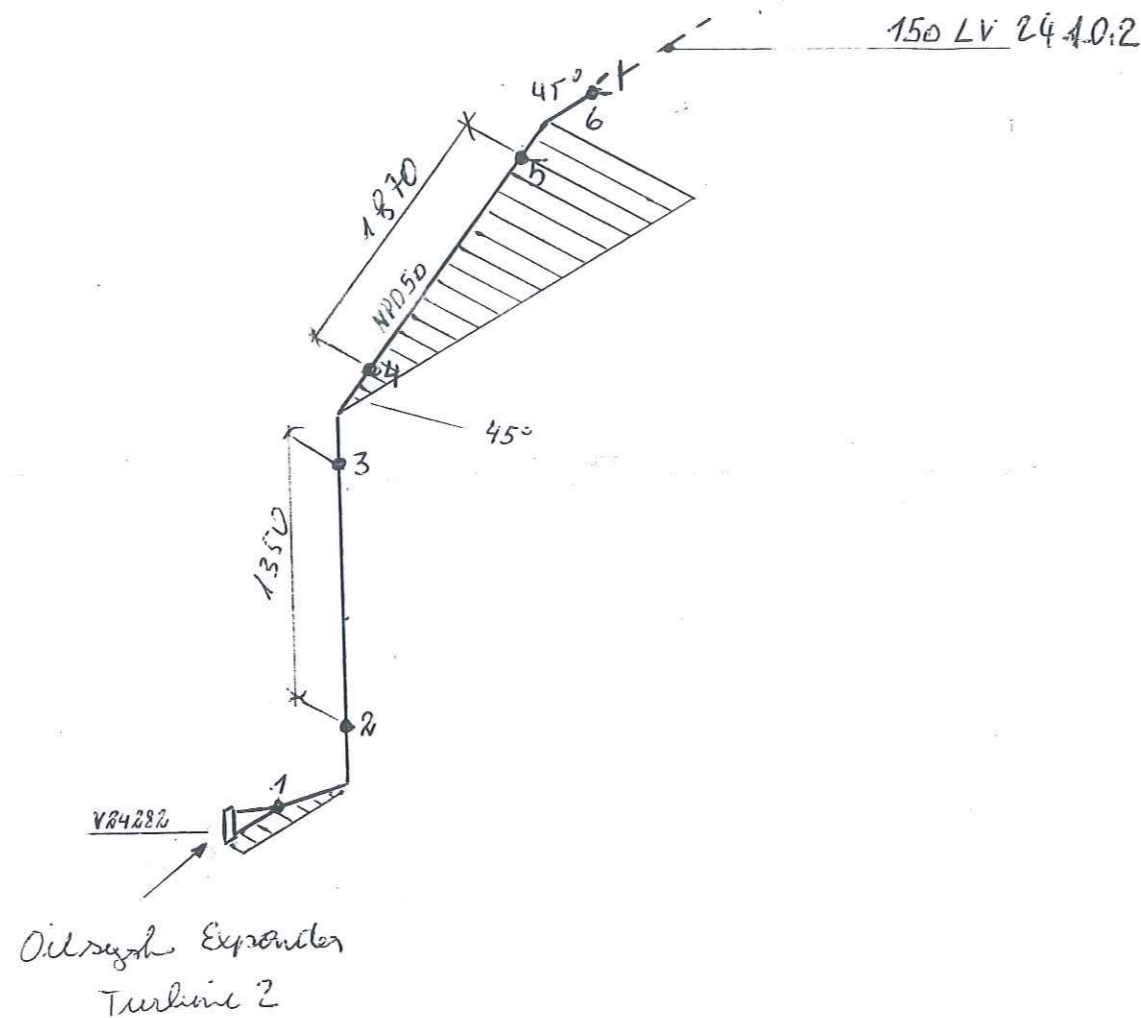
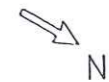
VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 150LV24202AA10C1 0 150 LV 24202 AA10C1 Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0100	50	0	Flat packings Graphite with CrNi-insert Standard 40002 107x2x61		1,00				0,00
GW12	50	0	girth weld 1.0254 (St 37.0) 60,3x2,9		6,00				0,00
P0006	50	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 60,3x2,9	4,11 kg	3,22				0,00
P0205	50	0	Elbow 90° R=1.5 DA, seamless 1.0254 (St 37.0) DIN 2609 60,3x2,9	0,49 kg	3,00				0,00
P2932_A	50	0	WELDING NECK FLANGES, PN 40 1.0038		1,00				0,00
SC5	50	0	Segment cut 60,3		2,00				0,00
XZB21	50	0	THREAD END 5.6		1,00				0,00
Summe: 0 150LV24202AA10C1 0				14,70 kg		0,00	0,00		0,00

