

## Preis-Stückliste 0 1000WC80001AA10C2 0 1000 WC 80001 AA10C2 Revision: 01

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0034	24	90	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,43 kg	80,00				0,00
B0509	24	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,11 kg	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		4,00				0,00
GW35	500	0	GIRTH WELD 1.0254 ( St 37.0 ) 508x6,3		6,00				0,00
GW38	1000	0	girth weld 1.0254 ( St 37.0 ) 1016x10		3,00				0,00
IFT80001	500	0	FT80001 supplied by AGS		1,00				0,00
IK80010	500	0	K80010 supplied by AGS		1,00				0,00
IP180001	15	0	PI80001 supplied by AGS		1,00				0,00
ITE80001	15	0	TE80001		1,00				0,00
IV80001H1	15	0	V80001H1 supplied by AGS		1,00				0,00
P0074	500	0	pipe, welded 1.0254 ( St 37.0 ) DIN 1626 508x6,3	77,90 kg	2,75				0,00
P0079	1000	0	pipe, welded 1.0254 ( St 37.0 ) DIN 1626 1016x10	248,00 kg	11,60				0,00

Preis-Stückliste 0 1000WC80001AA10C2 0 1000 WC 80001 AA10C2 Revision: 01

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
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	4,00				0,00
P3200	1000	0	Welding neck flanges: PN 6 1.0038 ( S235JRG2 ) DIN EN 1092-1 1016	67,00 kg	1,00				0,00
PWI37	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		3,00				0,00
SC18	1000	0	Segment cut 1016		1,00				0,00
XZB02	500	15	welding nozzle for pressure gauge, drawi 1.4541 22		1,00				0,00
XZB04	500	15	welding nozzle for thermowell, drawing N 1.4541 22		1,00				0,00
Summe: 0 1000WC80001AA10C2 0				3.561,48 kg		0,00	0,00		0,00

Liefersumme:  
Montagesumme:  
Gesamtsumme:

AS BUILT



Preis-Stückliste 0 1000WC80001AA10C2 0 1000 WC 80001 AA10C2 Revision: 01

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Gesamtgewicht:				3.561,48 kg					
** Ende der Ausgabe									

AS BUILT





# As built

Y 10987514  
X 3072123  
EL +230289

F4  
CONN. TOP 8

11  
EL +230289

1  
1000X500NPD

12  
K80010

F5 G6 B8

S17

PS-588

SS

SV150G 1027 W1 LF

837

127

F5 G6

2550

4720

14

650

F5 G6 B7

F5 G6 B7

2

500X15NPD

548

Y 11000374

X 3072034

EL +225570

TE80001

16

EL +225553

Y 11000000

X 3072033

EL +225500

504

25 NPD

PI80001

3

500X15NPD

Y 11000000

X 3071530

EL +225558

13

V80001H1

<3> 10

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
01	General Rev.	15.09.2005	Les	Zul

<b>AIR LIQUIDE</b> Air Liquide AGS GmbH		Date: 27-SEP-2005	Name: Lesum / HGH	Checked: 05-09-15	History file:
Replaces: 79_-----		Job Code: K70101		Scale: 1	Original format: DIN A3
Replaced by: 79_-----		Reference: ASU No. 9, Kosice		Sheets: 1	Sheets: 1
		Title: 1000 WC 80001 AA10C2		Drawing No: 792.87826	Rev. 01

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	1000X500REDUCER, CONCENTRIC, WELDED 1016*10.0/508*6.3, ST37.0, DIN 2616-1	
2	1	500X15 WELDING NOZZLE FOR THERMOWELL, DRAWING NO. 792.61076	
3	1	500X15 WELDING NOZZLE FOR PRESSURE GAUGE, DRAWING NO. 792.55981	
4	1	1000 WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1	
5	4	500 WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1	
6	4	500 FIBROUS PACKINGS	
7	40	24 HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 90.0MM LANG	
8	20	24 HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 220.0MM LANG	
9	11018 MM	1000 PIPE, WELDED 1016*10.0, ST37.0, DIN EN 10220	
10	2943 MM	500 PIPE, WELDED 508*6.3, ST37.0, DIN EN 10220	
11	1	500 ELBOW, WELDED, 1,5D 508*6.3-90, B-ART 3, DIN 2605-1	
12	1	500 K80010	
13	1	15 V80001H1	
14	1	500 FT80001 FT80001	
15	1	15 PI80001 PI80001	
16	1	TE80001	
17	1	1000 SLIDE SUPPORT PSUPPORT	

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	2400	500		BEVEL	BEVEL	RG
<2>	11018	1000		BEVEL	BEVEL	RG
<3>	543	500		BEVEL	SQ.CUT	RG



Preis-Stückliste 0 300WC80002AA10C2 0 300 WC 80002 AA10C2 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	12,00				0,00
B0026	20	160	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,45 kg	12,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	24,00				0,00
G0129	400	0	FLAT PACKINGS Graphite with CrNi-insert Standard 40002 490x2x420		1,00				0,00
G0163	300	0	Fibrous packings asbestos-free laminate made of aramide f 378x2x325		2,00				0,00
GW24	150	0	GIRTH WELD 1.0254 ( St 37.0 ) 168,3x4,5		1,00				0,00
GW31	300	0	girth weld 1.0254 ( St 37.0 ) 323,9x5,6		10,00				0,00
GW34	400	0	girth weld 1.0254 ( St 37.0 ) 406,4x6,3		1,00				0,00
IK11505	300	0	K11505 supplied by AGS		1,00				0,00
P0071	300	0	PIPE, WELDED St37.0 / DIN 2458/ 323,9x5,6	44,00 kg	5,60				0,00
P0227	300	0	Elbow 90° R=1,5 DA, welded 1.0254 ( St 37.0 ) DIN 2609 323,9x5,6	31,59 kg	3,00				0,00
P0530	300	150	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 323,9x7,1x168,3x4,5	30,65 kg	1,00				0,00

## Preis-Stückliste 0 300WC80002AA10C2 0 300 WC 80002 AA10C2 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P1621	400	300	REDUCER, CONCENTRIC, WELDED 1.0254 ( St 37.0 ) DIN 2609 406,4x6,3/323,9x5,6		1,00				0,00
P2886	300	0	Welding neck flanges; PN 10 1.0038 ( S235JRG2 ) DIN EN 1092-1 323,9	18,00 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	1,00				0,00
S0062	300	0	Web-support, SV 150G 324 W1 OZN 1.0 Hesterberg 324	52,10 kg	1,00				0,00
SC12	300	0	Segment cut 323,9		6,00				0,00
Summe: 0 300WC80002AA10C2 0				499,38 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

\*\* Ende der Ausgabe

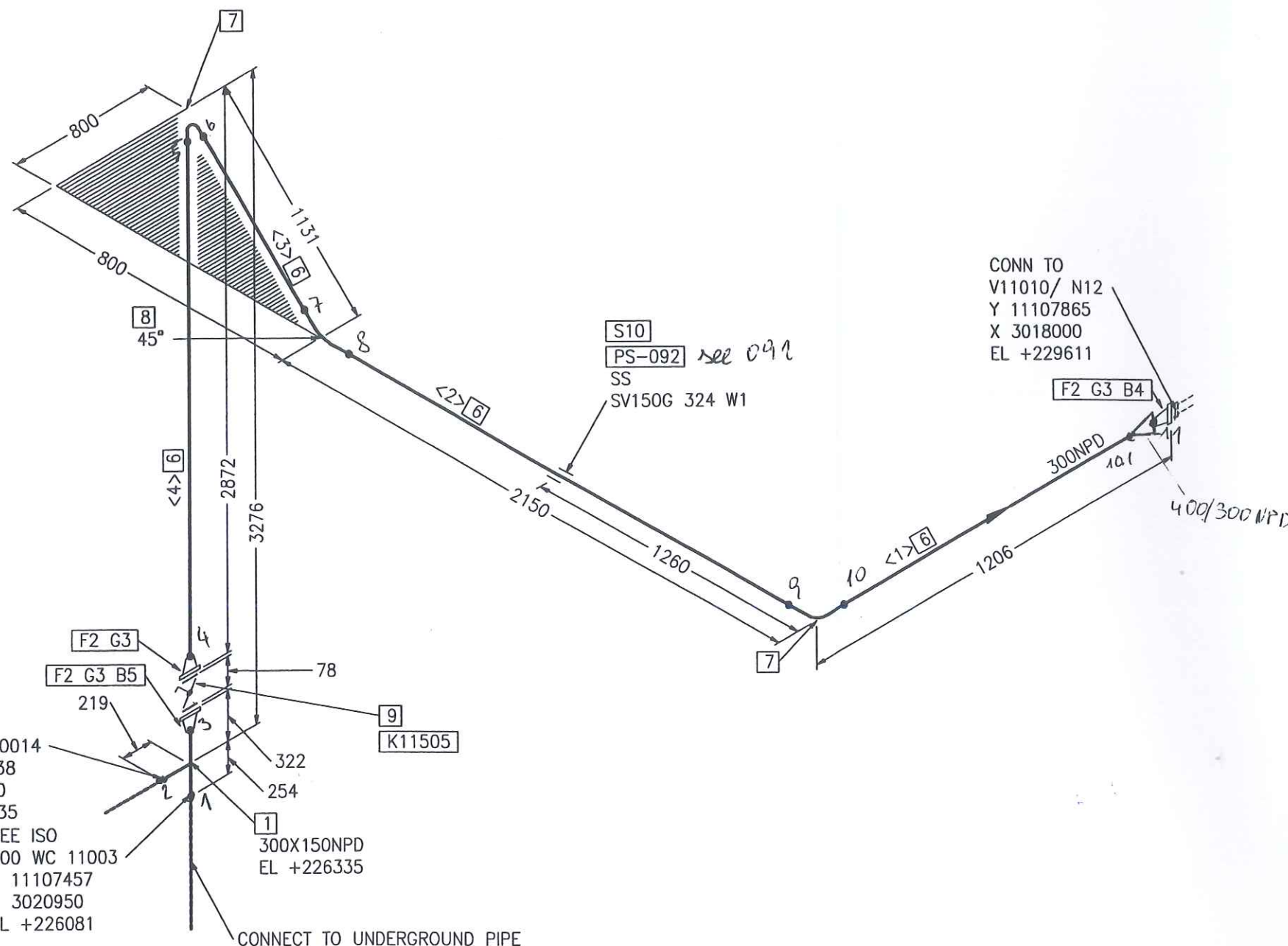
499,38 kg

AS BUILT





# As built



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	3	300	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
3	3	300	FIBROUS PACKINGS
4	12	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 80.0MM LANG
5	12	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 160.0MM LANG
6	5016 MM	300	PIPE, WELDED 323.9*5.6, ST37.0, DIN EN 10220
7	2	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	K11505
10	1	300	SLIDE SUPPORT PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	681	300		BEVEL	BEVEL	RG
<2>	1503	300		BEVEL	BEVEL	RG
<3>	485	300		BEVEL	BEVEL	RG
<4>	2347	300		BEVEL	BEVEL	RG

SEE ISO  
150 WC 80014  
Y 11107238  
X 3020950  
EL +226335

SEE ISO  
300 WC 11003  
Y 11107457  
X 3020950  
EL +226081

CONNECT TO UNDERGROUND PIPE

## SUPPORTS:

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



Air Liquide AGS GmbH

Rev.	Revisions	Date	Name	checked
C				
B				
A				

Date:	01-JUL-2005	Name:	Lesum / HGH	Checked:	05-07-11	History file:	
Job Code:	K70101	Reference:	ASU No. 9. Kosice	Scale:	1	Original format:	DIN A3
Title:	300 WC 80002 AA10C2	Drawing No.:	792.87826	Rev.:	00		

12. Juli 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 300WC80003AA10C2 0 300 WC 80003 AA10C2 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0026	20	160	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,45 kg	12,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	12,00				0,00
G0163	300	0	Fibrous packings asbestos-free laminate made of aramide f 378x2x325		3,00				0,00
GW24	150	0	GIRTH WELD 1.0254 ( St 37.0 ) 168,3x4,5		1,00				0,00
GW31	300	0	girth weld 1.0254 ( St 37.0 ) 323,9x5,6		8,00				0,00
IK16630	300	0	K16630 supplied by AGS		1,00				0,00
P0071	300	0	PIPE, WELDED St37.0 / DIN 2458/ 323,9x5,6	44,00 kg	0,85				0,00
P0227	300	0	Elbow 90° R=1,5 DA, welded 1.0254 ( St 37.0 ) DIN 2609 323,9x5,6	31,59 kg	3,00				0,00
P0530	300	150	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 323,9x7,1x168,3x4,5	30,65 kg	1,00				0,00
P2886	300	0	Welding neck flanges; PN 10 1.0038 ( S235JRG2 ) DIN EN 1092-1 323,9	18,00 kg	2,00				0,00
P2886_A	300	0	WELDING NECK FLANGES, PN 10 1.0038	18,00 kg	1,00				0,00
SC12	300	0	Segment cut 323,9		4,00				0,00
Summe: 0 300WC80003AA10C2 0				222,94 kg		0,00	0,00		0,00



Preis-Stückliste 0 300WC80003AA10C2 0 300 WC 80003 AA10C2 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
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Liefersumme:	
Montagesumme:	
Gesamtsumme:	222,94 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT

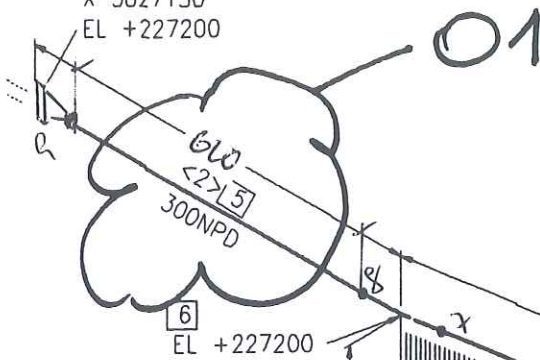






As built

CONN TO  
V16010/ N2  
Y 11105400  
X 3027150  
EL +227200



6  
EL +227200

732

<1> 5 1085

F2 G3 B4

SEE ISO  
150 WC 80015  
Y 11105981  
X 3025700  
EL +225539

SEE ISO  
300 WC 16003U  
Y 11106200  
X 3025700  
EL +225285

300NPD

6  
EL +226468

6  
914

7  
K16630

F2 G3

219

2

3

78

322

254

1  
300X150NPD  
EL +225539

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	2	300	FIBROUS PACKINGS
4	12	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 160.0MM LANG
5	250 MM	300	PIPE, WELDED 323.9*5.6, ST37.0, DIN EN 10220
6	3	300	ELBOW, WELDED, 1.5D 323.9*5.6-90, B-ART 3,DIN 2605-1
7	1	300	K16630

CUT PIPE LENGTH


PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	1712	300		BEVEL	BEVEL	RG
<2>	620	300		BEVEL	SO.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

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: 1
	Title: 300 WC 80003 AA10C2			Drawing No. 792.87826	Rev. 01



Preis-Stückliste 0 50WC80005AA10C1 0 50 WC 80005 AA10C1 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		6,00				0,00
GW9	40	0	girth weld 1.0254 ( St 37.0 ) 48,3x2,6		6,00				0,00
IV24131	40	0	V24131 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	1,70				0,00
P0006	50	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 60,3x2,9	4,11 kg	4,40				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	2,00				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



Preis-Stückliste 0 50WC80005AA10C1 0 50 WC 80005 AA10C1 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		3,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
SPS136	0	0	SUPPORT PS-136	17,77 kg	1,00				0,00
SPS138	0	0	SUPPORT PS-138	20,74 kg	1,00				0,00
Summe: 0 50WC80005AA10C1 0				87,53 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

\*\* Ende der Ausgabe

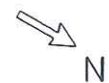
87,53 kg

AS BUILT





# As built



SEE ISO  
80 WC 80006\_1  
Y 11135506  
X 3047884  
EL +227676

80X50NPD

S6  
PS-138  
SS  
TA120G 61 W1

SEE ISO  
40 WC 80016  
Y 11139090  
X 3048069  
EL +226876

CONN TO  
ET24101/ N3  
Y 11139090  
X 3048935  
EL +225555

S7  
PS-136  
PG  
TA120G 48 W1

2  
50X40NPD  
EL +226876

SUPPLY LIMIT ETV

1  
50X40NPD

V24131

10  
40NPD  
244

1051

1317

932

200

121

64

5

4

3

2

1

12

11

10

9

8

7

6

5

4

3

2

1

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

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

<b>AIR LIQUIDE</b>		Date: 16-SEP-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 WC 80005 AA10C2		Drawing No: 792.8782601	



**As built**

**Front View:** Shows a vertical assembly with a base plate (1) and a vertical column (2). The base plate has a width of 170 and a height of 15. The column has a diameter of 152 and a height of 330. The base plate is secured with four bolts (3) and a nut (4). The base plate is labeled with part number 1. The column is labeled with part number 2. The base plate is labeled with part number 1. The column is labeled with part number 2. The base plate is labeled with part number 1. The column is labeled with part number 2.

**Side View:** Shows the side profile of the assembly. The base plate has a width of 170 and a height of 15. The column has a diameter of 152 and a height of 330. The base plate is secured with four bolts (3) and a nut (4). The base plate is labeled with part number 1. The column is labeled with part number 2. The base plate is labeled with part number 1. The column is labeled with part number 2.

**Detail View:** Shows a detail of the base plate and column connection. The base plate has a width of 170 and a height of 15. The column has a diameter of 152 and a height of 330. The base plate is secured with four bolts (3) and a nut (4). The base plate is labeled with part number 1. The column is labeled with part number 2. The base plate is labeled with part number 1. The column is labeled with part number 2.

**Isometric View:** Shows the assembly in a 3D perspective view. The base plate has a width of 170 and a height of 15. The column has a diameter of 152 and a height of 330. The base plate is secured with four bolts (3) and a nut (4). The base plate is labeled with part number 1. The column is labeled with part number 2. The base plate is labeled with part number 1. The column is labeled with part number 2.

**Dimensions:**

- Base plate width: 170
- Base plate height: 15
- Column diameter: 152
- Column height: 330
- Base plate thickness: 15
- Column thickness: 15

**Part Numbers:**

- Base plate: 1
- Column: 2
- Bolts: 3
- Nut: 4

**Coordinates:**

- X = 3048694
- Y = 1113888
- Y = 11139090

**Revisions:**

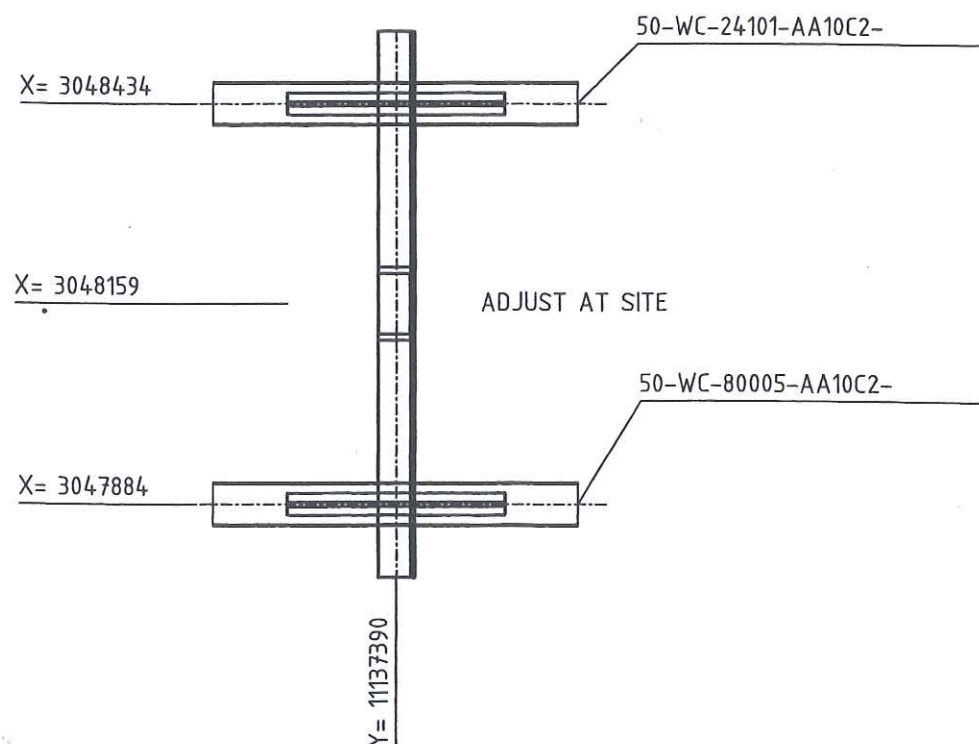
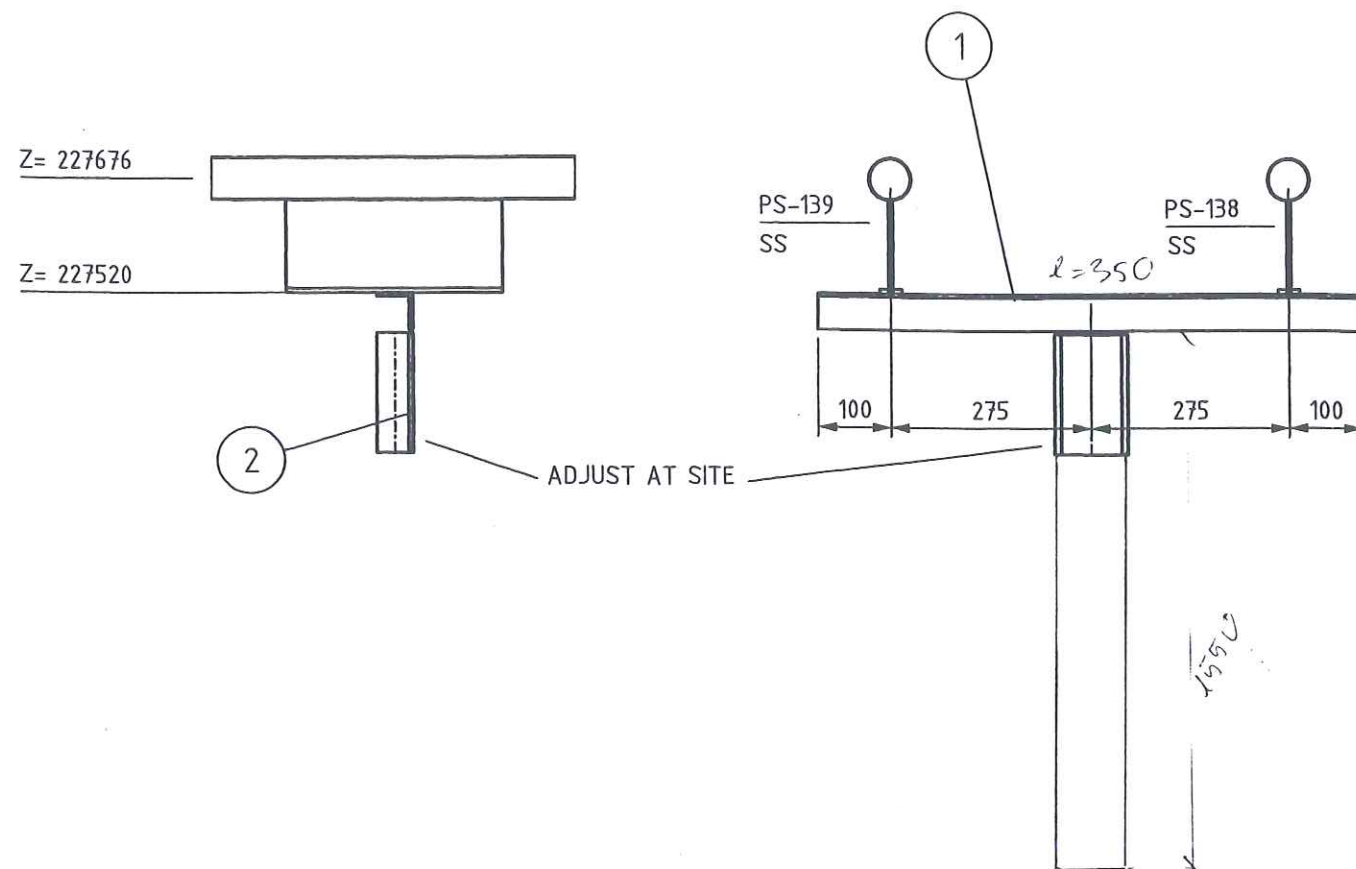
Archives Rev No.	Rev.	Job No.	Description	Sign.
REVISIONS				

	Date	Name	Check.	History File	
	19.07.2005	GU	Zut		
	Job Code: K70101 ASU No.9 Kosice			Scale: 1:10	Original Format DIN A3
	Reference: PIPING SUPPORT			Sheet: 1	of: 1
Replaces:	Title PS-136			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



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

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

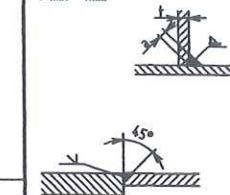
- ALL SHARP EDGES REMOVED
- MANUFACTURING ALLOWANCE ACC. TO DIN ISO 2766-M
- FOR STAINLESS STEEL PIPES (SS) PIPE SHOE WRAP INSIDE WITH PTFE-BAND
- NOT MARKING WELDED SEAMS a=4mm ROUND

MARKING:

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

WELDING DATA ACC. TO DIN 1912 T5

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



Total Weight: 4.54 kg

Item	No. Off	Unit	Description	Dimension	Material	Weight kg	Remark
1	1	pcs	PROFILE U 100 L=350	L50X50X5, L=0.750	RST37-2	2.797	3.71
2	1	pcs	PROFILE U 100 L=350	U100, L=0.465	RST37-2	1.741	16.43
							0.6
							20.74

Approved by	Date	Name	Signature
Checked by	27. Juli 2005	Gans	
Checked by	25. JUL. 2005	Zuf	
Drawn checked by			

H G H  
HEGMANN'S

AIR LIQUIDE<sup>TM</sup>

Air Liquide AGS GmbH

Date	Name	Check.	History File
19.07.2005	GU	Zuf	
Job Code:	K70101 ASU No.9 Kosice		
Reference:	PIPING SUPPORT		
Replaces:	Title	PS-138	
Scale:	1:10	Original Format	DIN A3
Sheet:	1 of:	1	
Drawing-No.	792.87926	Rev.	a

## Preis-Stückliste 0 200WC80006AA10C2-WE 0 200 WC 80006 AA10C2-WE Revision:

Teilenummer	NW1	NW2	Teilbezeichnung	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
B0018	20	80	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,26 kg	16,00				0,00
B0025	20	150	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,45 kg	8,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	8,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	24,00				0,00
G0158	100	0	Fibrous packings asbestos-free laminate made of aramide f 162x2x115		1,00				0,00
G0161	200	0	Fibrous packings asbestos-free laminate made of aramide f 273x2x220		4,00				0,00
GW18	100	0	girth weld 1.0254 ( St 37.0 ) 114,3x3,6		1,00				0,00
GW2	15	0	girth weld 1.0254 ( St 37.0 ) 21,3x2		9,00				0,00
GW26	200	0	girth weld 1.0254 ( St 37.0 ) 219,1x4,5		14,00				0,00
IF13110	200	0	F13110 supplied by AGS		1,00				0,00
IH13080	15	0	H13080 supplied by AGS		1,00				0,00
IH13180	15	0	H13180 supplied by AGS		1,00				0,00



Preis-Stückliste 0 200WC80006AA10C2-WE 0 200 WC 80006 AA10C2-WE Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
IK13140	200	0	K13140 supplied by AGS		1,00				0,00
P0001	15	0	PIPE, SEAMLESS 1.0254 ( St 37.0 ) DIN 1629 21,3x2	0,95 kg	1,54				0,00
P0069	200	0	PIPE, WELDED 1.0254 ( St 37.0 ) DIN 1626 219,1x4,5	23,80 kg	0,60				0,00
P0159	15	0	ELBOW 90° R=1,5 DA, SEAMLESS 1.0254 ( St 37.0 ) DIN 2609 21,3x2	0,04 kg	5,00				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
P0523	200	200	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 219,1x6,3x219,1x6,3	14,05 kg	1,00				0,00
P1307	200	100	Reducer, concentric, seamless 1.0254 ( St 37.0 ) DIN 2609 219,1x4,5x114,3x3,6	2,74 kg	1,00				0,00
P2881	100	0	Welding neck flanges; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 114,3	4,50 kg	1,00				0,00
P2884	200	0	WELDING NECK FLANGES; PN 10 C22.8 /DIN 2632/ 219,1	11,30 kg	4,00				0,00
PW112	200	15	Pipe weld-in 1.0254 ( St 37.0 ) 219,1x4,5x21,3x2		2,00				0,00
SC1	15	0	Segment cut 21,3		8,00				0,00

Preis-Stückliste 0 200WC80006AA10C2-WE 0 . 200 WC 80006 AA10C2-WE Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SC10	200	0	Segment cut 219,1		4,00				0,00
XZB06	15	0	HOLENDER 1.4404 21,3	0,35 kg	1,00				0,00
XZB10	15	0	THREAD END 5,6 21,3		4,00				0,00
Summe: 0 200WC80006AA10C2-WE 0				104,66 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

\*\* Ende der Ausgabe

104,66 kg

AS BUILT



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

**Order No.:**

**Title:**

200 WC 80006

Sheet 1

**Drawing No.:**

792.87826 - 01

Maker's No.:

(Kunde / TÜV, ...)

Schweisstechnologie VAM

**Datum / Unterschrift**

**erstellt:**

20.02.06 Pil  
Pelzeder Erich

(Kunde / TÜV, ...)

[illegible]

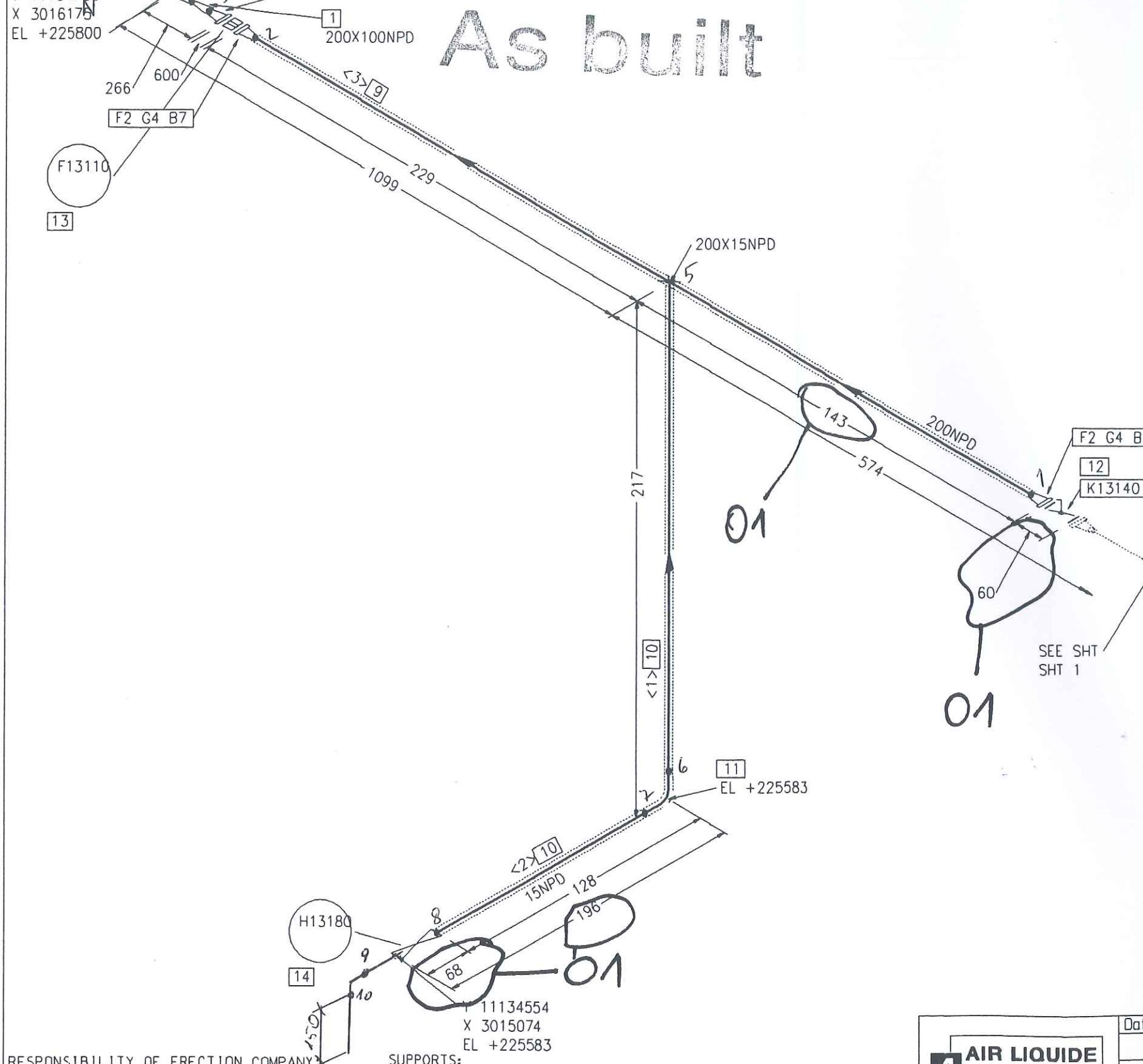








CONN TO  
P13180/ N2  
Y 11134750  
X 3016175  
EL +225800



As built

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	200X100	REDUCER, CONCENTRIC, SEAMLESS 219.1*4.5/114.3*3.6, ST37.0, DIN 2616-1
2	3	200	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
3	1	100	WELDING-NECK-FLANGE PN16, S235JRG2, DIN EN 1092-1
4	3	200	FIBROUS PACKINGS
5	1	100	FIBROUS PACKINGS
6	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 140.0MM LANG
7	16	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 80.0MM LANG
8	8	16	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 65.0MM LANG
9	248 MM	200	PIPE, WELDED 219.1*4.5, ST37.0, DIN EN 10220
10	180 MM	15	PIPE, SEAMLESS 21.3*2.0, ST37.0, DIN EN 10220
11	1	15	ELBOW, SEAMLESS, 1,5D 21.3*2.0-90, B-ART 3,DIN 2605-1
12	1	200	K13140
13	1	200	F13110 F13110
14	1	15	H13180 H13180

CUT PIPE LENGTH					
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO
<1>	80	15		SHAPED BEVEL	BEVEL
<2>	100	15		BEVEL	BEVEL
<3>	248	200		BEVEL	BEVEL

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
01	General Rev	15.09.2005	Les	Zul

<b>AIR LIQUIDE</b> Air Liquide AGS GmbH	Date: 16-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: 2
	Title: 200 WC 80006 AA10C2WE			Drawing No. 792.87826	Rev. 01

Preis-Stückliste 0 80WC80006\_1AA10C1 0 80 WC 80006\_1 AA10C1 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		7,00				0,00
GW16	80	0	girth weld 1.0254 ( St 37.0 ) 88,9x3,2		13,00				0,00
GW9	40	0	girth weld 1.0254 ( St 37.0 ) 48,3x2,6		6,00				0,00
IV24231	40	0	V24231 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	1,70				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	7,80				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	5,00				0,00



## Preis-Stückliste 0 80WC80006\_1AA10C1 0 80 WC 80006\_1 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
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
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		2,00				0,00
SC6	80	0	Segment cut 88,9		9,00				0,00
SPS134	0	0	SUPPORT PS-134	17,77 kg	1,00				0,00
			Summe: 0 80WC80006_1AA10C1 0	112,12 kg		0,00	0,00		0,00

Preis-Stückliste 0 80WC80006\_1AA10C1 0 80 WC 80006\_1 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
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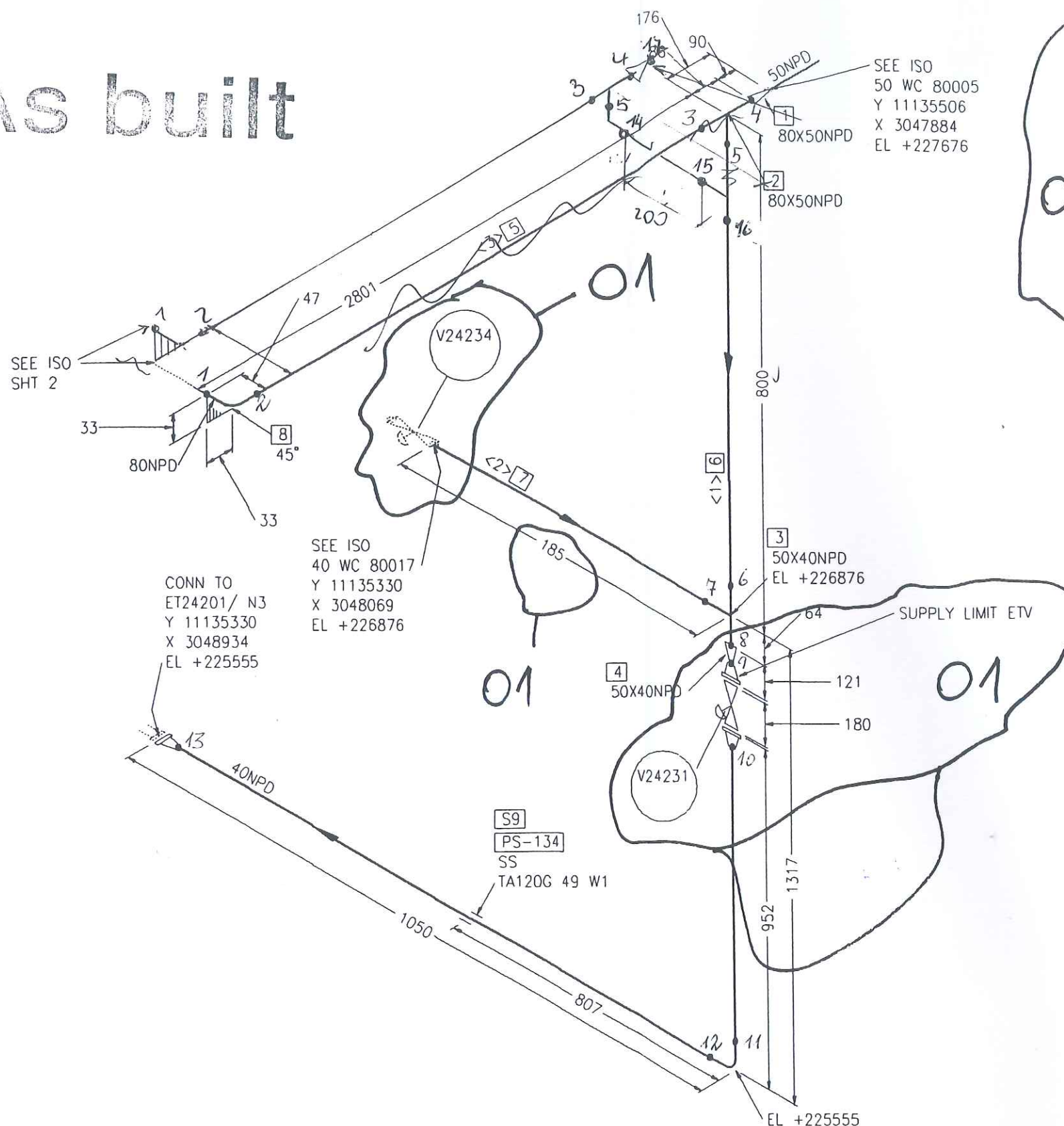
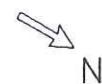
Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	112,12 kg
** Ende der Ausgabe	

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	2668 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	1	80	ELBOW, SEAMLESS, 1.5D 88.9*3.2-45, B-ART 3, DIN 2605-1
9	1	40	SLIDE SUPPORT PSUPPORT

CUT PIPE LENGTH			REMARKS	END ONE	END TWO	ITEM CODE
PIECE NO	LENGTH (MM)	NPD (MM)				
<1>	600	50		BEVEL	BEVEL	RN
<2>	125	40		BEVEL	BEVEL	RN
<3>	2668	80		BEVEL	BEVEL	RN

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: 16-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: 2
	Title: 80 WC 80006_1 AA10C2		Drawing No. 792.87826	Rev 01

LEVELS:

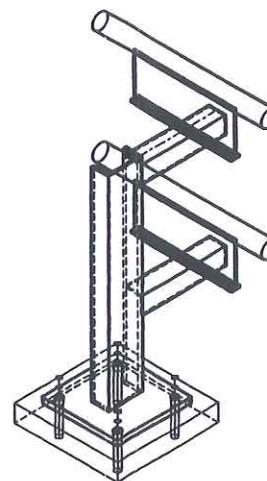
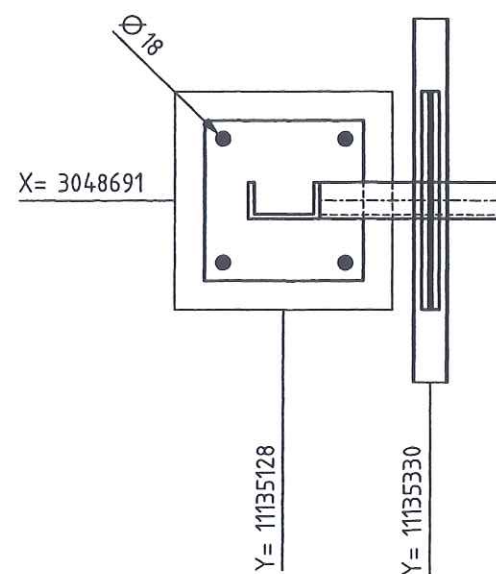
TOP OF INTERNAL ROADS: 225.00m n.m.

TOP OF FOUNDATION: 225.10m

BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00



# As about



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



	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-134			Drawing-No.
				792.87926	Rev
					a









Preis-Stückliste 0 200WC80007AA10C2-WE 0 200 WC 80007 AA10C2-WE 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
B0017	20	70	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,23 kg	16,00				0,00
B0024	20	140	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,42 kg	8,00				0,00
B0025	20	150	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,45 kg	8,00				0,00
B0032	20	220	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,63 kg	8,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	8,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	40,00				0,00
G0157	80	0	Fibrous packings asbestos-free laminate made of aramide f 142x2x90		1,00				0,00
G0160	150	0	Fibrous packings asbestos-free laminate made of aramide f 218x2x169		4,00				0,00
G0161	200	0	Fibrous packings asbestos-free laminate made of aramide f 273x2x220		4,00				0,00
GW16	80	0	girth weld 1.0254 ( St 37.0 ) 88,9x3,2		1,00				0,00
GW2	15	0	girth weld 1.0254 ( St 37.0 ) 21,3x2		10,00				0,00
GW24	150	0	GIRTH WELD 1.0254 ( St 37.0 ) 168,3x4,5		7,00				0,00



## Preis-Stückliste 0 200WC80007AA10C2-WE 0 200 WC 80007 AA10C2-WE Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW26	200	0	girth weld 1.0254 ( St 37.0 ) 219,1x4,5		16,00				0,00
IFK13007	150	0	FK13007 supplied by AGS		1,00				0,00
IFT13007	150	0	FT13007 supplied by AGS		1,00				0,00
IH13120	15	0	H13120 supplied by AGS		1,00				0,00
IH13181	15	0	H13181 supplied by AGS		1,00				0,00
IK13151	200	0	K13151 supplied by AGS		1,00				0,00
IP13120	15	0	PI13120 supplied by AGS		1,00				0,00
IR13150	200	0	R13150 supplied by AGS		1,00				0,00
P0001	15	0	PIPE, SEAMLESS 1.0254 ( St 37.0 ) DIN 1629 21,3x2	0,95 kg	1,68				0,00
P0011	150	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 168,3x4,5	18,20 kg	1,30				0,00
P0069	200	0	PIPE, WELDED 1.0254 ( St 37.0 ) DIN 1626 219,1x4,5	23,80 kg	7,80				0,00
P0169	150	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 168,3x4,5	6,55 kg	1,00				0,00
P0200	15	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 21,3x2	0,04 kg	4,00				0,00

## Preis-Stückliste 0 200WC80007AA10C2-WE 0 200 WC 80007 AA10C2-WE Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0225	200	0	Elbow 90° R=1,5 DA, welded 1.0254 ( St 37.0 ) DIN 2609 219,1x4,5	11,40 kg	2,00				0,00
P0523	200	200	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 219,1x6,3x219,1x6,3	14,05 kg	1,00				0,00
P1306	200	80	Reducer, concentric, seamless 1.0254 ( St 37.0 ) DIN 2609 219,1x4,5x88,9x3,2	2,53 kg	1,00				0,00
P1309	200	150	Reducer, concentric, seamless 1.0254 ( St 37.0 ) DIN 2609 219,1x4,5x168,3x4,5	3,19 kg	2,00				0,00
P2880	80	0	Welding neck flanges; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 88,9	4,00 kg	1,00				0,00
P2883	150	0	WELDING NECK FLANGES; PN 16 C22.8 /DIN 2633/ 168,3	7,75 kg	4,00				0,00
P2884	200	0	WELDING NECK FLANGES; PN 10 C22.8 /DIN 2632/ 219,1	11,30 kg	4,00				0,00
PW112	200	15	Pipe weld-in 1.0254 ( St 37.0 ) 219,1x4,5x21,3x2		1,00				0,00
PW138	200	15	PIPE WELD-IN 1.4541		1,00				0,00
S0012	200	0	T-support TA 120B 220 W1 OZN 1.0 Hesterberg 220	5,40 kg	1,00				0,00
S0024	200	0	T-support TA 120G 220 W1 OZN 1.0 Hesterberg 220	12,70 kg	1,00				0,00



Preis-Stückliste 0 200WC80007AA10C2-WE 0 200 WC 80007 AA10C2-WE Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SC1	15	0	Segment cut 21,3		7,00				0,00
SC10	200	0	Segment cut 219,1		8,00				0,00
SC9	150	0	Segment cut 168,3		3,00				0,00
SCP01	15	0	PIPE CLAMP, RB10A 22 W3 HESTERBERG 21,3		1,00				0,00
SPS056	0	0	SUPPORT PS-056	10,44 kg	1,00				0,00
SPS057	0	0	SUPPORT PS-057	10,44 kg	1,00				0,00
SPS337	0	0	SUPPORT PS-337, L 50, L=250	0,94 kg	1,00				0,00
XZB02	200	15	welding nozzle for pressure gauge, drawi 1.4541 22		1,00				0,00
XZB06	15	0	HOLENDER 1.4404 21,3	0,35 kg	1,00				0,00
XZB10	15	0	THREAD END 5,6 21,3		2,00				0,00
Summe: 0 200WC80007AA10C2-WE 0				403,20 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	403,20 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



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

Title: 200 WC 80007

**Drawing No.:**

**Maker's No.:**

(Kunde / TÜV, ...)

geprüft

20.02.06 P.L.L.  
Pelzeder Erich

Schweisstechnologie VAM:  
Datum / Unterschrift

**Datum / Unterschrift**

[illegible]



# As built

Port No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	200X200	TEE, SEAMLESS 219.1*6.3/219.1*6.3, ST37.0, DIN 2615-1
2	1	200X80	REDUCER, CONCENTRIC, SEAMLESS 219.1*4.5/88.9*3.2, ST37.0, DIN 2616-1
3	1	200X15	WELDING NOZZLE FOR PRESSURE GAUGE, DRAWING NO. 792.55981
4	4	200	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
5	1	80	WELDING-NECK-FLANGE PN16, S235JRG2, DIN EN 1092-1
6	4	200	FIBROUS PACKINGS
7	1	80	FIBROUS PACKINGS
8	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 140.0MM LANG
9	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 170.0MM LANG
10	8	16	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 65.0MM LANG
11	533 MM	200	PIPE, WELDED 219.1*4.5, ST37.0, DIN EN 10220
12	100 MM	15	PIPE, SEAMLESS 21.3*2.0, ST37.0, DIN EN 10220
13	1	200	K13151
14	1	15	H13181
15	1	15	H13120
16	1	200	R13150 R13150
17	1	15	PI13120 PI13120

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	232	200		BEVEL	BEVEL	RG
<2>	100	15		SHAPED	BEVEL	RN
<3>	151	200		BEVEL	BEVEL	RG
<4>	150	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

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

<b>AIR LIQUIDE</b> 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		Sheet: 1		Sheets: 2
Title: 200 WC 80007 AA10C2		Drawing No. 792.87826		Rev. 01

SEE ISO  
 200 WC 80009  
 Y 11134928  
 X 3016300  
 EL +227369

SEE ISO  
 SHT 2

200X15NPD  
 EL +226721

Y 11134450  
 X 3016300  
 EL +226328

CONN TO  
 P13100/ N1  
 Y 11134750  
 X 3016300  
 EL +226049

PS 337  
 4500L=250  
 +12B

# VAM

## SCHWEISSDOKUMENTATION WELDING DOCUMENTATION

Prot Nr.