AS BUILT

Liefersumme:	
Montagesumme:	
Gesamtsumme:	14,70 kg
Gesamtgewicht:	
** Ende der Ausgabe	

As built



LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
 PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE
 SS = SLIDING SUPPORT
 PG = PIPE GUIDE
 FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

 Air Liquide AGS GmbH	Date:	23-JUN-2005	Name:	Lesum / HGH	Checked:	05-07-11 <i>BA</i>	History file:
	Job Code: K70101				Scale:	---	Original format:
	Reference: ASU No. 9, Kosice				Sheet:		Sheets:
	Title:				Drawing No:		Rev.
Replaces: 79----- Replaced by: 79-----				150 LV 24 202 792.8782600			

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25A24203AA10C1 0 25 A 24203 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0002	12	55	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,06 kg	4,00				0,00
B0506	12	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,02 kg	4,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
GW5	25	0	girth weld 1.0254 (St 37.0) 33,7x2,6		7,00				0,00
P0038	25	0	pipe, seamless 1.0254 (St 37.0) DIN 1629 33,7x2,6	1,99 kg	4,17				0,00
P0202	25	0	Elbow 90° R=1,5 DA, seamless 1.0254 (St 37.0) DIN 2609 33,7x2,6	0,12 kg	3,00				0,00
P2935	25	0	Welding neck flanges; PN 40 1.0038 (S235JRG2) DIN EN 1092-1 33,7	1,00 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		6,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		1,00				0,00
SPS312	0	0	SUPPORT PS-312, U 80, L=1000	8,64 kg	1,00				0,00
Summe: 0 25A24203AA10C1 0				18,62 kg		0,00	0,00		0,00

Liefersumme:
Montagesumme:
Gesamtsumme:

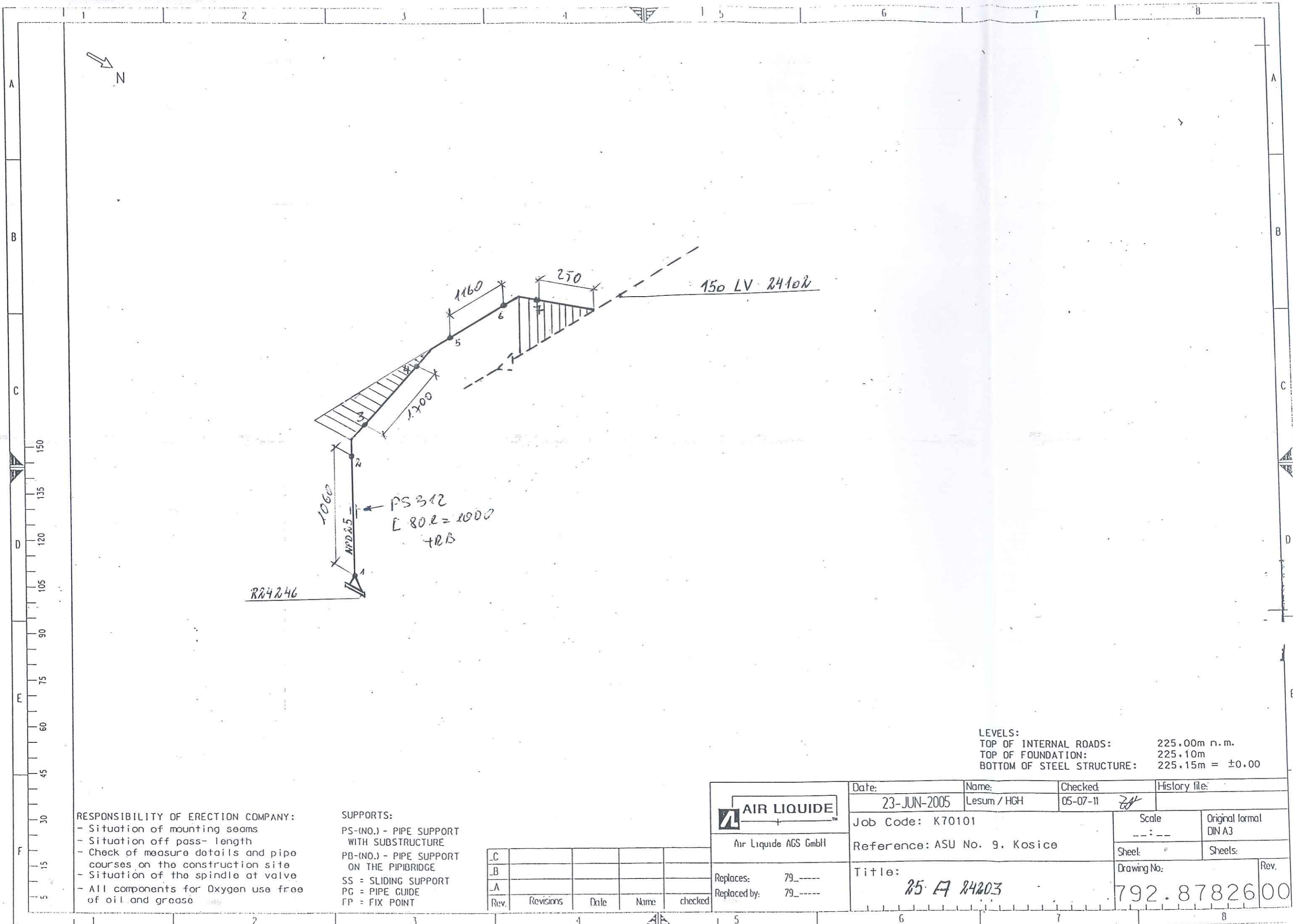
AS BUILT

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25A24203AA10C1 0 25 A 24203 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Gesamtgewicht:				18,62 kg					
** Ende der Ausgabe									

AS BUILT



LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
 - Situation of mounting seams
 - Situation off pass- length
 - Check of measure details and pipe courses on the construction site
 - Situation of the spindle at valve
 - All components for Oxygen use free of oil and grease

SUPPORTS:
 PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
 PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
 SS = SLIDING SUPPORT
 PG = PIPE GUIDE
 FP = FIX POINT

Rev.	Revisions	Date	Name	checked

	Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-11	History file:
	Job Code: K70101			Scale: ---
Reference: ASU No. 9, Kosice			Sheet: 792.87826	Sheets: 00
Title: 25. A 24203 Replaces: 79_---- Replaced by: 79_----			Drawing No: 792.87826 Rev.	

VAM Anlagentechnik und Montagen
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 150LV24205ZB16C1 0 150 LV 24205 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0103	12	60	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	0,07 kg	4,00				0,00
B0532	12	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,02 kg	4,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
GW15	80	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 88,9x2,3		6,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		7,00				0,00
P0131	25	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 33,7x2	1,58 kg	2,95				0,00
P0136	80	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 88,9x2,3	4,98 kg	3,76				0,00
P0284	25	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2	0,09 kg	3,00				0,00
P0289	80	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 88,9x2,3	0,89 kg	3,00				0,00
P2993	25	0	Welding neck flanges; PN 40 1.4541 (X 6 CrNiTi 18 10) DIN EN 1092- 33,7	1,00 kg	1,00				0,00
PW13	80	25	Pipe weld-in 1.4541 (X 6 CrNiTi 18 10) 88,9x2,3x33,7x2		1,00				0,00
S0044250	80	0	T-support, 1.4541, TA 120G 89 W3, H2 = 2 1.4 Hesterberg	8,70 kg	1,00				0,00

Preis-Stückliste 0 150LV24205ZB16C1 0 150 LV 24205 ZB16C1 Revision:									
(Fortsetzung)									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SC3	25	0	Segment cut 33,7		4,00				0,00
SC6	80	0	Segment cut 88,9		4,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
Summe: 0 150LV24205ZB16C1 0				36,39 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	36,39 kg
** Ende der Ausgabe	