Jop Code:

K70101 ASU No. 9, Kosice

Order No.:

Client:

AIR LIQUIDE

Title:

200 WC 80007

Sheet 2

Drawing No.:

792.87826 - 01

Maker's No.:

erstellt:

H. B. L. Pelzeder Erich  
Datum / Unterschrift

geprüft

Schweisstechnologie VAM  
Datum / Unterschrift

(Kunde / TÜV, ...)



Datum / Unterschrift

Project No.: 9050300

Seam No.:

Welder  
No.:

Material

Dimension

Wärme-  
behandlung

RT

UT

MT/PT

SP

Remerk

1

V6

ST37.0

219,1\*4,5

R0217

2

V6

ST37.0

219,1\*4,5

3

V6

ST37.0

168,3\*4,5

4

V6

ST37.0

168,3\*4,5

5

V3

ST37.0

168,3\*4,5

R0218

6

V3

ST37.0

168,3\*4,5

7

V6

ST37.0

168,3\*4,5

8

V6

ST37.0

168,3\*4,5

9

V6

ST37.0

168,3\*4,5

10

V3

ST37.0

219,1\*4,5

11

V3

ST37.0

219,1\*4,5

12

V3

ST37.0

219,1\*4,5

13

V6

ST37.0

219,1\*4,5

14

V3

ST37.0

219,1\*4,5

15

V3

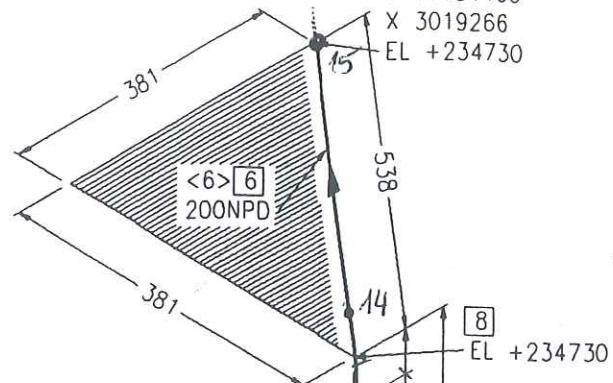
ST37.0

219,1\*4,5



# As built

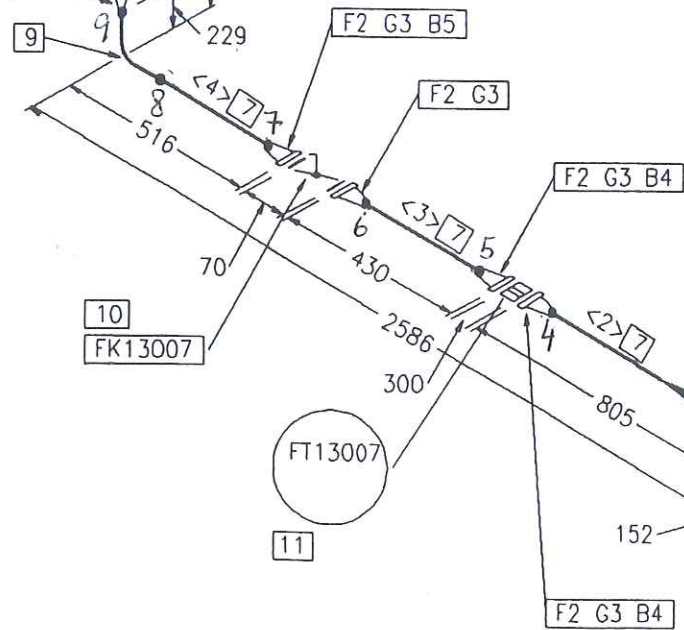
CONN TO  
W13001/ N3  
Y 11134466  
X 3019266  
EL +234730



S13  
PS-057  
E 45.0 S  
FP  
TA120B 220 W1

S12  
PS-056  
E 45.0 S  
PG  
TA120G 220 W1

1  
200X150NPD



SEE SHT  
SHT 1

Port No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	2	200X150	REDUCER, CONCENTRIC, SEAMLESS 219.1*4.5/168.3*4.5, ST37.0, DIN 2616-1
2	4	150	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
3	4	150	FIBROUS PACKINGS
4	16	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 70.0MM LANG
5	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 150.0MM LANG
6	7089 MM	200	PIPE, WELDED 219.1*4.5, ST37.0, DIN EN 10220
7	1302 MM	150	PIPE, SEAMLESS 168.3*4.5, ST37.0, DIN EN 10220
8	2	200	ELBOW, WELDED, 1.5D 219.1*4.5-90, B-ART 3,DIN 2605-1
9	1	150	ELBOW, SEAMLESS, 1.5D 168.3*4.5-90, B-ART 3,DIN 2605-1
10	1	150	FK13007
11	1	150	FT13007 FT13007
12	1	200	PIPE GUIDE PSUPPORT
13	1	200	FIX POINT PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	181	200		BEVEL	BEVEL	RG
<2>	750	150		BEVEL	BEVEL	RN
<3>	320	150		BEVEL	BEVEL	RN
<4>	232	150		BEVEL	BEVEL	RN
<5>	6675	200		BEVEL	BEVEL	RG
<6>	233	200		BEVEL	SO.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

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

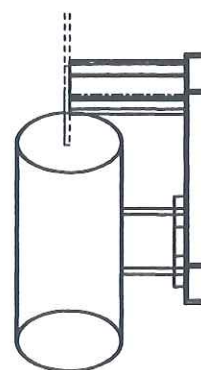
<b>AIR LIQUIDE</b> Air Liquide AGS GmbH	Date: 16-SEP-2005	Name: Lesum / HGH	Checked: 05-09-15	History file:
	Job Code: K70101		Scale: 1:100	Original format: DIN A3
	Reference: ASU No. 9, Kosice		Sheet: 2	Sheets: 2
	Title: 200 WC 80007 AA10C2		Drawing No. 792.87826	Rev. 01







# 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	
	14.07.2005	GU	Zut		
	Job Code:	K70101 ASU No.9 Kosice			Scale: 1:10
	Reference:	PIPING SUPPORT			Original Format DIN A3
Replaces:	Title	PS-057			Sheet: 1 of:
					Drawing-No. 792.87926

## Preis-Stückliste 0 150WC80007\_1AA10C2 0 150 WC 80007\_1 AA10C2 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
B0025	20	150	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,45 kg	8,00				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
G0160	150	0	Fibrous packings asbestos-free laminate made of aramide f 218x2x169		3,00				0,00
GW18	100	0	girth weld 1.0254 ( St 37.0 ) 114,3x3,6		1,00				0,00
GW24	150	0	GIRTH WELD 1.0254 ( St 37.0 ) 168,3x4,5		7,00				0,00
IK70505	150	0	K70505 supplied by AGS		1,00				0,00
P0011	150	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 168,3x4,5	18,20 kg	1,19				0,00
P0169	150	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 168,3x4,5	6,55 kg	2,00				0,00
P0516	150	100	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 168,3x4,5x114,3x3,6	5,92 kg	1,00				0,00
P2883	150	0	WELDING NECK FLANGES; PN 16 C22.8 /DIN 2633/ 168,3	7,75 kg	3,00				0,00
SC9	150	0	Segment cut 168,3		4,00				0,00
Summe: 0 150WC80007_1AA10C2 0				70,57 kg		0,00	0,00		0,00



Preis-Stückliste 0 150WC80007\_1AA10C2 0 150 WC 80007\_1 AA10C2 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
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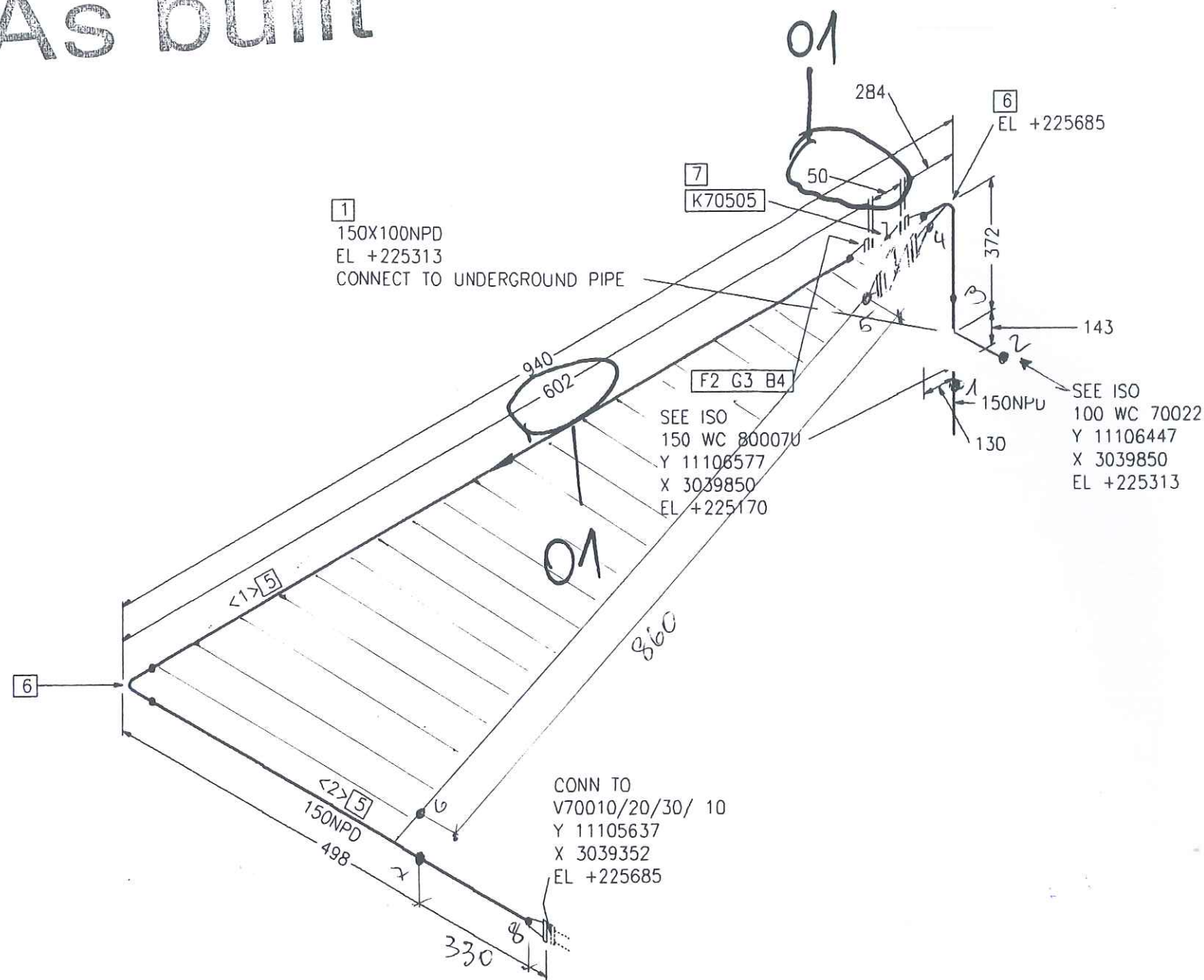
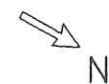
Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	70,57 kg
** Ende der Ausgabe	

AS BUILT





# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	150X100	TEE, SEAMLESS 168.3*4.5/114.3*3.6, ST37.0, DIN 2615-1
2	2	150	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
3	2	150	FIBROUS PACKINGS
4	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 130.0MM LANG
5	532 MM	150	PIPE, SEAMLESS 168.3*4.5, ST37.0, DIN EN 10220
6	2	150	ELBOW, SEAMLESS, 1.5D 168.3*4.5-90, B-ART 3, DIN 2605-1
7	1	150	K70505

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	318	150		BEVEL	BEVEL	RN
<2>	214	150		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 / 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_----- Replaced by: 79_-----				150 WC 80007_1 AA10C2 792.87826 01			

## Preis-Stückliste 0 200WC80008AA10C2-WE 0 200 WC 80008 AA10C2-WE 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
B0018	20	80	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,26 kg	16,00				0,00
B0025	20	150	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,45 kg	8,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	8,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	24,00				0,00
G0158	100	0	Fibrous packings asbestos-free laminate made of aramide f 162x2x115		1,00				0,00
G0161	200	0	Fibrous packings asbestos-free laminate made of aramide f 273x2x220		4,00				0,00
GW18	100	0	girth weld 1.0254 ( St 37.0 ) 114,3x3,6		1,00				0,00
GW2	15	0	girth weld 1.0254 ( St 37.0 ) 21,3x2		5,00				0,00
GW26	200	0	girth weld 1.0254 ( St 37.0 ) 219,1x4,5		5,00				0,00
IF13210	200	0	F13210 supplied by AGS		1,00				0,00
IH13280	15	0	H13280 supplied by AGS		1,00				0,00
IK13240	200	0	K13240 supplied by AGS		1,00				0,00



## Preis-Stückliste 0 200WC80008AA10C2-WE 0 200 WC 80008 AA10C2-WE Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0001	15	0	PIPE, SEAMLESS 1.0254 ( St 37.0 ) DIN 1629 21,3x2	0,95 kg	0,40				0,00
P0069	200	0	PIPE, WELDED 1.0254 ( St 37.0 ) DIN 1626 219,1x4,5	23,80 kg	0,50				0,00
P0159	15	0	ELBOW 90° R=1,5 DA, SEAMLESS 1.0254 ( St 37.0 ) DIN 2609 21,3x2	0,04 kg	2,00				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
P1307	200	100	Reducer, concentric, seamless 1.0254 ( St 37.0 ) DIN 2609 219,1x4,5x114,3x3,6	2,74 kg	1,00				0,00
P2881	100	0	Welding neck flanges; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 114,3	4,50 kg	1,00				0,00
P2884	200	0	WELDING NECK FLANGES; PN 10 C22.8 / DIN 2632/ 219,1	11,30 kg	4,00				0,00
PW112	200	15	Pipe weld-in 1.0254 ( St 37.0 ) 219,1x4,5x21,3x2		1,00				0,00
SC1	15	0	Segment cut 21,3		3,00				0,00
SC10	200	0	Segment cut 219,1		2,00				0,00
XZB10	15	0	THREAD END 5.6 21,3		2,00				0,00
Summe: 0 200WC80008AA10C2-WE 0				86,68 kg		0,00	0,00		0,00

Preis-Stückliste 0 200WC80008AA10C2-WE 0 200 WC 80008 AA10C2-WE Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt

Liefersumme:	
Montagesumme:	
Gesamtsumme:	86,68 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



[illegible]





## Preis-Stückliste 0 150WC80008\_1AA10C2 0 150 WC 80008\_1 AA10C2 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
B0025	20	150	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,45 kg	8,00				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
G0160	150	0	Fibrous packings asbestos-free laminate made of aramide f 218x2x169		3,00				0,00
GW18	100	0	girth weld 1.0254 ( St 37.0 ) 114,3x3,6		1,00				0,00
GW24	150	0	GIRTH WELD 1.0254 ( St 37.0 ) 168,3x4,5		7,00				0,00
IK77505	150	0	K77505 supplied by AGS		1,00				0,00
P0011	150	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 168,3x4,5	18,20 kg	0,60				0,00
P0169	150	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 168,3x4,5	6,55 kg	2,00				0,00
P0516	150	100	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 168,3x4,5x114,3x3,6	5,92 kg	1,00				0,00
P2883	150	0	WELDING NECK FLANGES; PN 16 C22.8 /DIN 2633/ 168,3	7,75 kg	3,00				0,00
SC9	150	0	Segment cut 168,3		4,00				0,00
Summe: 0 150WC80008_1AA10C2 0				59,83 kg		0,00	0,00		0,00

Preis-Stückliste 0 150WC80008\_1AA10C2 0 150 WC 80008\_1 AA10C2 Revision:

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

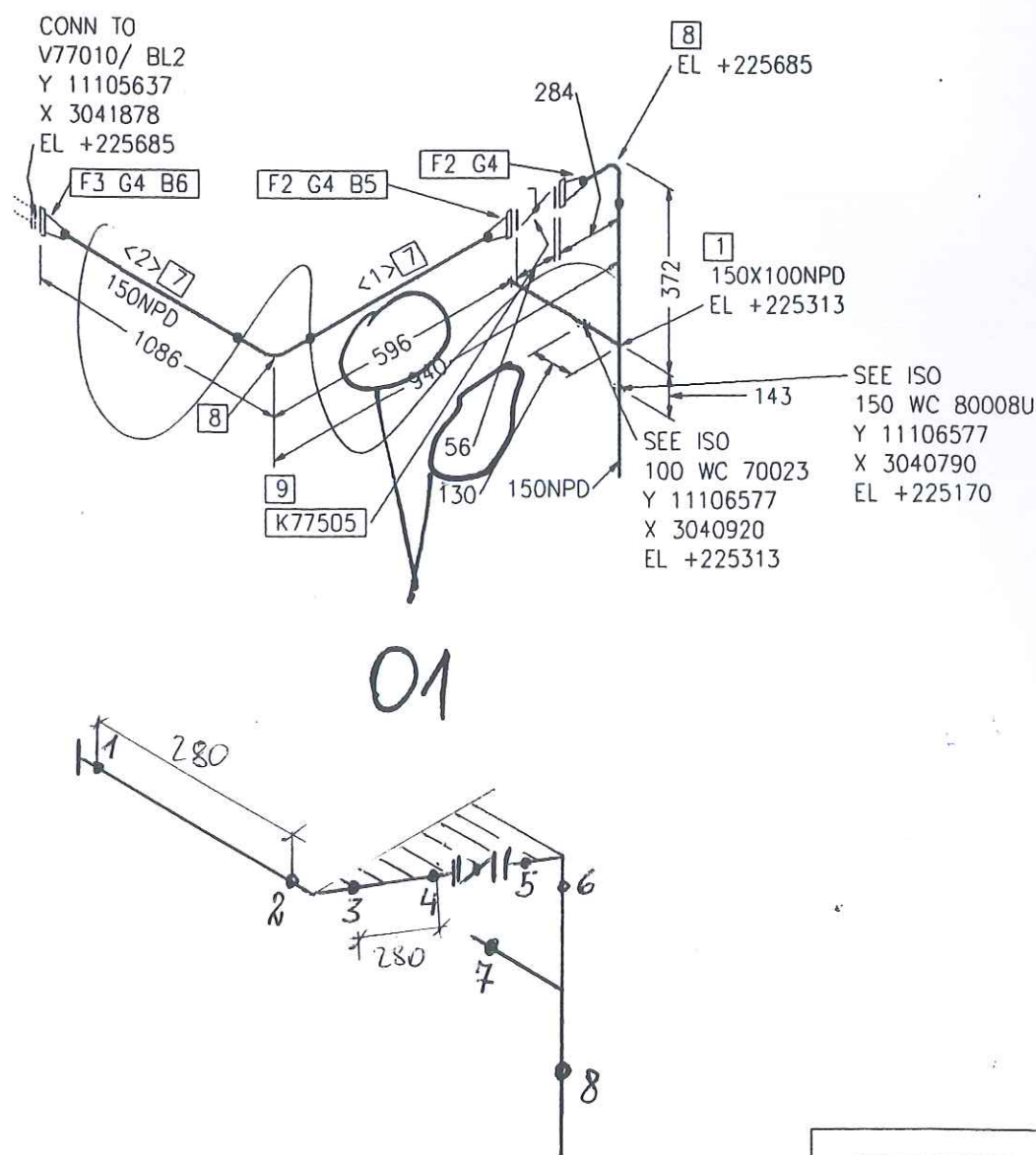
Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	59,83 kg
** Ende der Ausgabe	

AS BUILT





# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	150X100	TEE, SEAMLESS 168.3*4.5/114.3*3.6, ST37.0, DIN 2615-1
2	2	150	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
3	1	150	WELDING-NECK-FLANGE PN16, S235JRG2, DIN EN 1092-1
4	3	150	FIBROUS PACKINGS
5	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 130.0MM LANG
6	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 70.0MM LANG
7	1114 MM	150	PIPE, SEAMLESS 168.3*4.5, ST37.0, DIN EN 10220
8	2	150	ELBOW, SEAMLESS, 1,5D 168.3*4.5-90, B-ART 3, DIN 2605-1
9	1	150	K77505

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	312	150		BEVEL	BEVEL	RN
<2>	802	150		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

 Air Liquide AGS GmbH	Date: 16-SEP-2005	Name: Lesum / HGH	Checked: 05-09-05	History file:
	Job Code: K70101		Scale: 1:1	Original format: DIN A3
Reference: ASU No. 9, Kosice			Sheet: 1	Sheets: 1
Title: 150 WC 80008_1 AA10C2			Drawing No. 792.87826	Rev. 01

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



## Preis-Stückliste 0 200WC80009AA10C2-WE 0 200 WC 80009 AA10C2-WE 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
B0024	20	140	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,42 kg	8,00				0,00
B0032	20	220	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,63 kg	8,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	8,00				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
G0157	80	0	Fibrous packings asbestos-free laminate made of aramide f 142x2x90		1,00				0,00
G0161	200	0	Fibrous packings asbestos-free laminate made of aramide f 273x2x220		4,00				0,00
GW16	80	0	girth weld 1.0254 ( St 37.0 ) 88,9x3,2		1,00				0,00
GW2	15	0	girth weld 1.0254 ( St 37.0 ) 21,3x2		19,00				0,00
GW26	200	0	girth weld 1.0254 ( St 37.0 ) 219,1x4,5		7,00				0,00
IH13088	15	0	H13088 supplied by AGS		1,00				0,00
IH13220	15	0	H13220 supplied by AGS		1,00				0,00
IH13281	15	0	H13281 supplied by AGS		1,00				0,00

## Preis-Stückliste 0 200WC80009AA10C2-WE 0 200 WC 80009 AA10C2-WE Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
IK13251	200	0	K13251 supplied by AGS		1,00				0,00
IP113220	15	0	PI13220 supplied by AGS		1,00				0,00
IR13250	200	0	R13250 supplied by AGS		1,00				0,00
P0001	15	0	PIPE, SEAMLESS 1.0254 ( St 37.0 ) DIN 1629 21,3x2	0,95 kg	4,28				0,00
P0069	200	0	PIPE, WELDED 1.0254 ( St 37.0 ) DIN 1626 219,1x4,5	23,80 kg	1,40				0,00
P0200	15	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 21,3x2	0,04 kg	7,00				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
P1306	200	80	Reducer, concentric, seamless 1.0254 ( St 37.0 ) DIN 2609 219,1x4,5x88,9x3,2	2,53 kg	1,00				0,00
P2880	80	0	Welding neck flanges; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 88,9	4,00 kg	1,00				0,00
P2884	200	0	WELDING NECK FLANGES; PN 10 C22.8 /DIN 2632/ 219,1	11,30 kg	4,00				0,00
PWI12	200	15	Pipe weld-in 1.0254 ( St 37.0 ) 219,1x4,5x21,3x2		2,00				0,00
PWI38	200	15	PIPE WELD-IN 1.4541		1,00				0,00



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 200WC80009AA10C2-WE 0 200 WC 80009 AA10C2-WE Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
S0012	200	0	T-support TA 120B 220 W1 OZN 1.0 Hesterberg 220	5,40 kg	1,00				0,00
SC1	15	0	Segment cut 21,3		12,00				0,00
SC10	200	0	Segment cut 219,1		4,00				0,00
SCP01	15	0	PIPE CLAMP, RB10A 22 W3 HESTERBERG 21,3		2,00				0,00
SPS055	0	0	SUPPORT PS-055	58,99 kg	1,00				0,00
SPS338	0	0	SUPPORT PS-338, L 50, L=250	0,94 kg	1,00				0,00
SPS339	0	0	SUPPORT PS-339, L 50, L=200	0,75 kg	1,00				0,00
XZB02	200	15	welding nozzle for pressure gauge, drawi 1.4541 22		1,00				0,00
XZB10	15	0	THREAD END 5,6 21,3		4,00				0,00
XZB25	15	0	HOLLÄNDER 5,6		2,00				0,00
Summe: 0 200WC80009AA10C2-WE 0				177,52 kg		0,00	0,00		0,00

Liefersumme:  
Montagesumme:  
Gesamtsumme:  
Gesamtgewicht: 177,52 kg  
\*\* Ende der Ausgabe

AS BUILT

	<b>SCHWEISSDOKUMENTATION</b> WELDING DOCUMENTATION		erstellt: <div style="border-bottom: 1px solid black; display: inline-block; width: 100px; margin-top: 5px;">24.02.06</div> Pelzeder Erich	geprüft <div style="border-bottom: 1px solid black; display: inline-block; width: 100px; margin-top: 5px;"></div> Schweißtechnologie VAM	(Kunde / TÜV, ...)
Jop Code: K70101 ASU No. 9, Kosice		Order No.:		Project No.: 9050300	
Client: AIR LIQUIDE		Title: 200 WC 80009		Drawing No.: 792.87826 - 01	
		Sheet 1		Maker's No.:	

Seam No.:		Welder No.:	Material	Dimension	Wärme- behandlung	RT	UT	MT/PT	SP	Remerk
1		V2	ST37.0	88,9*3,2						
2		V2	ST37.0	219,1*4,5						
3		V2	ST37.0 - 1.4541	NPD15				47/ 2006		
4		V13	ST37.0	219,1*4,5		R0220				
5		V10	ST37.0	219,1*4,5						
6		V10	ST37.0	NPD15				47/ 2006		
7		V10	ST37.0	219,1*4,5						
8		V10	ST37.0	219,1*4,5						
9		V10	ST37.0	219,1*4,5		R0219				
10		V10	ST37.0	219,1*4,5						
11		V10	ST37.0	NPD15				47/ 2006		
12		V10	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						





As built

SEE ISO  
200 WC 80007  
Y 11134928  
X 3016300  
EL +227369

PS-055  
FP  
TA120B 220 W1

PS 339  
450L=200  
+RB

Y 11135028  
X 3016300  
EL +227646

F3 G5 B8

K13251

F3 G5

200X15NPD  
EL +226721

H13281

F3 G5 B7

F3 G5

Y 11136250  
X 3016022  
EL +226721

Y 11136550  
X 3016300  
EL +226328

H13220

200X80NPD

F4 G6 B9

CONN TO  
P13200/ N1  
Y 11136250  
X 3016300  
EL +226049

AIR LIQUIDE

Air Liquide AGS GmbH

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

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	Scale:	1:1	Original format:	DIN A3
Title:	200 WC 80009 AA10C2			Sheet:	1	Sheets:	1
				Drawing No.	792.8782601	Rev.	01

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	200X80	REDUCER, CONCENTRIC, SEAMLESS 219.1*4.5/88.9*3.2, ST37.0, DIN 2616-1
2	1	200X15	WELDING NOZZLE FOR PRESSURE GAUGE, DRAWING NO. 792.55981
3	4	200	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
4	1	80	WELDING-NECK-FLANGE PN16, S235JRG2, DIN EN 1092-1
5	4	200	FIBROUS PACKINGS
6	1	80	FIBROUS PACKINGS
7	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 170.0MM LANG
8	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 140.0MM LANG
9	8	16	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 65.0MM LANG
10	1423 MM	200	PIPE, WELDED 219.1*4.5, ST37.0, DIN EN 10220
11	200 MM	15	PIPE, SEAMLESS 21.3*2.0, ST37.0, DIN EN 10220
12	1	200	ELBOW, WELDED, 1.5D 219.1*4.5-90, B-ART 3,DIN 2605-1
13	1	200	K13251
14	1	15	H13220
15	1	15	H13281
16	1	15	H13088
17	1	200	R13250 R13250
18	1	15	PI13220 PI13220
19	1	200	FIX POINT PSUPPORT

CUT PIPE LENGTH

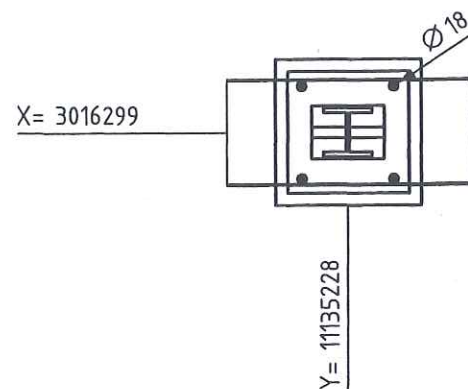
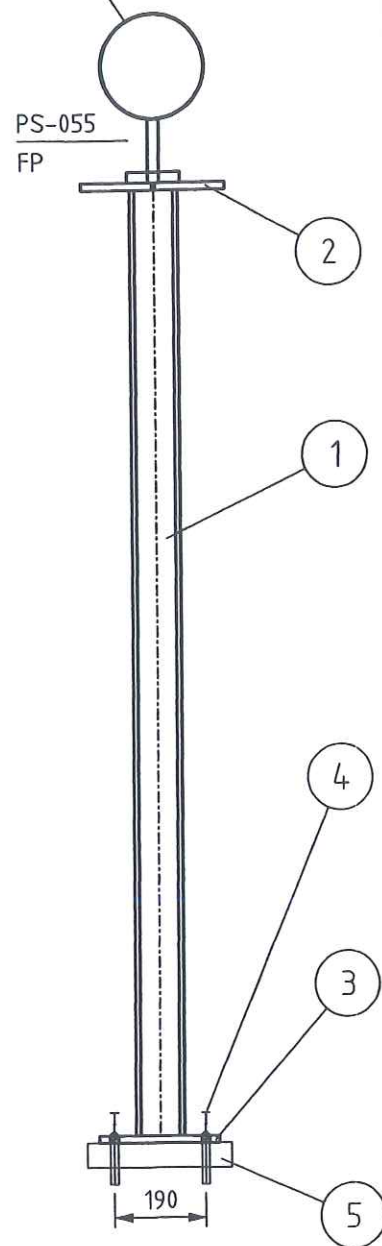
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	150	200		BEVEL SHAPED	BEVEL	RG
<2>	100	15		BEVEL	BEVEL	RN
<3>	151	200		BEVEL	BEVEL	RG
<4>	105	200		BEVEL	BEVEL	RG
<5>	100	15		BEVEL SHAPED	BEVEL	RN
<6>	1017	200		BEVEL	BEVEL	RG

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



Rec. 100805 ~~77~~ 10

200-WC-80009-AA10C2-



```

- 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

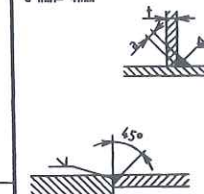
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- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

- 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

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

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

[illegible]

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



HEGMANN

 **AIR LIQUIDE**  
Air Liquide AGS GmbH

	Date	Name	Check.	History File	
	02.06.2005	GU	Zut		
	Job Code:	K70101 ASU No.9 Kosice			Scale: 1:15
	Reference:	PIPING SUPPORT			Original Format DIN A3
				Sheet: 1 of:	
Replaces:	Title	PS-055			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 150WC80010AA10C2-WE 0 150 WC 80010 AA10C2-WE Revision:**

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0025	20	150	Hexagon head screws 5,6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,45 kg	8,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	8,00				0,00
G0160	150	0	Fibrous packings asbestos-free laminate made of aramide f 218x2x169		2,00				0,00
GW16	80	0	girth weld 1.0254 ( St 37.0 ) 88,9x3,2		1,00				0,00
GW24	150	0	GIRTH WELD 1.0254 ( St 37.0 ) 168,3x4,5		17,00				0,00
GW26	200	0	girth weld 1.0254 ( St 37.0 ) 219,1x4,5		1,00				0,00
IK12070	150	0	K12070 supplied by AGS		1,00				0,00
P0011	150	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 168,3x4,5	18,20 kg	6,10				0,00
P0169	150	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 168,3x4,5	6,55 kg	5,00				0,00
P0515	150	80	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 168,3x4,5x88,9x3,2	5,74 kg	1,00				0,00
P0518	150	150	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 168,3x4,5x168,3x4,5	6,28 kg	1,00				0,00
P1309	200	150	Reducer, concentric, seamless 1.0254 ( St 37.0 ) DIN 2609 219,1x4,5x168,3x4,5	3,19 kg	1,00				0,00



Preis-Stückliste 0 150WC80010AA10C2-WE 0 150 WC 80010 AA10C2-WE Revision:

(Fortsetzung)

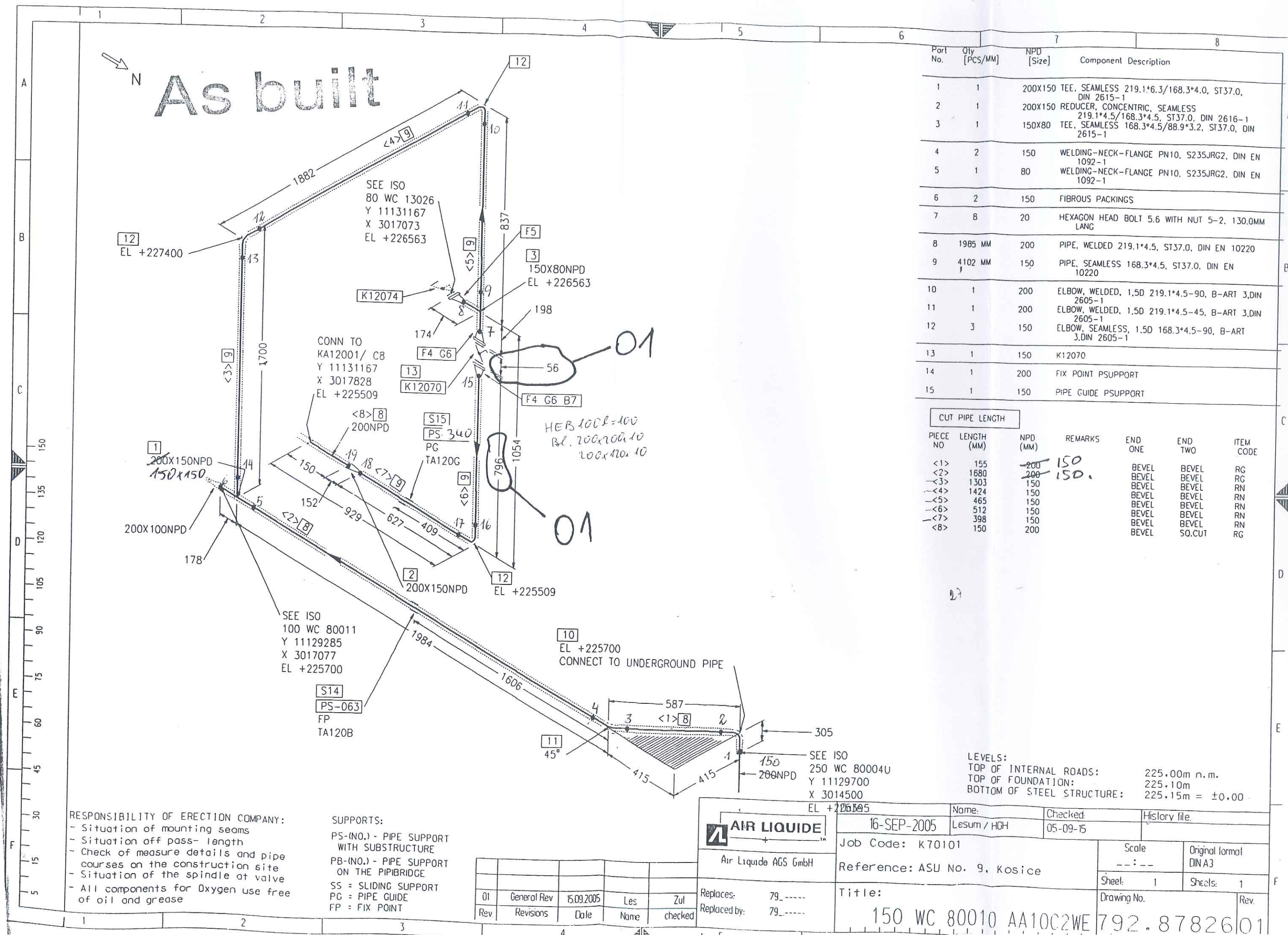
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P2880	80	0	Welding neck flanges; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 88,9	4,00 kg	1,00				0,00
P2883	150	0	WELDING NECK FLANGES; PN 16 C22.8 /DIN 2633/ 168,3	7,75 kg	2,00				0,00
S0011	150	0	T-support TA 120B 169 W1 OZN 1.0 Hesterberg 169	5,00 kg	1,00				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		9,00				0,00
SPS063	0	0	SUPPORT PS-063	21,96 kg	1,00				0,00
SPS340	0	0	SUPPORT PS-340	8,36 kg	1,00				0,00
Summe: 0 150WC80010AA10C2-WE 0				229,48 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	229,48 kg
Gesamtgewicht:	
** Ende der Ausgabe	

ASBUILT













Preis-Stückliste 0 100WC80011AA10C2-WE 0 100 WC 80011 AA10C2-WE Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0014	16	120	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,20 kg	8,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	8,00				0,00
G0158	100	0	Fibrous packings asbestos-free laminate made of aramide f 162x2x115		2,00				0,00
GW16	80	0	girth weld 1.0254 ( St 37.0 ) 88,9x3,2		1,00				0,00
GW18	100	0	girth weld 1.0254 ( St 37.0 ) 114,3x3,6		15,00				0,00
GW2	15	0	girth weld 1.0254 ( St 37.0 ) 21,3x2		5,00				0,00
IH14006	15	0	H14006 supplied by AGS		1,00				0,00
IUK14003	100	0	UK14003 supplied by AGS		1,00				0,00
P0001	15	0	PIPE, SEAMLESS 1.0254 ( St 37.0 ) DIN 1629 21,3x2	0,95 kg	0,50				0,00
P0009	100	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 114,3x3,6	9,83 kg	15,60				0,00
P0159	15	0	ELBOW 90° R=1,5 DA, SEAMLESS 1.0254 ( St 37.0 ) DIN 2609 21,3x2	0,04 kg	2,00				0,00
P0167	100	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 114,3x3,6	2,35 kg	4,00				0,00

## Preis-Stückliste 0 100WC80011AA10C2-WE 0 100 WC 80011 AA10C2-WE Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0507	100	80	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 114,3x3,6x88,9x3,2	2,43 kg	1,00				0,00
P1475	150	100	Reducer, concentric, seamless 1.0254 ( St 37.0 ) DIN 2609 168,3x4,5x114,3x3,6	2,13 kg	1,00				0,00
P2881	100	0	Welding neck flanges; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 114,3	4,50 kg	2,00				0,00
PW17	100	15	Pipe weld-in 1.0254 ( St 37.0 ) 114,3x3,6x21,3x2		1,00				0,00
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	4,00				0,00
SC1	15	0	Segment cut 21,3		3,00				0,00
SC7	100	0	Segment cut 114,3		7,00				0,00
SPS058	0	0	SUPPORT PS-058	5,55 kg	1,00				0,00
SPS059	0	0	SUPPORT PS-059	5,55 kg	1,00				0,00
SPS060	0	0	SUPPORT PS-060	5,55 kg	1,00				0,00
SPS061	0	0	SUPPORT PS-061	5,55 kg	1,00				0,00
SPS062	0	0	SUPPORT PS-062	5,55 kg	1,00				0,00
XZB10	15	0	THREAD END 5.6 21,3		2,00				0,00
Summe: 0 100WC80011AA10C2-WE 0				253,75 kg		0,00	0,00		0,00



Preis-Stückliste 0 100WC80011AA10C2-WE 0 100 WC 80011 AA10C2-WE Revision:

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

Liefersumme:	
Montagesumme:	
Gesamtsumme:	253,75 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT









(Kunde / TÜV, ...)

geprüft

7. v. c. 2. 06

**Schweisstechnologie VAM**  
**Datum / Unterschrift**



**Datum / Unterschrift**

**Project No.: 9050300**

792.87826 - 01	Maker's No.:
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Sheet 2	Drawing No.:
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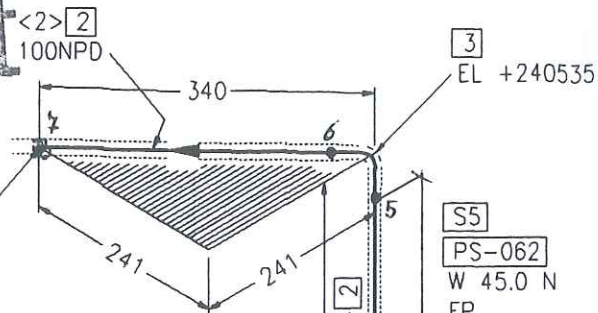
**Maker's No.:**

[illegible]



As built

CONN TO  
W14001/ N3  
Y 11128462  
X 3019338  
EL +240535



3  
EL +240535

S5  
PS-062  
W 45.0 N  
FP  
TA120B 115 W1

S4  
PS-061  
W 45.0 N  
PG  
TA120G 115 W1

S4  
PS-060  
W 45.0 N  
PG  
TA120G 115 W1

S4  
PS-059  
W 45.0 N  
PG  
TA120G 115 W1

S4  
PS-058  
W 45.0 N  
PG  
TA120G 115 W1

1  
100X80NPD  
EL +227597

SEE ISO  
80 WC 13021  
Y 11128800  
X 3019098  
EL +227597

SEE SHT  
SHT 1

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

<b>AIR LIQUIDE</b> Air Liquide AGS GmbH	Date: 16-SEP-2005	Name: Lesum / HGH	Checked: 05-09-15	History file.	
	Job Code: K70101		Scale: ---:---		Original format: DIN A3
Reference: ASU No. 9, Kosice		Title: 100 WC 80011 AA10C2WE		Sheet: 2	Sheets: 2
Replaces: 79_----- Replaced by: 79_-----		Drawing No. 792.87826		Rev. 01	

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	100X80	TEE, SEAMLESS 114.3*3.6/88.9*3.2, ST37.0, DIN 2615-1
2	12869 MM	100	PIPE, SEAMLESS 114.3*3.6, ST37.0, DIN EN 10220
3	1	100	ELBOW, SEAMLESS, 1,5D 114.3*3.6-90, B-ART 3,DIN 2605-1
4	4	100	PIPE GUIDE PSUPPORT
5	1	100	FIX POINT PSUPPORT

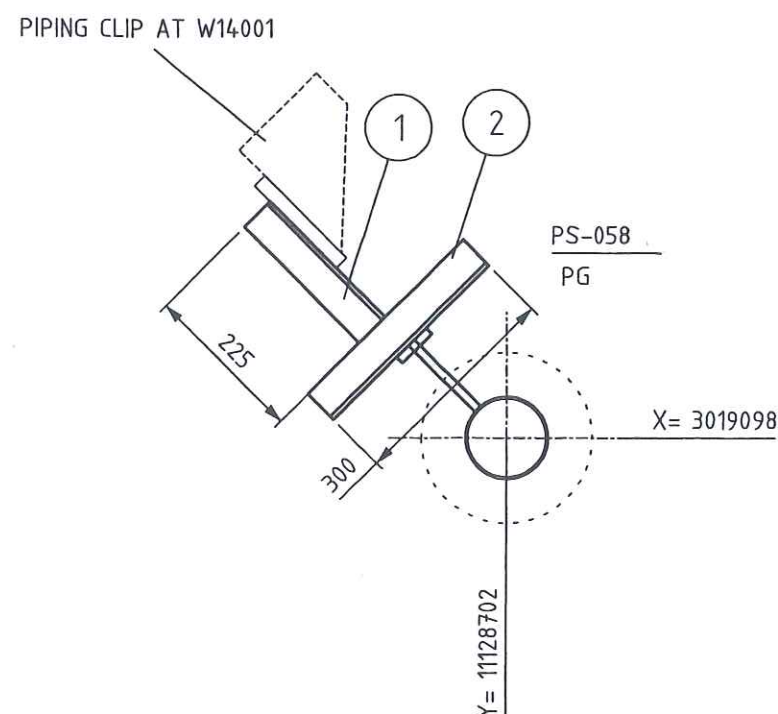
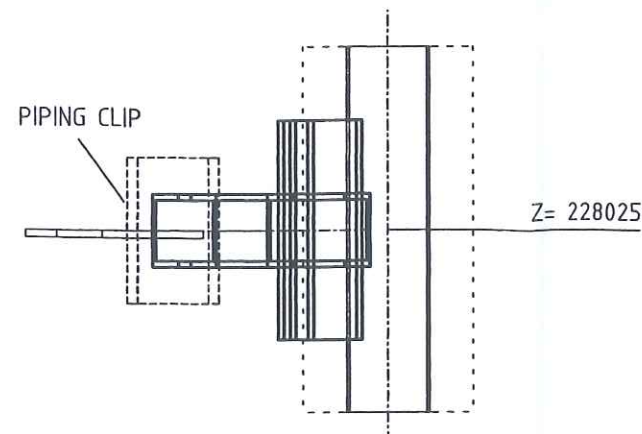
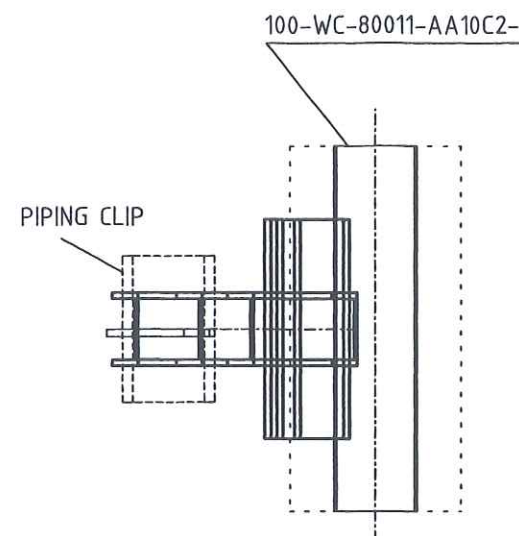
#### CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	12681	100		BEVEL	BEVEL	RN
<2>	188	100		BEVEL	SQ.CUT	RN

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



# As built



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:  
-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


TA 120 G DN 100-200



ANGLE STEEL: L60x10x100LENGTH  
ANGLE STEEL AND PLATE ACCORDING  
TO ORDER NO. PIPE SHOE

Total Weight:	5.55 kg
---------------	---------

[illegible]

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



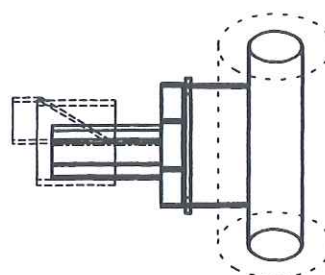
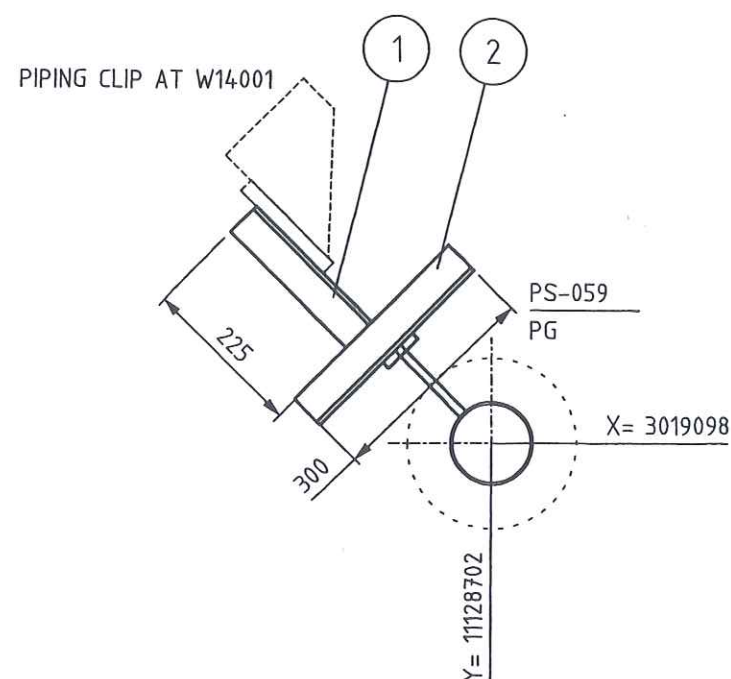
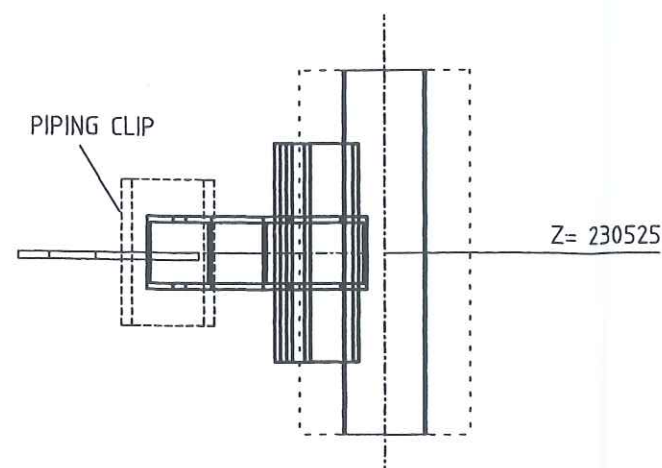
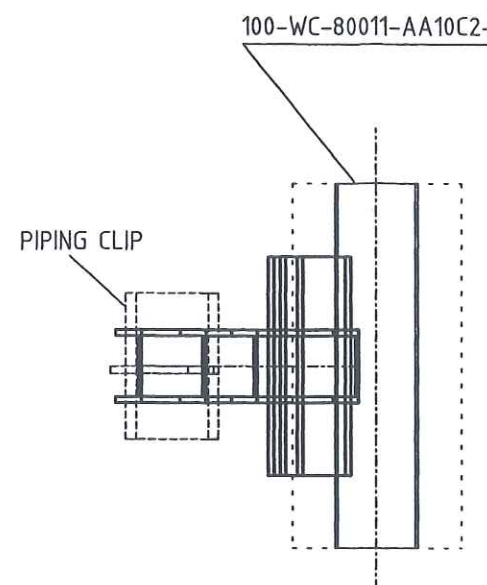
**AIR LIQUIDE**

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:	1:10	Original Format DIN A3
		Sheet:	1	of:
Replaces:	Title	PS-058		
		Drawing-No.	792.87926	Re:



# As built



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

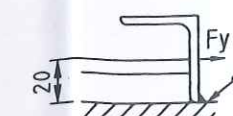
LEGEND:

-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

- 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

TA 120 G DN 100-200



ANGLE STEEL: L60x10x100LENGTH  
ANGLE STEEL AND PLATE ACCORDING  
TO ORDER NO. PIPE SHOE

Total Weight:	5.55 kg
---------------	---------

[illegible]

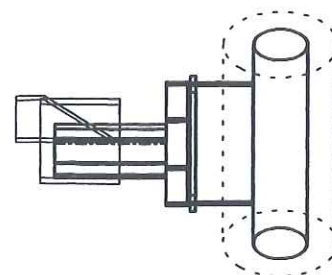
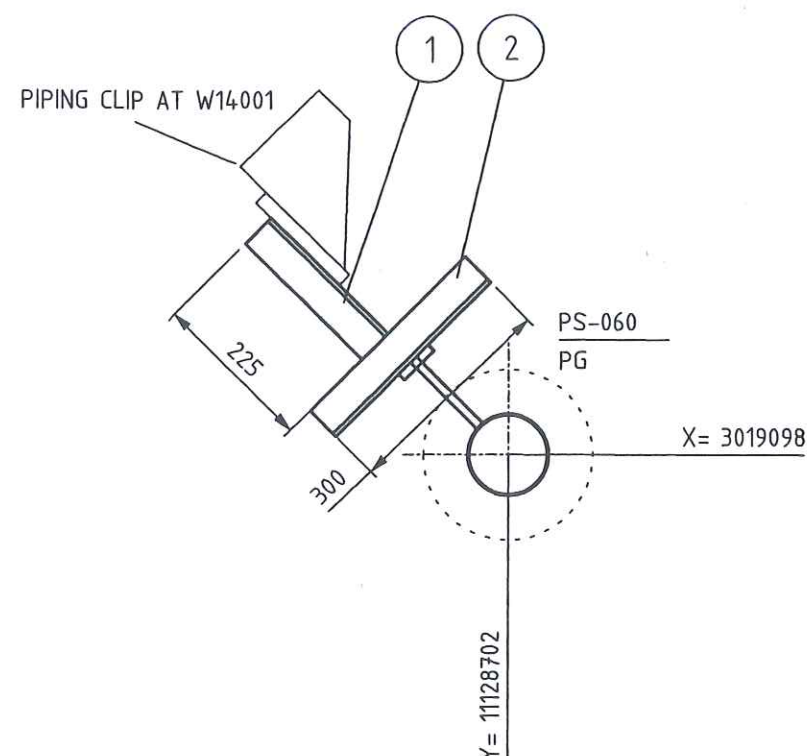
**AIR LIQUIDE**™

Air Liquide AGS GmbH

	Date	Name	Check.	History File	
	15.07.2005	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-059			Drawing-No. 792.87926



# As built



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

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

ANGLE STEEL: L60x10x100LENGTH  
ANGLE STEEL AND PLATE ACCORDING  
TO ORDER NO. PIPE SHOE

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

Total Weight:	5.55 kg
---------------	---------

[illegible]

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by	25. JUL. 2005	Zut	<i>Z</i>
Drawn checked by			


  
**HEGMANN**

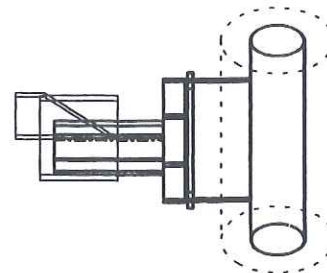

**AIR LIQUIDE**

Air Liquide AGS GmbH

	Date	Name	Check.	History File		
	15.07.2005	GU	Zut			
	Job Code:	K70101 ASU No.9 Kosice			Scale:	Original Format
	Reference:	PIPING SUPPORT			1:10	DIN A3
					Sheet:	1 of:
Replaces:	Title	PS-060			Drawing-No.	Rev
					792.87926	a



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



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  $a=4\text{mm}$  ROUND

MARKING:

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

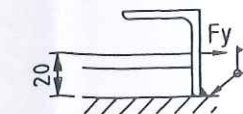
### RESPONSIBILITY OF ERECTION COMPANY

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

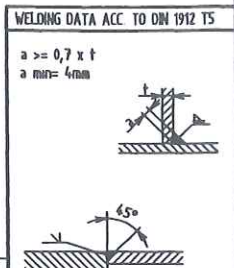
COATING:

- 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

TA 120 G DN 100-200





ANGLE STEEL: L60x10x100LENGTH  
ANGLE STEEL AND PLATE ACCORDING  
TO ORDER NO. PIPE SHOE



Total Weight:	5.55 kg
---------------	---------

[illegible]

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



**HEGMANN'S**



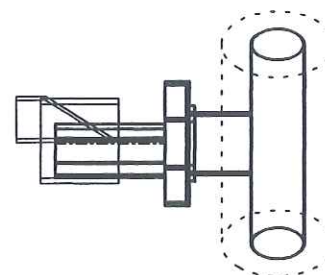
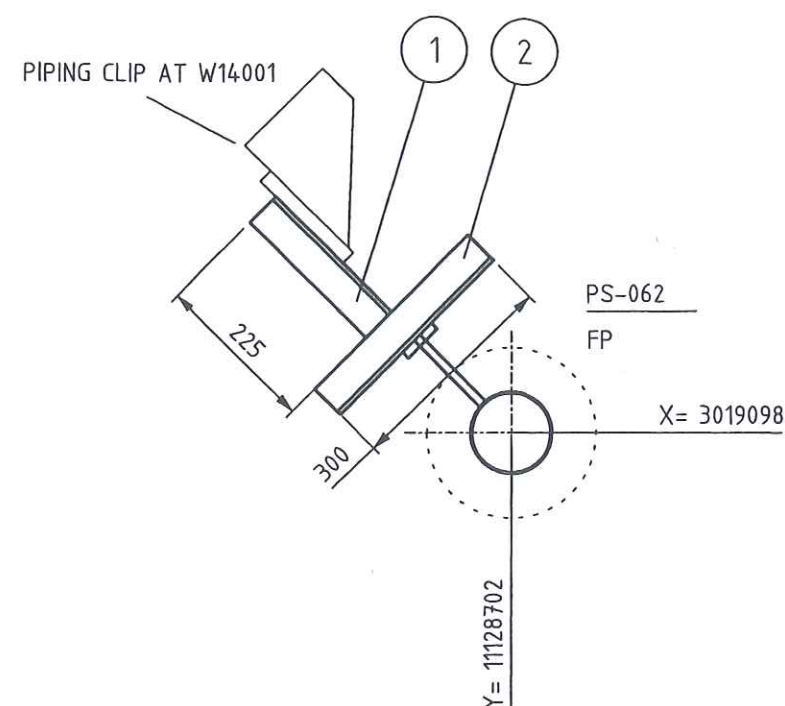
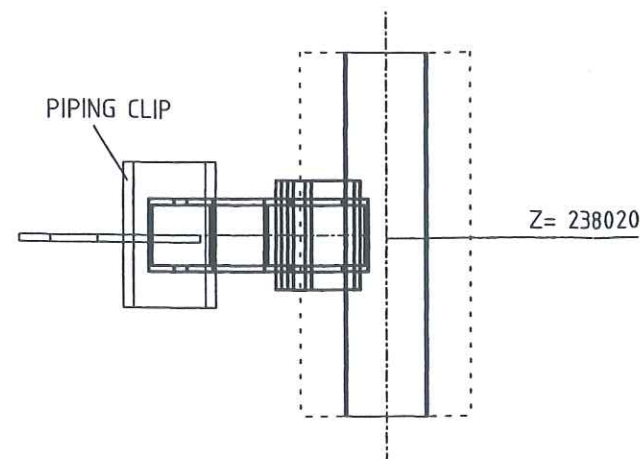
**AIR LIQUIDE**<sup>TM</sup>

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: 1:10	Original Format DIN A3
Replaces:	Title	PS-061		Sheet: 1 of: 1	Rev. a
				Drawing-No. 792.87926	



# 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:**

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

Total Weight:	5.55 kg
---------------	---------

[illegible]

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



Air Liquide AGS GmbH

	Date	Name	Check.	History File			
	15.07.2005	GU	Zut				
	Job Code:	K70101 ASU No.9 Kosice			Scale:	1:10	Original Format
	Reference:	PIPING SUPPORT			Sheet:	1	of:
Replaces:	Title	PS-062			Drawing-No.	792.87926	Re

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



Preis-Stückliste 0 150WC80014AA10C2 0 150 WC 80014 AA10C2 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0023	20	130	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,39 kg	8,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,06 kg	8,00				0,00
G0160	150	0	Fibrous packings asbestos-free laminate made of aramide f 218x2x169		2,00				0,00
GW24	150	0	GIRTH WELD 1.0254 ( St 37.0 ) 168,3x4,5		1,00				0,00
IK11508	150	0	K11508 supplied by AGS		1,00				0,00
P0011	150	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 168,3x4,5	18,20 kg	0,20				0,00
P2883	150	0	WELDING NECK FLANGES; PN 16 C22.8 /DIN 2633/ 168,3	7,75 kg	1,00				0,00
SC9	150	0	Segment cut 168,3		1,00				0,00
Summe: 0 150WC80014AA10C2 0				14,99 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	14,99 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT



Prot Nr.

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

<b>Client:</b>	<b>AIR LIQUIDE</b>	<b>Title:</b>	<b>150 WC 80014</b>
----------------	--------------------	---------------	---------------------

Sheet 1

**Drawing No.:**

**Maker's No.:**

1000

erstellt:

ko.ox.06

geprüft

Schweisstechnologie VAM

**Datum / Unterschrift**

(Kunde / TÜV, ...)

[illegible]





As built

SEE ISO 11003  
300 WC 80002  
Y 11106931  
X 3020950  
EL +226335

F1 G2  
56

5  
K11508

G2 B3

300X150NPD

300NPD  
300NPD

SEE ISO 80008  
300 WC 11003  
Y 11107238  
X 3020950  
EL +226335

305  
247

<1> 4  
150NPD

FREIGAN  
CONSTRUCTION

12 JUN 2005 Cean

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: 1:1	Original format: DIN A3
Reference: ASU No. 9, Kosice		Sheet: 1		Sheets: 1
Title: 150 WC 80014 AA10C2		Drawing No: 792.87826		Rev. 00

Preis-Stückliste 0 150WC80015AA10C2 0 150 WC 80015 AA10C2 Revision:										
Teilenummer	NW1	NW2	Teilebezeichnung		Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0023	20	130	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014		0,39 kg	8,00				0,00
B0508	20	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032		0,06 kg	8,00				0,00
G0160	150	0	Fibrous packings asbestos-free laminate made of aramide f 218x2x169			2,00				0,00
GW24	150	0	GIRTH WELD 1.0254 ( St 37.0 ) 168,3x4,5			1,00				0,00
IK16631	150	0	K16631 supplied by AGS			1,00				0,00
P0011	150	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 168,3x4,5		18,20 kg	0,20				0,00
P2883	150	0	WELDING NECK FLANGES; PN 16 C22.8 /DIN 2633/ 168,3		7,75 kg	1,00				0,00
SC9	150	0	Segment cut 168,3			1,00				0,00
Summe: 0 150WC80015AA10C2 0					14,99 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	14,99 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT





Prot Nr.

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

**Client:** AIR LIQUIDE

Title: 150 WC 80015

Sheet: 1 Drawing No.:

Vaker's No.:

---

Seam No.:

Welder  
No.:  
15

## Material

Dimension

Wärme-  
behandlung

—

15

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Protocol No.:

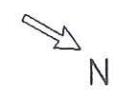
MT/ST

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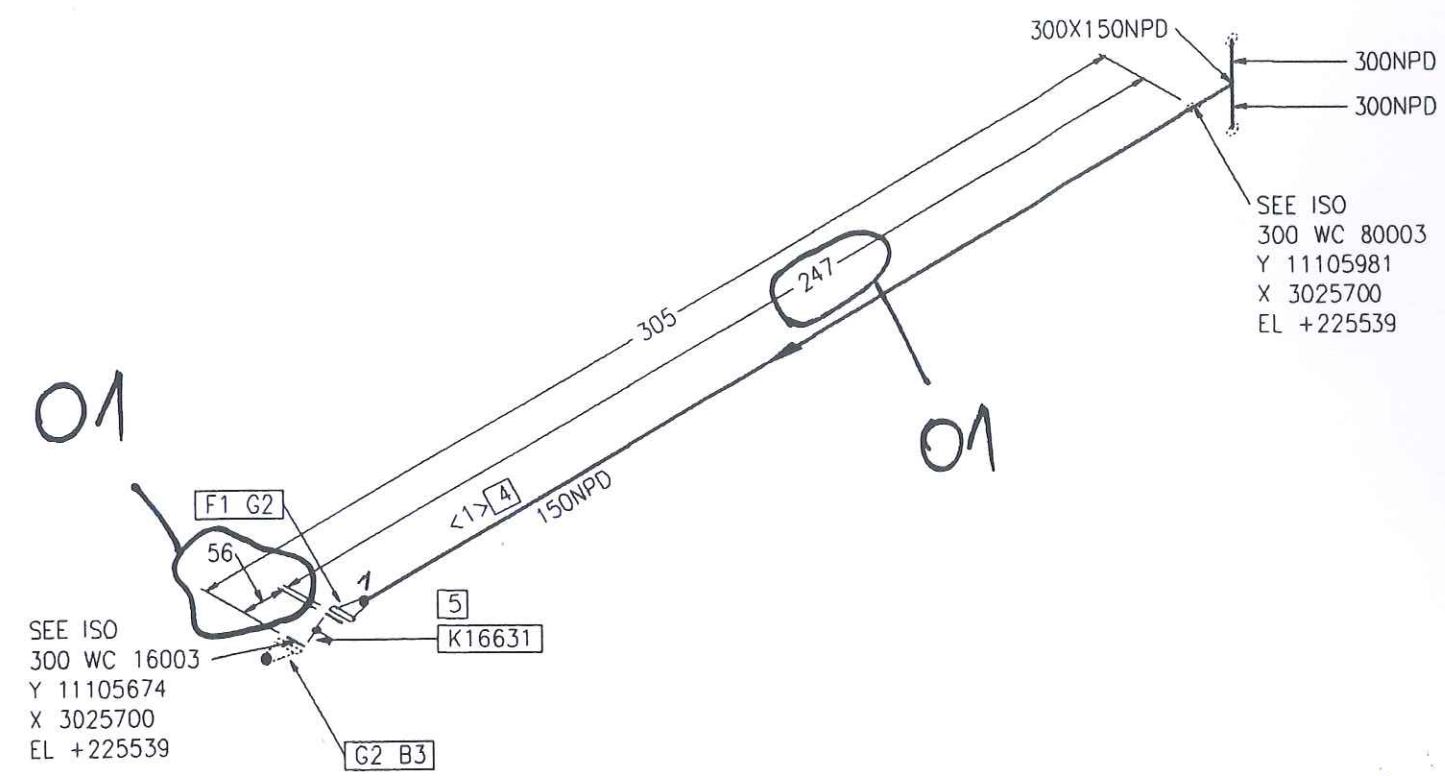
Remark.

Pelzeder Erich, 20.02.06

Косица



As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	150	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
2	2	150	FIBROUS PACKINGS
3	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 130.0MM LANG
4	192 MM	150	PIPE, SEAMLESS 168.3*4.5, ST37.0, DIN EN 10220
5	1	150	K16631

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	192	150		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 PIPEBRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT

 Air Liquide AGS GmbH	Date: 16-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: 150 WC 80015 AA10C2		Drawing No. 792.87826		Rev. 01	

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



Preis-Stückliste 0 40WC80016AA10C2 0 40 WC 80016 AA10C2 Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW9	40	0	girth weld 1.0254 ( St 37.0 ) 48,3x2,6		2,00				0,00
IV24134	40	0	V24134 supplied by AGS		1,00				0,00
Summe: 0 40WC80016AA10C2 0				0,00 kg		0,00	0,00		0,00

Liefersumme:  
Montagesumme:  
Gesamtsumme:  
Gesamtgewicht:  
\*\* Ende der Ausgabe

AS BUILT





1 2 3 4 5 6 7 8

N

As built

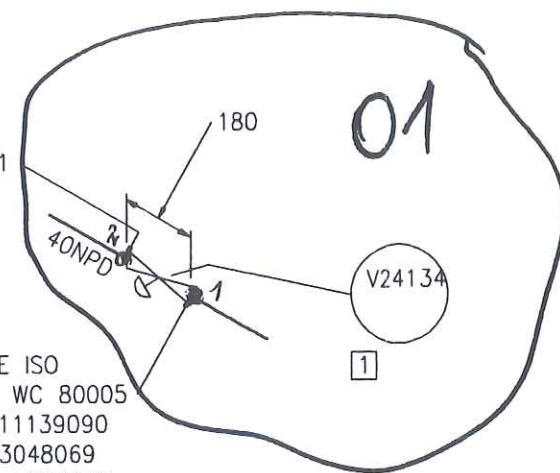
Part No. Qty [PCS/MM] NPD [Size] Component Description

1 1 40 V24134 V24134

01

SEE ISO  
50 WC 24101  
Y 11139090  
X 3048249  
EL +226876


SEE ISO  
50 WC 80005  
Y 11139090  
X 3048069  
EL +226876



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: 16-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: 40 WC 80016 AA40C1792.8782601			Drawing No:	Rev.

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

1 2 3 4 5 6 7 8

Preis-Stückliste 0 40WC80017AA10C2 0 40 WC 80017 AA10C2 Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW9	40	0	girth weld 1.0254 ( St 37.0 ) 48,3x2,6		2,00				0,00
IV24234	40	0	V24234 supplied by AGS		1,00				0,00
Summe: 0 40WC80017AA10C2 0				0,00 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

\*\* Ende der Ausgabe

AS BUILT







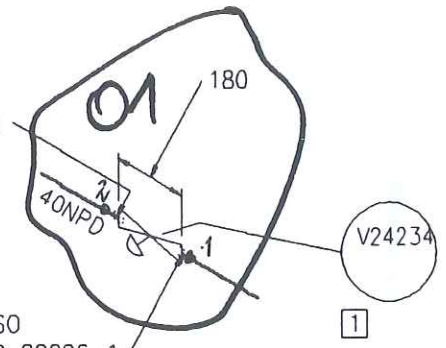
As built

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
----------	--------------	------------	-----------------------

1	1	40	V24234 V24234
---	---	----	---------------

01

SEE ISO  
80 WC 24201  
Y 11135330  
X 3048249  
EL +226876




SEE ISO  
80 WC 80006\_1  
Y 11135330  
X 3048069  
EL +226876

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:	16-SEP-2005	Name:	Lesum / HGH	Checked:	05-09-15	History file.	
	Job Code: K70101						Scale	Original format
	Reference: ASU No. 9, Kosice						Sheet: 1	Sheets: 1
	Title:						Drawing No.	Rev.
40 WC 80017 AA40C1						792.8782601		

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



**Preis-Stückliste 0 80N81002AA10C1 0 80 N 81002 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
G0103	80	0	Flat packings Graphite with CrNi-insert Standard 40002 142x2x90		1,00				0,00
GW12	50	0	girth weld 1.0254 ( St 37.0 ) 60,3x2,9		1,00				0,00
GW16	80	0	girth weld 1.0254 ( St 37.0 ) 88,9x3,2		34,00				0,00
GW2	15	0	girth weld 1.0254 ( St 37.0 ) 21,3x2		2,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		6,00				0,00
GW9	40	0	girth weld 1.0254 ( St 37.0 ) 48,3x2,6		7,00				0,00
P0005	40	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 48,3x2,6	2,93 kg	1,30				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	1,40				0,00
P0048	80	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 88,9x3,2	6,76 kg	61,22				0,00

## Preis-Stückliste 0 80N81002AA10C1 0 80 N 81002 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0163	40	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 48,3x2,6	0,26 kg	3,00				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	1,00				0,00
P0207	80	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 88,9x3,2	1,21 kg	12,00				0,00
P0491	40	25	TEE MADE OF SEAMLESS PIPE St 35.81 /DIN 2615-1/ 48,3x2,6/33,7x2,6	0,50 kg	1,00				0,00
P0729	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
P0731	80	80	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 88,9x3,2x88,9x3,2	1,44 kg	1,00				0,00
P1284	40	25	REDUCER, CONCENTRIC, SEAMLESS St35.81 /DIN 2616-1/ 48,3x2,6/33,7x2,6	0,10 kg	1,00				0,00
P1450	80	40	REDUCER, CONCENTRIC, SEAMLESS St35.81 /DIN 2616-2/ 88,9x3,2/48,3x2,6	0,50 kg	1,00				0,00
P2940	80	0	Welding neck flanges; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 88,9	4,00 kg	1,00				0,00
PW15	80	25	Pipe weld-in 1.0254 ( St 37.0 ) 88,9x3,2x33,7x2,6		2,00				0,00



Preis-Stückliste 0 80N81002AA10C1 0 80 N 81002 AA10C1 Revision:										
(Fortsetzung)										
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt	
S0020	80	0	T-support TA 120G 89 W1 OZN 1.0 Hesterberg 89	8,70 kg	11,00				0,00	
SC3	25	0	Segment cut 33,7		3,00				0,00	
SC4	40	0	Segment cut 48,3		2,00				0,00	
SC6	80	0	Segment cut 88,9		16,00				0,00	
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		7,00				0,00	
Summe: 0 80N81002AA10C1 0				540,73 kg		0,00	0,00		0,00	

Liefersumme:	
Montagesumme:	
Gesamtsumme:	540,73 kg
Gesamtgewicht:	
** Ende der Ausgabe	

ASBULT

<div>VAM</div>		<div>SCHWEISSDOKUMENTATION WELDING DOCUMENTATION</div>		<div>erstellt: 20.02.06 Pelzeder Erich</div>		<div>geprüft Schweisstechnologie VAM</div>		<div>(Kunde / TÜV, ...)</div>	
Prot. Nr.		ASU No. 9, Kosice		Order No.:		Datum / Unterschrift		Datum / Unterschrift	
Jop Code: K70101		AIR LIQUIDE		Title: 80 N 81002		Drawing No.:		Maker's No.:	
Client:		ASU No. 9, Kosice		Order No.:		Project No.: 9050300		792.87826 - 01	
Sheet 1		Title: 80 N 81002		Drawing No.:		Project No.: 9050300		792.87826 - 01	
Welder No.:		Material		Dimension		Wärmebehandlung		RT	
Seam No.:		Welder No.:		Material		Dimension		Wärmebehandlung	
1		V5		ST37.0		48,3*2,6		RT	
2		V5		ST37.0		48,3*2,6		RT	
3		V5		ST37.0		48,3*2,6		RT	
4		V5		ST37.0		48,3*2,6		RT	
5		V5		ST37.0		48,3*2,6		RT	
6		V5		ST37.0		48,3*2,6		RT	
7		V5		ST37.0		48,3*2,6		RT	
8		V5		ST37.0		48,3*2,6		RT	
9		V5		ST37.0		33,7*2,6		RT	
10		V5		ST37.0		33,7*2,6		RT	
11		V5		ST37.0		33,7*2,6		RT	
								UT	
								MT/PT	
								SP	
								Remerk	



 N



CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	3575	25		BEVEL	BEVEL	RN
<2>	1312	40		BEVEL	BEVEL	RN
<3>	2254	40		BEVEL	BEVEL	RN
<4>	70	40		BEVEL	BEVEL	RN

SUPPORTS:

PS-(NO.) - PIPE SUPPORT  
WITH SUBSTRUCTURE

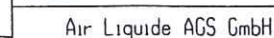
PB-(NO.) - PIPE SUPPORT  
ON THE PIPIBRIDGE

SS = SLIDING SUPPORT

PG = PIPE GUIDE

FP = FIX POINT

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



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

Date:	Name:	Checked:	History file:
22-SEP-2005	Lesum / HGH	05-09-15	
Job Code: K70101		Scale _ _ : _ _	Original format DIN A3
Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 3
Title:		Drawing No:	Rev.
80 N 81002 AA10C1		792.87826	01

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



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

<b>Client:</b>	<b>AIR LIQUIDE</b>	<b>Title:</b>	<b>80 N 81002</b>
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**Title:**

002

**Drawing No.:**

**792.87826 - 01**

**Maker's No.:**

(Kunde / TÜV, ...)

geprüft

Mo. 22. 06

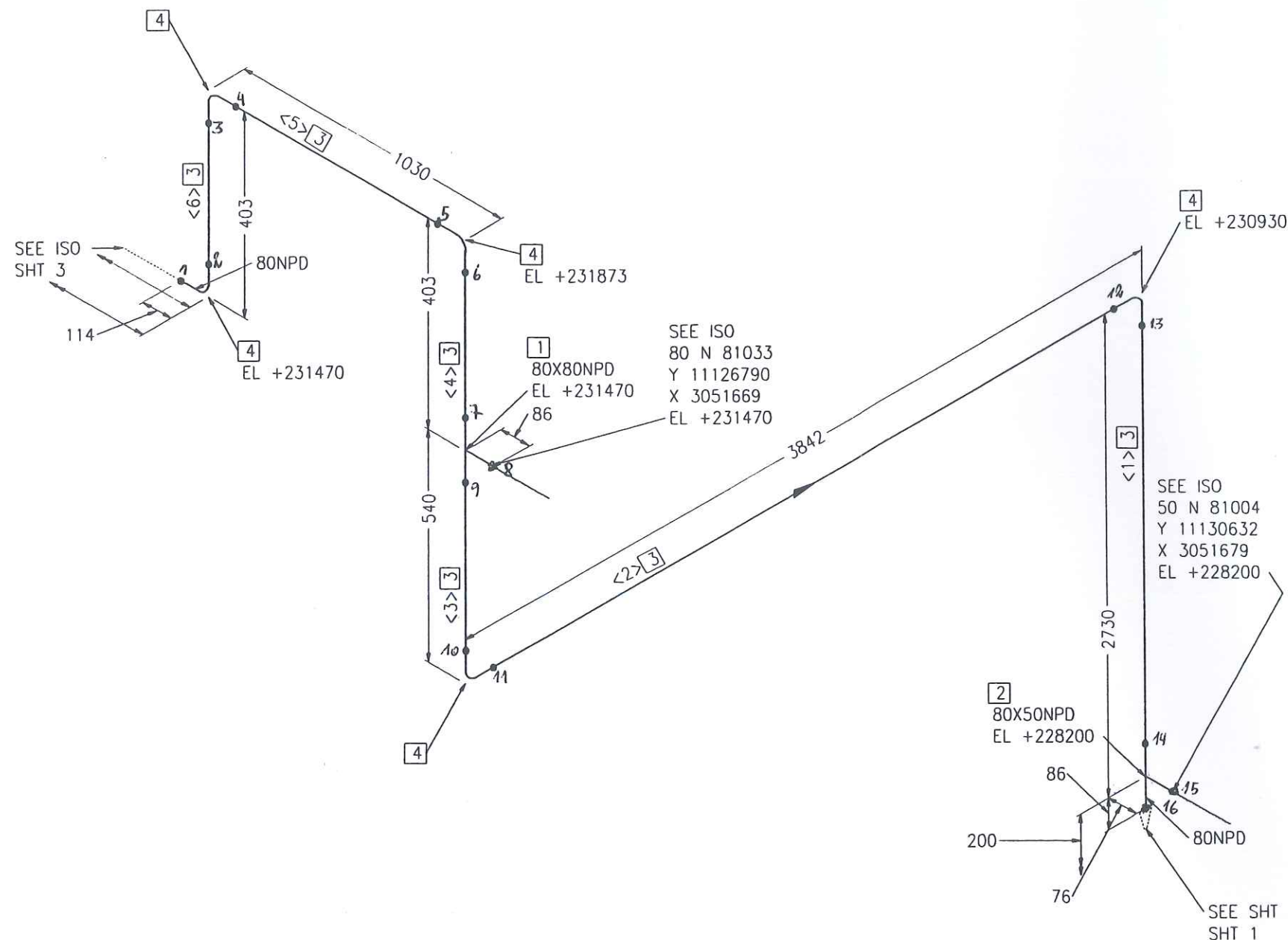
Schweisstechnologie VAM  
Datum / Unterschrift

**Datum / Unterschrift**

[illegible]



# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	80X80	TEE, SEAMLESS 88.9*3.2/88.9*3.2, ST37.0, DIN 2615-1
2	1	80X50	TEE, SEAMLESS 88.9*3.2/60.3*2.9, ST37.0, DIN 2615-1
3	7665 MM	80	PIPE, SEAMLESS 88.9*3.2, ST37.0, DIN EN 10220
4	5	80	ELBOW, SEAMLESS, 1,50 88.9*3.2-90, B-ART 3, DIN 2605-1

CUT PIPE LENGTH						
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	2530	80		BEVEL	BEVEL	RN
<2>	3615	80		BEVEL	BEVEL	RN
<3>	340	80		BEVEL	BEVEL	RN
<4>	203	80		BEVEL	BEVEL	RN
<5>	802	80		BEVEL	BEVEL	RN
<6>	175	80		BEVEL	BEVEL	RN

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:	22-SEP-2005	Name:	Lesum / HGH	Checked:	05-09-15	History file:
	Job Code: K70101				Scale	Original format	
	Reference: ASU No. 9, Kosice				Sheet: 2	Sheets: 3	
	Title:				Drawing No:		Rev.
Replaces: 79----- Replaced by: 79-----				80 N 81002 AA10C1792.8782601			

KOMPLETT ÜBERARBEITET

LEVELS:

TOP OF INTERNAL ROADS: 225.00m n.m.

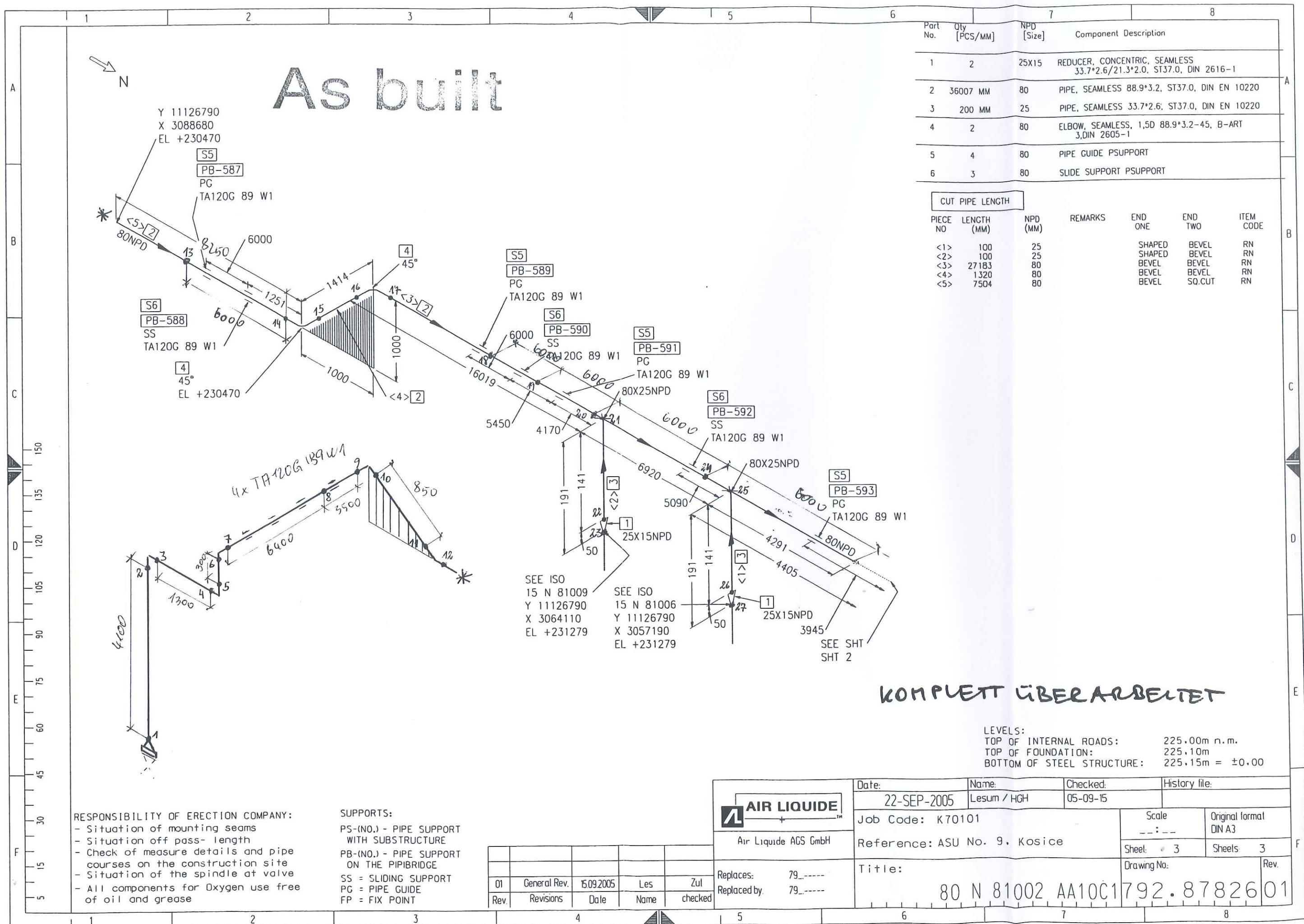
TOP OF FOUNDATION: 225.10m

BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

	<b>SCHWEISSDOKUMENTATION</b> WELDING DOCUMENTATION		erstellt: 20.02.06 <i>PE</i> Pelzeder Erich <small>Datum / Unterschrift</small>	geprüft  Schweisstechnologie VAM <small>Datum / Unterschrift</small>	(Kunde / TÜV, ...)
Jop Code: K70101 ASU No. 9, Kosice		Order No.:		Project No.: 9050300	
Client: AIR LIQUIDE		Title: 80 N 81002		Drawing No.: 792.87826 - 01	
		Sheet 3		Maker's No.:	

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:				Remerk
				Wärme- behandlung	RT	UT	MT/PT	SP
1	V2	ST37.0	88,9*3,2					
2	V2	ST37.0	88,9*3,2					
3	V2	ST37.0	88,9*3,2					
4	V2	ST37.0	88,9*3,2					
5	V2	ST37.0	88,9*3,2					
6	V2	ST37.0	88,9*3,2					
7	V2	ST37.0	88,9*3,2					
8	V2	ST37.0	88,9*3,2					
9	V2	ST37.0	88,9*3,2					
10	V2	ST37.0	88,9*3,2					
11	V2	ST37.0	88,9*3,2					
12	V2	ST37.0	88,9*3,2					
13	V9	ST37.0	88,9*3,2					
14	V9	ST37.0	88,9*3,2					
15	V2	ST37.0	88,9*3,2					
16	V2	ST37.0	88,9*3,2					
17	V9	ST37.0	88,9*3,2					
18	V9	ST37.0	88,9*3,2					
19	V9	ST37.0	88,9*3,2					
20	V9	ST37.0	88,9*3,2					
21	V9	ST37.0	NPD25					
22	V9	ST37.0	33,7*2,6					
23	V9	ST37.0	21,3*2					
24	V9	ST37.0	88,9*3,6					
25	V9	ST37.0	NPD25					
26	V9	ST37.0	33,7*2,6					
27	V9	ST37.0	21,3*2					





## Preis-Stückliste 0 50A81003AA10C1 0 50 A 81003 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
B0008	16	65	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,13 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
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	4,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
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		33,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		27,00				0,00
IAD01	25	0	AIR DISTRIBUTOR, DN 25		2,00				0,00
P0014	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	37,25				0,00
P0044	50	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 60,3x2,9	4,11 kg	58,30				0,00
P0157	25	0	BEND 1.0254	0,12 kg	2,00				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	10,00				0,00

AS BUILT



## Preis-Stückliste 0 50A81003AA10C1 0 50 A 81003 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0205	50	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 60,3x2,9	0,49 kg	9,00				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
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
P2935	25	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 33,7	1,00 kg	1,00				0,00
P2938	50	0	Welding neck flanges; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 60,3	3,00 kg	1,00				0,00
P3092	25	0	Blind flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1	1,50 kg	1,00				0,00
S0018	50	0	T-support TA 120G 61 W1 OZN 1.0 Hesterberg 61	8,30 kg	5,00				0,00
SAS01	25	0	DISTRIBUTOR SUPPORT, DN 25		2,00				0,00
SC3	25	0	Segment cut 33,7		10,00				0,00
SC5	50	0	Segment cut 60,3		17,00				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		11,00				0,00
SPS341	0	0	SUPPORT PS-341	3,58 kg	1,00				0,00

Preis-Stückliste 0 50A81003AA10C1 0 50 A 81003 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
XZB09	25	0	HOLLÄNDER 5.6		2,00				0,00
Summe: 0 50A81003AA10C1 0				373,57 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	373,57 kg
** Ende der Ausgabe	

AS BUILT





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

ce  
Orc

50 A 81003

Drawing No.:

792.87826 - 00	Makers No.:
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24.02.06 PLI  
Pelzeder Erich

Schweisstechnologie VAM

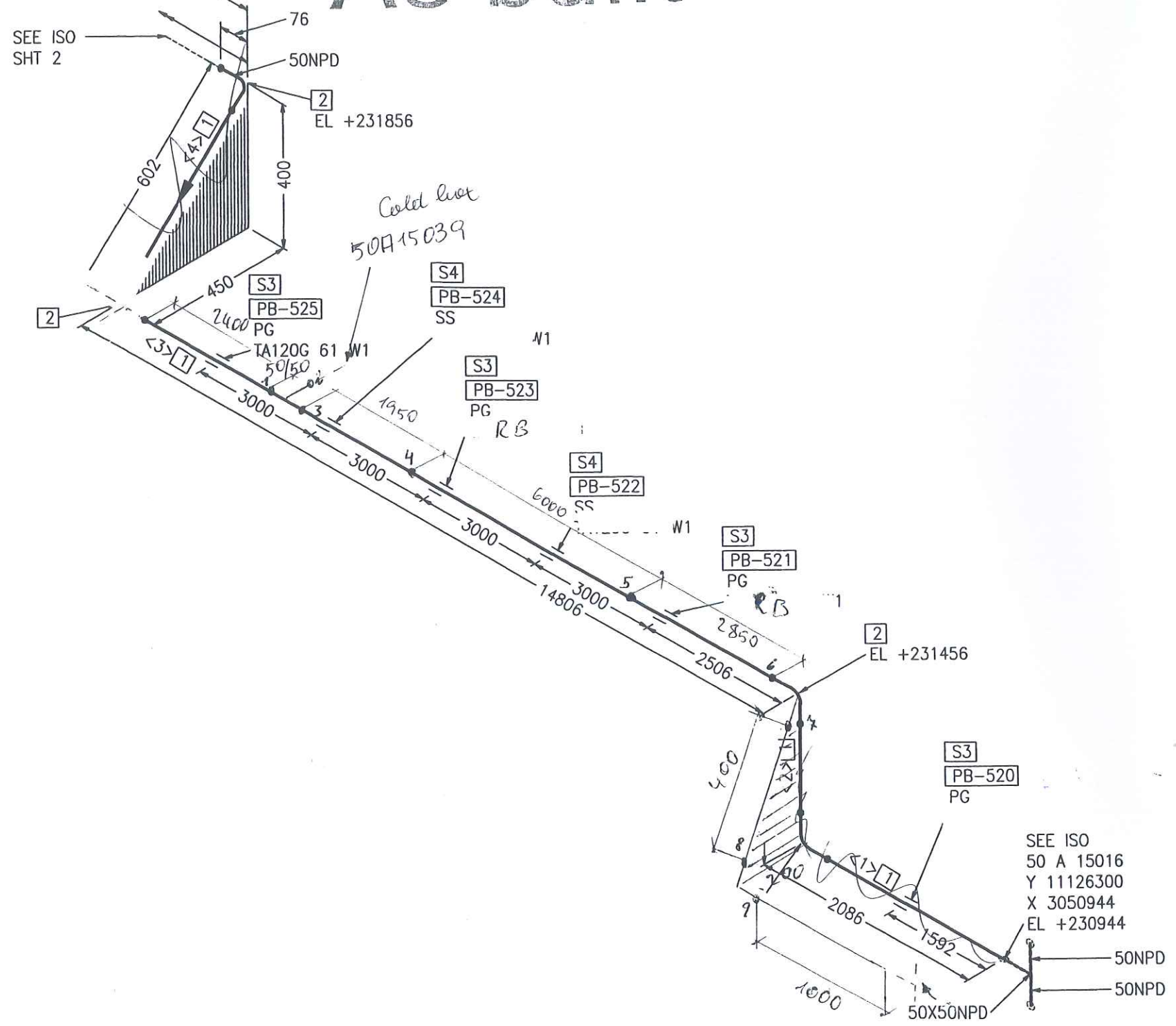
**Datum / Unterschrift**

[illegible]

1 2 3 4 5 6 7 8



As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	17474 MM	50	PIPE, SEAMLESS 60.3*2.9, ST37.0, DIN EN 10220
2	4	50	ELBOW, SEAMLESS, 1,5D 60.3*2.9-90, B-ART 3,DIN 2605-1
3	4	50	PIPE GUIDE PSUPPORT
4	2	50	SLIDE SUPPORT PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	2010	50		BEVEL	BEVEL	RN
<2>	360	50		BEVEL	BEVEL	RN
<3>	14654	50		BEVEL	BEVEL	RN
<4>	450	50		BEVEL	BEVEL	RN




12. Juli 2005 *cau*

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:	05-07-11	History file:	
	Job Code: K70101				Scale: 1:1		Original format: DIN A3	
	Reference: ASU No. 9, Kosice				Sheet: 1		Sheets: 2	
	Title: 50 A 81003 AA10C1792.8782600				Drawing No:		Rev.	

Replaces:	79_
Replaced by:	79_

Rev.	Revisions	Date	Name	checked



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 50A81003AA10C1 0 50 A 81003 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
B0008	16	65	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,13 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
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	4,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		1,00				0,00
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		33,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		27,00				0,00
IAD01	25	0	AIR DISTRIBUTOR, DN 25		2,00				0,00
P0014	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	37,25				0,00
P0044	50	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 60,3x2,9	4,11 kg	58,30				0,00
P0157	25	0	BEND 1.0254	0,12 kg	2,00				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	10,00				0,00

VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 50A81003AA10C1 0 50 A 81003 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0205	50	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 60,3x2,9	0,49 kg	9,00				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
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
P2935	25	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 33,7	1,00 kg	1,00				0,00
P2938	50	0	Welding neck flanges; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 60,3	3,00 kg	1,00				0,00
P3092	25	0	Blind flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1	1,50 kg	1,00				0,00
S0018	50	0	T-support TA 120G 61 W1 OZN 1.0 Hesterberg 61	8,30 kg	5,00				0,00
SAS01	25	0	DISTRIBUTOR SUPPORT, DN 25		2,00				0,00
SC3	25	0	Segment cut 33,7		10,00				0,00
SC5	50	0	Segment cut 60,3		17,00				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		11,00				0,00
SPS341	0	0	SUPPORT PS-341	3,58 kg	1,00				0,00



Preis-Stückliste 0 50A81003AA10C1 0 50 A 81003 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
XZB09	25	0	HOLLÄNDER 5.6		2,00				0,00
Summe: 0 50A81003AA10C1 0				373,57 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	373,57 kg
Gesamtgewicht:	
** Ende der Ausgabe	

ASBUILT

	<b>SCHWEISSDOKUMENTATION</b> WELDING DOCUMENTATION		erstellt: <div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;">           24.02.06          Pelzeder Erich       </div> <div style="text-align: center;">         Datum / Unterschrift       </div> </div>	geprüft <div style="text-align: center;">         Schweisstechnologie VAM          Datum / Unterschrift       </div>	(Kunde / TÜV, ...)
Jop Code: K70101 ASU No. 9, Kosice		Order No.:		Project No.: 9050300	
Client: AIR LIQUIDE		Title: 50 A 81003		Drawing No.: 792.87826 - 00	
		Sheet 2		Maker's No.:	

Seam No.:		Welder No.:	Material	Dimension	Wärmebehandlung	RT	UT	MT/PT	SP	Remerk
1		V3	ST37.0	60,3*2,9						
1,1		V3	ST37.0	33,*2,6						
2		V3	ST37.0	33,*2,6						
3		V3	ST37.0	33,*2,6						
4		V3	ST37.0	33,*2,6						
5		V3	ST37.0	33,*2,6						
6		V3	ST37.0	33,*2,6						
7		V3	ST37.0	33,*2,6						
8		V3	ST37.0	60,9*2,9						
9		V3	ST37.0	60,9*2,9						
10		V3	ST37.0	60,9*2,9						
11		V3	ST37.0	33,7*2,6						
12		V3	ST37.0	33,7*2,6						
13		V3	ST37.0	33,7*2,6						
14		V3	ST37.0	33,7*2,6						
15		V3	ST37.0	33,7*2,6						
16		V3	ST37.0	33,7*2,6						
17		V3	ST37.0	60,3*2,9						
18		V3	ST37.0	60,3*2,9						
19		V3	ST37.0	60,3*2,9						
20		V3	ST37.0	60,3*2,9						
21		V3	ST37.0	60,3*2,9						
22		V3	ST37.0	60,3*2,9						
23		V3	ST37.0	60,3*2,9						
24		V3	ST37.0	60,3*2,9						
25		V3	ST37.0	60,3*2,9						
26		V3	ST37.0	60,3*2,9						



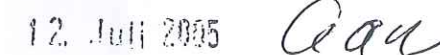




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CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	12185	50		BEVEL	BEVEL	RN
<2>	1352	50		BEVEL	BEVEL	RN
<3>	7610	50		BEVEL	BEVEL	RN



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	05-07-11	<del>SA</del>
Job Code: K70101		Scale --:--	Original format DIN A3
Reference: ASU No. 9, Kosice		Sheet: 2	Sheets: 2
Title:		Drawing No:	Rev.
50 A 81003 AA10C1		792.87826	00



**Preis-Stückliste 0 50N81004AA10C1 0 50 N 81004 AA10C1 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	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
G0099	40	0	Flat packings Graphite with CrNi-insert Standard 40002 92x2x49		2,00				0,00
GW12	50	0	girth weld 1.0254 ( St 37.0 ) 60,3x2,9		5,00				0,00
GW9	40	0	girth weld 1.0254 ( St 37.0 ) 48,3x2,6		1,00				0,00
IPV87011	40	0	PV87011 supplied by AGS		1,00				0,00
P0044	50	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 60,3x2,9	4,11 kg	3,00				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	2,00				0,00
P1437	50	40	Reducer, concentric, seamless 1.0254 ( St 37.0 ) DIN 2609 60,3x2,9x48,3x2,6	0,28 kg	1,00				0,00
P2937	40	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 48,3	2,00 kg	1,00				0,00
SC5	50	0	Segment cut 60,3		4,00				0,00
<b>Summe: 0 50N81004AA10C1 0</b>				<b>16,79 kg</b>		<b>0,00</b>	<b>0,00</b>		<b>0,00</b>

AS BUILT

Preis-Stückliste 0 50N81004AA10C1 0 50 N 81004 AA10C1 Revision:

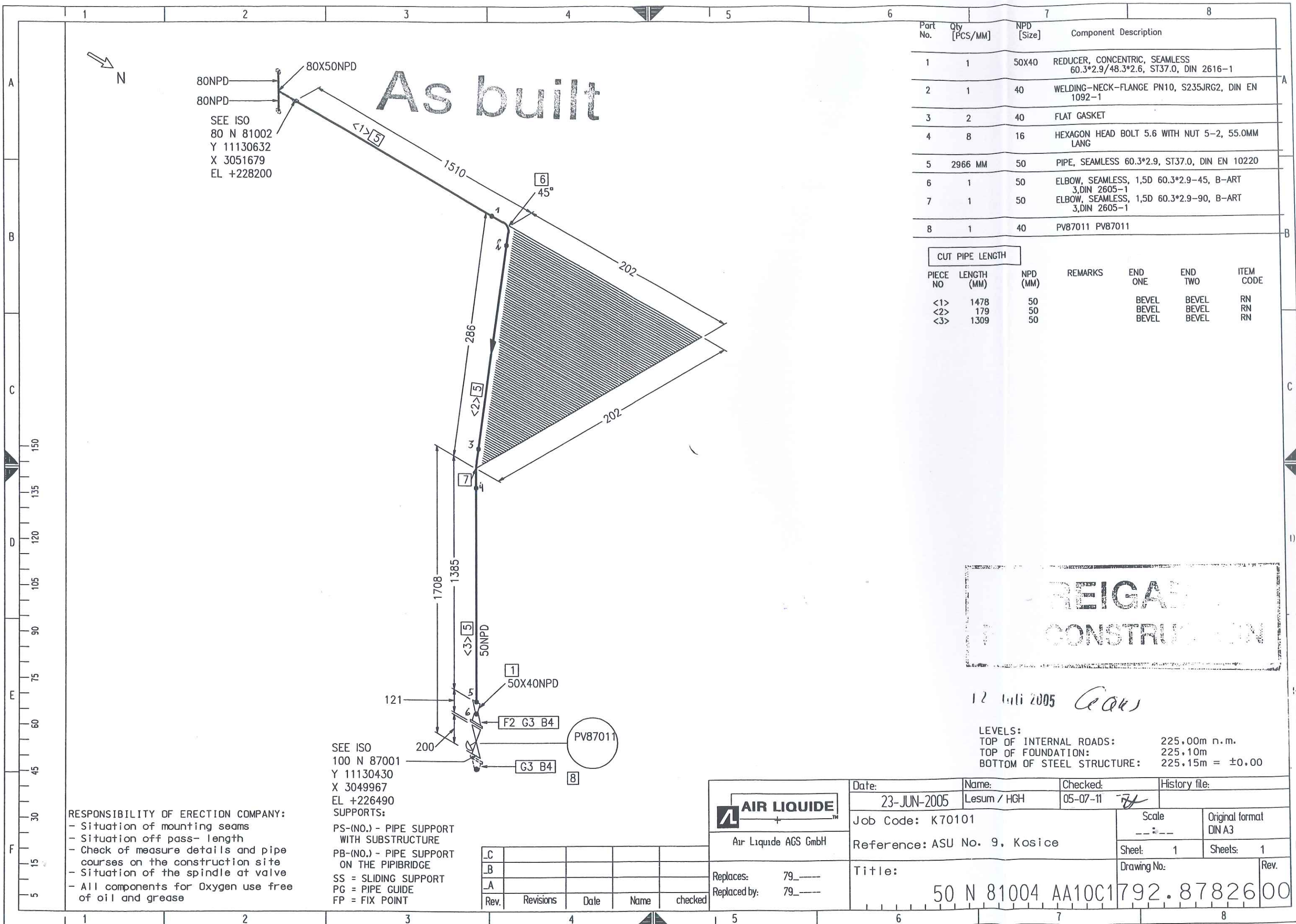
Teilenummer	NW1 NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
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Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	16,79 kg
** Ende der Ausgabe	

AS BUILT









Preis-Stückliste 0 15N81006AA10C1 0 15 N 81006 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GEV	12	0	Straight screw in connection		2,00				0,00
GW1	15	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 21,3x1,6		21,00				0,00
GW40	12	0	GRITH WELD 1.4541		2,00				0,00
P0034	15	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 21,3x2	0,95 kg	11,60				0,00
P0150	12	0	PIPE, SEAMLESS, ERMETO 1.4541	0,28 kg	0,40				0,00
P0200	15	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 21,3x2	0,04 kg	9,00				0,00
P0703	15	15	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 21,3x2x21,3x2	0,61 kg	1,00				0,00
P1282	15	12	REDUCER, CONCENTRIC, SEAMLESS St35.8l	0,19 kg	2,00				0,00
SC1	15	0	Segment cut 21,3		10,00				0,00
SC20	12	0	SEGMENT CUT		2,00				0,00
SCP01	15	0	PIPE CLAMP, RB10A 22 W3 HESTERBERG 21,3		6,00				0,00
SPS342	0	0	SUPPORT PS-342	30,74 kg	1,00				0,00
SPS343	0	0	SUPPORT PS-343	7,95 kg	1,00				0,00
SPS344	0	0	SUPPORT PS-344	0,33 kg	3,00				0,00
Summe: 0 15N81006AA10C1 0				52,16 kg		0,00	0,00		0,00

Preis-Stückliste 0 15N81006AA10C1 0 15 N 81006 AA10C1 Revision:

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

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	52,16 kg
** Ende der Ausgabe	

ASBUILT