AS BUILT



Jop Code: K70101 ASU No. 9, Kosice **Order No.:**

Title: 150 LV 24205

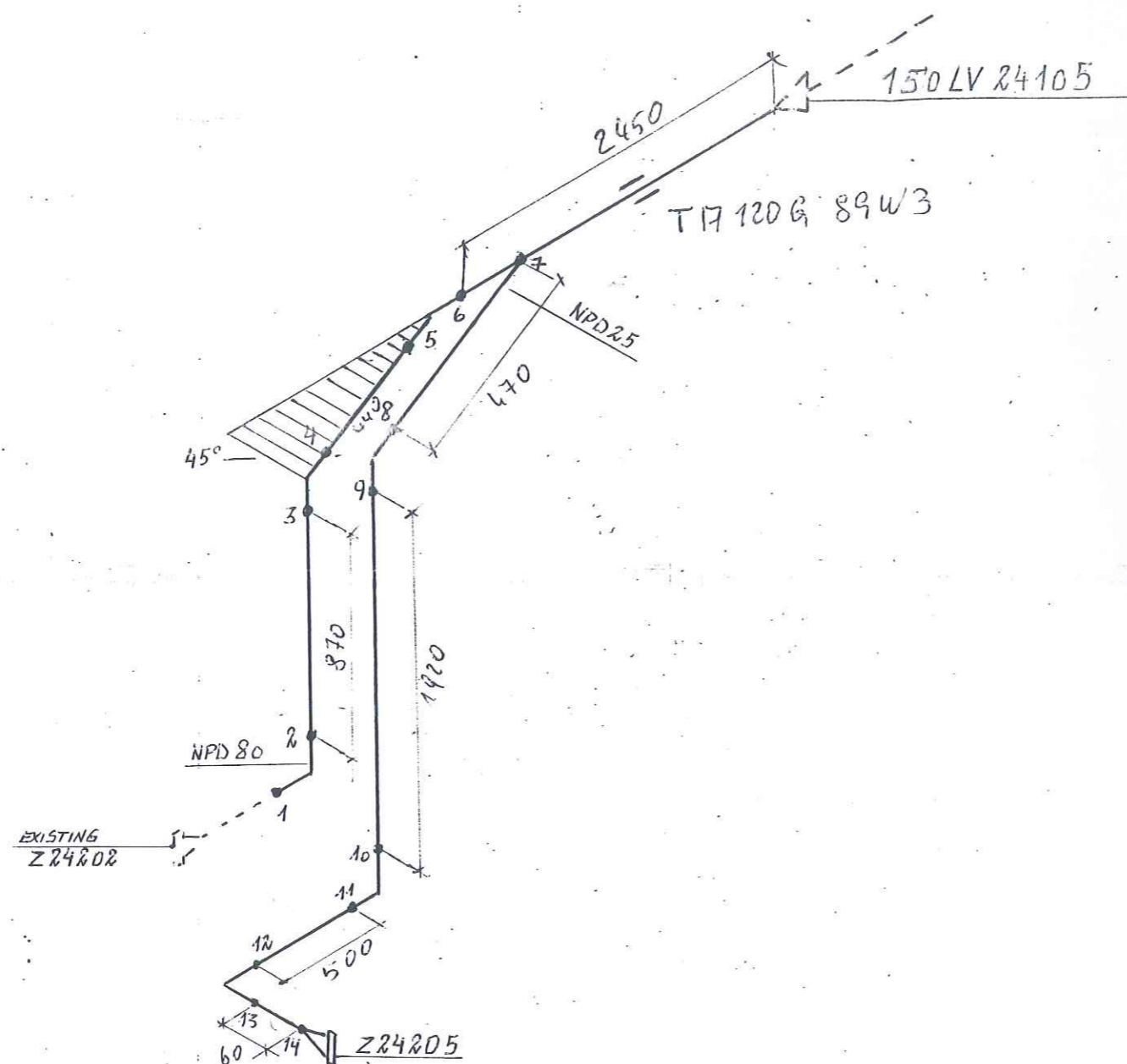
Drawing No.:

792.87826 - 00

Maker's No.:

Kosice

As built



RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE

PD-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

 Air Liquide AGS GmbH	Date:	Name:	Checked:	History file:
	23-JUN-2005	Lesum / HGH	05-07-11	
	Job Code: K70101			Scale
	Reference: ASU No. 9, Kosice			Original format DIN A3
Title:			Drawing No:	Rev.
150 LV 24205			792-8782600	

Preis-Stückliste 0 25A24206ZB16C1 0 25 A 24206 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0095	20	0	Flat packings Graphite with CrNi-insert Standard 40002 60x2x28		1,00				0,00
GW3	20	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 26,9x1,6		2,00				0,00
GW4	25	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 33,7x2		15,00				0,00
P0130	20	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 26,9x1,6	1,01 kg	0,10				0,00
P0131	25	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 33,7x2	1,58 kg	9,78				0,00
P0284	25	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2	0,09 kg	6,00				0,00
P1004	25	25	Tee made of welded pipe 1.4541 (X 6 CrNiTi 18 10) DIN 2609 33,7x2x33,7x2	0,15 kg	1,00				0,00
P1740	25	20	REDUCER, CONCENTRIC, WELDED 1.4541		1,00				0,00
SC2	20	0	Segment cut 26,9		1,00				0,00
SC3	25	0	Segment cut 33,7		7,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		4,00				0,00
SPS408	0	0	SUPPORT PS-408, L 50, L=200	0,75 kg	1,00				0,00
SPS409	0	0	SUPPORT PS-409, L 50, L=250	0,94 kg	1,00				0,00

Preis-Stückliste 0 25A24206ZB16C1 0 25 A 24206 ZB16C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SPS410	0	0	SUPPORT PS-410, L 50, L=300	1,13 kg	1,00				0,00
Summe: 0 25A24206ZB16C1 0				19,06 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht: 19,06 kg

** Ende der Ausgabe

AS BUILT



Prot Nr.

Jop Code: K70101 ASU No. 9, Kosice **Order No.:**

Client:	AIR LIQUIDE	Title:	25 A 24206
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Sheet 1

Drawing No.: 792.87826 - 00

792.87826 - 00	Maker's No.:
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(Kunde / TÜV, ...)

geprüft

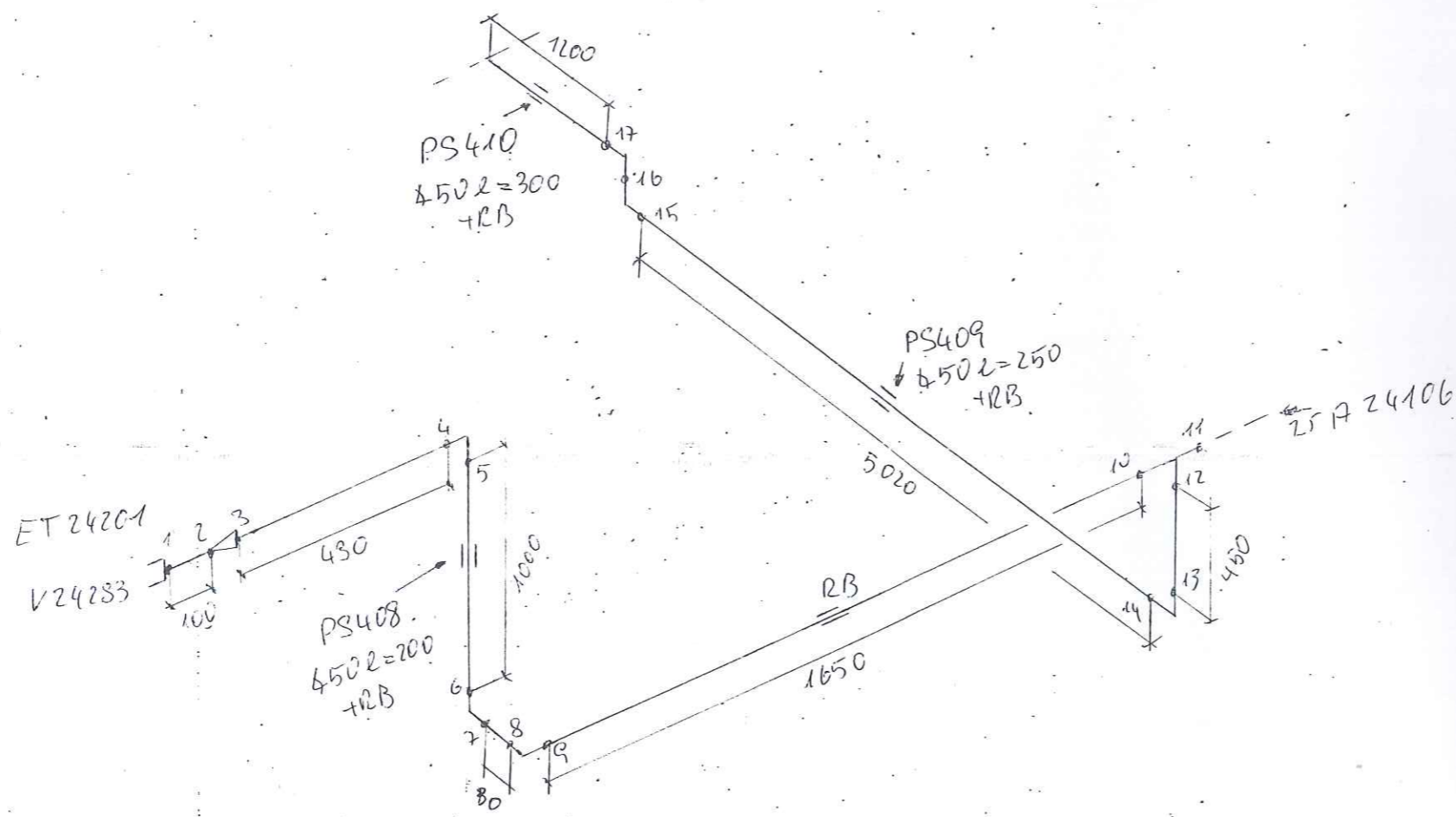
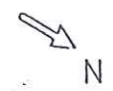
14.12.2016
Pelzeder Erich
Datum / Unterschrift