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

**Order No.:**

**Title:** 15 N 81006

**Drawing No.:**

792.87826 - 00	Makers No.:
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(Kunde / TÜV, ...)

geprüft

**erstellt:**

Schweisstechnologie VAM

*Pelzeder Erich*

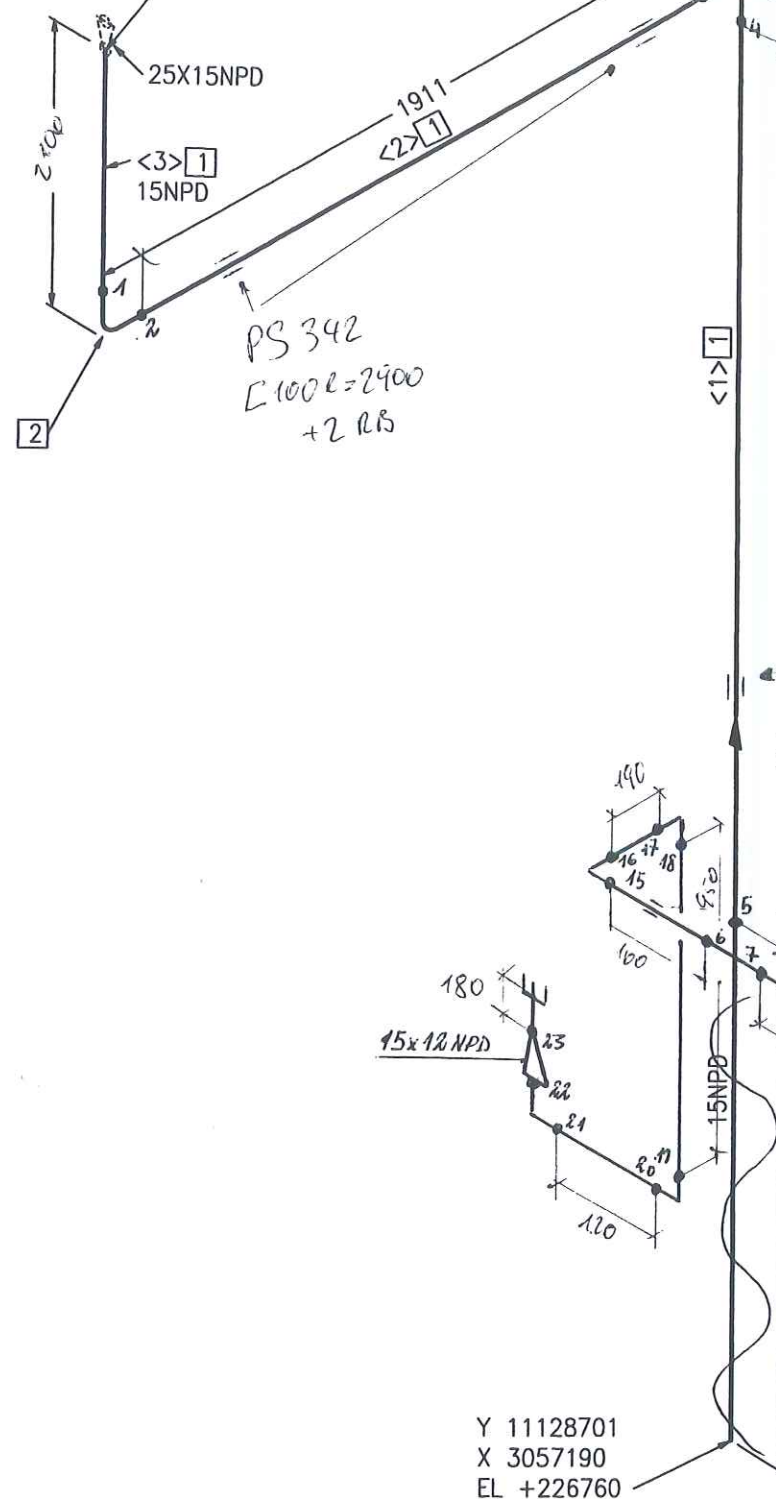
**Datum / Unterschrift**

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As built

SEE ISO  
80 N 81002  
Y 11126790  
X 3057190  
EL +231279

2  
EL +230950



Y 11128701  
X 3057190  
EL +226760

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	6318 MM	15	PIPE, SEAMLESS 21.3*2.0, ST37.0, DIN EN 10220
2	2	15	ELBOW, SEAMLESS, 1,5D 21.3*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>	4162	15		SQ.CUT	BEVEL	RN
<2>	1855	15		BEVEL	BEVEL	RN
<3>	301	15		BEVEL	BEVEL	RN

NUR ZUR INFORMATION

FOR INFORMATION ONLY

21. OKT. 2005

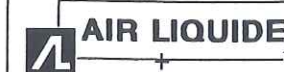
LEVELS:  
TOP OF INTERNAL ROADS: 225.00m n.m.  
TOP OF FOUNDATION: 225.10m  
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

#### 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



Air Liquide AGS GmbH

Date: 17-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
Job Code: K70101	Reference: ASU No. 9, Kosice	Title: 15 N 81006 AA10C1792.878260	Scale: 1:1
Replaces: 79----	Replaced by: 79----	Drawing No: 1	Original format DIN A3
Rev.	Revisions	Date	Name checked



**Preis-Stückliste 0 15N81007AA10C1 0 15 N 81007 AA10C1 Revision:**

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GEV	12	0	Straight screw in connection		1,00				0,00
GW1	15	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 21,3x1,6		1,00				0,00
GW4	25	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 33,7x2		14,00				0,00
GW40	12	0	GRITH WELD 1.4541		1,00				0,00
P0014	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	16,65				0,00
P0150	12	0	PIPE, SEAMLESS, ERMETO 1.4541	0,28 kg	0,45				0,00
P0155	12	0	BEND	0,02 kg	2,00				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	6,00				0,00
P1282	15	12	REDUCER, CONCENTRIC, SEAMLESS St35.8l	0,19 kg	1,00				0,00
P1284	40	25	REDUCER, CONCENTRIC, SEAMLESS St35.8l /DIN 2616-1/ 48,3x2,6/33,7x2,6	0,10 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
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	4,00				0,00
SC21	16	0	SEGMENT CUT		1,00				0,00
SC3	25	0	Segment cut 33,7		8,00				0,00

Preis-Stückliste 0 15N81007AA10C1 0 15 N 81007 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
SPS345	0	0	SUPPORT PS-345, L 80, L=350	2,56 kg	1,00				0,00
SPS346	0	0	SUPPORT PS-346, L 80, L=600	4,40 kg	1,00				0,00
SPS347	0	0	SUPPORT PS-347, L 80, L=500	3,67 kg	1,00				0,00
SPS348	0	0	SUPPORT PS-348, L 80, L=800	5,87 kg	1,00				0,00
SPS349	0	0	SUPPORT PS-349, L 30, L=200	0,35 kg	1,00				0,00
Summe: 0 15N81007AA10C1 0				81,64 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	81,64 kg
Gesamtgewicht:	
** Ende der Ausgabe	

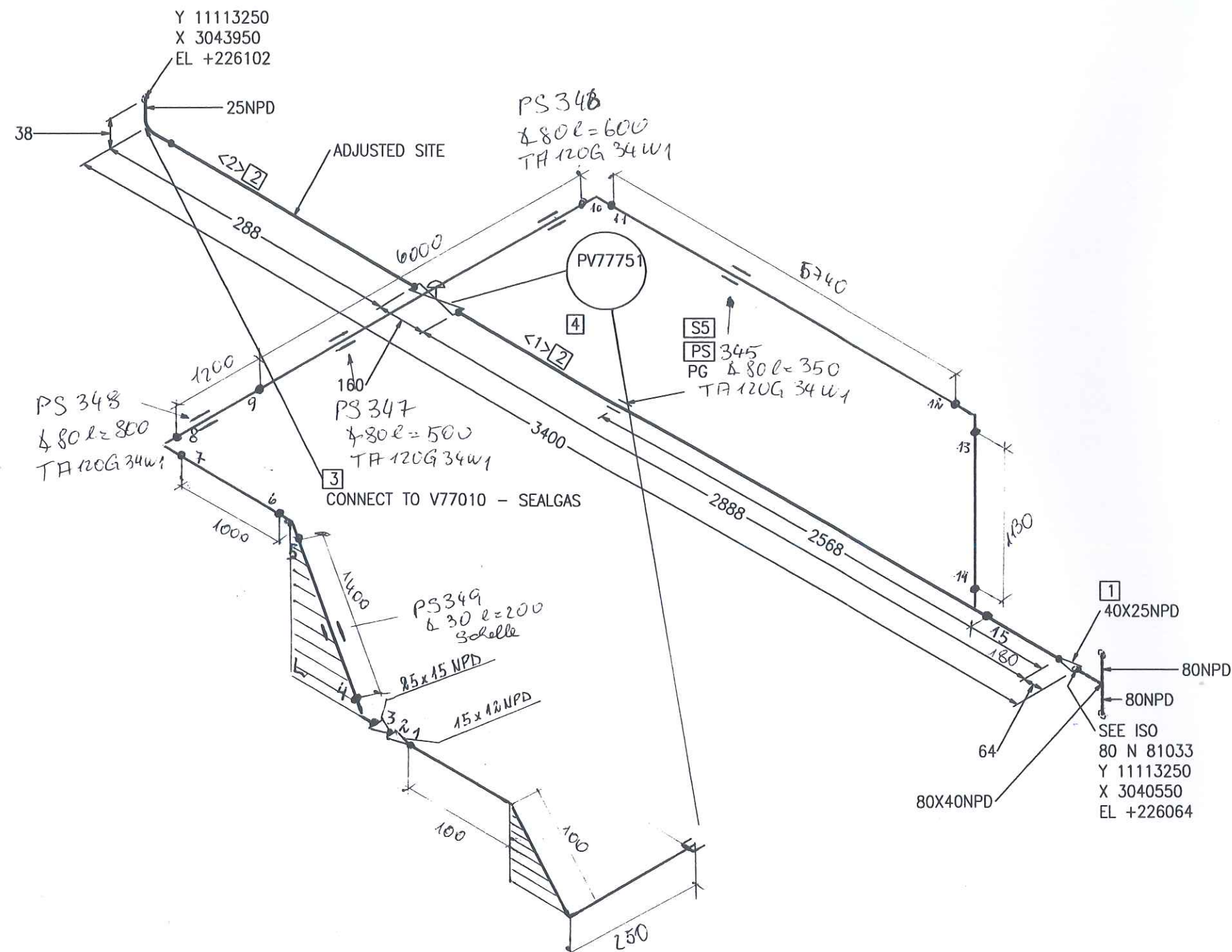
AS BUILT



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# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	40X25	REDUCER, CONCENTRIC, SEAMLESS 48.3*2.6/33.7*2.6, ST37.0, DIN 2616-1
2	3138 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
4	1	25	PV77751
5	1	25	PIPE GUIDE PSUPPORT

#### CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	2888	25		BEVEL	BEVEL	RN
<2>	250	25		BEVEL	BEVEL	RN

NUR ZUR INFORMATION  
FÜR INFORMATION

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

21 OCT. 2005

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 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
	Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 1
	Title: 25 N 81007 AA10C1792.878260		Drawing No:	Rev.

Rev.	Revisions	Date	Name	checked



Preis-Stückliste 0 25N81008AA10C1 0 25 N 81008 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GEV	12	0	Straight screw in connection		1,00				0,00
GW2	15	0	girth weld 1.0254 ( St 37.0 ) 21,3x2		1,00				0,00
GW40	12	0	GRITH WELD 1.4541		1,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		15,00				0,00
P0014	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	13,16				0,00
P0150	12	0	PIPE, SEAMLESS, ERMETO 1.4541	0,28 kg	0,55				0,00
P0155	12	0	BEND	0,02 kg	3,00				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	6,00				0,00
P1282	15	12	REDUCER, CONCENTRIC, SEAMLESS St35.8l	0,19 kg	1,00				0,00
P1284	40	25	REDUCER, CONCENTRIC, SEAMLESS St35.8l / DIN 2616-1/ 48,3x2,6/33,7x2,6	0,10 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
SC20	12	0	SEGMENT CUT		1,00				0,00
SC3	25	0	Segment cut 33,7		7,00				0,00
SPC01	25	0	PIPE CLAMP, DN 25 33,7		3,00				0,00
SPC02	300	0	PIPE CLAMP	16,00 kg	1,00				0,00

Preis-Stückliste 0 25N81008AA10C1 0 25 N 81008 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SPS350	0	0	SUPPORT PS-350, L 50, L=200	0,75 kg	1,00				0,00
Summe: 0 25N81008AA10C1 0				44,24 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	44,24 kg
Gesamtgewicht:	
** Ende der Ausgabe	

ASBUILT









VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

**Preis-Stückliste 0 15N81009AA10C1 0 15 N 81009 AA10C1 Revision:**

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GEV	12	0	Straight screw in connection		1,00				0,00
GW2	15	0	girth weld 1.0254 ( St 37.0 ) 21,3x2		13,00				0,00
GW40	12	0	GRITH WELD 1.4541		1,00				0,00
P0034	15	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 21,3x2	0,95 kg	8,66				0,00
P0150	12	0	PIPE, SEAMLESS, ERMETO 1.4541	0,28 kg	0,15				0,00
P0200	15	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 21,3x2	0,04 kg	6,00				0,00
P1282	15	12	REDUCER, CONCENTRIC, SEAMLESS St35.8l	0,19 kg	1,00				0,00
SC1	15	0	Segment cut 21,3		7,00				0,00
SC20	12	0	SEGMENT CUT		1,00				0,00
SCP01	15	0	PIPE CLAMP, RB10A 22 W3 HESTERBERG 21,3		5,00				0,00
SPS351	0	0	SUPPORT PS-351, L 40, L=100	0,24 kg	1,00				0,00
SPS352	0	0	SUPPORT PS-352, L 40, L=160	0,38 kg	2,00				0,00
SPS353	0	0	SUPPORT PS-353, U 100, L=2900	30,74 kg	1,00				0,00
Summe: 0 15N81009AA10C1 0				40,44 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

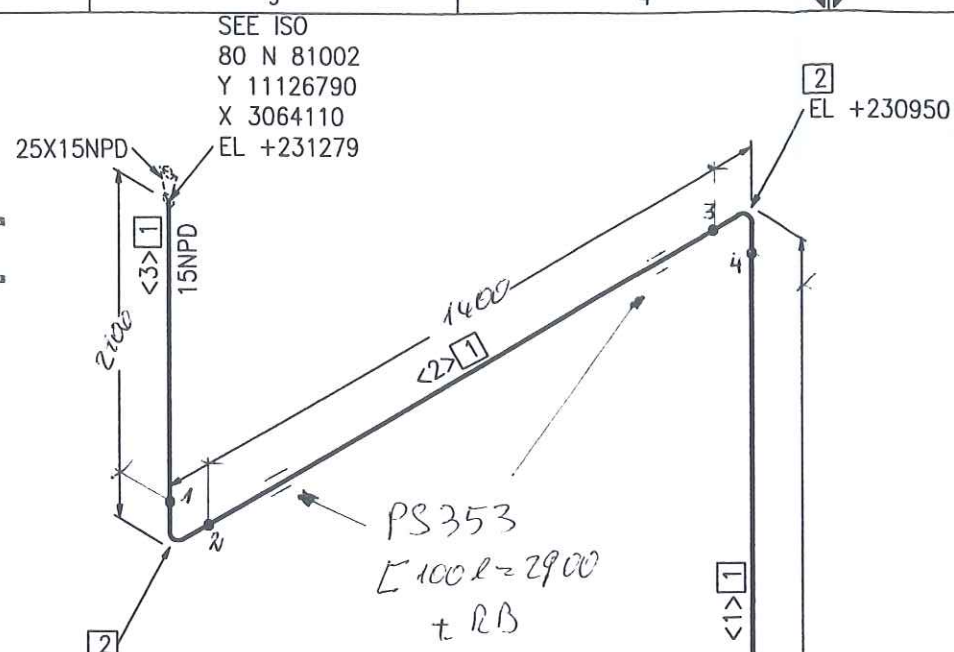
Preis-Stückliste 0 15N81009AA10C1 0 15 N 81009 AA10C1 Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Gesamtgewicht:				40,44 kg					
** Ende der Ausgabe									

AS BUILT

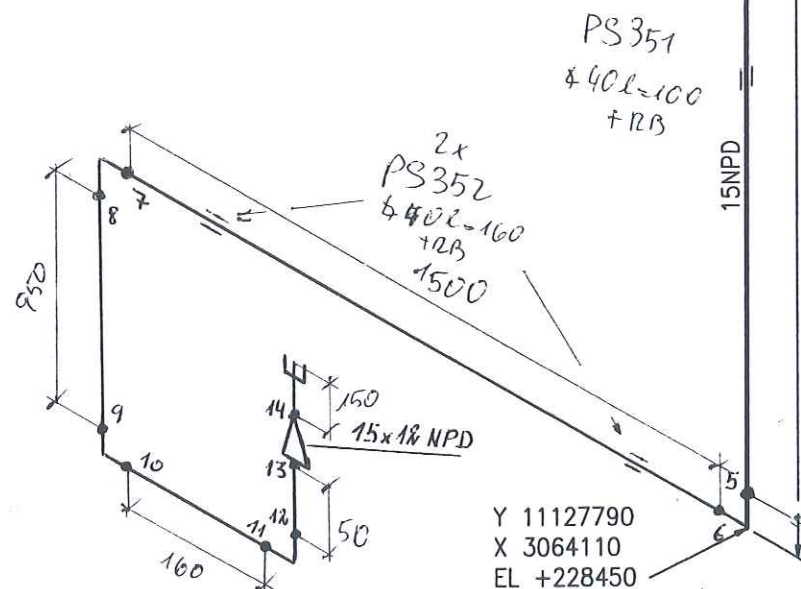


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# As built



ADJUSTED SITE



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	3717 MM	15	PIPE, SEAMLESS 21.3*2.0, ST37.0, DIN EN 10220
2	2	15	ELBOW, SEAMLESS, 1,5D 21.3*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>	2472	15		SQ.CUT	BEVEL	RN
<2>	944	15		BEVEL	BEVEL	RN
<3>	301	15		BEVEL	BEVEL	RN

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

	Date: 17-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: 15 N 81009 AA10C1792.878260		Drawing No: Rev.		

Rev.	Revisions	Date	Name	checked



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 40N81010AA10C1 0 40 N 81010 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
B0008	16	65	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,13 kg	8,00				0,00
B0507	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	8,00				0,00
B0516	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
G0099	40	0	Flat packings Graphite with CrNi-insert Standard 40002 92x2x49		2,00				0,00
GW10	40	0	girth weld 1.0254 ( St 37.0 ) 48,3x4		14,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		2,00				0,00
IF16751	40	0	F16751		1,00				0,00
P0005	40	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 48,3x2,6	2,93 kg	16,62				0,00
P0014	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	0,70				0,00
P0204	40	0	ELBOW 45 -BA3- SEAMLESS St35.81 /DIN 2605-1/ 48,3x2,6	0,26 kg	5,00				0,00

VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 40N81010AA10C1 0 40 N 81010 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P1284	40	25	REDUCER, CONCENTRIC, SEAMLESS St35.8I /DIN 2616-1/ 48,3x2,6/33,7x2,6	0,10 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	2,00				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
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	5,00				0,00
SC3	25	0	Segment cut 33,7		1,00				0,00
SC4	40	0	Segment cut 48,3		8,00				0,00
SPC04	40	0	PIPE CLAMP		1,00				0,00
SPS356	0	0	SUPPORT PS-356, H 100, L=330	6,73 kg	1,00				0,00
SPS357	0	0	SUPPORT PS-357, L 80, L=300	2,20 kg	1,00				0,00
SPS358	0	0	SUPPORT PS-358, U 80, L=900	11,14 kg	1,00				0,00
SPS359	0	0	SUPPORT PS-359, U 120, L=650	8,71 kg	1,00				0,00
SPS360	0	0	SUPPORT PS-360, L 50, L=800	3,01 kg	1,00				0,00
Summe: 0 40N81010AA10C1 0				127,88 kg		0,00	0,00		0,00

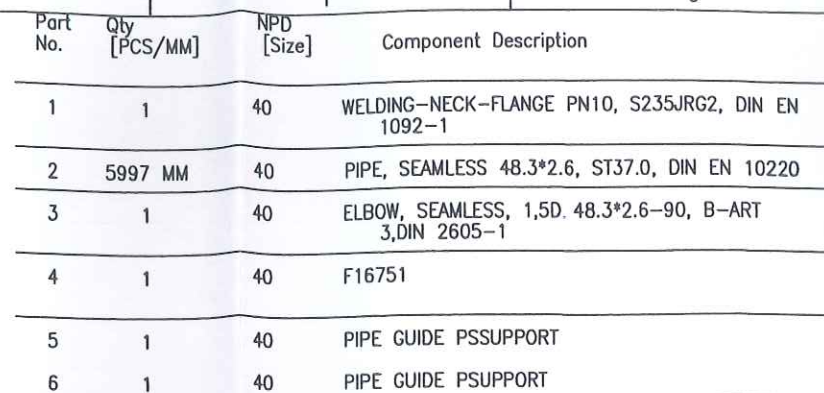
Liefersumme:	
Montagesumme:	
Gesamtsumme:	127,88 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT






# As built



NUR ZUR INFORMATION  
FOR INFORMATION ONLY

2 1 347 203

		Date:	Name:	Checked:	History file:
		17-OCT-2005	Lesum / HGH	05-10-20	
Job Code: K70101 Reference: ASU No. 9, Kosice				Scale	Original format
				---:--	DIN A3
Air Liquide AGS GmbH				Sheet: 1	Sheets: 1
Replaces: 79_	Title: 40 N.81010. AA10C1				Drawing No: 792.878260
Replaced by: 79_					



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 40N81013AA10C1 0 40 N 81013 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
GW10	40	0	girth weld 1.0254 ( St 37.0 ) 48,3x4		3,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		12,00				0,00
P0005	40	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 48,3x2,6	2,93 kg	7,75				0,00
P0014	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	21,99				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
P1284	40	25	REDUCER, CONCENTRIC, SEAMLESS St35.8 / DIN 2616-1/ 48,3x2,6/33,7x2,6	0,10 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
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	8,00				0,00
S0019	40	0	T-SUPPORT TA 40G 49 W1		1,00				0,00

VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 40N81013AA10C1 0 40 N 81013 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SC3	25	0	Segment cut 33,7		4,00				0,00
SC4	40	0	Segment cut 48,3		3,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		1,00				0,00
SPS361	0	0	SUPPORT PS-361, L 80, L=300	2,20 kg	2,00				0,00
SPS362	0	0	SUPPORT PS-362, L 50, L=100	0,37 kg	1,00				0,00
SPS363	0	0	SUPPORT PS-363, U 100, L=300	3,18 kg	4,00				0,00
SPS364	0	0	SUPPORT PS-364, U 120, L=300	10,22 kg	3,00				0,00
Summe: 0 40N81013AA10C1 0				177,44 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

\*\* Ende der Ausgabe

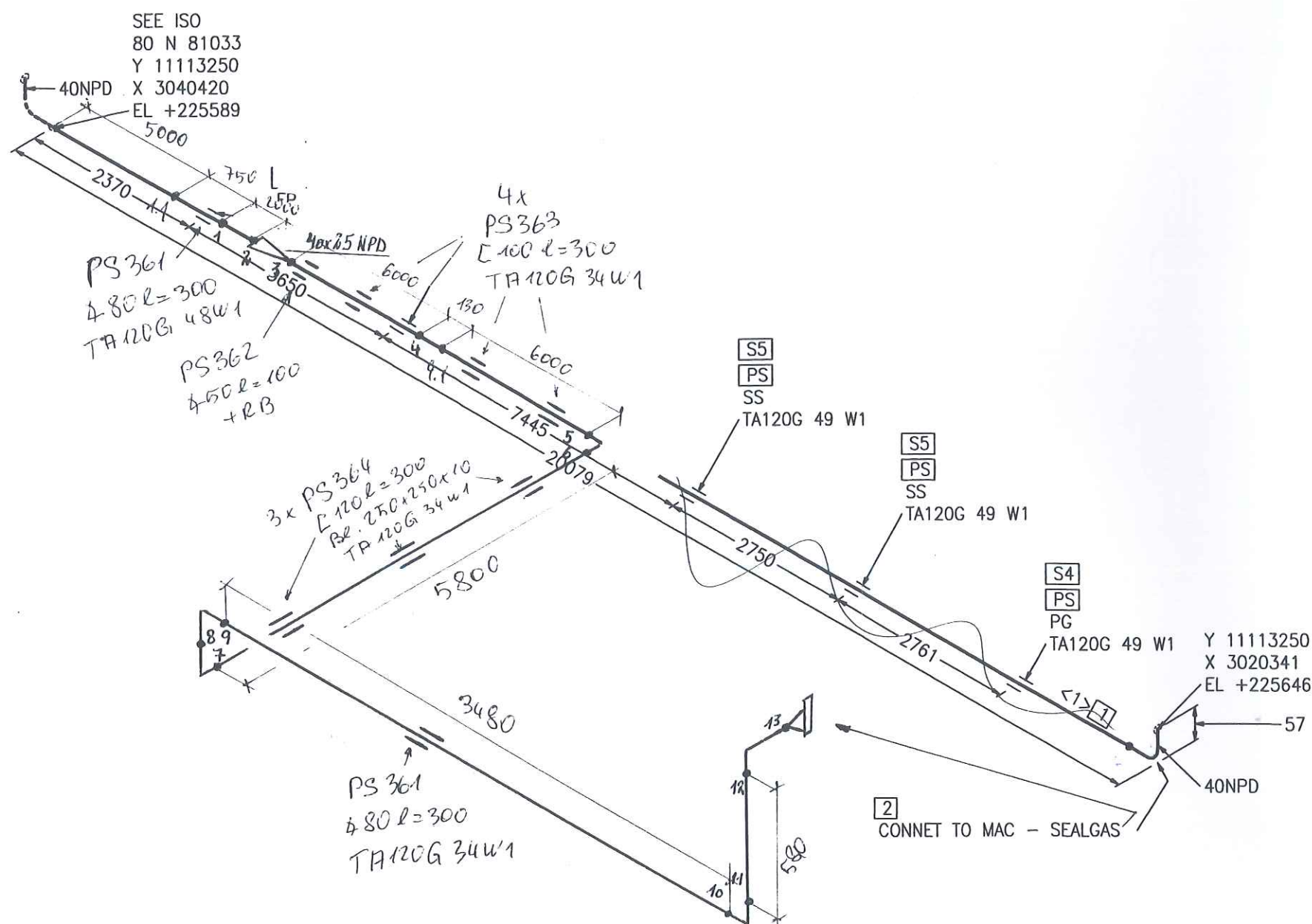
177,44 kg

AS BUILT





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As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	20021 MM	40	PIPE, SEAMLESS 48.3*2.6, ST37.0, DIN EN 10220
2	1	40	ELBOW, SEAMLESS, 1,5D 48.3*2.6-90, B-ART 3,DIN 2605-1
3	1	40	FIX POINT PSUPPORT
4	2	40	PIPE GUIDE PSUPPORT
5	2	40	SLIDE SUPPORT PSUPPORT

#### CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	20021	40		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 PIPIBRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT



Air Liquide AGS GmbH

Rev.	Revisions	Date	Name	checked

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

Date:	Name:	Checked:	History file:
17-OCT-2005	Lesum / HGH	05-10-20	
Job Code: K70101		Scale	Original format
Reference: ASU No. 9, Kosice		---	DIN A3
Title:		Sheet: 1	Sheets: 1
40 N 81013 AA10C1792.878260		Drawing No:	Rev.



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25081020ZB16C1 0 25 O 81020 ZB16C1 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	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
GW1	15	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 21,3x1,6		1,00				0,00
GW4	25	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 33,7x2		34,00				0,00
P0131	25	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 33,7x2	1,58 kg	56,42				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	12,00				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
P1742	25	15	REDUCER, CONCENTRIC, WELDED 1.4541		1,00				0,00
P2994	25	0	WELDING NECK FLANGES, PN 16 1.4541 /DIN 2633/	1,00 kg	1,00				0,00
S0039	25	0	T-support, 1.4541, TA 120G 34 W3 1.4 Hesterberg 34	7,60 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		17,00				0,00

VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25O81020ZB16C1 0 25 O 81020 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		19,00				0,00
SPS369	0	0	SUPPORT PS-369, L 50, L=100	0,37 kg	2,00				0,00
SPS370	0	0	SUPPORT PS-370, L 50, L=100	1,13 kg	1,00				0,00
SPS371	0	0	SUPPORT PS-371, L 50, L=200	0,75 kg	2,00				0,00
Summe: 0 25O81020ZB16C1 0				102,65 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

\*\* Ende der Ausgabe

102,65 kg

AS BUILT



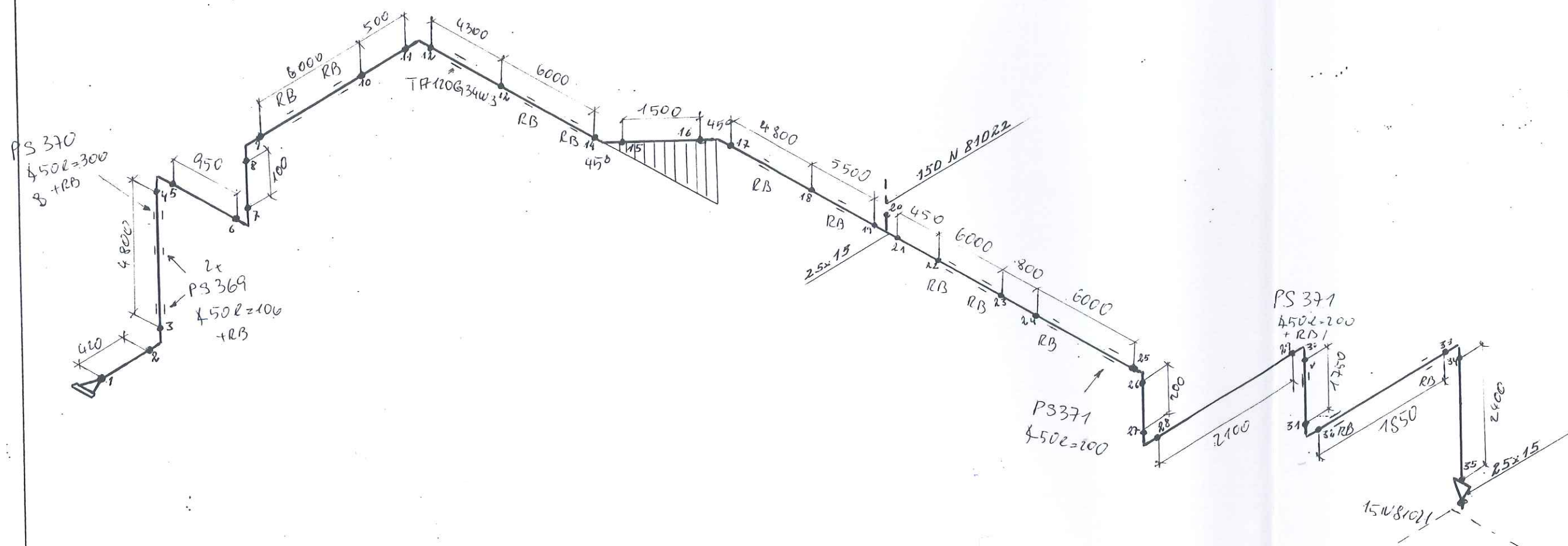
	<b>SCHWEISSDOKUMENTATION</b> WELDING DOCUMENTATION		erstellt: <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">21.02.06</div> </div> Pelzeder Erich <small>Datum / Unterschrift</small>	geprüft Schweißtechnologie VAM <small>Datum / Unterschrift</small>	(Kunde / TÜV, ...)
Jop Code: K70101 ASU No. 9, Kosice		Order No.:			
Client: AIR LIQUIDE		Title: 25 N 81020		Project No.: 9050300	
		Sheet 1		Drawing No.: 792.87826 - 00	
				Maker's No.:	

Seam No.:		Welder No.:	Material	Dimension	Wärmebehandlung	RT	UT	MT/PT	SP	Remerk
1		V4	ST37.0	33,7*2,6						
2		V4	ST37.0	33,7*2,6						
3		V4	ST37.0	33,7*2,6						
4		V4	ST37.0	33,7*2,6						
5		V4	ST37.0	33,7*2,6						
6		V4	ST37.0	33,7*2,6						
7		V4	ST37.0	33,7*2,6						
8		V4	ST37.0	33,7*2,6						
9		V4	ST37.0	33,7*2,6						
10		V4	ST37.0	33,7*2,6						
11		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	33,7*2,6						
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	21,3*2						
21		V4	ST37.0	33,7*2,6						
22		V4	ST37.0	33,7*2,6						
23		V4	ST37.0	33,7*2,6						
24		V4	ST37.0	33,7*2,6						
25		V4	ST37.0	33,7*2,6						
26		V4	ST37.0	33,7*2,6						
27		V4	ST37.0	33,7*2,6						





# As built



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				

 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:				Drawing No:		Rev.
Replaces: 79----- Replaced by: 79-----	2508102D, 2B16C1, 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 15081021ZB16C1 0 15 O 81021 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GEV	12	0	Straight screw in connection		1,00				0,00
GW1	15	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 21,3x1,6		4,00				0,00
GW40	12	0	GRITH WELD 1.4541		1,00				0,00
P0129	15	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 21,3x1,6	0,79 kg	0,20				0,00
P0150	12	0	PIPE, SEAMLESS, ERMETO 1.4541	0,28 kg	1,55				0,00
P0155	12	0	BEND	0,02 kg	4,00				0,00
P0994	15	15	Tee made of welded pipe 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 21,3x1,6x21,3x1,6	0,05 kg	1,00				0,00
P1745	15	12	REDUCER, CONCENTRIC, WELDED 1.4541		1,00				0,00
SC1	15	0	Segment cut 21,3		1,00				0,00
SC20	12	0	SEGMENT CUT		1,00				0,00
SCP01	15	0	PIPE CLAMP, RB10A 22 W3 HESTERBERG 21,3		1,00				0,00
SPS372	0	0	SUPPORT PS-372, L 40, L=120	0,29 kg	1,00				0,00
			Summe: 0 15081021ZB16C1 0	1,01 kg		0,00	0,00		0,00

Liefersumme:  
Montagesumme:  
Gesamtsumme:  
Gesamtgewicht: 1,01 kg

AS BUILT



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

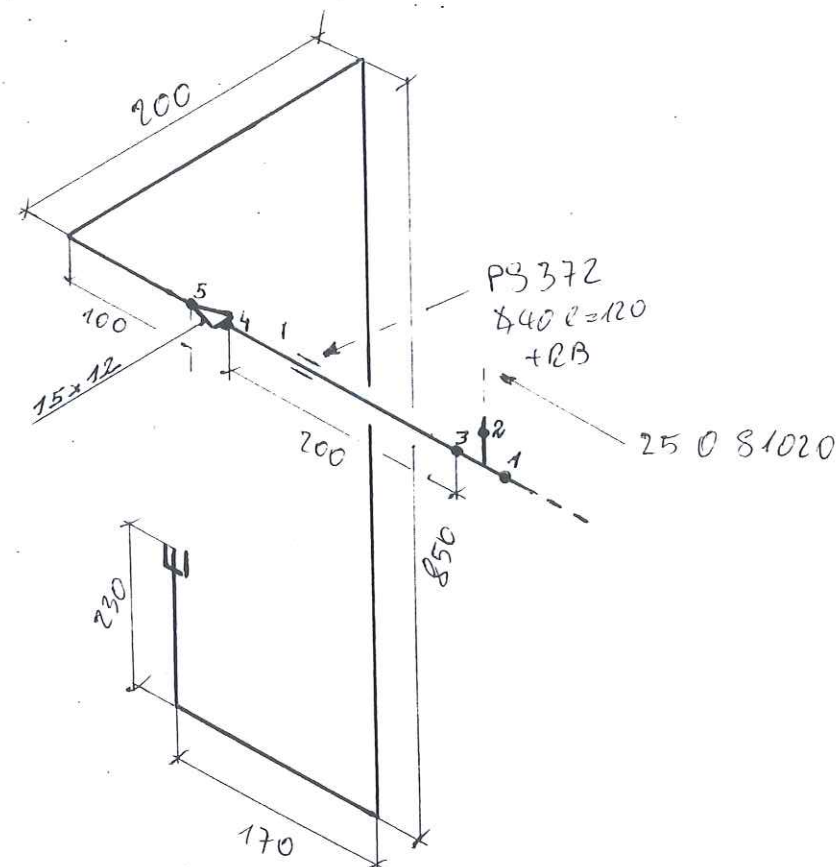
Preis-Stückliste 0 15081021ZB16C1 0 15 O 81021 ZB16C1 Revision:						
Teilenummer	NW1 NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage
** Ende der Ausgabe					L + M	Gesamt

AS BUILT

[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 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	Date:	23-JUN-2005	Name:	Lesum / HGH	Checked:	05-07-11	History file:
	Job Code:	K70101			Scale:	1:1	
Replaces:	79_----	Reference:	ASU No. 9. Kosice			Original format:	DIN A3
Replaced by:	79_----	Title:	1:50' 81021 2B-16C1			Sheet:	1
					Drawing No:	792.8782600	Rev.

VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 15081022ZB16C1 0 15 O 81022 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GEV	12	0	Straight screw in connection		1,00				0,00
GW1	15	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 21,3x1,6		20,00				0,00
GW40	12	0	GRITH WELD 1.4541		1,00				0,00
P0131	25	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 33,7x2	1,58 kg	17,20				0,00
P0150	12	0	PIPE, SEAMLESS, ERMETO 1.4541	0,28 kg	0,15				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	10,00				0,00
P1745	15	12	REDUCER, CONCENTRIC, WELDED 1.4541		1,00				0,00
SC1	15	0	Segment cut 21,3		10,00				0,00
SC20	12	0	SEGMENT CUT		1,00				0,00
SCP01	15	0	PIPE CLAMP, RB10A 22 W3 HESTERBERG 21,3		4,00				0,00
SPS373	0	0	SUPPORT PS-373, L 50, L=250	0,94 kg	1,00				0,00
SPS374	0	0	SUPPORT PS-374, L 50, L=150	0,56 kg	2,00				0,00
SPS375	0	0	SUPPORT PS-375, U 100, L=1250	13,25 kg	1,00				0,00
SPS376	0	0	SUPPORT PS-376, L 40, L=550	1,33 kg	1,00				0,00
Summe: 0 15081022ZB16C1 0				44,76 kg		0,00	0,00		0,00

Liefersumme:  
Montagesumme:

AS BUILT



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 15O81022ZB16C1 0 15 O 81022 ZB16C1 Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Gesamtsumme:				44,76 kg					
Gesamtgewicht:									
** Ende der Ausgabe									

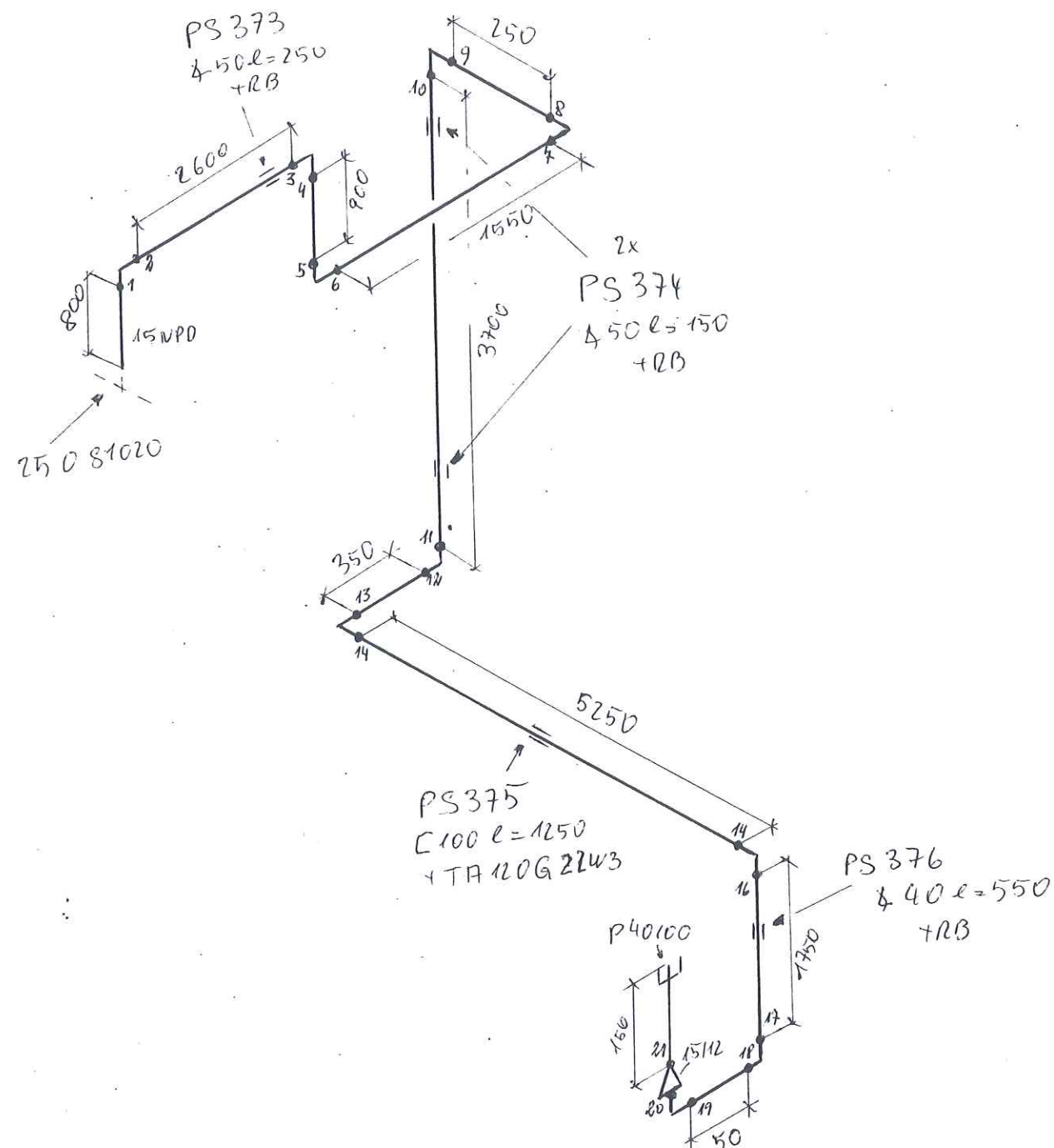
44,76 kg

AS BUILT





# 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 al valva  
 - 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:	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 81022 2B.16C1 792.87826 00		

VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25N81025AA10C1 0 25 N 81025 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
B0516	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		2,00				0,00
GEV1	16	0	STRAIGHT SCREW IN CONNECTION		1,00				0,00
GW1	15	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 21,3x1,6		1,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		31,00				0,00
IR24150	25	0	R24150		1,00				0,00
IV24150	25	0	V24150		1,00				0,00
IZ24155	25	0	Z24155		1,00				0,00
P0035	16	0	PIPE, SEAMLESS, ERMETO 1.4541	1,02 kg	0,10				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	11,20				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	10,00				0,00
P0708	25	25	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 33,7x2,6x33,7x2,6	0,19 kg	2,00				0,00
P1524	25	15	Reducer, concentric, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6x21,3x2	0,08 kg	1,00				0,00



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25N81025AA10C1 0 25 N 81025 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P2935	25	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 33,7	1,00 kg	2,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	2,00				0,00
SC21	16	0	SEGMENT CUT		1,00				0,00
SC3	25	0	Segment cut 33,7		14,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
SPS365	0	0	SUPPORT PS-365, L 40, L=200	0,48 kg	1,00				0,00
SPS366	0	0	SUPPORT PS-366, L 40, L=300	0,72 kg	2,00				0,00
XZB09	25	0	HOLLÄNDER 5.6		1,00				0,00
XZB12	25	0	THREAD END 5.6 33,7		1,00				0,00
XZB29	20	0	MUFFEN 5.6		1,00				0,00
Summe: 0 25N81025AA10C1 0				43,77 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

\*\* Ende der Ausgabe

43,77 kg

AS BUILT

	<b>SCHWEISSDOKUMENTATION</b> WELDING DOCUMENTATION		erstellt:  Pelzeder Erich Datum / Unterschrift	geprüft Schweißtechnologie VAM Datum / Unterschrift	(Kunde / TÜV, ...)
Jop Code: K70101 ASU No. 9, Kosice		Order No.:		Project No.: 9050300	
Client: AIR LIQUIDE		Title: 25 N 81025		Drawing No.: 792.87826 - 00	
		Sheet 1		Maker's No.:	

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:				Remerk
				Wärmebehandlung	RT	UT	MT/PT	
1	V4	ST37.0	33,7*2,6		R0364			
2	V4	ST37.0	33,7*2,6					
3	V4	ST37.0	33,7*2,6					
4	V4	ST37.0	33,7*2,6					
5	V4	ST37.0	33,7*2,6					
6	V4	ST37.0	33,7*2,6		R0365			
7	V4	ST37.0	33,7*2,6		R0366			
8	V4	ST37.0	33,7*2,6		R0367			
9	V4	ST37.0	33,7*2,6		R0368			
10	V4	ST37.0	33,7*2,6		R0369			
11	V4	ST37.0	33,7*2,6		R0370			
12	V4	ST37.0	33,7*2,6		R0371			
13	V4	ST37.0	33,7*2,6		R0372			
14	V4	ST37.0	33,7*2,6		R0373			
15	V4	ST37.0	33,7*2,6					
16	V4	ST37.0	33,7*2,6					
17	V4	ST37.0	33,7*2,6					
18	V4	ST37.0	33,7*2,6		R0374			
19	V4	ST37.0	33,7*2,6		R0375			
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	33,7*2,6					
24	V4	ST37.0	33,7*2,6					
25	V4	ST37.0	33,7*2,6					
26	V4	ST37.0	33,7*2,6		R0376			
27	V4	ST37.0	33,7*2,6		R0377			





 N

~~25NPD~~

$$\frac{1}{\sqrt{1}}$$

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\_-----

Date:	Name:	Checked:	History file:
17-OCT-2005	Lesum / HGH	05-10-20 <i>zh</i>	
Job Code: K70101		Scale -- : --	Original format DIN A3
Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 1
Title:		Drawing No:	
25 N 81025 AA10C1		792.878260	

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 = $\pm 0,00$

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description			
1	462 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	ITEM CODE
<1>	462	25		SQ.CUT	BEVEL	RN



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25N81026AA10C1 0 25 N 81026 AA10C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0003	12	70	HEXAGON HEAD SCREWS 5.6		4,00				0,00
B0516	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		2,00				0,00
GEV1	16	0	STRAIGHT SCREW IN CONNECTION		1,00				0,00
GW1	15	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 21,3x1,6		1,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		19,00				0,00
IR24250	25	0	R24250		1,00				0,00
IV24250	25	0	V24250		1,00				0,00
IZ24255	25	0	Z24255		1,00				0,00
P0035	16	0	PIPE, SEAMLESS, ERMETO 1.4541	1,02 kg	0,10				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	4,40				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	3,00				0,00
P0708	25	25	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 33,7x2,6x33,7x2,6	0,19 kg	2,00				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

Preis-Stückliste 0 25N81026AA10C1 0 25 N 81026 AA10C1 Revision:

(Fortsetzung)										
Teilenummer	NW1	NW2	Teilebezeichnung		Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P2935	25	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 33,7		1,00 kg	2,00				0,00
SC21	16	0	SEGMENT CUT			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			3,00				0,00
SPS367	0	0	SUPPORT PS-367, L 40, L=200		0,48 kg	1,00				0,00
SPS368	0	0	SUPPORT PS-368, L 40, L=350		0,84 kg	2,00				0,00
XZB09	25	0	HOLLÄNDER 5.6			1,00				0,00
XZB12	25	0	THREAD END 5.6 33,7			1,00				0,00
XZB27	25	0	MUFFEN 5.6			1,00				0,00
Summe: 0 25N81026AA10C1 0					13,92 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:




Gesamtgewicht:

\*\* Ende der Ausgabe

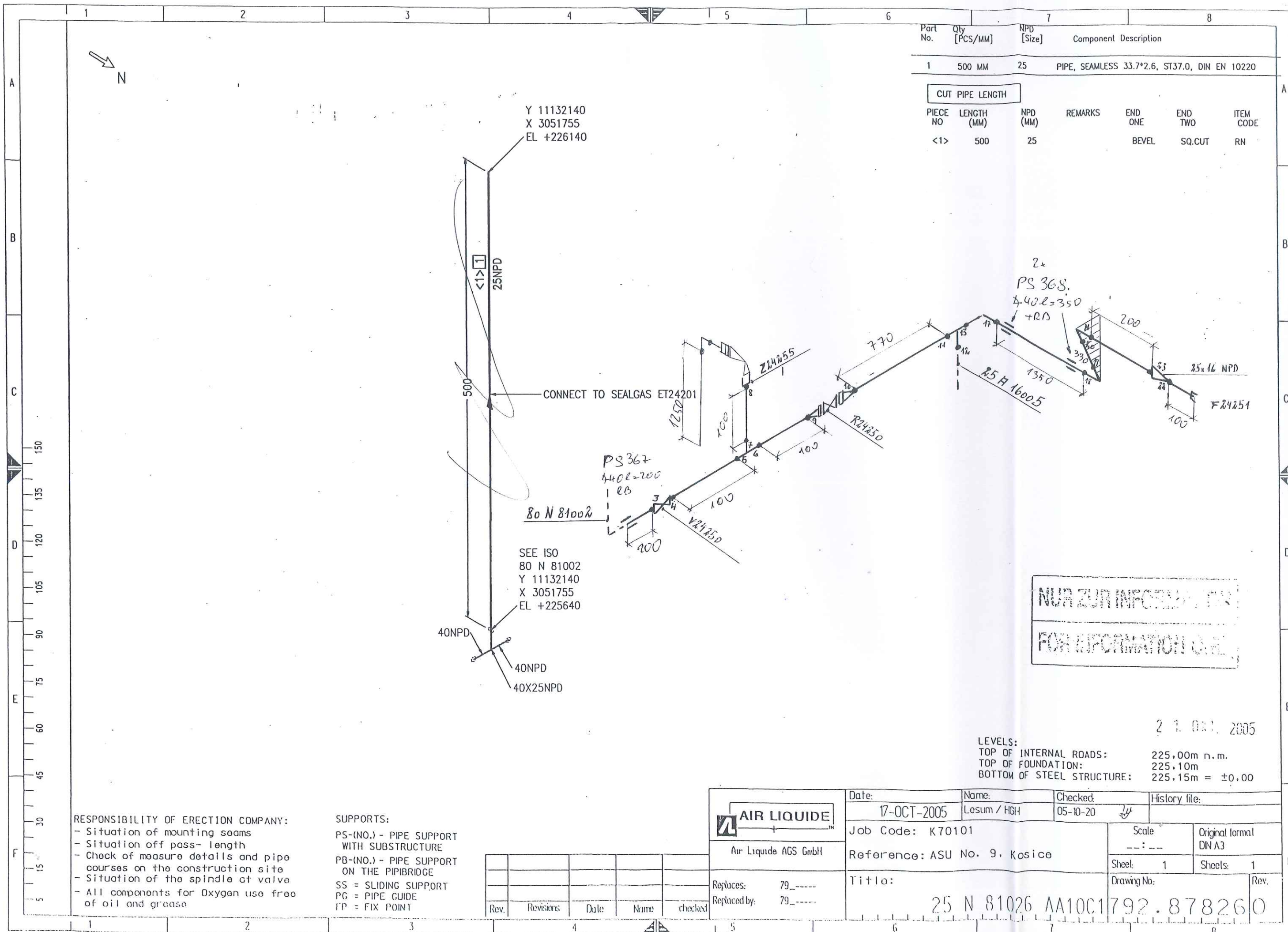
13,92 kg

AS BUILT



	<b>SCHWEISSDOKUMENTATION</b> WELDING DOCUMENTATION		erstellt:  Pelzeder Erich Datum / Unterschrift	geprüft Schweisstechnologie VAM Datum / Unterschrift	(Kunde / TÜV, ...) 
	Prot. Nr.				
Jop Code: K70101 Client: AIR LIQUIDE	ASU No. 9, Kosice Title: 25 N 81026	Order No.: Sheet 1	Project No.: 9050300 792.87826 - 00	Maker's No.:	

[illegible]





VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDERVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 15081028ZB16C1 0 15 O 81028 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GEV	12	0	Straight screw in connection		1,00				0,00
GW1	15	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 21,3x1,6		1,00				0,00
GW40	12	0	GRITH WELD 1.4541		1,00				0,00
P0131	25	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 33,7x2	1,58 kg	2,20				0,00
P0150	12	0	PIPE, SEAMLESS, ERMETO 1.4541	0,28 kg	1,75				0,00
P0155	12	0	BEND	0,02 kg	4,00				0,00
P1745	15	12	REDUCER, CONCENTRIC, WELDED 1.4541		1,00				0,00
SC1	15	0	Segment cut 21,3		1,00				0,00
SC20	12	0	SEGMENT CUT		1,00				0,00
SCP01	15	0	PIPE CLAMP, RB10A 22 W3 HESTERBERG 21,3		1,00				0,00
SPS377	0	0	SUPPORT PS-377, L 40, L=120	0,29 kg	1,00				0,00
			Summe: 0 15081028ZB16C1 0	4,34 kg		0,00	0,00		0,00

Liefersumme:  
Montagesumme:  
Gesamtsumme:  
Gesamtgewicht:  
\*\* Ende der Ausgabe

4,34 kg

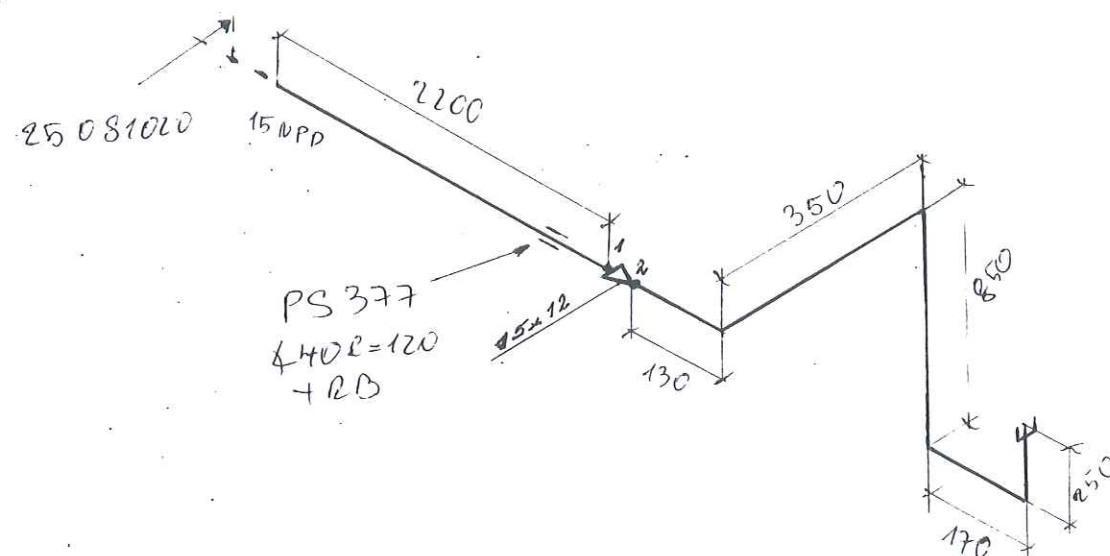
AS BUILT







# As built



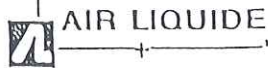

RESPONSIBILITY OF ERECTION COMPANY:

- 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.	Revisors	Date	Name	checked
-C				
-D				
-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, Kosice			Sheet: 1	Sheets: 1
	Title: 15N81028 2B16 C1			Drawing No: 792.87826	Rev. 00

VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 80N81033AA10C1 0 80 N 81033 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
B0517	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	16,00				0,00
G0103	80	0	Flat packings Graphite with CrNi-insert Standard 40002 142x2x90		2,00				0,00
GW16	80	0	girth weld 1.0254 ( St 37.0 ) 88,9x3,2		21,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		3,00				0,00
GW9	40	0	girth weld 1.0254 ( St 37.0 ) 48,3x2,6		4,00				0,00
IV81009	80	0	V81009 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	0,10				0,00
P0048	80	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 88,9x3,2	6,76 kg	29,80				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
P0207	80	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 88,9x3,2	1,21 kg	7,00				0,00
P0728	80	40	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 88,9x3,2x48,3x2,6	1,31 kg	3,00				0,00



Preis-Stückliste 0 80N81033AA10C1 0 80 N 81033 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P1450	80	40	REDUCER, CONCENTRIC, SEAMLESS St35.8I / DIN 2616-2/ 88,9x3,2/48,3x2,6	0,50 kg	1,00				0,00
P2940	80	0	Welding neck flanges; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 88,9	4,00 kg	2,00				0,00
S0008	80	0	T-support TA 120B 89 W1 OZN 1.0 Hesterberg 89	4,10 kg	3,00				0,00
S0020	80	0	T-support TA 120G 89 W1 OZN 1.0 Hesterberg 89	8,70 kg	4,00				0,00
SC4	40	0	Segment cut 48,3		1,00				0,00
SC6	80	0	Segment cut 88,9		12,00				0,00
Summe: 0 80N81033AA10C1 0				272,56 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	272,56 kg
Gesamtgewicht:	
** Ende der Ausgabe	

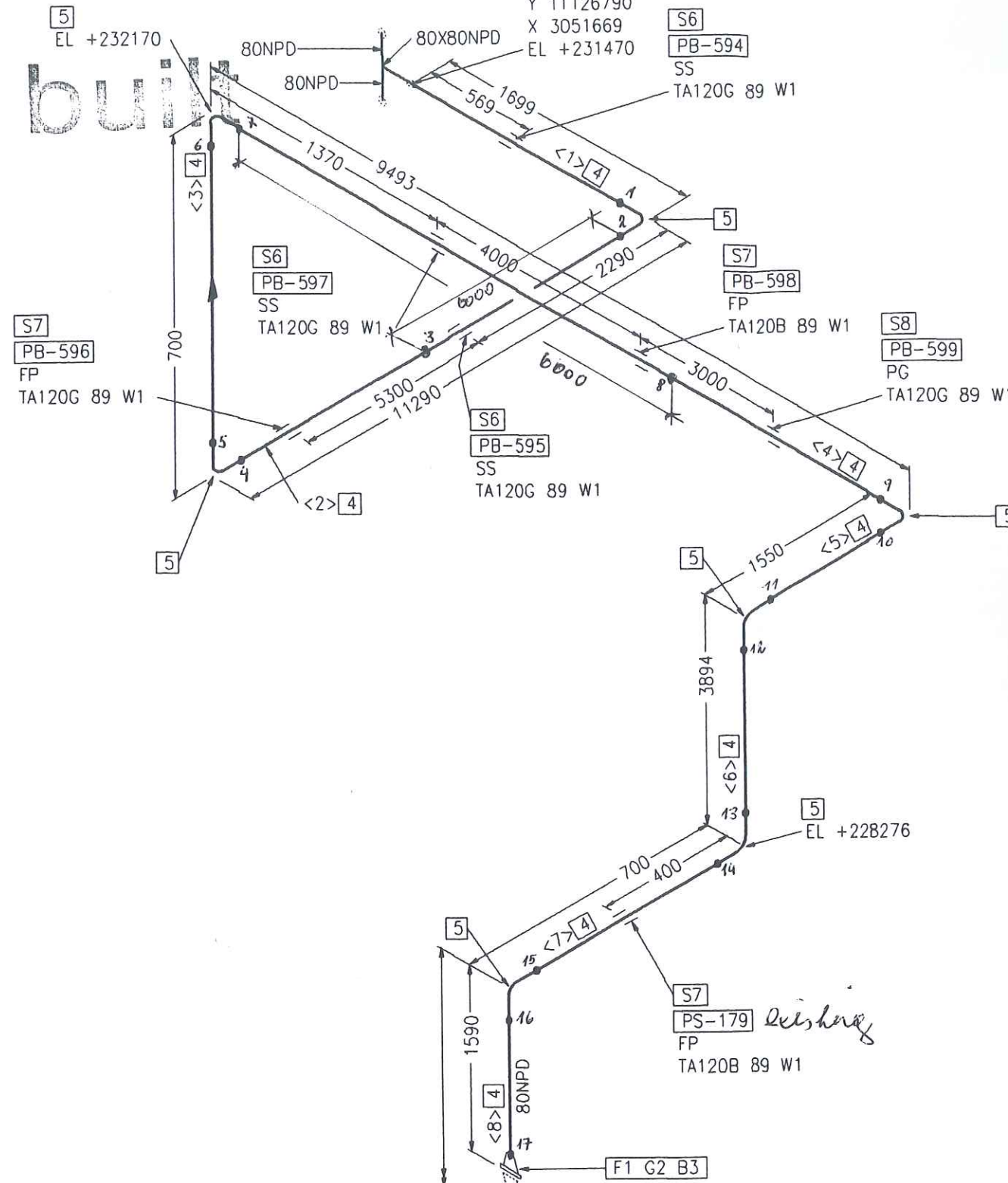
AS BUILT





N

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	80	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
2	1	80	FLAT GASKET
3	8	16	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 65.0MM LANG
4	29270 MM	80	PIPE, SEAMLESS 88.9*3.2, ST37.0, DIN EN 10220
5	7	80	ELBOW, SEAMLESS, 1.5D 88.9*3.2-90, B-ART 3, DIN 2605-1
6	3	80	SLIDE SUPPORT PSUPPORT
7	3	80	FIX POINT PSUPPORT
8	1	80	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	1585	80		BEVEL	BEVEL	RN
<2>	11062	80		BEVEL	BEVEL	RN
<3>	472	80		BEVEL	BEVEL	RN
<4>	9265	80		BEVEL	BEVEL	RN
<5>	1322	80		BEVEL	BEVEL	RN
<6>	3666	80		BEVEL	BEVEL	RN
<7>	472	80		BEVEL	BEVEL	RN
<8>	1426	80		BEVEL	BEVEL	RN

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	checked

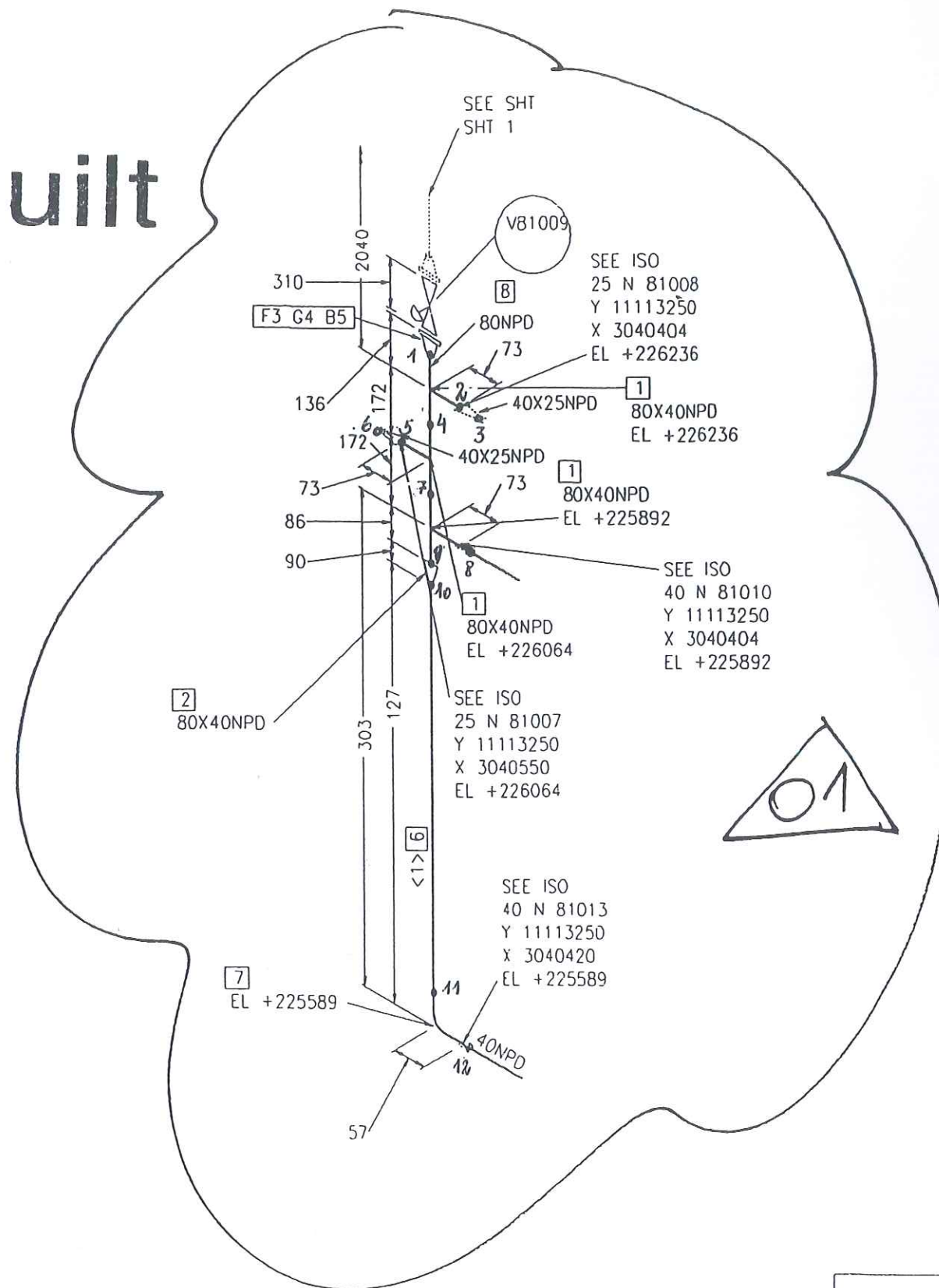
<b>AIR LIQUIDE</b> Air Liquide AGS GmbH	Date:	24-AUG-2005	Name:	Lesum / HGH	Checked:	05-09-15	History file:
	Job Code: K70101				Scale	Original format	
	Reference: ASU No. 9, Kosice				Sheet: 1	Sheets: 2	
	Title:				Drawing No.		
Replaces: 79_----- Replaced by: 79_-----				80 N 81033 AA10C1792.8782601			

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

[illegible]



↓  
N



CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	70	40	:	BEVEL	BEVEL	RN

LEVELS:

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

- 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 PIPBRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT

01	General Rev	15.01.2005	Les	Zul
Rev	Revisions	Date	Name	checke



Air Liquide AGS GmbH

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

Date:	Name:	Checked:	History file	
24-AUG-2005	Lesum / HGH	05-09-15		
Job Code: K70101		Scale	Original format	
Reference: ASU No. 9. Kosice		Sheet: 2	DIN A3	
Title:		Drawing No.	Rev	
80 N 81033 AA10C1		792.878260		

Preis-Stückliste 0 100S84002BA25C1-W 0 100 S 84002 BA25C1-W 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	32,00				0,00
B0169	20	95	Screw bolts 24 CrMo 5 ( 1.7258 ) DIN 267-13	0,20 kg	16,00				0,00
B0502	20	0	Hexagon head nuts Ck 35 ( 1.1181 ) DIN 267-13	0,06 kg	48,00				0,00
G0105	100	0	Flat packings Graphite with CrNi-insert Standard 40002 168x2x115		7,00				0,00
GW19	100	0	girth weld 1.0305 ( St 35.8 I ) 114,3x3,6		53,00				0,00
IV85025	100	0	V85025 supplied by AGS		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	0,30				0,00
P0063	100	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 114,3x3,6	9,83 kg	95,90				0,00
P0219	100	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 114,3x6,3	4,01 kg	15,00				0,00
P0736	100	100	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 114,3x3,6x114,3x3,6	2,54 kg	1,00				0,00
P0816	100	100	Tee made of seamless pipe 1.0305 ( St 35.8 I ) DIN 2609 114,3x6,3x114,3x6,3	5,91 kg	2,00				0,00
P2973	100	0	WELDING NECK FLANGES; PN 40 C22.8 ( 1.0460 ) DIN 2519 114,3	6,50 kg	6,00				0,00



Preis-Stückliste 0.100S84002BA25C1-W 0 100 S 84002 BA25C1-W Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P2973_A	100	0	WELDING NECK FLANGES, PN 40 C22.8		1,00				0,00
P3120	100	0	BLIND FLANGES; PN 40 C22.8 /DIN 2527/	7,50 kg	3,00				0,00
PW18	100	25	Pipe weld-in 1.0305 ( St 35.8 I ) 114,3x3,6x33,7x2,6		3,00				0,00
S0009	100	0	T-support TA 120B 115 W1 OZN 1.0 Hesterberg 115	4,50 kg	1,00				0,00
S0009257	100	0	T-support TA 120B 115 W1 OZN, H2 = 257 1.0 Hesterberg	4,50 kg	1,00				0,00
S0009275	100	0	T-support TA 120B 115 W1 OZN, H2 = 275 1.0 Hesterberg	4,50 kg	1,00				0,00
S0021	100	0	T-support TA 120G 115 W1 OZN 1.0 Hesterberg 115	10,70 kg	5,00				0,00
S0021189	100	0	T-support TA 120G 115 W1 OZN, H2 = 189 1.0 Hesterberg	10,70 kg	2,00				0,00
S0021198	100	0	T-support TA 120G 115 W1 OZN, H2 = 198 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021202	100	0	T-support TA 120G 115 W1 OZN, H2 = 202 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021209	100	0	T-support TA 120G 115 W1 OZN, H2 = 209 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021216	100	0	T-support TA 120G 115 W1 OZN, H2 = 216 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021217	100	0	T-support TA 120G 115 W1 OZN, H2 = 217 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021223	100	0	T-support TA 120G 115 W1 OZN, H2 = 223 1.0 Hesterberg	10,70 kg	1,00				0,00

Preis-Stückliste 0 100S84002BA25C1-W 0 100 S 84002 BA25C1-W Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
S0021232	100	0	T-support TA 120G 115 W1 OZN, H2 = 232 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021236	100	0	T-support TA 120G 115 W1 OZN, H2 = 236 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021238	100	0	T-support TA 120G 115 W1 OZN, H2 = 238 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021245	100	0	T-support TA 120G 115 W1 OZN, H2 = 245 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021249	100	0	T-support TA 120G 115 W1 OZN, H2 = 249 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021253	100	0	T-support TA 120G 115 W1 OZN, H2 = 253 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021260	100	0	T-support TA 120G 115 W1 OZN, H2 = 260 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021268	100	0	T-support TA 120G 115 W1 OZN, H2 = 268 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021269	100	0	T-support TA 120G 115 W1 OZN, H2=269 1.0 Hesterberg 115	10,70 kg	1,00				0,00
S0021284	100	0	T-support TA 120G 115 W1 OZN, H2 = 284 1.0 Hesterberg	10,70 kg	1,00				0,00
S0108	100	0	T-support TA 120H 115 W1 OZN 1.0 Hesterberg 115	10,70 kg	4,00				0,00
S0108272	100	0	T-support TA 120H 115 W1 OZN, H2 = 272 1.0 Hesterberg	10,70 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		3,00				0,00
SC7	100	0	Segment cut 114,3		22,00				0,00
SPS182	0	0	SUPPORT PS-182	19,75 kg	1,00				0,00



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 100S84002BA25C1-W 0 100 S 84002 BA25C1-W Revision:

(Fortsetzung)

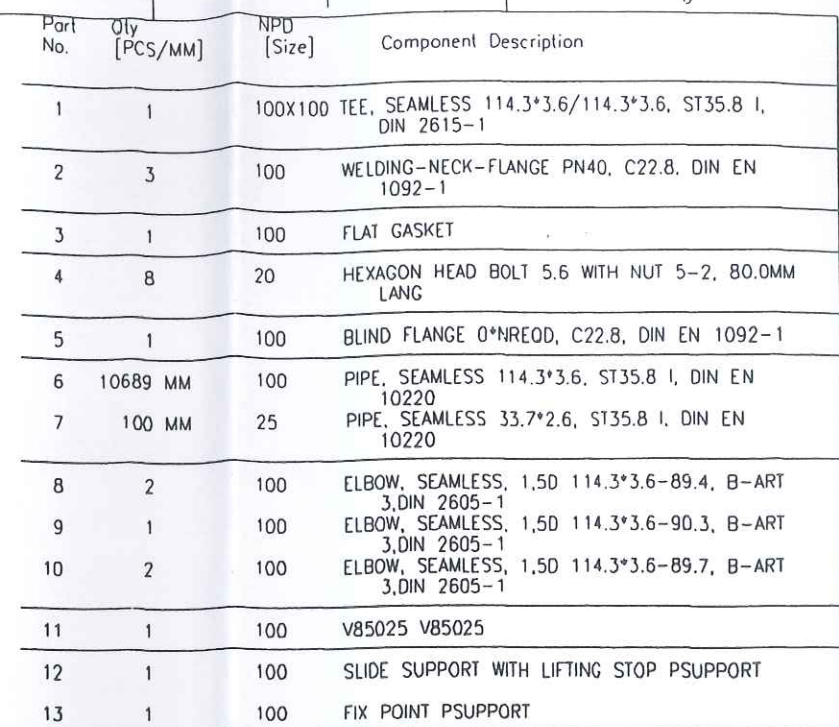
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SPS183	0	0	SUPPORT PS-183	66,06 kg	1,00				0,00
Summe: 0 100S84002BA25C1-W 0				1.492,61 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	1.492,61 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 = $\pm 0.00$

 <b>AIR LIQUIDE</b> Air Liquide AGS GmbH	Date:	Name:	Checked:	History file.
	24-AUG-2005	Lesum / HGH	05-09-15	
	Job Code: K70101		Scale _ _ _ _	Original format DIN A3
	Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 4
Replaces: 79_ _ _ _ _ Replaced by: 79_ _ _ _ _	Title: 100 S 84002 BA25C1W		Drawing No. 792.87826	Rev. 01



100-S-84.002-BA25C1-

Z= 226295

PS-182

FP

Z= 226110

Z= 225150

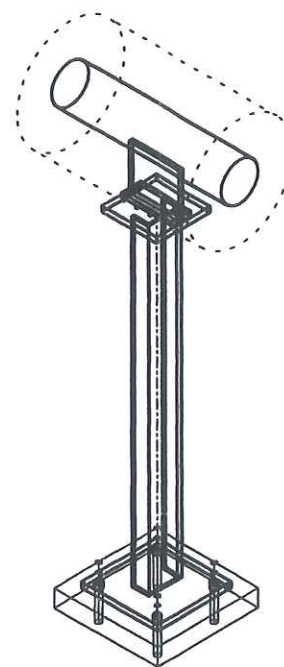
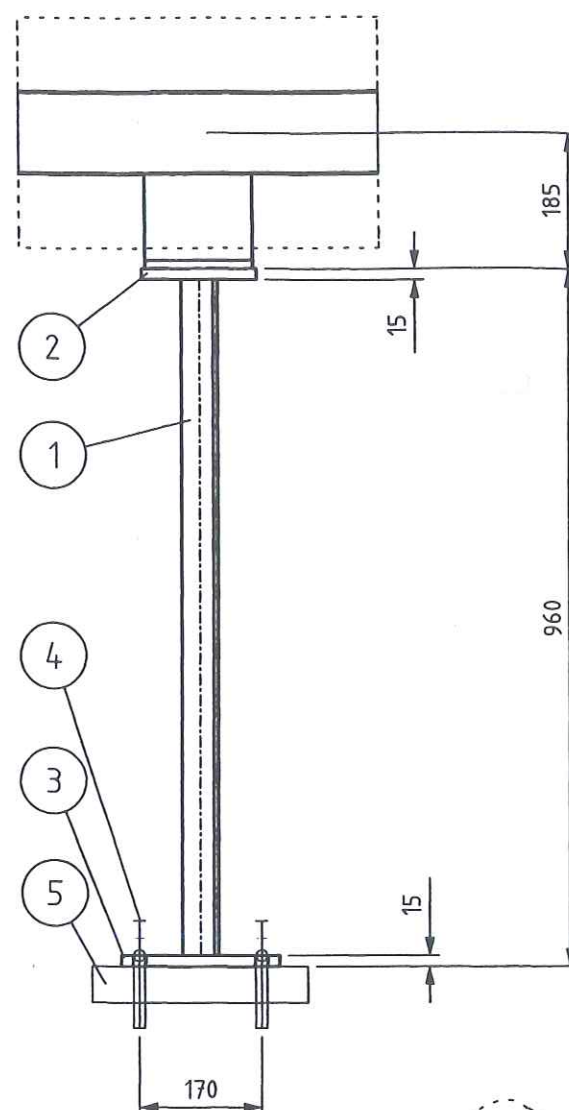
170

$\varnothing 18$

X= 3024479

Y= 11126000

# 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

```


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

Total Weight:	18.55 kg
---------------	----------

[illegible]

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



**AIR LIQUIDE**™

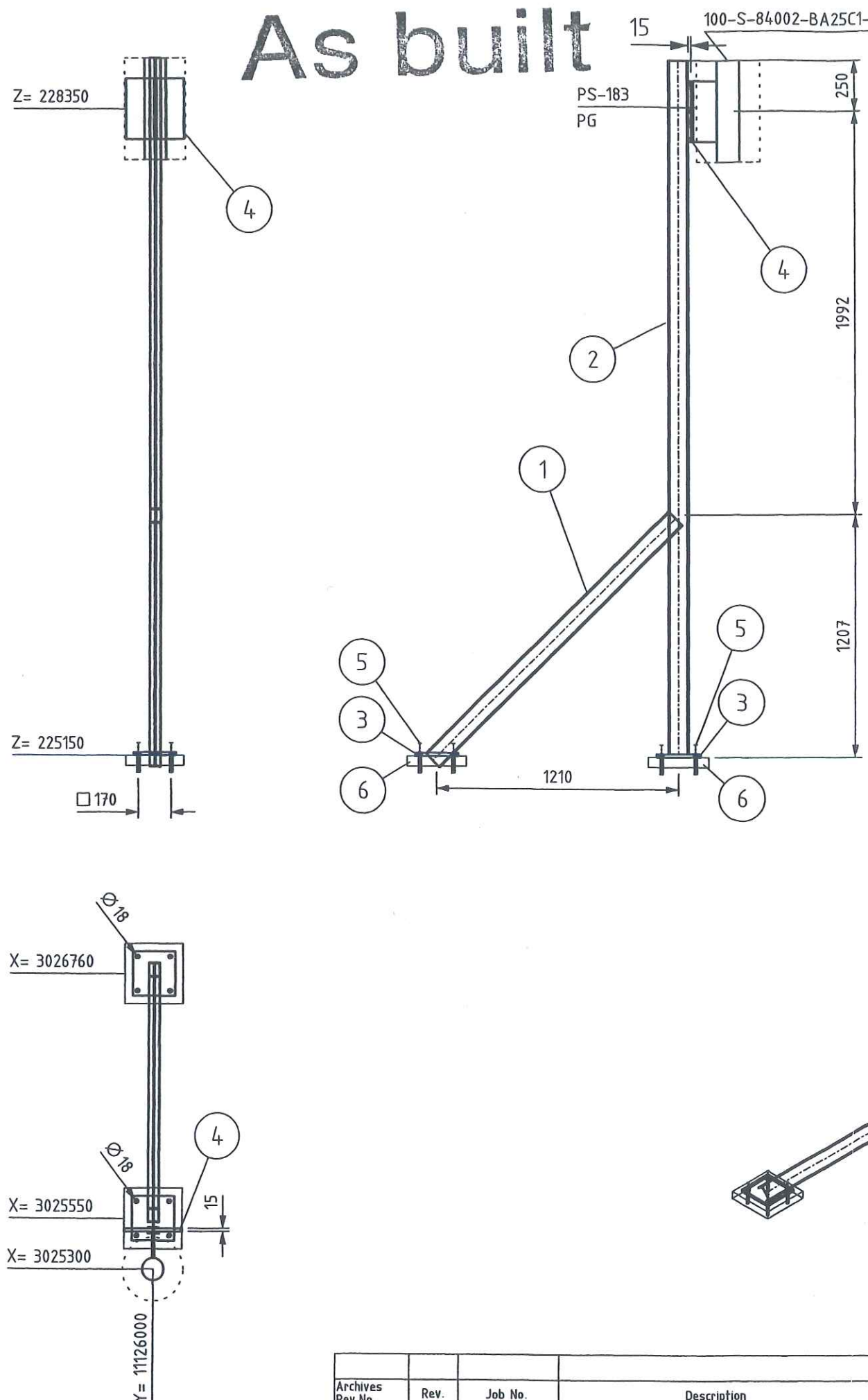
Air Liquide AGS GmbH

	Date	Name	Check.	History File
	20.07.2005	GU	Zut	
	Job Code:	K70101 ASU No.9 Kosice		
	Reference:	PIPING SUPPORT		
		Scale:	1:10	Original Format DIN A3
		Sheet:	1	of:
Replaces:	Title	PS-182		
		Drawing-No.	792.87926	Re