Schweisstechnologie VAM
Datum / Unterschrift

Datum / Unterschrift

[illegible]

As built



LEVELS:
 TOP OF INTERNAL ROADS: 225.00m n.m.
 TOP OF FOUNDATION: 225.10m
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
 - Situation of mounting seams
 - Situation off pass- length
 - Check of measure details and pipe courses on the construction site
 - Situation of the spindle at valve
 - All components for Oxygen use free of oil and grease

SUPPORTS:
 PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
 PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE
 SS = SLIDING SUPPORT
 PG = PIPE GUIDE
 FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

 Air Liquide AGS GmbH	Date:	23-JUN-2005	Name:	Lesum / HGH	Checked:	05-07-11	History file:
	Job Code: K70101				Scale:	Original format DIN A3	
	Reference: ASU No. 9. Kosico				Sheet:	Sheets:	
	Title:				Drawing No:		Rev.
Replaces: 79_----- Replaced by: 79_-----				25 A 24206 2B 1001 792.8782600			

Preis-Stückliste 0 150LV24280AA10C1 0 150 LV 24280 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
G0103	80	0	Flat packings Graphite with CrNi-insert Standard 40002 142x2x90		1,00				0,00
GW15	80	0	girth weld 1.4541 (X 6 CrNiTi 18 10) 88,9x2,3		6,00				0,00
P0136	80	0	pipe, welded 1.4541 (X 6 CrNiTi 18 10) DIN 17457 88,9x2,3	4,98 kg	3,69				0,00
P0289	80	0	Elbow 90° R=1,5 DA, welded 1.4541 (X 6 CrNiTi 18 10) DIN 2609 88,9x2,3	0,89 kg	3,00				0,00
SC6	80	0	Segment cut 88,9		4,00				0,00
Summe: 0 150LV24280AA10C1 0				21,05 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	21,05 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Jop Code:	K70101	ASU No. 9, Kosice	Order No.:
Client:	AIR LIQUIDE	Title:	150 LV24280

Project No.: 9050300	
792.87826 - 00	

Maker's No.:

(Kunde / TÜV, ...)