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



# As built



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

```

- 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

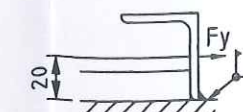
### RESPONSIBILITY OF ERECTION COMPANY

- 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

TA 120 G DN 100-200




ANGLE STEEL: L60x10x100LENGTH  
ANGLE STEEL AND PLATE ACCORDING  
TO ORDER NO. PIPE SHOE

WELDING DATA ACC. TO DIN 1912 TS

 $a \geq 0,7 \times t$   
 $a_{\min} = 6 \text{ mm}$ 

|               |          |
|---------------|----------|
| Total Weight: | 63.64 kg |
|---------------|----------|

[illegible]

|                  | 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          |                        |
|           | 20.07.2005                       | GU   | Zut    |                       |                        |
|           | Job Code: K70101 ASU No.9 Kosice |      |        | Scale: 1:25           | Original Format DIN A3 |
|           | Reference: PIPING SUPPORT        |      |        | Sheet: 1              | of:                    |
| Replaces: | Title PS-183                     |      |        | Drawing-No. 792.87926 | R                      |

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





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

**Client:** AIR LIQUIDE

**Title:**

**100 S 84002**

|         |              |
|---------|--------------|
| Sheet 2 | Drawing No.: |
|---------|--------------|

Project No.: 9050300

**Maker's No.:**

(Kunde / TÜV, ...)

geprüft

22.02.06  
Pelzeder Erich

**Schweisstechnologie VAM**  
**Datum / Unterschrift**

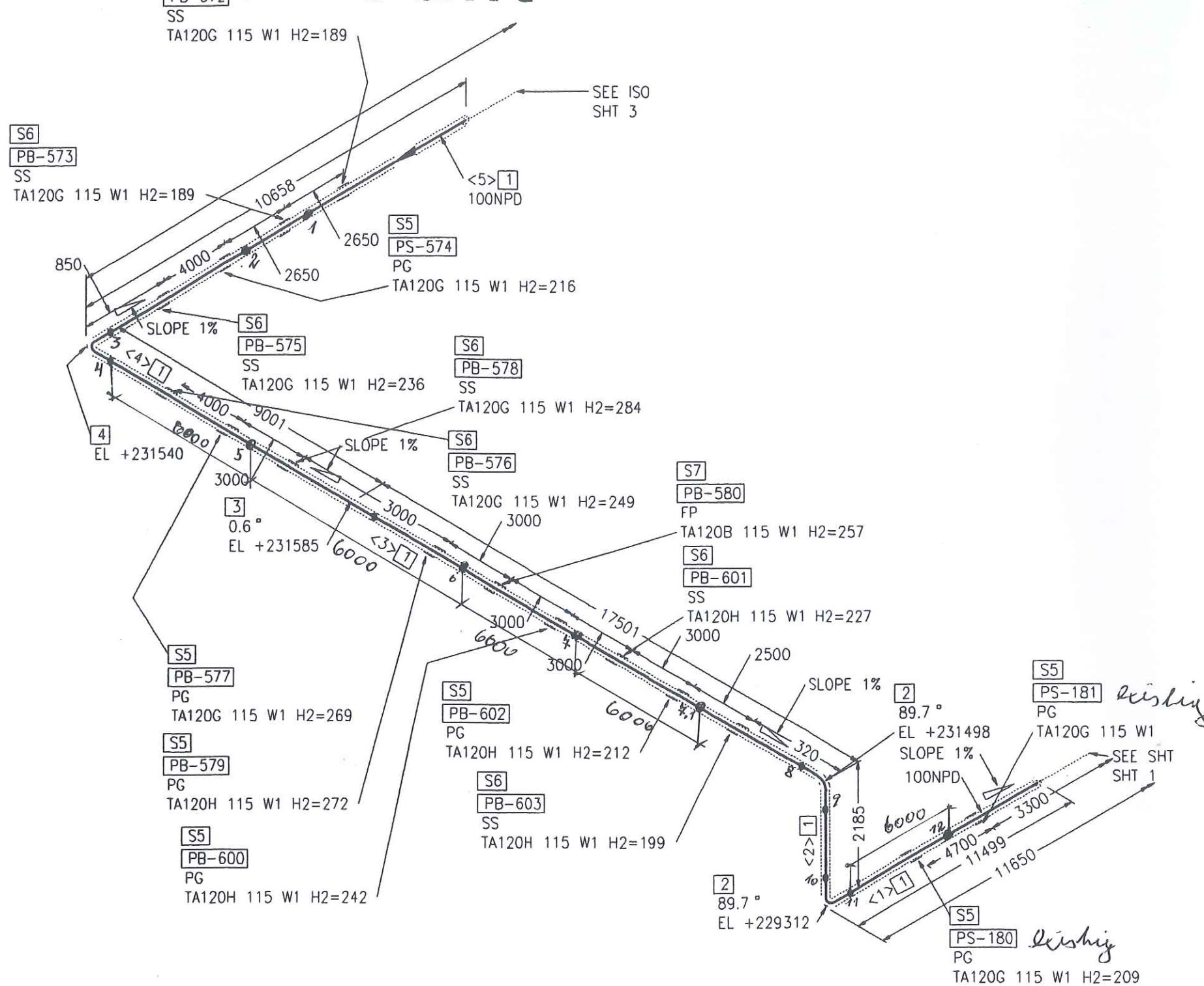
**Datum / Unterschrift**

[illegible]





**As built**



| Part No. | Qty [PCS/MM] | NPD [Size] | Component Description                                    |
|----------|--------------|------------|----------------------------------------------------------|
| 1        | 49932 MM     | 100        | PIPE, SEAMLESS 114.3*3.6, ST35.8 I, DIN EN 10220         |
| 2        | 2            | 100        | ELBOW, SEAMLESS, 1.5D 114.3*3.6-89.7, B-ART 3,DIN 2605-1 |
| 3        | 1            | 100        | ELBOW, SEAMLESS, 1.5D 114.3*3.6-0.6, B-ART 3,DIN 2605-1  |
| 4        | 1            | 100        | ELBOW, SEAMLESS, 1.5D 114.3*3.6-90, B-ART 3,DIN 2605-1   |
| 5        | 7            | 100        | PIPE GUIDE PSUPPORT                                      |
| 6        | 7            | 100        | SLIDE SUPPORT PSUPPORT                                   |
| 7        | 1            | 100        | FIX POINT PSUPPORT                                       |

**CUT PIPE LENGTH**

| PIECE NO | LENGTH (MM) | NPD (MM) | REMARKS | END ONE | END TWO | ITEM CODE |
|----------|-------------|----------|---------|---------|---------|-----------|
| <1>      | 11348       | 100      |         | BEVEL   | BEVEL   | RN        |
| <2>      | 1883        | 100      |         | BEVEL   | BEVEL   | RN        |
| <3>      | 17348       | 100      |         | BEVEL   | BEVEL   | RN        |
| <4>      | 8847        | 100      |         | BEVEL   | BEVEL   | RN        |
| <5>      | 10506       | 100      |         | BEVEL   | BEVEL   | RN        |

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

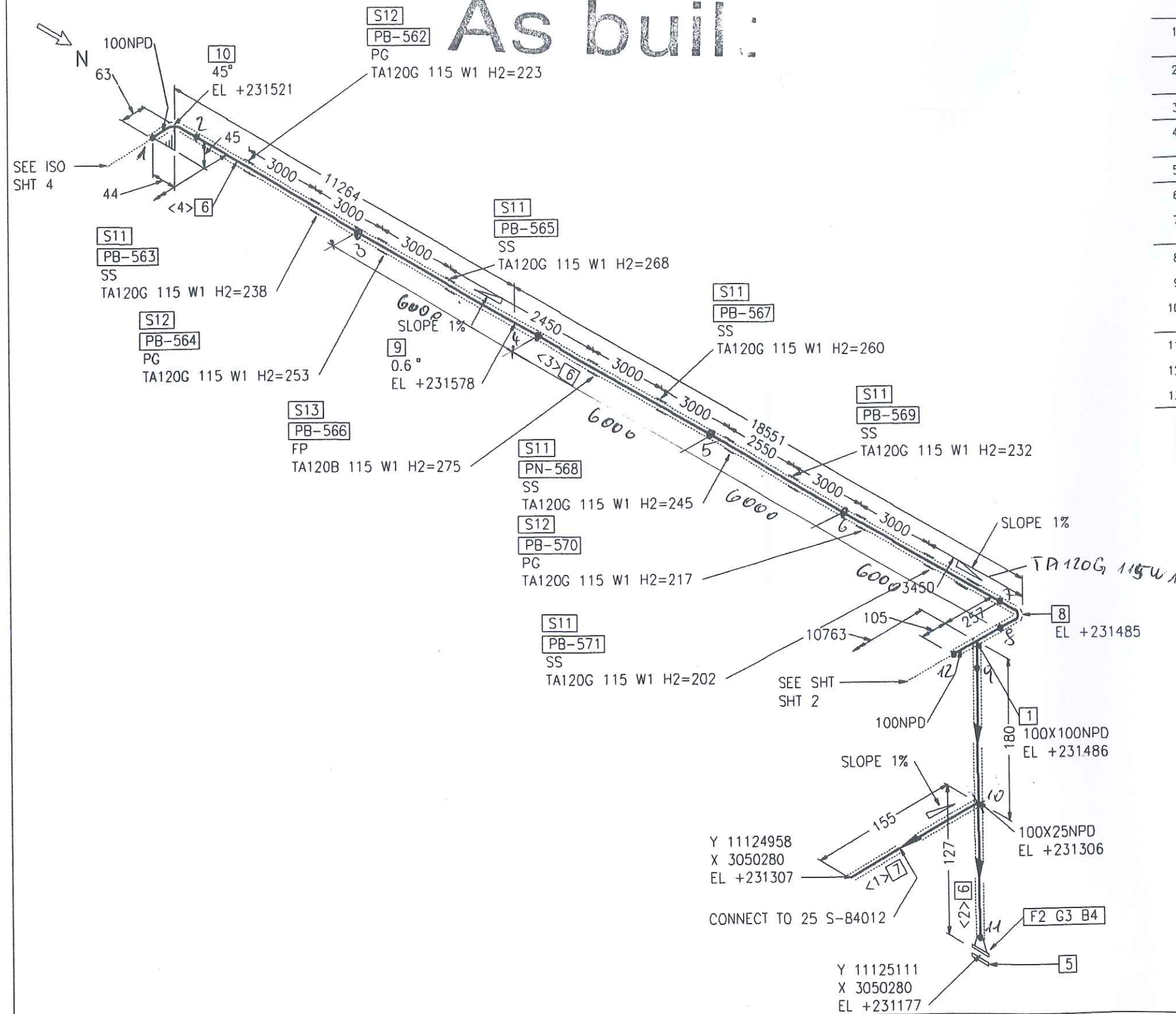
| Rev. | Revisions   | Date       | Name | checked |
|------|-------------|------------|------|---------|
| 01   | General Rev | 15.09.2005 | Les  | Zul     |

|                                            |                              |                   |                   |                |                         |
|--------------------------------------------|------------------------------|-------------------|-------------------|----------------|-------------------------|
| <b>AIR LIQUIDE</b><br>Air Liquide AGS GmbH | Date: 24-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: 2       | Sheets: 4               |
| Title: 100 S 84002 BA25C1W 792.8782601     |                              |                   | Drawing No. Rev.  |                |                         |





# As built



| Part No. | Qty [PCS/MM] | NPD [Size] | Component Description                                    |
|----------|--------------|------------|----------------------------------------------------------|
| 1        | 1            | 100X100    | TEE, SEAMLESS 114.3*3.6/114.3*3.6, ST35.8 I, DIN 2615-1  |
| 2        | 1            | 100        | WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1           |
| 3        | 1            | 100        | FLAT GASKET                                              |
| 4        | 8            | 20         | HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 80.0MM LANG          |
| 5        | 1            | 100        | BLIND FLANGE 0°NREQD, C22.8, DIN EN 1092-1               |
| 6        | 29746 MM     | 100        | PIPE, SEAMLESS 114.3*3.6, ST35.8 I, DIN EN 10220         |
| 7        | 100 MM       | 25         | PIPE, SEAMLESS 33.7*2.6, ST35.8 I, DIN EN 10220          |
| 8        | 1            | 100        | ELBOW, SEAMLESS, 1.5D 114.3*3.6-90, B-ART 3, DIN 2605-1  |
| 9        | 1            | 100        | ELBOW, SEAMLESS, 1.5D 114.3*3.6-0.6, B-ART 3, DIN 2605-1 |
| 10       | 1            | 100        | ELBOW, SEAMLESS, 1.5D 114.3*3.6-45, B-ART 3, DIN 2605-1  |
| 11       | 6            | 100        | SLIDE SUPPORT PSUPPORT                                   |
| 12       | 3            | 100        | PIPE GUIDE PSUPPORT                                      |
| 13       | 1            | 100        | FIX POINT PSUPPORT                                       |

## CUT PIPE LENGTH

| PIECE NO | LENGTH (MM) | NPD (MM) | REMARKS | END ONE | END TWO | ITEM CODE |
|----------|-------------|----------|---------|---------|---------|-----------|
| <1>      | 100         | 25       |         | SHAPED  | SO.CUT  | RN        |
| <2>      | 150         | 100      |         | BEVEL   | BEVEL   | RN        |
| <3>      | 18397       | 100      |         | BEVEL   | BEVEL   | RN        |
| <4>      | 11199       | 100      |         | BEVEL   | BEVEL   | RN        |

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: 24-AUG-2005  | Name: Lesum / HGH            | Checked: 05-09-15          | History file:           |
| Job Code: K70101   | Reference: ASU No. 9, Kosice | Scale: ---:---             | Original format: DIN A3 |
| Replaces: 79_----- | Replaced by: 79_-----        | Title: 100 S 84002 BA25C1W | Drawing No. 792.8782601 |
| Rev. Revisions     | Date                         | Name                       | checked                 |
| 01                 | General Rev                  | 15.09.2005                 | Les Zul                 |

LEVELS:

TOP OF INTERNAL ROADS: 225.00m n.m.

TOP OF FOUNDATION: 225.10m

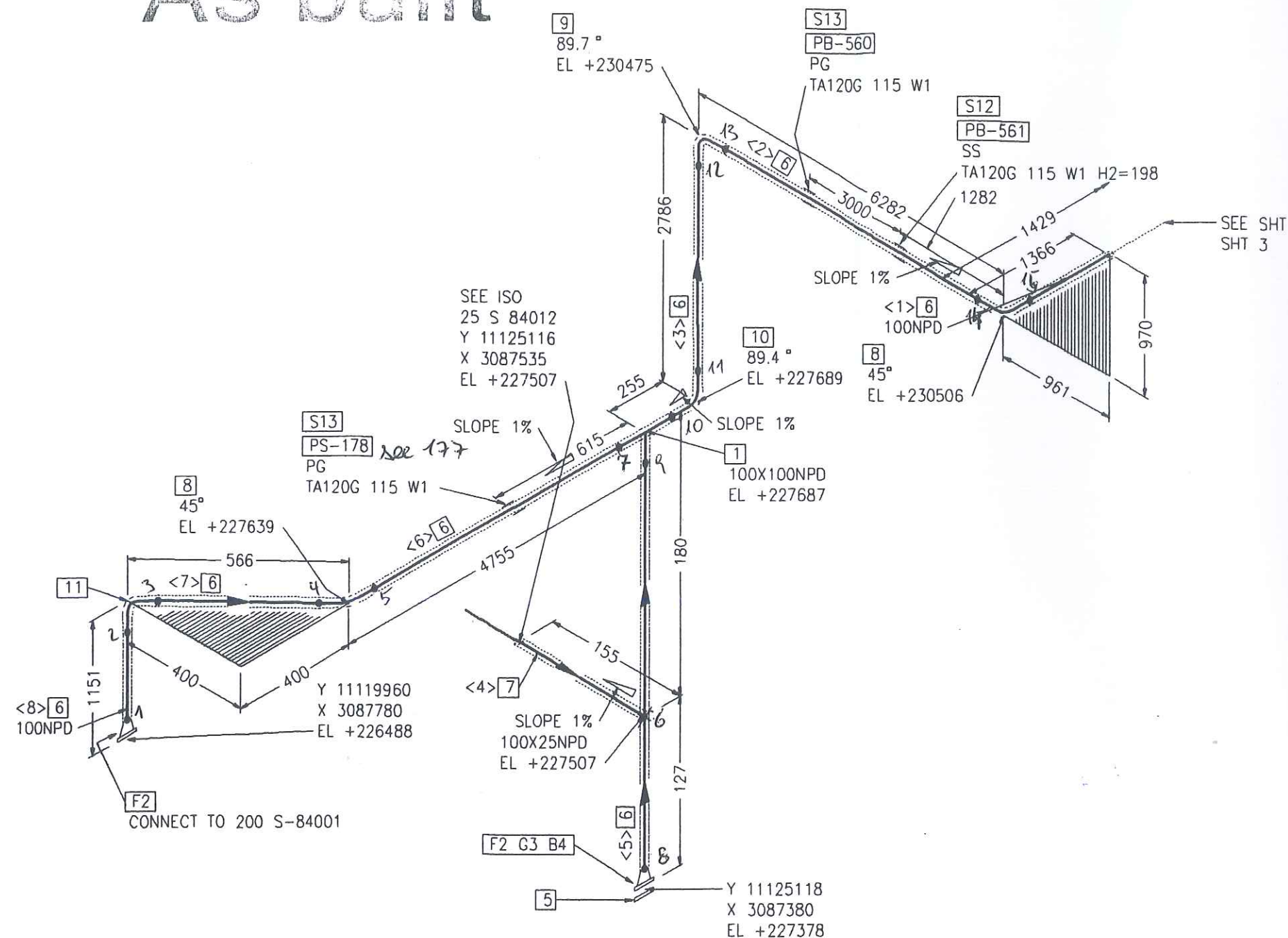
BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00







 N

CUT PIPE LENGTH

| PIECE NO | LENGTH (MM) | NPD (MM) | REMARKS | END ONE | END TWO | ITEM CODE |
|----------|-------------|----------|---------|---------|---------|-----------|
| <1>      | 1303        | 100      |         | BEVEL   | BEVEL   | RN        |
| <2>      | 6068        | 100      |         | BEVEL   | BEVEL   | RN        |
| <3>      | 2484        | 100      |         | BEVEL   | BEVEL   | RN        |
| <4>      | 100         | 25       |         | SHAPE D | BEVEL   | RN        |
| <5>      | 150         | 100      |         | BEVEL   | BEVEL   | RN        |
| <6>      | 4587        | 100      |         | BEVEL   | BEVEL   | RN        |
| <7>      | 351         | 100      |         | BEVEL   | BEVEL   | RN        |
| <8>      | 947         | 100      |         | BEVEL   | BEVEL   | RN        |

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 | checked |



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<br>--:-- | Original format<br>DIN A3 |      |
| Reference: ASU No. 9, Kosice |             | Sheet: 4       | Sheets: 4                 |      |
| Title:                       |             | Drawing No.    |                           | Rev. |
| 100 S 84002 BA25C1W          |             | 792.87826      |                           | 01   |

Preis-Stückliste 0 250S84003BA25C1 0 250 S 84003 BA25C1 Revision:

| Teilenummer | NW1 | NW2 | Teilebezeichnung                                                        | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|-------------|-----|-----|-------------------------------------------------------------------------|------------|-------|-----------|---------|-------|--------|
| B0034       | 24  | 90  | Hexagon head screws<br>5.6 DIN EN ISO 898-1 / DIN EN ISO 4014           | 0,43 kg    | 12,00 |           |         |       | 0,00   |
| B0067       | 27  | 220 | HEXAGON HEAD SCREWS<br>5.6                                              |            | 12,00 |           |         |       | 0,00   |
| B0509       | 24  | 0   | Hexagon nuts<br>5-2 DIN EN ISO 898-2 / DIN EN ISO 4032                  | 0,11 kg    | 12,00 |           |         |       | 0,00   |
| B0520       | 27  | 0   | Hexagon nuts<br>5-2 DIN EN ISO 898-2 / DIN EN ISO 4032                  | 0,17 kg    | 12,00 |           |         |       | 0,00   |
| G0113       | 250 | 0   | Flat packings<br>Graphite with CrNi-insert Standard 40002<br>328x2x274  |            | 3,00  |           |         |       | 0,00   |
| GW28        | 250 | 0   | girth weld<br>1.0254 ( St 37.0 )<br>273x5                               |            | 5,00  |           |         |       | 0,00   |
| IR90004     | 250 | 0   | R90004<br>supplied by AGS                                               |            | 1,00  |           |         |       | 0,00   |
| P0095       | 250 | 0   | pipe, welded<br>1.0254 ( St 37.0 ) DIN 1626<br>273x5                    | 33,00 kg   | 1,96  |           |         |       | 0,00   |
| P0251       | 250 | 0   | Elbow 90° R=1,5 DA, welded<br>1.0254 ( St 37.0 ) DIN 2609<br>273x5      | 19,75 kg   | 1,00  |           |         |       | 0,00   |
| P2924       | 250 | 0   | WELDING NECK FLANGES, PN 40<br>1.0254                                   |            | 2,00  |           |         |       | 0,00   |
| P2945       | 250 | 0   | Welding neck flanges; PN 10<br>1.0038 ( S235JRG2 ) DIN EN 1092-1<br>273 | 15,50 kg   | 1,00  |           |         |       | 0,00   |
| SC11        | 250 | 0   | Segment cut<br>273                                                      |            | 3,00  |           |         |       | 0,00   |
| SPC03       | 250 | 0   | PIPE CLAMP                                                              |            | 2,00  |           |         |       | 0,00   |
| SPS172      | 250 | 0   | Support PS-172, DN 250, SS<br>pipe support                              | 11,41 kg   | 1,00  |           |         |       | 0,00   |



Preis-Stückliste 0 250S84003BA25C1 0 250 S 84003 BA25C1 Revision:

(Fortsetzung)

| Teilenummer                | NW1 | NW2 | Teilebezeichnung                        | Einzelgew. | Menge | Lieferung | Montage | L + M | Gesamt |
|----------------------------|-----|-----|-----------------------------------------|------------|-------|-----------|---------|-------|--------|
| SPS173                     | 250 | 0   | Support PS-173, DN 250, PG pipe support | 11,41 kg   | 1,00  |           |         |       | 0,00   |
| SPS378                     | 0   | 0   | SUPPORT PS-378, H 140, L=1300           | 53,81 kg   | 2,00  |           |         |       | 0,00   |
| Summe: 0 250S84003BA25C1 0 |     |     |                                         | 238,89 kg  |       | 0,00      | 0,00    |       | 0,00   |

|                     |           |
|---------------------|-----------|
| Liefersumme:        |           |
| Montagesumme:       |           |
| Gesamtsumme:        | 238,89 kg |
| Gesamtgewicht:      |           |
| ** Ende der Ausgabe |           |

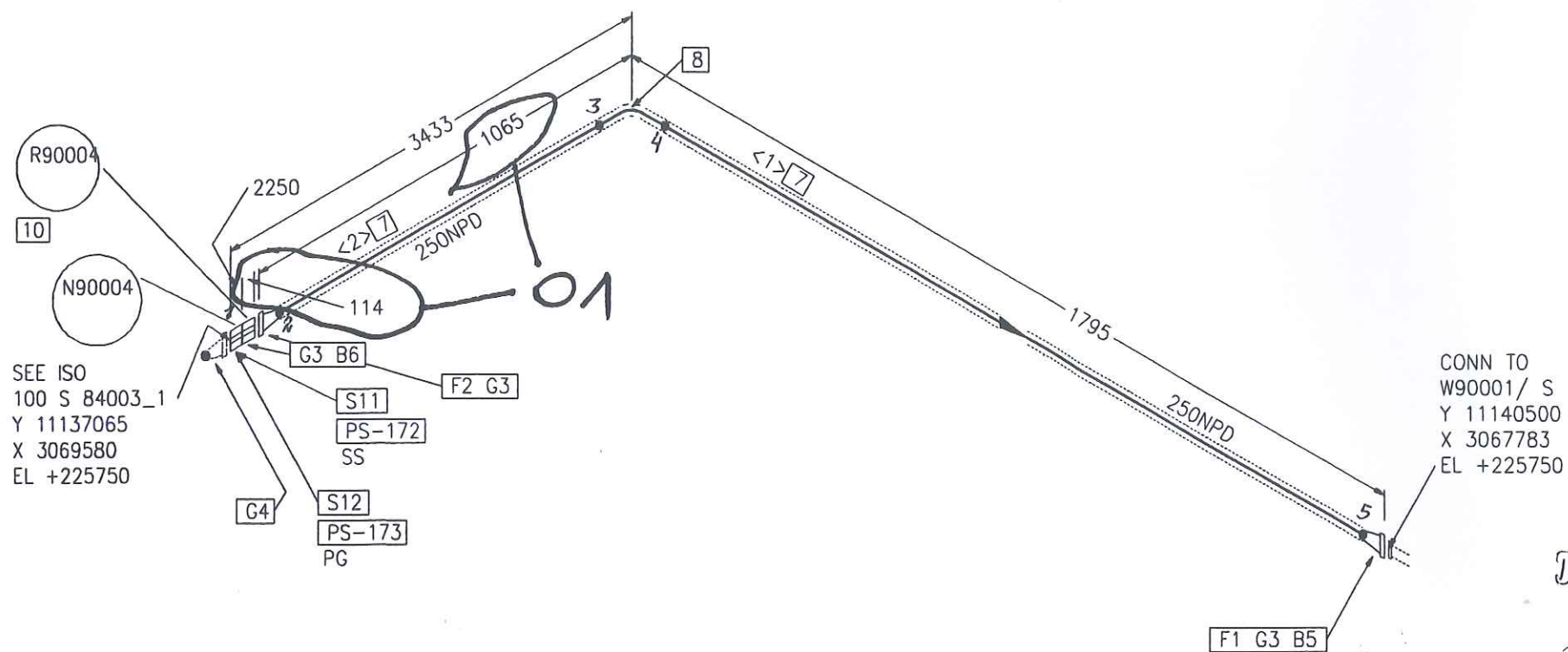
AS BUILT







As built



CONN TO  
W90001/ S  
Y 11140500  
X 3067783  
EL +225750

Dump

2x PS 378  
Bl. 250/250/20  
HEB 140 L = 1300  
+ Schelle

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        | 1            | 250        | WELDING-NECK-FLANGE PN16, S235JRG2, DIN EN 1092-1           |
| 2        | 1            | 250        | WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1           |
| 3        | 3            | 250        | FLAT GASKET                                                 |
| 4        | 1            | 100        | FLAT GASKET                                                 |
| 5        | 12           | 24         | HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 90.0MM LANG             |
| 6        | 12           | 20         | HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 200.0MM LANG            |
| 7        | 1960 MM      | 250        | PIPE, WELDED 273*5.0, ST37.0, DIN EN 10220                  |
| 8        | 1            | 250        | ELBOW, WELDED, 1,5D 273*5.0-90, B-ART 3,DIN 2605-1          |
| 9        | 1            | 250X100    | ERROR READING SPECIALTY MATERIAL DESCRIPTION LIBRARY N90004 |
| 10       | 1            | 250        | R90004 R90004                                               |
| 11       | 1            | 250        | SLIDE SUPPORT PSUPPORT                                      |
| 12       | 1            | 250        | PIPE GUIDE PSUPPORT                                         |

CUT PIPE LENGTH

| PIECE NO | LENGTH (MM) | NPD (MM) | REMARKS | END ONE | END TWO | ITEM CODE |
|----------|-------------|----------|---------|---------|---------|-----------|
| <1>      | 1344        | 250      |         | BEVEL   | BEVEL   | RG        |
| <2>      | 616         | 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

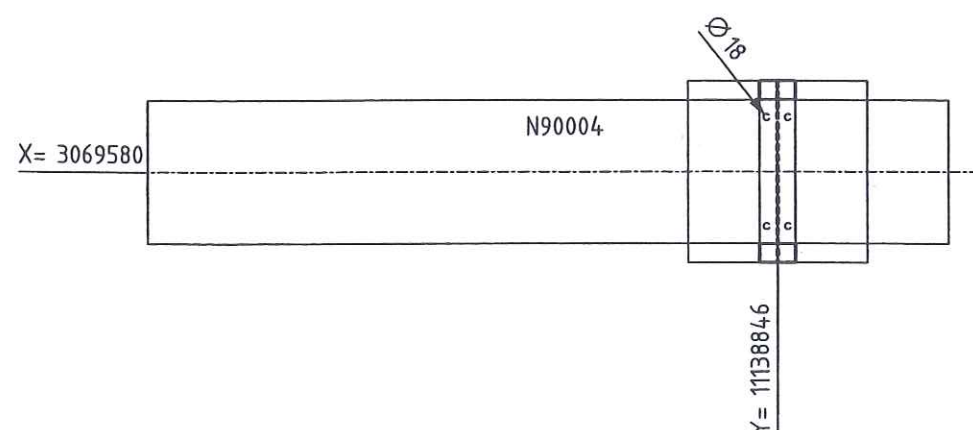
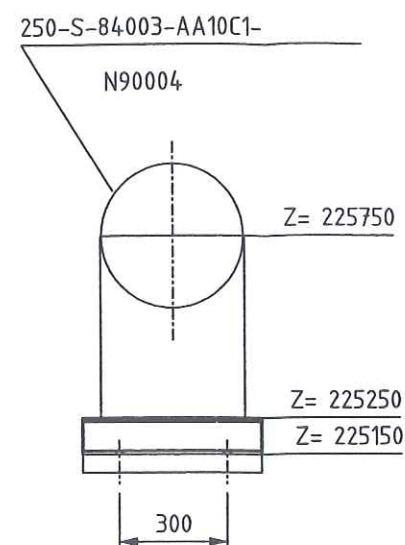
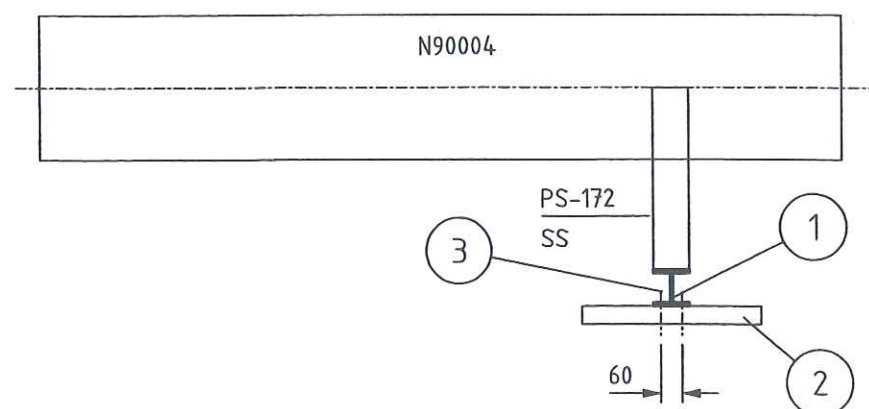
SUPPORTS:  
PS-(NO.) - PIPE SUPPORT WITH SUBSTRUCTURE  
PB-(NO.) - PIPE SUPPORT ON THE PIPEBRIDGE  
SS = SLIDING SUPPORT  
PG = PIPE GUIDE  
FP = FIX POINT

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

|                          |                              |                   |                   |                       |                         |
|--------------------------|------------------------------|-------------------|-------------------|-----------------------|-------------------------|
| <br>Air Liquide AGS GmbH | Date: 16-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: 250 S 84003 AA10C1W   |                   |                   | Drawing No. 792.87826 | Rev. 01                 |



# As built



LEGEND:

- ```

LEADER:
- 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

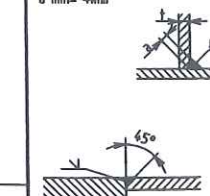
- LOCATION OF FIELD WELDS
- FITTING LENGTHS
- DIMENSIONAL CHECK AT SITE BEFORE STARTING SPOOL MANUFACTURE

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



Total Weight:	10.21 kg
---------------	----------

Item	No. Off	Unit	Description	Dimension	Material	Weight kg	Remark
1	1	pcs	PROFILE	HE100B, L=0.500	RST37-2	10.205	
2	1	pcs	BASE	500x500x50	CONCRETE	0.000	
3	4	pcs	ANCHOR BOLT HST(-R)M16/100	HST-(-R) 16-0-M16	1.44.01	0.000	4,2 11,41


**FREIGABE**

**FOR CONSTRUCTION**

27. Juli 2005

# PREIGABE FOR CONSTRUCTION

27. Juli 2005

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


**AIR LIQUIDE**™

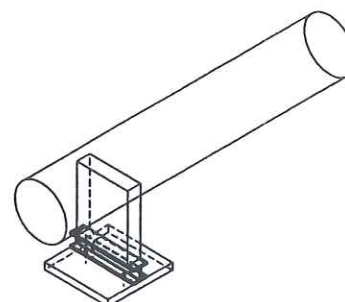
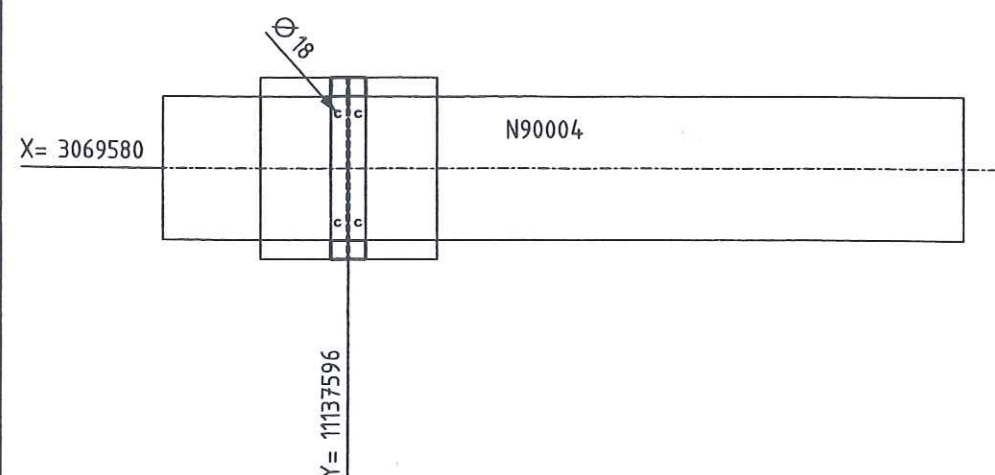
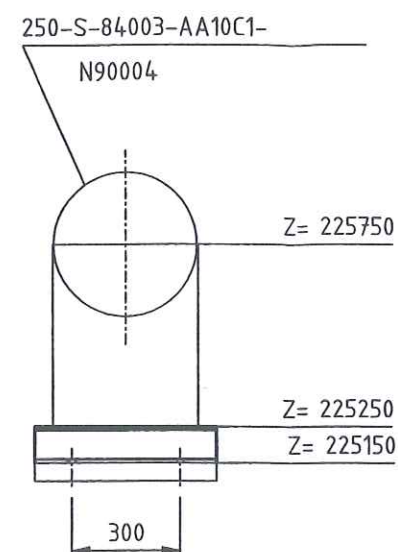
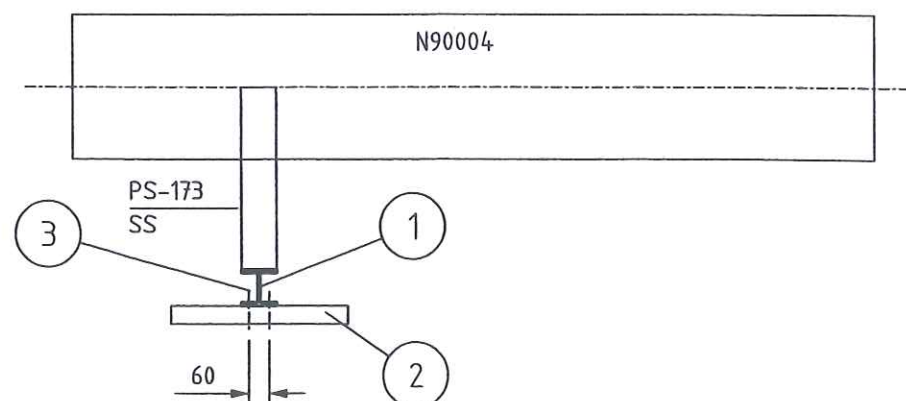
Air Liquide AGS GmbH

	Date	Name	Check.	History File	
	20.07.2005	GU	Zut		
	Job Code:	K70101 ASU No.9 Kosice			Scale: 1:20
	Reference:	PIPING SUPPORT			Original Format DIN A3
Replaces:	Title	PS-172			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					



# Asbluit



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 TS

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




Total Weight:	10.21 kg
---------------	----------

[illegible]

**FREIGABE  
FÜR CONSTRUCTION**

27 Juli 2004

	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
	20.07.2005	GU	Zut	
	Job Code:	K70101 ASU No.9 Kosice		
	Reference:	PIPING SUPPORT		
Replaces:	Title	PS-173		
			Scale:	1:20
			Original Format	DIN A3
			Sheet:	1 of:
			Drawing-No.	792.87926
				Re

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

Preis-Stückliste 0 100S84003\_1BA25C1-W 0 100 S 84003\_1 BA25C1-W .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	56,00				0,00
B0502	20	0	Hexagon head nuts Ck 35 ( 1.1181 ) DIN 267-13	0,06 kg	56,00				0,00
G0105	100	0	Flat packings Graphite with CrNi-insert Standard 40002 168x2x115		7,00				0,00
GW19	100	0	girth weld 1.0305 ( St 35.8 I ) 114,3x3,6		31,00				0,00
ITV90004	100	0	TV90004 supplied by AGS		1,00				0,00
IV84035	100	0	V84035 supplied by AGS		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	0,20				0,00
P0063	100	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 114,3x3,6	9,83 kg	40,70				0,00
P0219	100	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 114,3x6,3	4,01 kg	10,00				0,00
P0736	100	100	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 114,3x3,6x114,3x3,6	2,54 kg	1,00				0,00
P2973	100	0	WELDING NECK FLANGES; PN 40 C22.8 ( 1.0460 ) DIN 2519 114,3	6,50 kg	7,00				0,00
P3120	100	0	BLIND FLANGES; PN 40 C22.8 /DIN 2527/	7,50 kg	1,00				0,00



Preis-Stückliste 0 100S84003\_1BA25C1-W 0 100 S 84003\_1 BA25C1-W Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
PW18	100	25	Pipe weld-in 1.0305 ( St 35.8 l ) 114,3x3,6x33,7x2,6		2,00				0,00
S0009200	100	0	T-support TA 120B 115 W1 OZN, H2 = 200 1.0 Hesterberg	4,50 kg	1,00				0,00
S0021	100	0	T-support TA 120G 115 W1 OZN 1.0 Hesterberg 115	10,70 kg	6,00				0,00
S0021196	100	0	T-support TA 120G 115 W1 OZN, H2 = 196 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021215	100	0	T-support TA 120G 115 W1 OZN, H2 = 215 1.0 Hesterberg	10,70 kg	1,00				0,00
S0021230	100	0	T-support TA 120G 115 W1 OZN, H2 = 230 1.0 Hesterberg	10,70 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		2,00				0,00
SC7	100	0	Segment cut 114,3		7,00				0,00
SPS174	0	0	SUPPORT PS-174	27,02 kg	1,00				0,00
SPS175	0	0	SUPPORT PS-175	79,23 kg	1,00				0,00
SPS176	0	0	SUPPORT PS-176	80,06 kg	1,00				0,00
SPS177	0	0	SUPPORT PS-177	21,44 kg	1,00				0,00
SPS431	0	0	SUPPORT PS-431, HEB 100, L=1200	24,48 kg	1,00				0,00
Summe: 0 100S84003_1BA25C1-W 0				847,07 kg		0,00	0,00		0,00

AS BUILT

Liefersumme:  
Montagesumme:  
Gesamtsumme:  
Gesamtgewicht:

847,07 kg

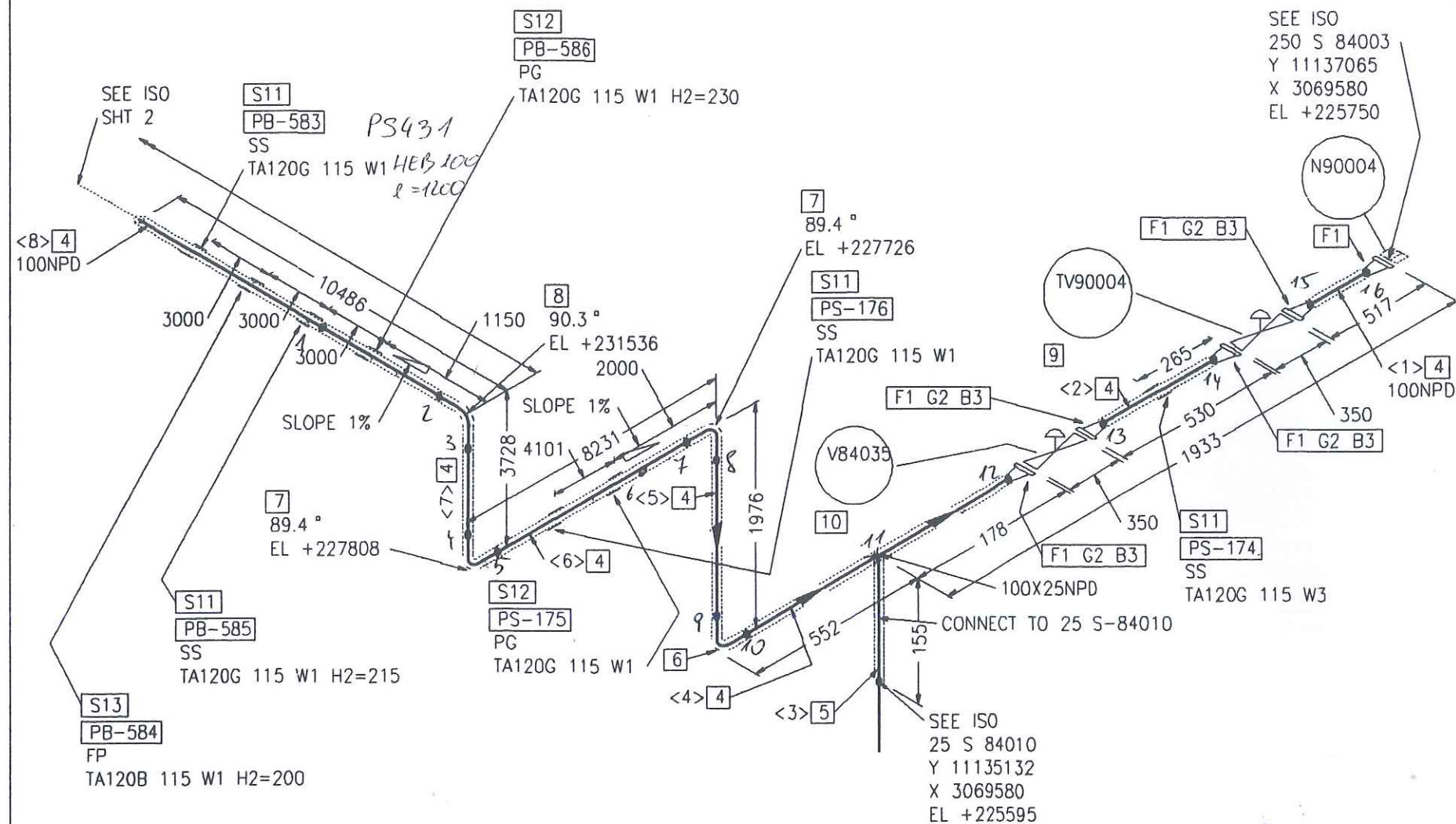
Preis-Stückliste 0 100S84003_1BA25C1-W 0 100 S 84003_1 BA25C1-W Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
** Ende der Ausgabe									

AS BUILT





As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	5	100	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
2	4	100	FLAT GASKET
3	32	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 80.0MM LANG
4	24727-MM	100	PIPE, SEAMLESS 114.3*3.6, ST35.8 I, DIN EN 10220
5	100 MM	25	PIPE, SEAMLESS 33.7*2.6, ST35.8 I, DIN EN 10220
6	1	100	ELBOW, WELDED, 1.5D 114.3*2.6-90, B-ART 3,DIN 2605-1
7	2	100	ELBOW, SEAMLESS, 1.5D 114.3*3.6-89.4, B-ART 3,DIN 2605-1
8	1	100	ELBOW, SEAMLESS, 1.5D 114.3*3.6-90.3, B-ART 3,DIN 2605-1
9	1	100	TV90004 TV90004
10	1	100	V84035 V84035
11	4	100	SLIDE SUPPORT PSUPPORT
12	2	100	PIPE GUIDE PSUPPORT
13	1	100	FIX POINT PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	413	100		BEVEL	BEVEL	RN
<2>	426	100		BEVEL	BEVEL	RN
<3>	100	25		SHAPED	BEVEL	RN
<4>	526	100		BEVEL	BEVEL	RN
<5>	1673	100		BEVEL	BEVEL	RN
<6>	7931	100		BEVEL	BEVEL	RN
<7>	3425	100		BEVEL	BEVEL	RN
<8>	10333	100		BEVEL	BEVEL	RN