2.12.06
Pelzeder Enich

Schweisstechnologie VAM
Datum / Unterschrift

Datum / Unterschrift

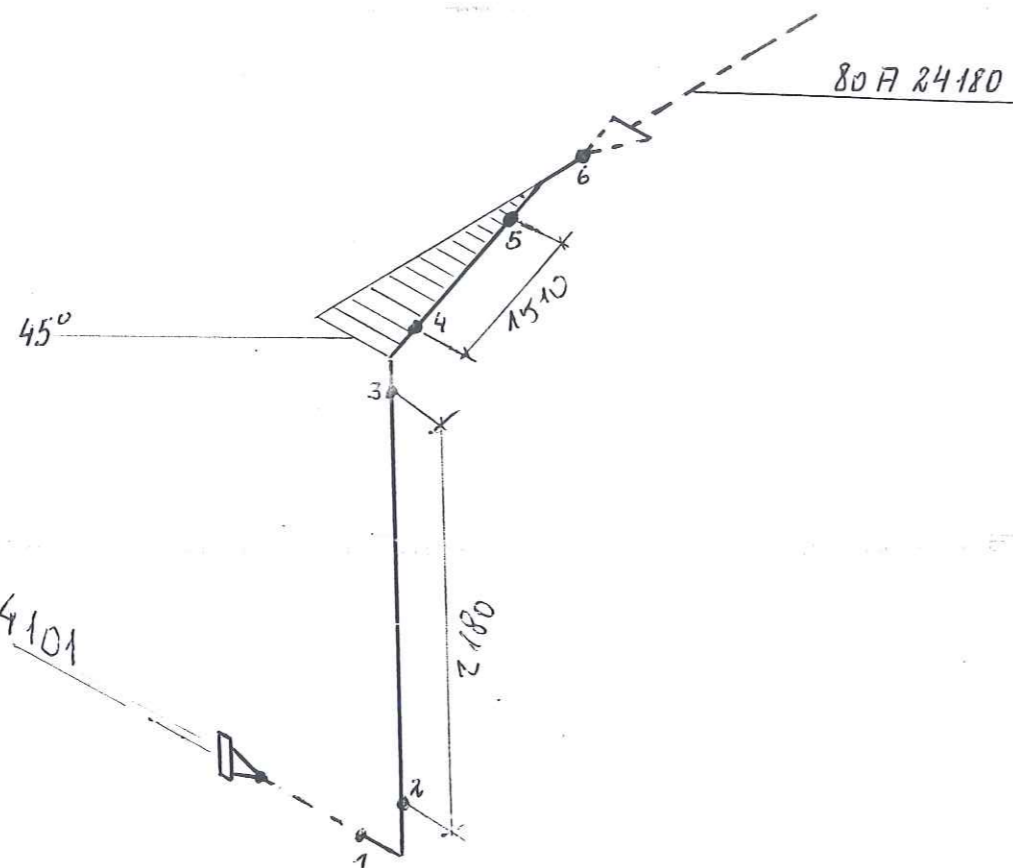
Jop Code:	K70101	ASU No. 9, Kosice	Order No.:
Client:	AIR LIQUIDE	Title:	150 LV24280

Project No.: 9050300	
792.87826 - 00	

Maker's No.:

[illegible]

As built



RESPONSIBILITY OF ERECTION COMPANY:

- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:

PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE

PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

Rev.	Revisions	Date	Name	checked
C				
B				
A				

AIR LIQUIDE		Date: 23-JUN-2005	Name: Lesum / HGH	Checked: 05-07-11	History file:
Air Liquide AGS GmbH		Job Code: K70101		Scale: ---:---	Original format: DIN A3
		Reference: ASU No. 9, Kosice		Sheet: 792.87826	Sheets: 00
		Title: 150LV 24280 2B16C1		Drawing No:	Rev.

LEVELS:

TOP OF INTERNAL ROADS: 225.00m n.m.