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

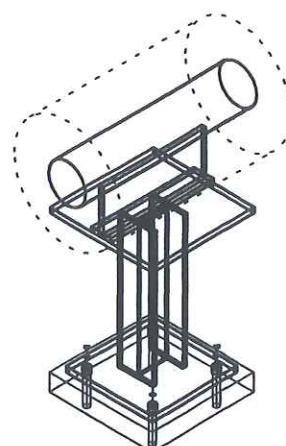
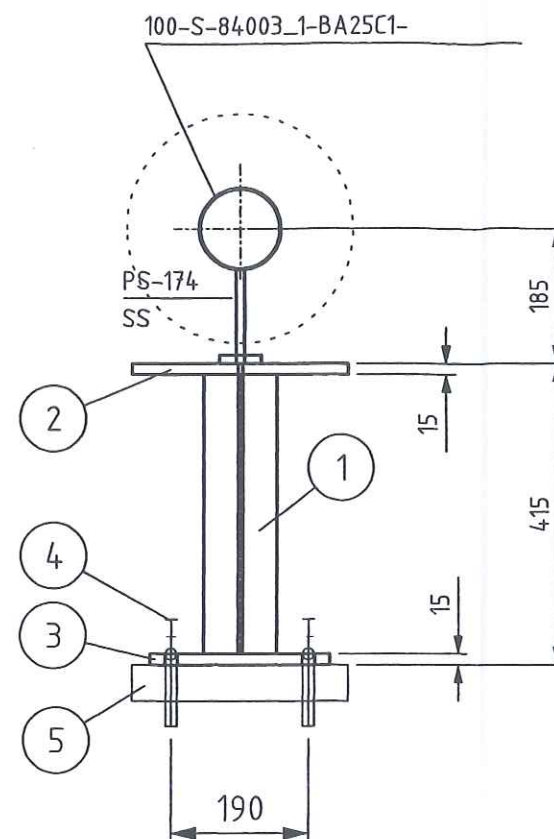
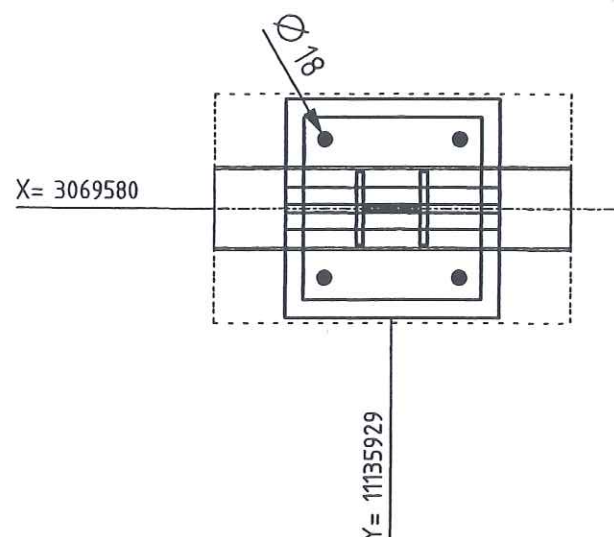
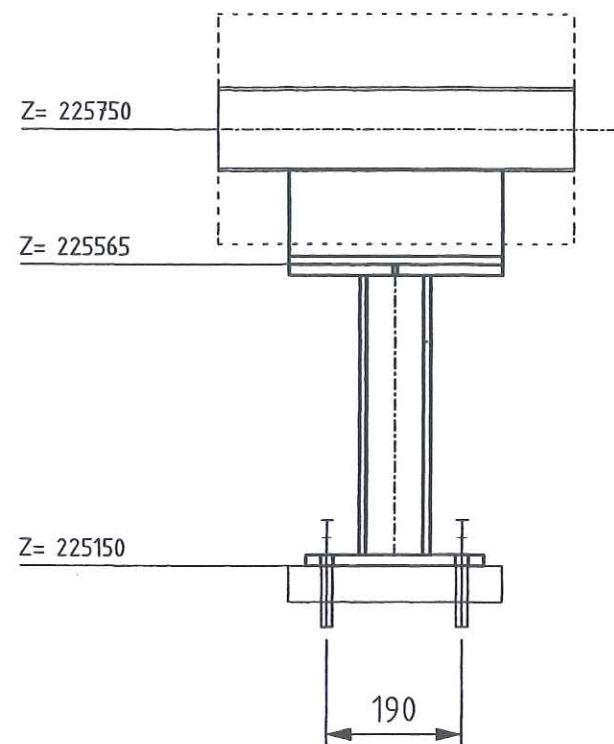
Rev.	General Rev	Revisions	Date	Name	checked
01	General Rev	15.09.2005	Les	Zul	

<b>AIR LIQUIDE</b> Air Liquide AGS GmbH	Date: 24-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: 100 S 84003_1 BA25C1W			Drawing No. 792.87826	Rev. 01

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



# As built



LEGEND:

- 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:  
-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 TS

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



Total Weight:	25.81 kg
---------------	----------

[illegible]

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by 23	JUL 2005	Zut	
Drawn checked by			



**HEGMANN**



**AIR LIQUIDE**™

Air Liquide AGS GmbH

	Date	Name	Check.	History File	
	20.07.2005	GU	Zut		
	Job Code:	K70101 ASU No.9 Kosice			Scale:
	Reference:	PIPING SUPPORT			1:10
Replaces:	Title	PS-174			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					



# As built

Z= 227746

Z= 227561

ADJUST AT SITE FOR  
PIPE WITH SLOPE

PS-175  
PG

Z= 225150

$$Y = 11132578$$
$$X = 3069580$$

```

-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

```

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

TA 120 G DN 100-200

ANGLE STEEL: L60x10x100LENGTH  
ANGLE STEEL AND PLATE ACCORDING  
TO ORDER NO. PIPE SHOE

Total Weight:	78.03 kg
---------------	----------

	Date	Name	Signature	 <b>HEGMANN S</b>
Approved by				
Checked by		Gans		
Checked by 25. JUL. 2005		Zut		
Drawn checked by				



**AIR LIQUIDE**<sup>TM</sup>

Air Liquide AGS GmbH

	Date	Name	Check.	History File
	20.07.2005	GU	Zut	
	Job Code:	K70101 ASU No.9 Kosice		
	Reference:	PIPING SUPPORT		
Replaces:	Title	PS-175		Scale: 1:20 Sheet: 1 of: Drawing-No. 792.87926
				Original Format DIN A3

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



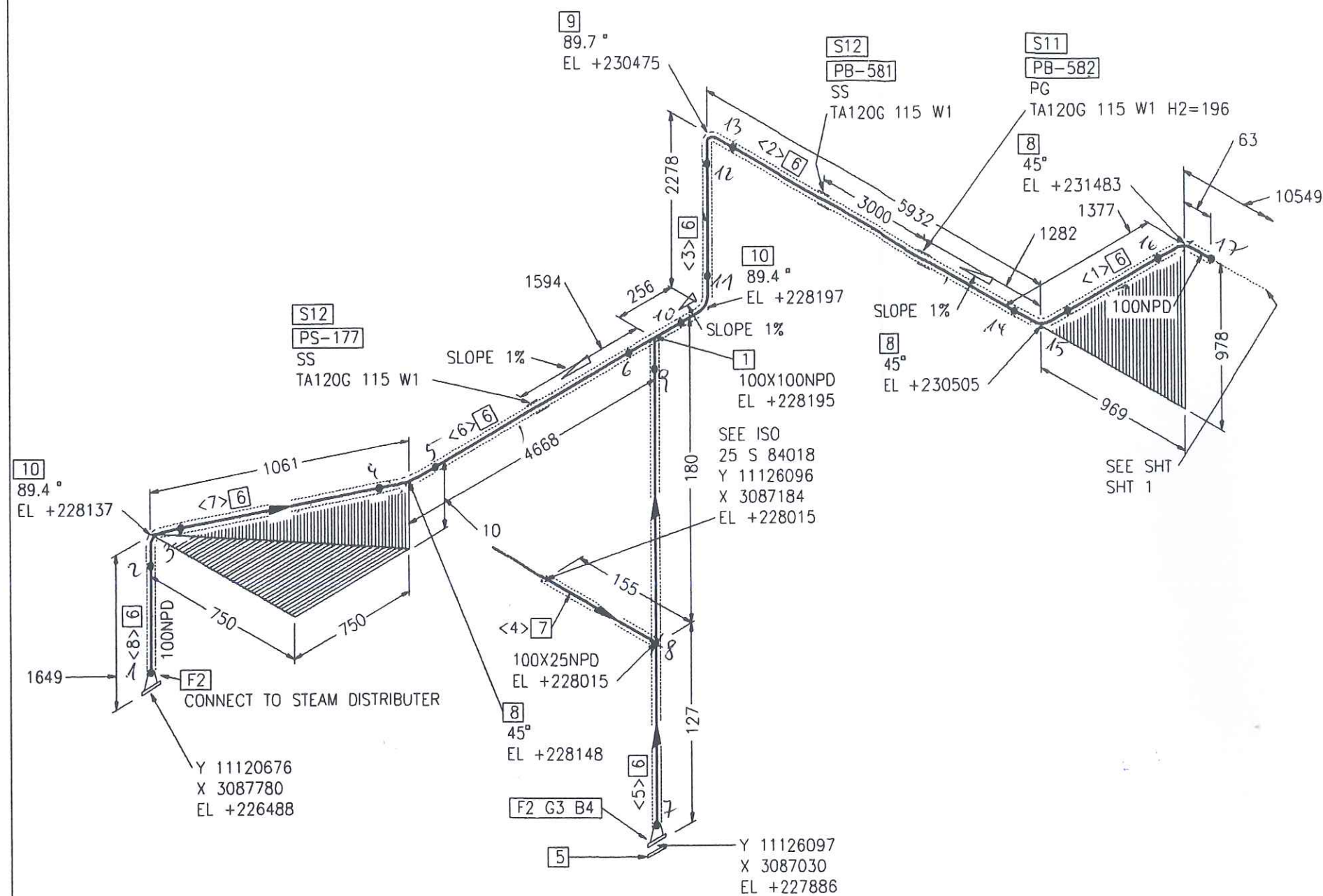








# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	100X100	TEE, SEAMLESS 114.3*3.6/114.3*3.6, ST35.8 I, DIN 2615-1
2	2	100	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
3	1	100	FLAT GASKET
4	8	20	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 80.0MM LANG
5	1	100	BLIND FLANGE 0°NREQD, C22.8, DIN EN 1092-1
6	15889 MM	100	PIPE, SEAMLESS 114.3*3.6, ST35.8 I, DIN EN 10220
7	100 MM	25	PIPE, SEAMLESS 33.7*2.6, ST35.8 I, DIN EN 10220
8	3	100	ELBOW, SEAMLESS, 1.5D 114.3*3.6-45, B-ART 3, DIN 2605-1
9	1	100	ELBOW, SEAMLESS, 1.5D 114.3*3.6-89.7, B-ART 3, DIN 2605-1
10	2	100	ELBOW, SEAMLESS, 1.5D 114.3*3.6-89.4, B-ART 3, DIN 2605-1
11	1	100	PIPE GUIDE PSUPPORT
12	2	100	SLIDE SUPPORT PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	1251	100		BEVEL	BEVEL	RN
<2>	5717	100		BEVEL	BEVEL	RN
<3>	1976	100		BEVEL	BEVEL	RN
<4>	100	25		SHAPE	BEVEL	RN
<5>	150	100		BEVEL	BEVEL	RN
<6>	4500	100		BEVEL	BEVEL	RN
<7>	848	100		BEVEL	BEVEL	RN
<8>	1447	100		BEVEL	BEVEL	RN

678

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

<b>AIR LIQUIDE</b>		Date: 24-AUG-2005	Name: Lesum / HGH	Checked: 05-09-15	History file.
Air Liquide AGS GmbH		Job Code: K70101		Scale: ---	Original format: DIN A3
		Reference: ASU No. 9, Kosice		Sheet: 2	Sheets: 2
		Title: 100 S 84003_1 BA25C1W		Drawing No. 792.87826	Rev. 01

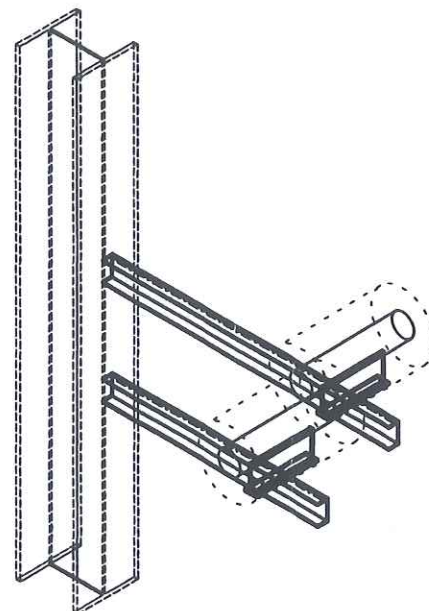
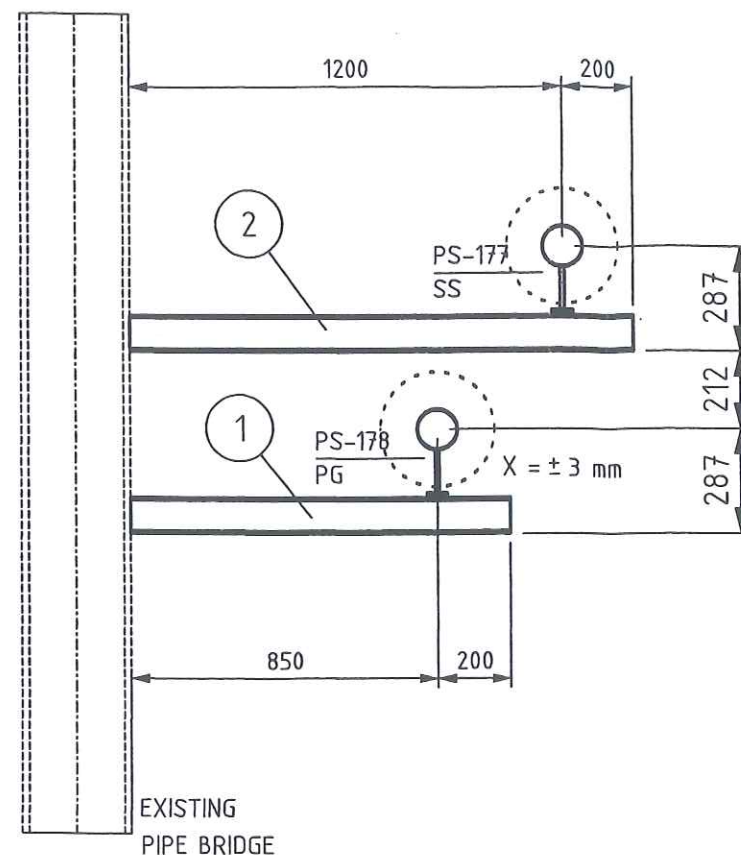
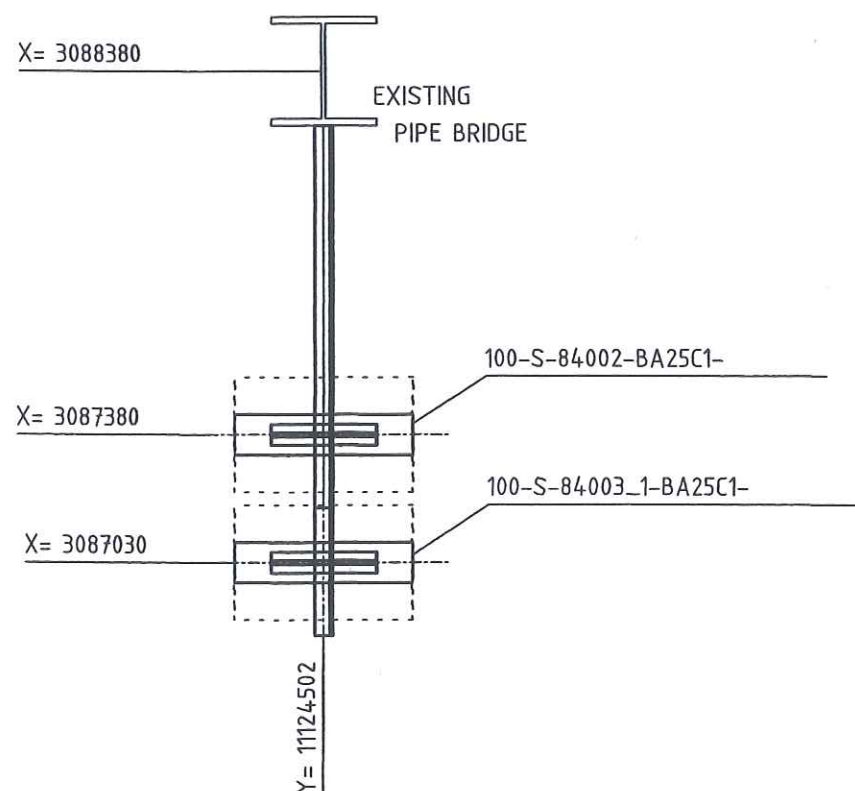
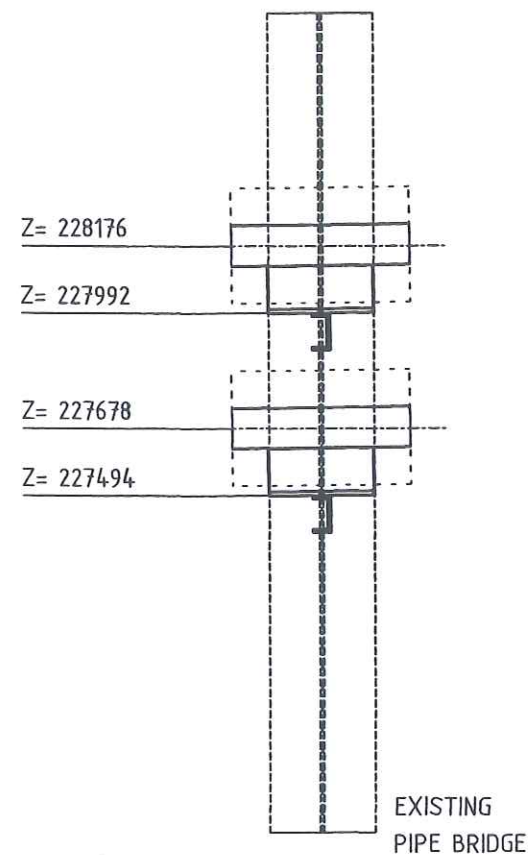
LEVELS:

TOP OF INTERNAL ROADS: 225.00m n.m.

TOP OF FOUNDATION: 225.10m

BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00





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

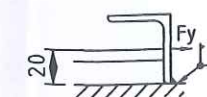
MARKING:  
-THE SUPPORT ID-NO. IS TO BE WRITTEN WITH WEATHER  
RESISTANT PAINT AND WHITE COLOR

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

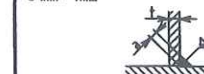
TA 120 G DN 100-200



ANGLE STEEL: L60x10x100LENGTH  
ANGLE STEEL AND PLATE ACCORDING  
TO ORDER NO. PIPE SHOE

WELDING DATA ACC. TO DIN 1912 T5

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



Total Weight:	25.93 kg
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[illegible]

**FREIGABE  
FOR CONSTRUCTION**

27. Juli 2005

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by	27. JUL 2005	Zuf	
Drawn checked by			


  
**HEGMANN**


**AIR LIQUIDE**™

Air Liquide AGS GmbH

	Date	Name	Check.	History File	
	27.07.2005	GU	Zut		
	Job Code: K70101 ASU No.9 Kosice Reference: PIPING SUPPORT			Scale: 1:20	Original Format DIN A3
Replaces:	Title PS-177			Sheet: 1 of:	Rev
				Drawing-No. 792.87926	a

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



Preis-Stückliste 0 25S84010BA25C1 0 25 S 84010 BA25C1 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
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	16,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		4,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 I ) (Leer) 33,7x2,6		11,00				0,00
IA88034	25	0	A88034		1,00				0,00
IV88034	25	0	V88034		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	0,80				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6	0,12 kg	2,00				0,00
P0788	25	25	Tee made of seamless pipe 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6x33,7x2,6	0,23 kg	1,00				0,00
P2967	25	0	Welding neck flanges, PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	4,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		5,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
SPS379	0	0	SUPPORT PS-379, H 100, L=550	12,42 kg	1,00				0,00

Preis-Stückliste 0 25S84010BA25C1 0 25 S 84010 BA25C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Summe: 0 25S84010BA25C1 0				27,36 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	27,36 kg
** Ende der Ausgabe	

AS BUILT





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

Title: 25 S 84010

Drawing No.:

**Maker's No.:**

---

(Kunde / TÜV, ...)

geprüft

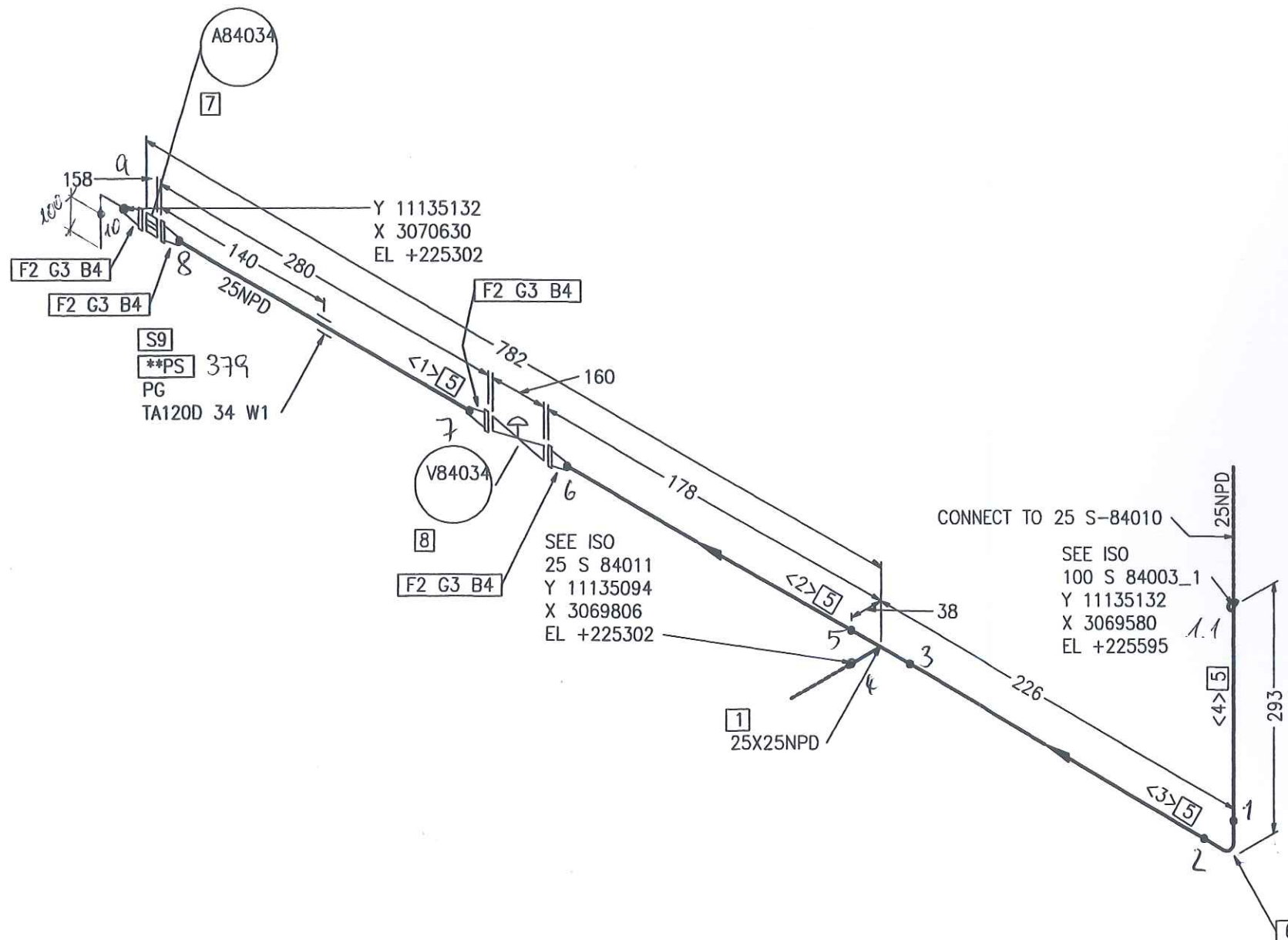
22.02.06  
Pelzeder Erich

Schweisstechnologie VAM

Datum / Unterschrift

[illegible]

# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25X25	TEE, SEAMLESS 33.7*2.6/33.7*2.6, ST35.8 I, DIN 2615-1
2	4	25	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
3	4	25	FLAT GASKET
4	16	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 55.0MM LANG
5	705 MM	25	PIPE, SEAMLESS 33.7*2.6, ST35.8 I, DIN EN 10220
6	1	25	ELBOW, SEAMLESS, 1.5D 33.7*2.6-90, B-ART 3, DIN 2605-1
7	1	25	A84034
8	1	25	V84034
9	1	25	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH					
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO
<1>	200	25		BEVEL	BEVEL
<2>	100	25		BEVEL	BEVEL
<3>	150	25		BEVEL	BEVEL
<4>	255	25		BEVEL	BEVEL

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 PIPIBRIDGE  
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			
Replaces: 79_	Reference: ASU No. 9, Kosice			
Replaced by: 79_	Title: 25 S 84010 BA25C1792.878260			
Scale: 1:1			Original format: DIN A3	
Sheet: 1			Sheets: 1	
Drawing No:			Rev.	



**Preis-Stückliste 0 25S84011BA25C1 0 25 S 84011 BA25C1 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
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	16,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		4,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 I ) (Leer) 33,7x2,6		6,00				0,00
IV84033	25	0	V84033		1,00				0,00
IV90081	25	0	V90081		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	0,60				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6	0,12 kg	2,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	4,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		3,00				0,00
Summe: 0 25S84011BA25C1 0				14,31 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

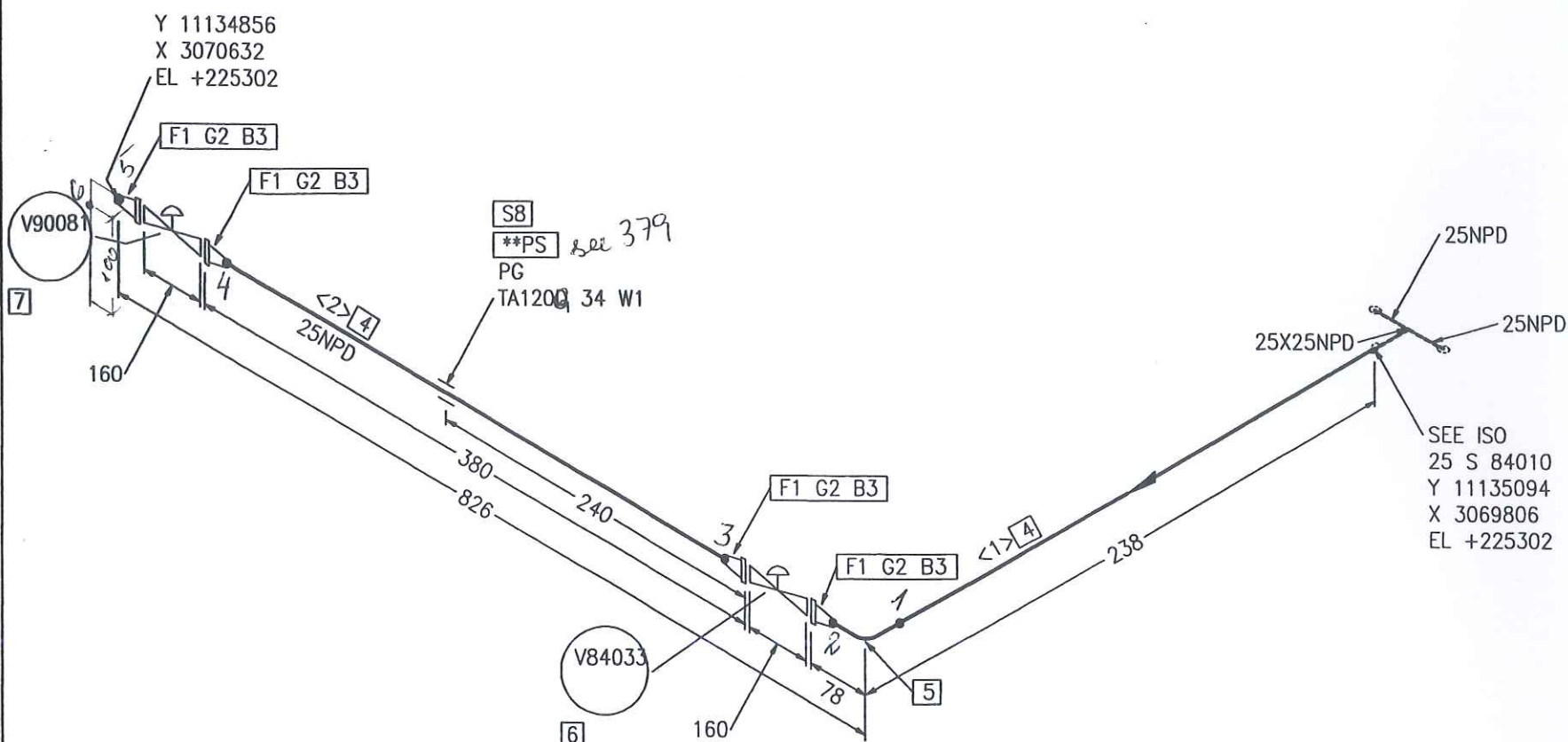
Preis-Stückliste 0 25S84011BA25C1 0 25 S 84011 BA25C1 Revision:													
Teilenummer				NW1	NW2	Teilebezeichnung		Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Gesamtsumme:													
Gesamtgewicht:													
** Ende der Ausgabe													
14,31 kg													

AS BUILT





# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	4	25	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
2	4	25	FLAT GASKET
3	16	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 55.0MM LANG
4	500 MM	25	PIPE, SEAMLESS 33.7*2.6, ST35.8 I, DIN EN 10220
5	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1
6	1	25	V84033
7	1	25	V90081
8	1	25	PIPE GUIDE PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	200	25		BEVEL	BEVEL	RN
<2>	300	25		BEVEL	BEVEL	RN

NUR ZUR INFORMATION

FOR INFORMATION ONLY

2. 10. 2005

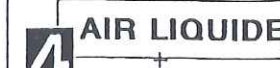
LEVELS:  
 TOP OF INTERNAL ROADS: 225.00m n.m.  
 TOP OF FOUNDATION: 225.10m  
 BOTTOM OF STEEL STRUCTURE: 225.15m = ±0.00

### 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
				Zut

Date:	Name:	Checked:	History file:
17-OCT-2005	Lesum / HGH	05-10-20	
Job Code: K70101	Reference: ASU No. 9, Kosice	Scale: 1:1	Original format DIN A3
Title: 25 S 84011 BA25C1	792.878260	Sheet: 1	Sheets: 1
		Drawing No:	Rev.



## Preis-Stückliste 0 25S84012BA25C1 0 25 S 84012 BA25C1. 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	12,00				0,00
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 I ) (Leer) 33,7x2,6		13,00				0,00
IA88002	25	0	A88002		1,00				0,00
IV88083	25	0	V88083		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	2,60				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6	0,12 kg	4,00				0,00
P0788	25	25	Tee made of seamless pipe 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6x33,7x2,6	0,23 kg	1,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	2,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	2,00				0,00
SC3	25	0	Segment cut 33,7		7,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
SPS380	0	0	SUPPORT PS-380, U 100, L=300	5,28 kg	1,00				0,00

Preis-Stückliste 0 25S84012BA25C1 0 25 S 84012 BA25C1 Revision:

(Fortsetzung)									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Summe: 0 25S84012BA25C1 0				29,32 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht: 29,32 kg

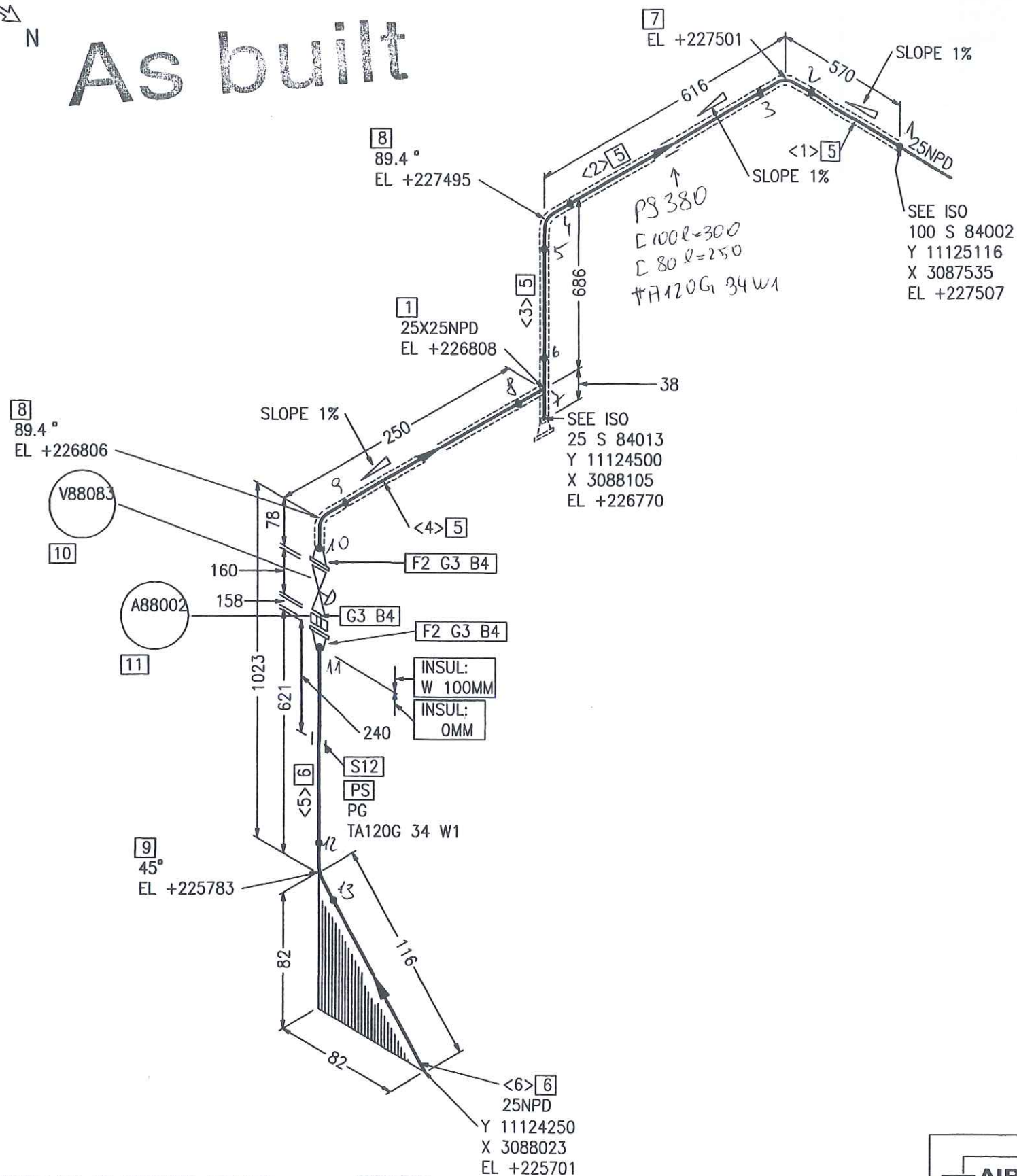
\*\* Ende der Ausgabe

AS BUILT





# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25X25	TEE, SEAMLESS 33.7*2.6/33.7*2.6, ST35.8 I, DIN 2615-1
2	2	25	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
3	3	25	FLAT GASKET
4	12	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 55.0MM LANG
5	1858	MM	PIPE, SEAMLESS 33.7*2.6, ST35.8 I, DIN EN 10220
6	666	MM	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
7	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1
8	2	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-89.4, B-ART 3,DIN 2605-1
9	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-45, B-ART 3,DIN 2605-1
10	1	25	V88083
11	1	25	A88002
12	1	25	PIPE GUIDE PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	532	25		BEVEL	BEVEL	RN
<2>	541	25		BEVEL	BEVEL	RN
<3>	611	25		BEVEL	BEVEL	RN
<4>	174	25		BEVEL	BEVEL	RN
<5>	566	25		BEVEL	BEVEL	RN
<6>	100	25		BEVEL	SQ.CUT	RN

NUR ZUR INFORMATION  
FOR INFORMATION ONLY

2.4.10.2005

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



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 S 84012 BA25C1W	792.878260
Scale: 1:1	Original format: DIN A3	Sheet: 1	Sheets: 1
Drawing No:	Rev:		



**Preis-Stückliste 0 25S84013BA25C1 0 25 S 84013 BA25C1 .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	8,00				0,00
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	8,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		2,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 I ) (Leer) 33,7x2,6		3,00				0,00
IV88084	25	0	V88084		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	0,85				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6	0,12 kg	1,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	2,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		3,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
Summe: 0 25S84013BA25C1 0				12,05 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Preis-Stückliste 0 25S84013BA25C1 0 25 S 84013 BA25C1 Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Gesamtsumme:									
Gesamtgewicht:				12,05 kg					
** Ende der Ausgabe									

AS BUILT



[illegible]

As built

ISO  
25 S 84012  
Y 11124500  
X 3088105  
EL +226770

F1 G2 B3  
F1 G2 B3

INSUL:  
W 100MM  
INSUL:  
OMM

S7  
PS  
FB  
TA120B 34 W1

5  
45°  
EL +225783

Y 11124500  
X 3088023  
EL +225701

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			Scale:	1:1	Original format:	DIN A3
Reference:	ASU No. 9, Kosice			Sheet:	1	Sheets:	1
Title:	25 S 84013 BA25C1W			Drawing No:	792.878260	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  
FOR INFORMATION ONLY

21 OCT. 2005

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	2	25	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
2	2	25	FLAT GASKET
3	8	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 55.0MM LANG
4	827 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
5	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-45, B-ART 3,DIN 2605-1
6	1	25	V88084
7	1	25	FIX POINT PSSUPPORT

CUT PIPE LENGTH					
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO
<1>	727	25		BEVEL	BEVEL
<2>	100	25		BEVEL	SQ.CUT



## Preis-Stückliste 0 25S84014BA25C1 0 25 S 84014 BA25C1 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	12,00				0,00
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 I ) (Leer) 33,7x2,6		18,00				0,00
IR24255	25	0	R24255		1,00				0,00
IV73063	25	0	V73063		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	7,14				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6	0,12 kg	7,00				0,00
P0788	25	25	Tee made of seamless pipe 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6x33,7x2,6	0,23 kg	1,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	2,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	2,00				0,00
SC3	25	0	Segment cut 33,7		8,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		1,00				0,00

Preis-Stückliste 0 25S84014BA25C1 0 25 S 84014 BA25C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
SPS381	0	0	SUPPORT PS-381, H 100, L=250	5,10 kg	2,00				0,00
SPS382	0	0	SUPPORT PS-382, L 50, L=500	1,88 kg	1,00				0,00
Summe: 0 25S84014BA25C1 0				45,52 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht:

\*\* Ende der Ausgabe

45,52 kg

AS BUILT









**Preis-Stückliste 0.25S84015BA25C1 0 25 S 84015 BA25C1 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	8,00				0,00
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	8,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		2,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 l ) (Leer) 33,7x2,6		4,00				0,00
IV73062	25	0	V73062		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 l ) DIN 17175 33,7x2,6	1,99 kg	1,27				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 l ) DIN 2609 33,7x2,6	0,12 kg	2,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	2,00				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
<b>Summe: 0 25S84015BA25C1 0</b>				<b>5,41 kg</b>		<b>0,00</b>	<b>0,00</b>		<b>0,00</b>

Liefersumme:

Montagesumme:

Gesamtsumme:

Preis-Stückliste 0 25S84015BA25C1 0 25 S 84015 BA25C1 Revision:									
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Gesamtgewicht:				5,41 kg					
** Ende der Ausgabe									

AS BUILT





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

Title: 25 S 84015

Drawing No.:

792.87826 - 00

Maker's No.:

(Kunde / TÜV, ...)

geprüft

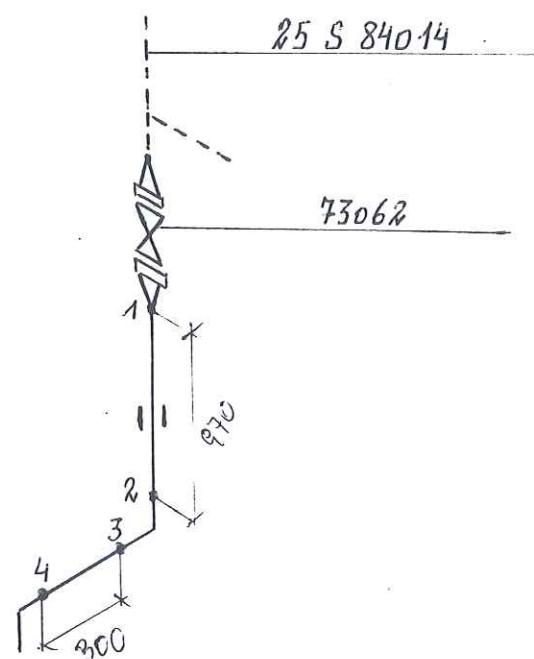
22.02.06  
Pelzeder Erich

**Schweisstechnologie VAM**  
**Datum / Unterschrift**



**Datum / Unterschrift**

[illegible]



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	
Replaces: 79_--- Replaced by: 79_---		Title: 25 S 84015 BA 25C 1		Drawing No: 792.8782600	Rev.



## Preis-Stückliste 0.25S84018BA25C1 0 25 S 84018 BA25C1 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	12,00				0,00
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 I ) (Leer) 33,7x2,6		13,00				0,00
IA88002	25	0	A88002		1,00				0,00
IV88083	25	0	V88083		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	3,70				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6	0,12 kg	4,00				0,00
P0788	25	25	Tee made of seamless pipe 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6x33,7x2,6	0,23 kg	1,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	2,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	2,00				0,00
SC3	25	0	Segment cut 33,7		7,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
SPS383	0	0	SUPPORT PS-383, H 100, L=360	10,98 kg	1,00				0,00

Preis-Stückliste 0 25S84018BA25C1 0 25 S 84018 BA25C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung		Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Summe: 0 25S84018BA25C1 0					37,21 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	37,21 kg
** Ende der Ausgabe	

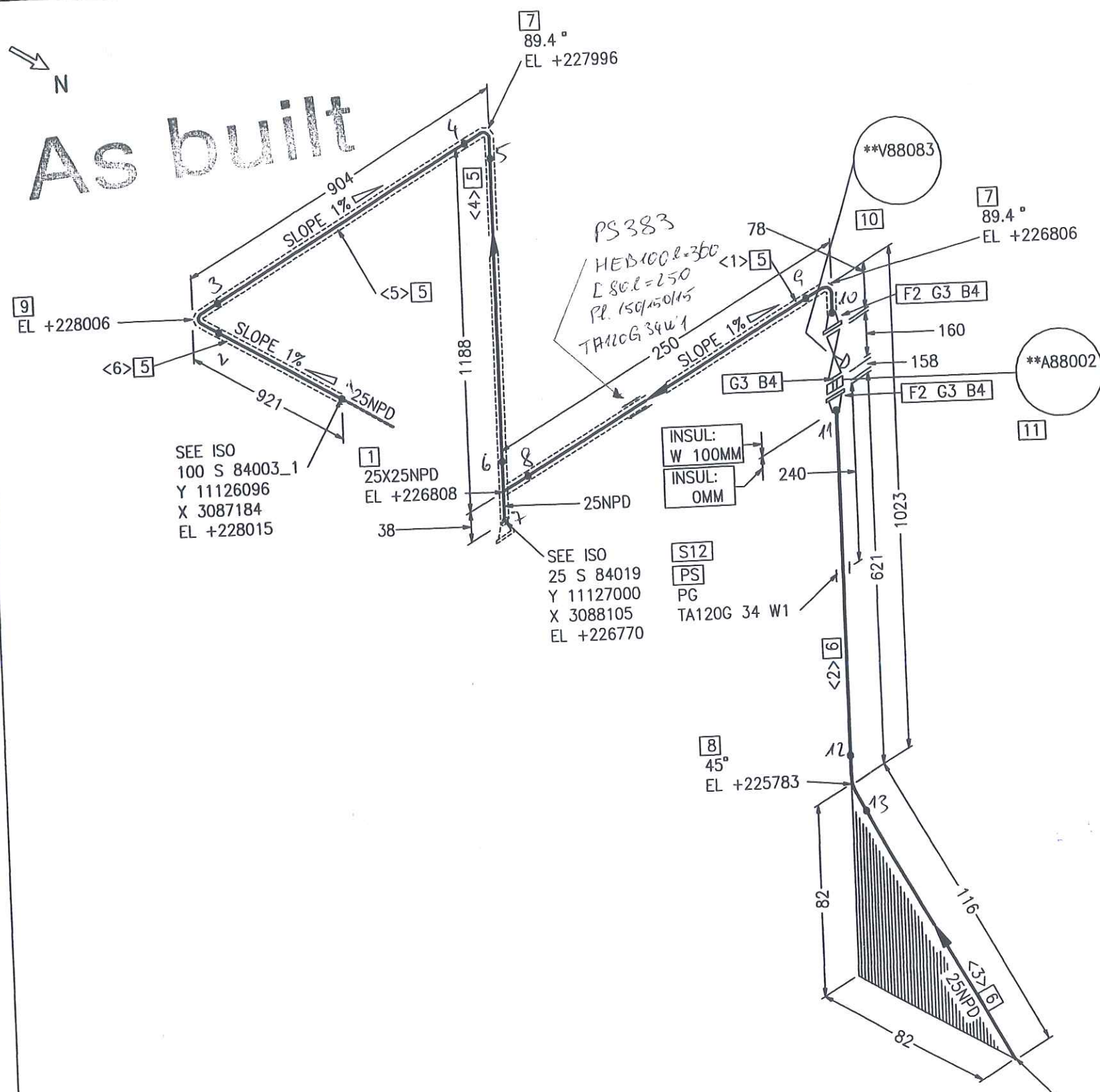
ASBUILT







# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25X25	TEE, SEAMLESS 33.7*2.6/33.7*2.6, ST35.8 I, DIN 2615-1
2	2	25	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
3	3	25	FLAT GASKET
4	12	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 55.0MM LANG
5	2998 MM	25	PIPE, SEAMLESS 33.7*2.6, ST35.8 I, DIN EN 10220
6	666 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
7	2	25	ELBOW, SEAMLESS, 1.5D 33.7*2.6-89.4, B-ART 3, DIN 2605-1
8	1	25	ELBOW, SEAMLESS, 1.5D 33.7*2.6-45, B-ART 3, DIN 2605-1
9	1	25	ELBOW, SEAMLESS, 1.5D 33.7*2.6-90, B-ART 3, DIN 2605-1
10	1	25	V88083
11	1	25	A88002
12	1	25	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH		NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
PIECE NO	LENGTH (MM)					
<1>	174	25		BEVEL	BEVEL	RN
<2>	566	25		BEVEL	BEVEL	RN
<3>	100	25		BEVEL	BEVEL	RN
<4>	1112	25		BEVEL	BEVEL	RN
<5>	829	25		BEVEL	BEVEL	RN
<6>	883	25		BEVEL	BEVEL	RN

**NUR ZUR INFORMATION**  
**FÜR INFORMATION ONLY**

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

Y 11127250  
 X 3088023  
 EL 225701

**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

Title: 25 S 84018 BA25C1W 792.878260

Scale: ---:---  
 Original format: DIN A3  
 Sheet: 1  
 Sheets: 1  
 Drawing No: 792.878260  
 Rev. 8



Preis-Stückliste 0 25S84019BA25C1 0 25 S 84019 BA25C1 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	8,00				0,00
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	8,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		2,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 I ) (Leer) 33,7x2,6		3,00				0,00
IV88084	25	0	V88084		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	0,85				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6	0,12 kg	1,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	2,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		3,00				0,00
SPG01	0	0	PIPE GUIDE 1.0 HESTERBERG		1,00				0,00
Summe: 0 25S84019BA25C1 0				12,05 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Preis-Stückliste 0 25S84019BA25C1 0 25 S 84019 BA25C1 Revision:

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

Gesamtgewicht:

12,05 kg

**\*\* Ende der Ausgabe**

# THE BAS



[illegible]

As built

\*\*V88084

6

25NPD  
25X25NPD  
25NPD  
F1 G2 B3  
INSUL:  
W 100MM  
INSUL:  
OMM  
F1 G2 B3

S7  
PS  
FB PG  
TA120 34 W1

5  
45°  
EL +225783

Y 11127000  
X 3088023  
EL +225701

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	Scale:	1:1	Original format:	DIN A3
Title:	25 S 84019 BA25C1W			Sheet:	1	Sheets:	1
				Drawing No:	792.878260	Rev.	