TOP OF FOUNDATION: 225.10m

BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

Preis-Stückliste 0 500WC24301AA10C2 0 500 WC 24301 AA10C2 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0033	24	60	HEXAGON HEAD SCREWS 5.6		40,00				0,00
G0149	1000	0	FLAT PACKINGS Graphite		1,00				0,00
G0166	500	0	Fibrous packings asbestos-free laminate made of aramide f 595x2x520		2,00				0,00
GW35	500	0	GIRTH WELD 1.0254 (St 37.0) 508x6,3		4,00				0,00
GW38	1000	0	girth weld 1.0254 (St 37.0) 1016x10		3,00				0,00
IK80001	500	0	K80001 supplied by AGS		1,00				0,00
ITE80010	15	0	TE80010		1,00				0,00
P0074	500	0	pipe, welded 1.0254 (St 37.0) DIN 1626 508x6,3	77,90 kg	3,60				0,00
P0079	1000	0	pipe, welded 1.0254 (St 37.0) DIN 1626 1016x10	248,00 kg	11,97				0,00
P0230	500	0	Elbow 90° R=1,5 DA, welded 1.0254 (St 37.0) DIN 2609 508x6,3	93,24 kg	1,00				0,00
P1598	1000	500	Reducer, concentric, welded 1.0254 (St 37.0) DIN 2609 1016x10x508x6,3	113,41 kg	1,00				0,00
P2889	500	0	Welding neck flanges; PN 10 1.0038 (S235JRG2) DIN EN 1092-1 508	39,50 kg	2,00				0,00

Preis-Stückliste 0 500WC24301AA10C2 0 500 WC 24301 AA10C2 .Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P3200	1000	0	Welding neck flanges: PN 6 1.0038 (S235JRG2) DIN EN 1092-1 1016	67,00 kg	1,00				0,00
PWI31	500	15	PIPE WELD-IN 1.4541		2,00				0,00
S0070	0	0	SUPPORT SV 150G 1027 W1 LF, DN 1000		1,00				0,00
SC15	500	0	Segment cut 508		2,00				0,00
SC18	1000	0	Segment cut 1016		1,00				0,00
XZB04	500	15	welding nozzle for thermowell, drawing N 1.4541 22		2,00				0,00
XZB20	15	0	PLUG		1,00				0,00
Summe: 0 500WC24301AA10C2 0				3.601,65 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	3.601,65 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

As built

Y 10987514
X 3070523
EL +230289

F3
CONN. TOP 7

S12
PS-587 *Leishing*
SS
SV150G 1027 LF H2=698

1
1000X500NPD

9
EL +230289

F4 G5 B6

10
F4 G5
K80010

TE80010

2
500X15NPD

Y 11000000
X 3070523
EL +225500

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	1000X500REDUCER, CONCENTRIC, WELDED	
2	1	1016*10.0/508*6.3, ST37.0, DIN 2616-1	
3	1	500X15 WELDING NOZZLE FOR THERMOWELL, DRAWING NO. 792.61076	
4	2	1000 WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1	
5	2	500 WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1	
6	20	500 FIBROUS PACKINGS	
7	11018 MM	1000 HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 220.0MM LANG	
8	3746 MM	1000 PIPE, WELDED 1016*10.0, ST37.0, DIN EN 10220	
9	1	500 PIPE, WELDED 508*6.3, ST37.0, DIN EN 10220	
10	1	500 ELBOW, WELDED, 1,5D 508*6.3-90, B-ART 3,DIN 2605-1	
11	1	500 K80010	
12	1	1000 TE80010	
		1000 SLIDE SUPPORT PSUPPORT	

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	11018	1000		BEVEL	BEVEL	RG
<2>	3746	500		BEVEL	SQ.CUT	RG

LEVELS:
TOP OF INTERNAL ROADS: 225.00m n.m.
TOP OF FOUNDATION: 225.10m
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

RESPONSIBILITY OF ERECTION COMPANY:
- Situation of mounting seams
- Situation off pass- length
- Check of measure details and pipe courses on the construction site
- Situation of the spindle at valve
- All components for Oxygen use free of oil and grease

SUPPORTS:
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE
PB-(NO.) - PIPE SUPPORT ON THE PIPIBRIDGE
SS = SLIDING SUPPORT
PG = PIPE GUIDE
FP = FIX POINT

Rev.	Revisions	Date	Name	checked
01	General Rev.	15.09.2005	Les	Zul

AIR LIQUIDE Air Liquide AGS GmbH	Date: 27-SEP-2005	Name: Lesum / HGH	Checked: 05-09-15	History file:
	Job Code: K70101		Scale: 1:1	Original format: DIN A3
Reference: ASU No. 9, Kosice		Title: 1000 WC 24301 AA10C2		Drawing No: 792.8782601
Replaces: 79_-----		Replaced by: 79_-----		Rev.