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	2	25	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
2	2	25	FLAT GASKET
3	8	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 55.0MM LANG
4	827 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
5	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-45, B-ART 3,DIN 2605-1
6	1	25	V88084
7	1	25	FIX POINT PSSUPPORT

#### CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	727	25		BEVEL	BEVEL	RN
<2>	100	25		BEVEL	SQ.CUT	RN

NUR ZUR INFORMATION  
FOR INFORMATION ONLY

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 25S84030BA25C1 0 25 S 84030 BA25C1 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	8,00				0,00
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	8,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		2,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 I ) ( Leer ) 33,7x2,6		13,00				0,00
IA84024	25	0	A84024		1,00				0,00
IV84093	25	0	V84093		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	1,00				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6	0,12 kg	4,00				0,00
P0788	25	25	Tee made of seamless pipe 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6x33,7x2,6	0,23 kg	1,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	2,00				0,00
SC3	25	0	Segment cut 33,7		5,00				0,00
<b>Summe: 0 25S84030BA25C1 0</b>				<b>5,34 kg</b>		<b>0,00</b>	<b>0,00</b>		<b>0,00</b>

Liefersumme:

Montagesumme:

Preis-Stückliste 0 25S84030BA25C1 0 25 S 84030.BA25C1 Revision:											
Teilenummer		NW1	NW2	Teilebezeichnung		Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Gesamtsumme:											
Gesamtgewicht:				5,34 kg							
** Ende der Ausgabe											

AS BUILT



[illegible]

# As built

CONNECT TO 25 S-84030

SEE ISO  
100 S 84002  
Y 11126000  
X 3024887  
EL +226113

6  
89.4 °  
EL +225870

F2 G3 B4

V84093

8

78

160

F2 G3 B4

1  
25X25NPD  
EL +225872

SEE ISO  
25 S 84031  
Y 11126000  
X 3024629  
EL +225834

VS10  
PS  
FP

38 1A120B 34 W1

A84024

9

95

38

7  
EL +225405

Y 11125612  
X 3024923  
EL +225405

13

25NPD

388

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 S 84030 BA25C1W		Drawing No: 792.878260	Rev.

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25X25	TEE, SEAMLESS 33.7*2.6/33.7*2.6, ST35.8 I, DIN 2615-1
2	2	25	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
3	2	25	FLAT GASKET
4	8	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 55.0MM LANG
5	1001 MM	25	PIPE, SEAMLESS 33.7*2.6, ST35.8 I, DIN EN 10220
6	2	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-89.4, B-ART 3,DIN 2605-1
7	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1
8	1	25	V84093
9	1	25	A84024
10	1	25	FIX POINT PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	220	25			BEVEL	RN
<2>	162	25		BEVEL	BEVEL	RN
<3>	219	25		BEVEL	BEVEL	RN
<4>	50	25		BEVEL	SQ.CUT	RN
<5>	350	25		BEVEL	SQ.CUT	RN

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



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25S84031BA25C1 0 25 S 84031 BA25C1 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	8,00				0,00
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	8,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		2,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 I ) (Leer) 33,7x2,6		4,00				0,00
IV84093	25	0	V84093		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	0,60				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6	0,12 kg	2,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	2,00				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
SPS384	0	0	SUPPORT PS-384, L 50, L=100 Summe: 0 25S84031BA25C1 0	0,37 kg 4,44 kg	1,00				0,00 0,00

Liefersumme:  
Montagesumme:

Preis-Stückliste 0 25S84031BA25C1 0 25 S 84031 BA25C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
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Gesamtgewicht: 4,44 kg

Gesamtgewicht:

**\*\* Ende der Ausgabe**

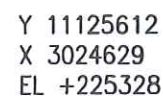
4,44 kg

# FLUBS AS





N



- Situation of mounting seams
- 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

**AIR LIQUIDE**  
+  
Air Liquide AGS GmbH

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

25	S	84031	BA25C1W	792.87826	0
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2 JUL 2005

LEVELS:

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



## Preis-Stückliste 0 100N87001AA10C1 0 100 N 87001 AA10C1 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	4,00				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
B0017	20	70	Hexagon head screws 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,23 kg	8,00				0,00
B0018	20	80	HEXAGON HEAD SCREWS 5.6 DIN EN ISO 898-1 / DIN EN ISO 4014	0,26 kg	8,00				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
B0517	16	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,03 kg	12,00				0,00
G0099	40	0	Flat packings Graphite with CrNi-insert Standard 40002 92x2x49		1,00				0,00
G0104	100	0	Flat packings Graphite with CrNi-insert Standard 40002 162x2x115		2,00				0,00
G0108	150	0	Flat packings Graphite with CrNi-insert Standard 40002 218x2x169		1,00				0,00
GW20	100	0	girth weld 1.0254 ( St 37.0 ) 114,3x3,6		6,00				0,00
GW25	150	0	girth weld 1.0254 ( St 37.0 ) 168,3x7,1		4,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		8,00				0,00

Preis-Stückliste 0 100N87001AA10C1 0 100 N 87001 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
GW9	40	0	girth weld 1.0254 ( St 37.0 ) 48,3x2,6		2,00				0,00
IPT87012	15	0	PT87012 supplied by AGS		1,00				0,00
IV87012H1	15	0	V87012H1 supplied by AGS		1,00				0,00
IZ87012	150	100	Z87012 supplied by AGS		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	1,10				0,00
P0042	40	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 48,3x2,6	2,93 kg	0,20				0,00
P0050	100	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 114,3x3,6	9,83 kg	2,20				0,00
P0054	150	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 168,3x4,5	18,20 kg	6,10				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	2,00				0,00
P0210	150	0	Elbow 90° R=1,5 DA, seamless 1.0254 ( St 37.0 ) DIN 2609 168,3x4,5	6,55 kg	2,00				0,00
P0732	100	40	Tee made of seamless pipe 1.0254 ( St 37.0 ) DIN 2609 114,3x3,6x48,3x2,6	2,25 kg	1,00				0,00
P2673	25	0	CAPS 1.0254		1,00				0,00



Preis-Stückliste 0 100N87001AA10C1 0 100 N 87001 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P2935	25	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 33,7	1,00 kg	7,00				0,00
P2937	40	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 48,3	2,00 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	2,00				0,00
P2943	150	0	WELDING NECK FLANGES; PN 16 1.0038 ( S235JRG2 ) DIN EN 1092-1 168,3	7,50 kg	1,00				0,00
PWI35	100	15	PIPE WELD-IN 1.4541		1,00				0,00
PWI9	100	25	Pipe weld-in 1.0254 ( St 37.0 ) 114,3x3,6x33,7x2,6		8,00				0,00
S0021	100	0	T-support TA 120G 115 W1 OZN 1.0 Hesterberg 115	10,70 kg	1,00				0,00
S0047	150	0	SUPPORT TA 120G 168 W1		2,00				0,00
S0166	100	0	T-support TA 120A 115 W1 OZN 1.0 Hesterberg 115	3,50 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		8,00				0,00
SC4	40	0	Segment cut 48,3		1,00				0,00
SC7	100	0	Segment cut 114,3		2,00				0,00
SC9	150	0	Segment cut 168,3		2,00				0,00

Preis-Stückliste 0 100N87001AA10C1 0 100 N 87001 AA10C1 Revision:..										
(Fortsetzung)										
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt	
SPS156	0	0	SUPPORT PS-156	66,26 kg	1,00				0,00	
SPS157	0	0	SUPPORT PS-157	26,22 kg	1,00				0,00	
SPS385	0	0	SUPPORT PS-385, H 140, L=650	51,24 kg	1,00				0,00	
SPS386	0	0	SUPPORT PS-386, H 140, L=700	45,59 kg	1,00				0,00	
XZB02	100	15	welding nozzle for pressure gauge, drawi 1.4541 22		1,00				0,00	
Summe: 0 100N87001AA10C1 0				391,32 kg		0,00	0,00		0,00	

Liefersumme:	
Montagesumme:	
Gesamtsumme:	391,32 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT







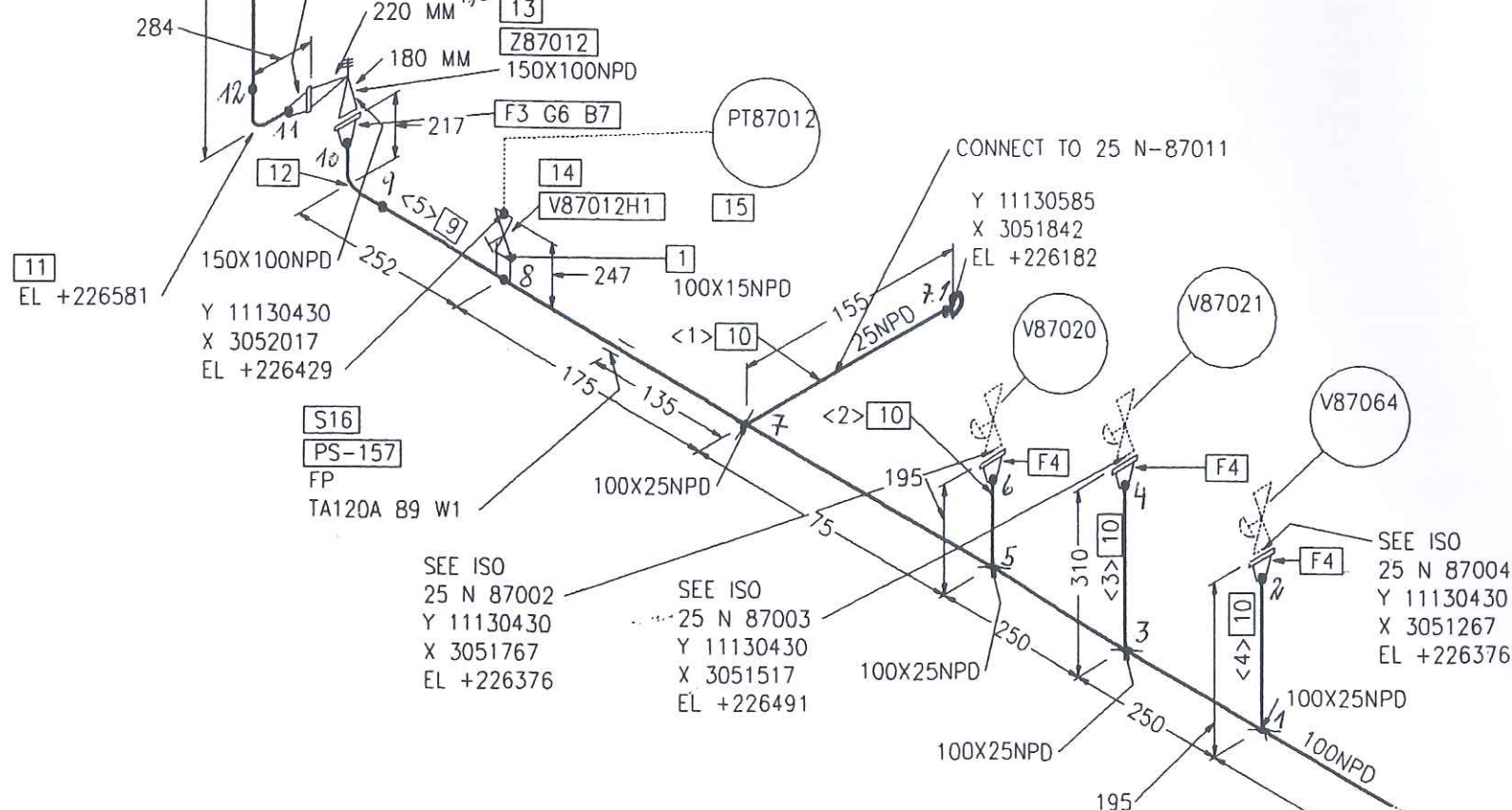
Y 11129534  
X 3052269  
EL +232886

N <7> [8]  
150NPD  
390  
14  
13  
11  
EL +232886

As built

PS 386  
HEB 140 L=700  
Bl. 300x300x20  
Bl. 200x200x20  
TA120G 168W1

PS 385 + TA120G 168W1  
HEB 140 L=650  
Bl. 300x300x20  
Bl. 200x200x20



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

<b>AIR LIQUIDE</b> Air Liquide AGS GmbH	Date: 26-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: 100 N 87001 AA10C1792.8782601			Drawing No.	Rev.



# As built

Technical drawing of a vertical rod assembly. The drawing shows a central vertical rod with a circular top and a base. Dimensions and labels are as follows:

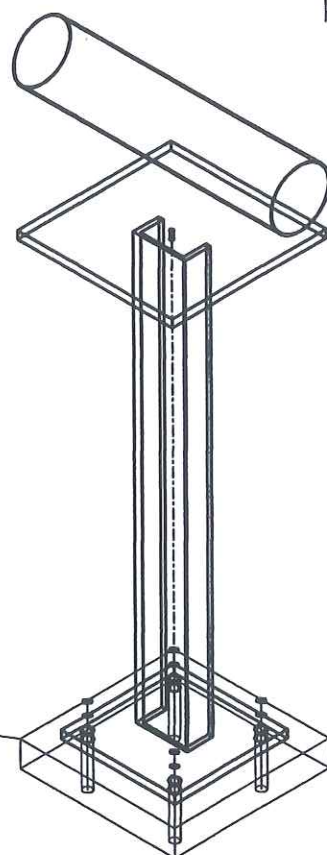
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- Top offset dimension: 15
- Top label: PS-157
- Top label: FP
- Top coordinate:  $Z = 226182$
- Bottom coordinate:  $Z = 226004$
- Bottom dimension: 854
- Bottom offset dimension: 15
- Bottom coordinate:  $Z = 225150$
- Bottom dimension: 170
- Labels 2, 3, 4, and 5 point to various components of the assembly.

Z= 226182

Z= 226004

Z= 225150

X= 3051977

$$Y = 11130430$$


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 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:	25.02 kg
---------------	----------

[illegible]

	Date	Name	Signature
Approved by			
Checked by		Gans	
Checked by	23 JUL 2005	Zut	
Drawn checked by			



Hegmanns



**AIR LIQUIDE**

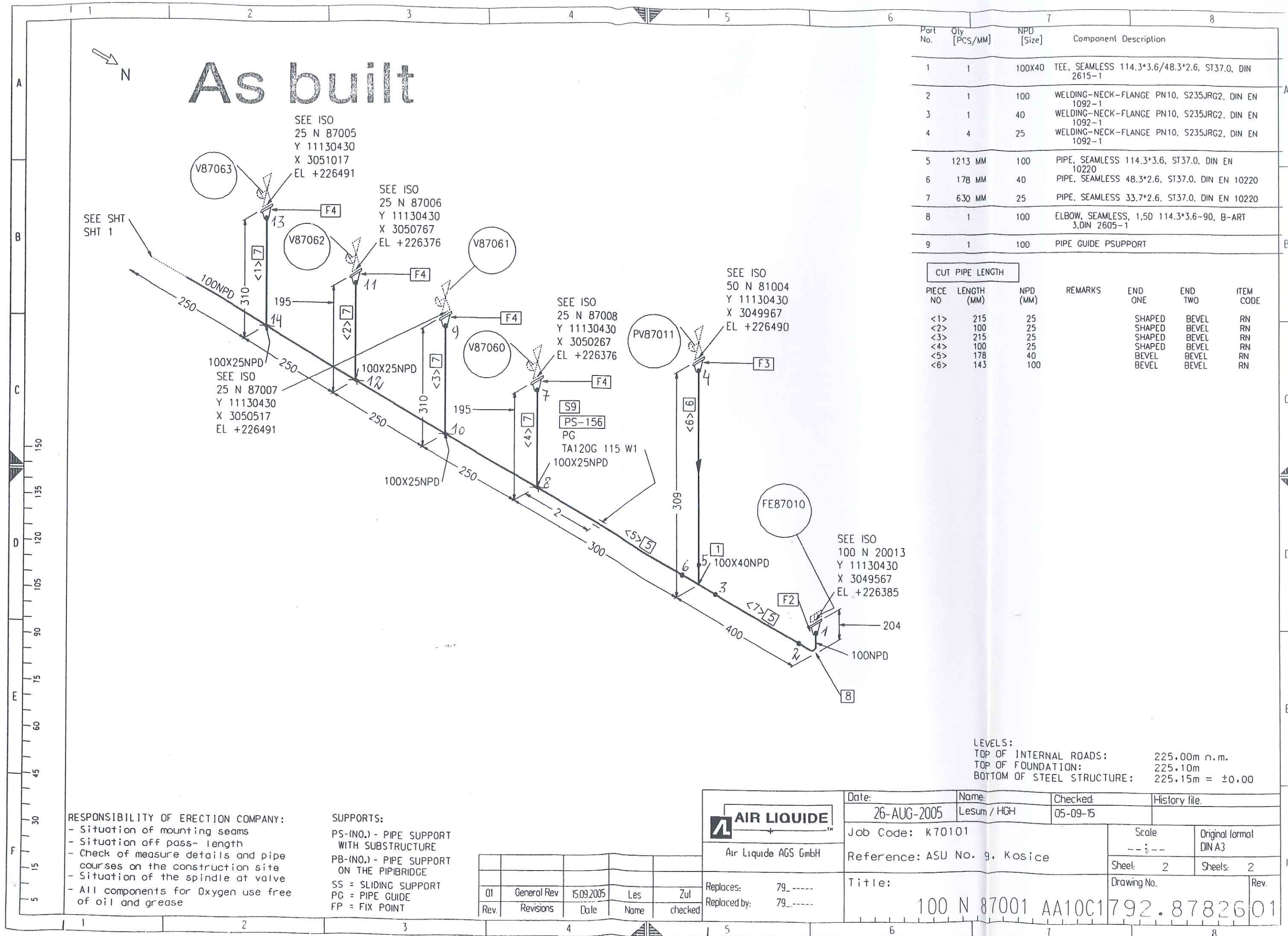
Air Liquide AGS GmbH

	Date	Name	Check.	History File
	23.05.2005	MG	Zut	
	Job Code: K70101 ASU No.9 Kosice Reference: PIPING SUPPORT			
Replaces:	Title	PS-157	Scale: 1:10      Original Format DIN A3	
			Sheet: 1 of:	
			Drawing-No. 792.87926	
			Rev a	







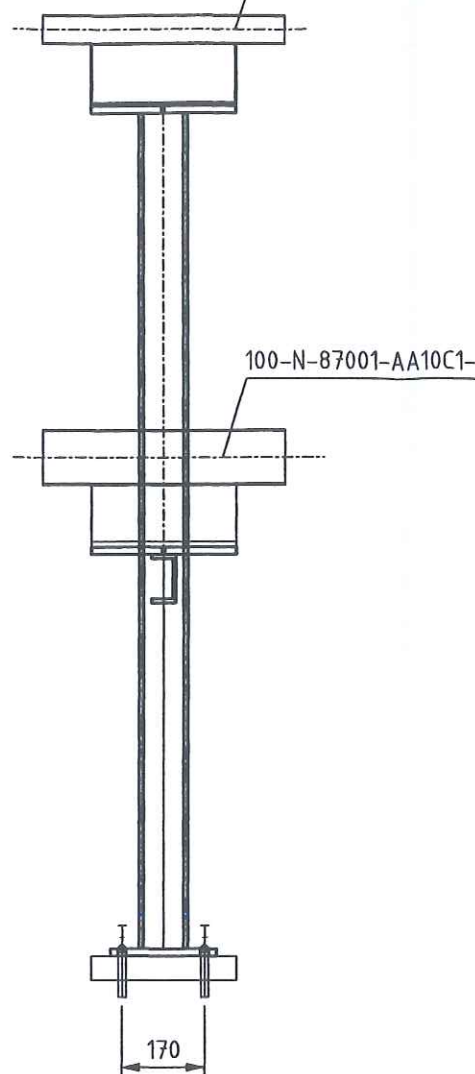
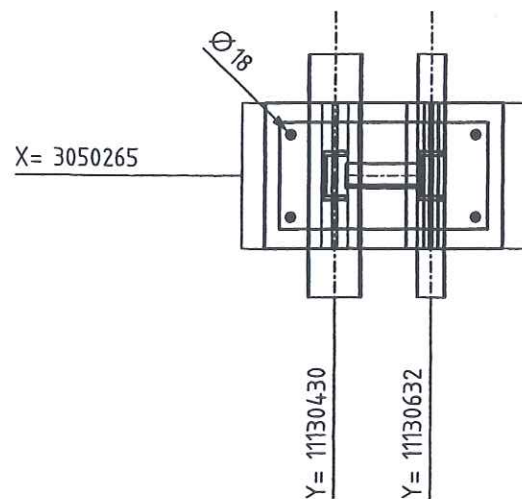
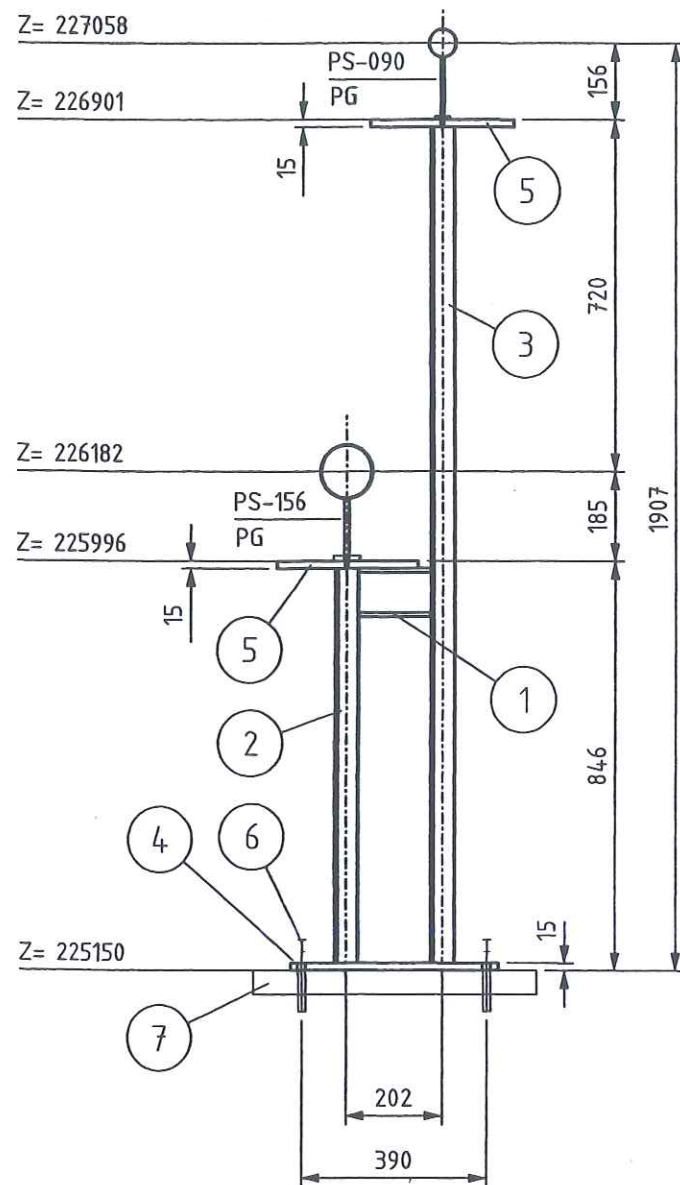




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As built

50-A-15040-AA10C1-



TA 120 G DN 100-200

ANGLE STEEL: L60x10x100LENGTH  
ANGLE STEEL AND PLATE ACCORDING  
TO ORDER NO. PIPE SHOE

#### 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

TA 120 G DN 15-80



ANGLE STEEL: L40x8x80LENGTH  
ANGLE STEEL AND PLATE ACCORDING  
TO ORDER NO. PIPE SHOE

WELDING DATA ACC. TO DIN 1912 TS

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



Total Weight: 61.05 kg

Item	No. Off	Unit	Description	Dimension	Material	Weight kg	Remark
1	1	pcs	PROFILE	U100, L=0.152	RST37-2	1.608	
2	1	pcs	PROFILE	U100, L=0.816	RST37-2	8.638	
3	1	pcs	PROFILE	U100, L=1.721	RST37-2	18.215	
4	1	pcs	PLATE 440x220x15	PLATE 15x220x440	RST37-2	11.398	
5	2	pcs	PLATE 300x300x15	PLATE 15x300x300	RST37-2	21.196	
6	4	pcs	ANCHOR BOLT HST(-R)M16/100	HST(-R) 16-0-M16	1.4401	0.000	1,2
7	1	pcs	BASE	600x300x50	CONCRETE	0.000	66,26

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

HEGMANN'S

AIR LIQUIDE

Air Liquide AGS GmbH

Date	Name	Check	History File
23.05.2005	MG	Zut	
Job Code:	K70101 ASU No.9 Kosice		
Reference:	PIPING SUPPORT		
Replaces:	Title		
Scale:	1:15		
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 25N87002AA10C1 0 25 N 87002 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	12,00				0,00
B0516	12	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		18,00				0,00
IF187020	25	0	FI87020		1,00				0,00
IV87020	25	0	V87020		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	19,32				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	8,00				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
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	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		5,00				0,00
SPS392	0	0	SUPPORT PS-392, L 80, L=700	5,33 kg	1,00				0,00
SPS393	0	0	SUPPORT PS-393, H 100, L=500	10,80 kg	1,00				0,00
			Summe: 0 25N87002AA10C1 0	65,10 kg		0,00	0,00		0,00

Preis-Stückliste 0 25N87002AA10C1 0 25 N 87002 AA10C1 Revision:

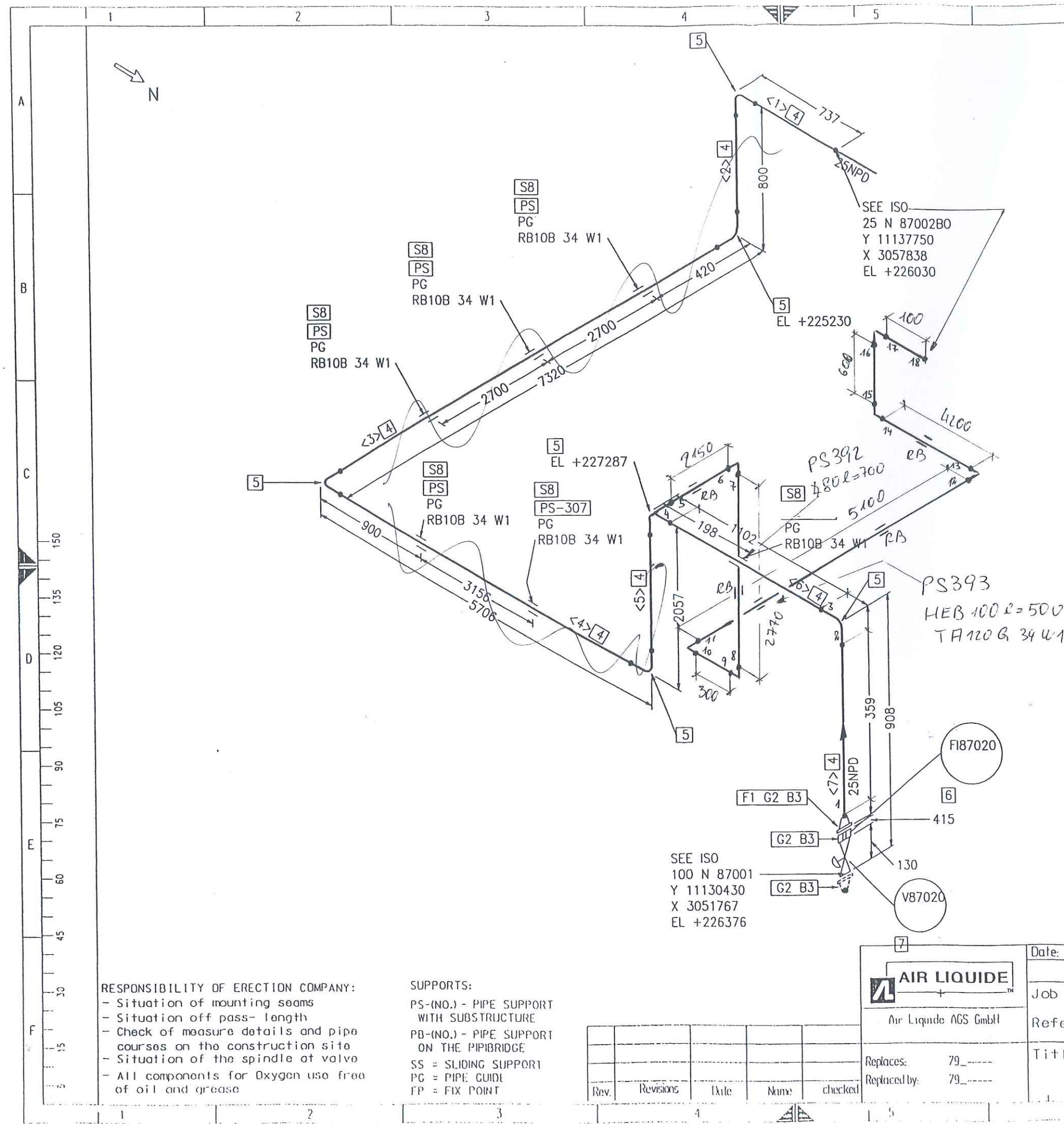
Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
-------------	-----	-----	------------------	------------	-------	-----------	---------	-------	--------

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	65,10 kg
** Ende der Ausgabe	

AS BUILT







Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
2	3	25	FLAT GASKET
3	12	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 50.0MM LANG
4	17585 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
5	6	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1
6	1	25	F187020
7	1	25	V87020
8	6	25	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH						
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	699	25		BEVEL	BEVEL	RN
<2>	724	25		BEVEL	BEVEL	RN
<3>	7244	25		BEVEL	BEVEL	RN
<4>	5630	25		BEVEL	BEVEL	RN
<5>	1981	25		BEVEL	BEVEL	RN
<6>	1026	25		BEVEL	BEVEL	RN
<7>	281	25		BEVEL	BEVEL	RN

FOR INFORMATION ONLY

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

<b>AIR LIQUIDE</b> Air Liquide AGS GmbH		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:
Replaces:		79_	Replaced by:		79_	Title:		25 N 87002 AA10C1792.878260
Drawing No:		1792.878260		Rev.		1		



## Preis-Stückliste 0 25N87003AA10C1.0 25 N 87003 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	12,00				0,00
B0516	12	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		18,00				0,00
IF187021	25	0	FI87021		1,00				0,00
IV87021	25	0	V87021		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	18,72				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	8,00				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
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	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		5,00				0,00
SPS394	0	0	SUPPORT PS-394, L 60, L=250	1,14 kg	1,00				0,00
SPS395	0	0	SUPPORT PS-395, L 60, L=300	1,37 kg	1,00				0,00
Summe: 0 25N87003AA10C1 0				50,28 kg		0,00	0,00		0,00

Preis-Stückliste 0 25N87003AA10C1 0 25 N 87003 AA10C1 Revision: .

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
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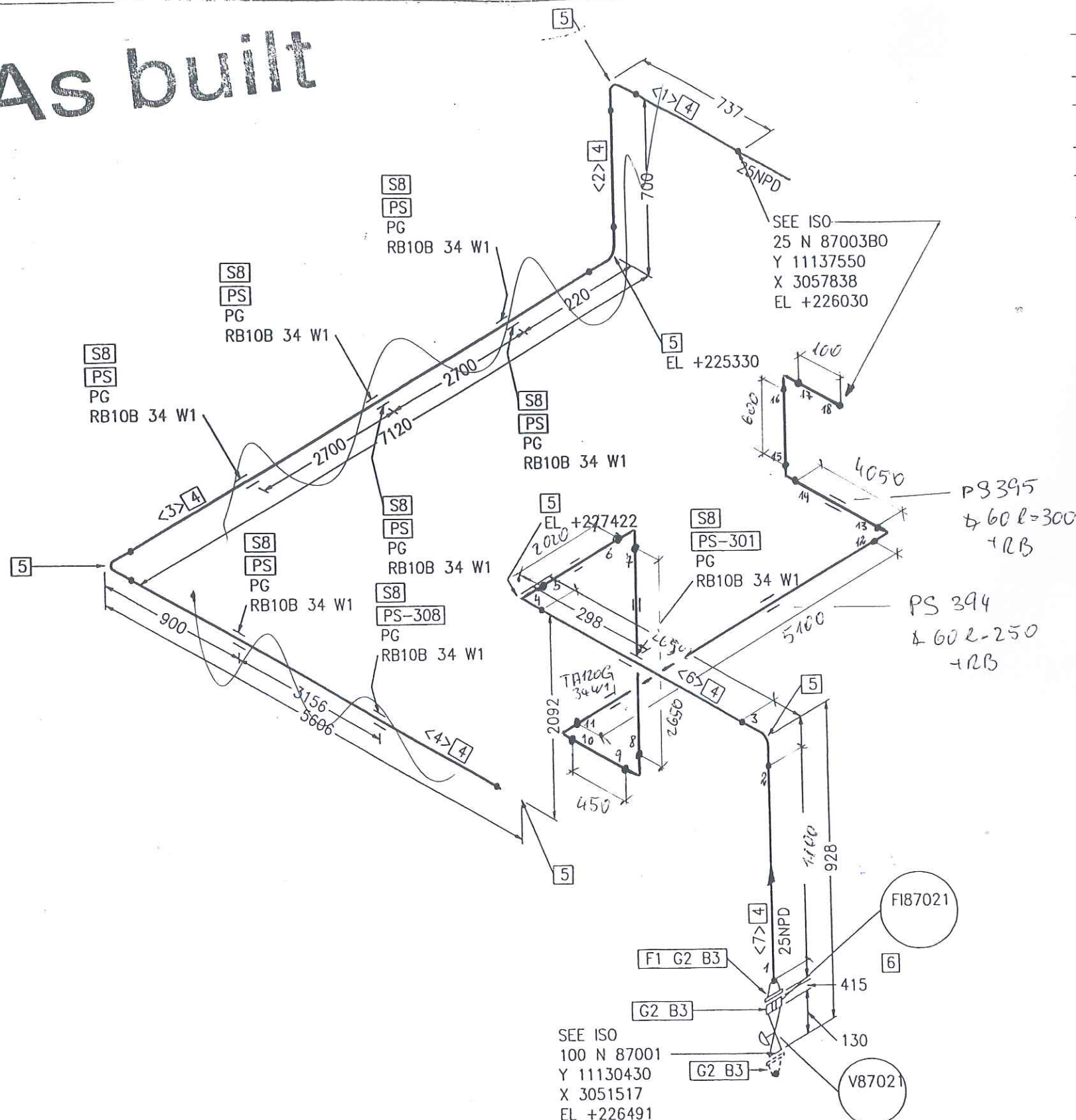
Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	50,28 kg
** Ende der Ausgabe	

AS BUILT





# As built



Port No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
2	3	25	FLAT GASKET
3	12	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 50.0MM LANG
4	17590 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
5	6	25	ELBOW, SEAMLESS, 1.5D 33.7*2.6-90, B-ART 3, DIN 2605-1
6	1	25	FIB7021
7	1	25	V87021
8	8	25	PIPE GUIDE PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	699	25		BEVEL	BEVEL	RN
<2>	624	25		BEVEL	BEVEL	RN
<3>	7044	25		BEVEL	BEVEL	RN
<4>	5530	25		BEVEL	BEVEL	RN
<5>	2016	25		BEVEL	BEVEL	RN
<6>	1376	25		BEVEL	BEVEL	RN
<7>	301	25		BEVEL	BEVEL	RN

P8395  
+ 60 L=300  
+ RB

PS 394  
+ 60 L=250  
+ RB

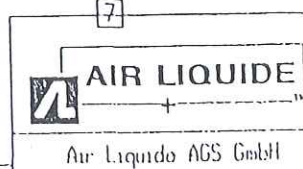
NUR ZUR INFORMATION  
FÜR INFORMATION

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



Replaces: 79  
Replaced by: 79

Date: 17-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 N 87003 AA10C1792.878260		Drawing No:	Rev.



**Preis-Stückliste 0 25N87004AA10C1 0 25 N 87004 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	12,00				0,00
B0516	12	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		18,00				0,00
IF187064	25	0	FI87064		1,00				0,00
IV87064	25	0	V87064		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	28,60				0,00
P0157	25	0	BEND 1.0254	0,12 kg	2,00				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
P2935	25	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 33,7	1,00 kg	1,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	8,00				0,00
SC3	25	0	Segment cut 33,7		10,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		4,00				0,00
SPS396	0	0	SUPPORT PS-396, L 80, L=700	5,33 kg	1,00				0,00

Preis-Stückliste 0 25N87004AA10C1 0 25 N 87004 AA10C1 Revision:

(Fortsetzung)							
Teilenummer	NW1	NW2	Teilebezeichnung				
SPS397	0	0	SUPPORT PS-397, L80, L=6,43				
			Einzelgew.	Menge	Lieferung	Montage	L + M
			6,43 kg	1,00			
			132,51 kg		0,00	0,00	
			Summe: 0 25N87004AA10C1 0				Gesamt
							0,00
							0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	132,51 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT





As built

SEE ISO  
25 N 87004B0  
Y 11139958  
X 3064500  
EL +227850

S3  
PS  
PG  
RB10B 34 W1

S3  
PS  
PG  
RB10B 34 W1

TR10G 34W1

TR10G 34W1

SEE ISO  
SHT 2

#### SUPPORTS:

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	10939 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
2	5	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1
3	2	25	PIPE GUIDE PSUPPORT

#### CUT PIPE LENGTH


PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	176	25			BEVEL	RN
<2>	5849	25		BEVEL	BEVEL	RN
<3>	1644	25		BEVEL	BEVEL	RN
<4>	2646	25		BEVEL	BEVEL	RN
<5>	624	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

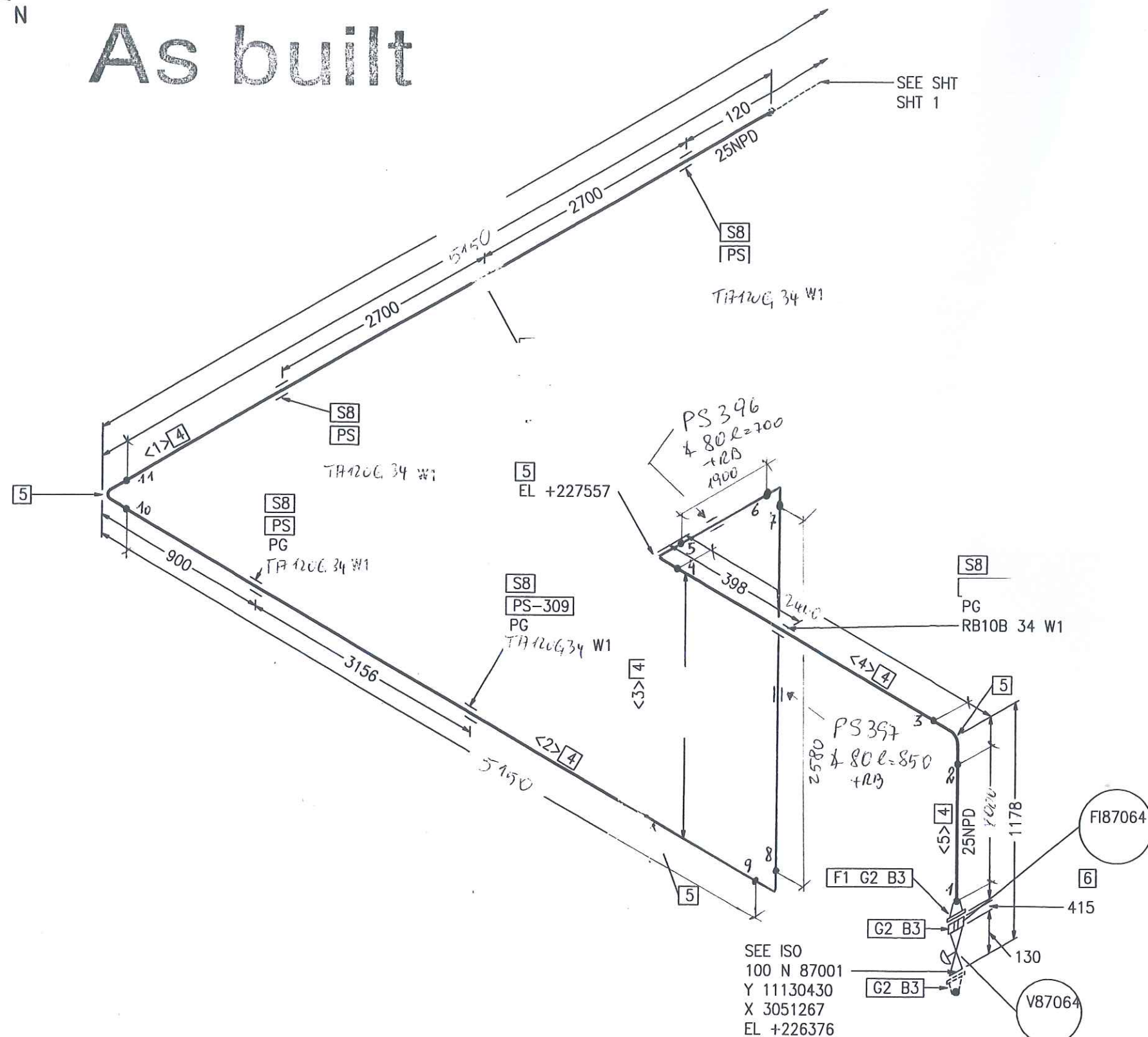
 Air Liquide AGS GmbH	Date: 17-OCT-2005	Name: Lesum / HGH	Checked: 05-10-20	History file:
	Job Code: K70101		Scale: 1:1	Original format: DIN A3
Reference: ASU No. 9, Kosice		Sheet: 1	Sheets: 2	
Title: 25 N 87004 AA10C1792.878260		Drawing No:		Rev.

Rev.	Revisions	Date	Name	checked



[illegible]

# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
2	3	25	FLAT GASKET
3	12	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 50.0MM LANG
4	16702 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
5	4	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3, DIN 2605-1
6	1	25	F187064
7	1	25	V87064
8	6	25	PIPE GUIDE PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	6944	25		BEVEL	BEVEL	RN
<2>	5430	25		BEVEL	BEVEL	RN
<3>	2051	25		BEVEL	BEVEL	RN
<4>	1726	25		BEVEL	BEVEL	RN
<5>	551	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

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

**AIR LIQUIDE**

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 N 87004 AA10C1792.878260	Scale: ---:--- Sheet: 2 Sheets: 2
Drawing No:	Rev.		



## Preis-Stückliste 0 25N87005AA10C1 0 25 N 87005 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	12,00				0,00
B0516	12	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		18,00				0,00
IF187063	25	0	FI87063		1,00				0,00
IV87063	25	0	V87063		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	27,67				0,00
P0157	25	0	BEND 1.0254	0,12 kg	2,00				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
P2935	25	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 33,7	1,00 kg	1,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	8,00				0,00
SC3	25	0	Segment cut 33,7		10,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		4,00				0,00
SPS398	0	0	SUPPORT PS-398, H 100, L=700	14,88 kg	2,00				0,00

Preis-Stückliste 0 25N87005AA10C1 0 25 N 87005 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1 NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Summe: 0 25N87005AA10C1 0			148,66 kg		0,00	0,00		0,00

Liefersumme:

Montagesumme:

Gesamtsumme:

Gesamtgewicht: 148,66 kg

\*\* Ende der Ausgabe

ASBUILT



[illegible]

# As built

SEE ISO  
25 N 87005B0  
Y 11139958  
X 3064500  
EL +227750

SEE ISO  
SHT 2

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:	1	Original format:	DIN A3
Replaces:	79_	Reference:	ASU No. 9, Kosice			Sheet:	2	Rev.
Replaced by:	79_	Title:	25 N 87005 AA10C1792.878260			Drawing No:		

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

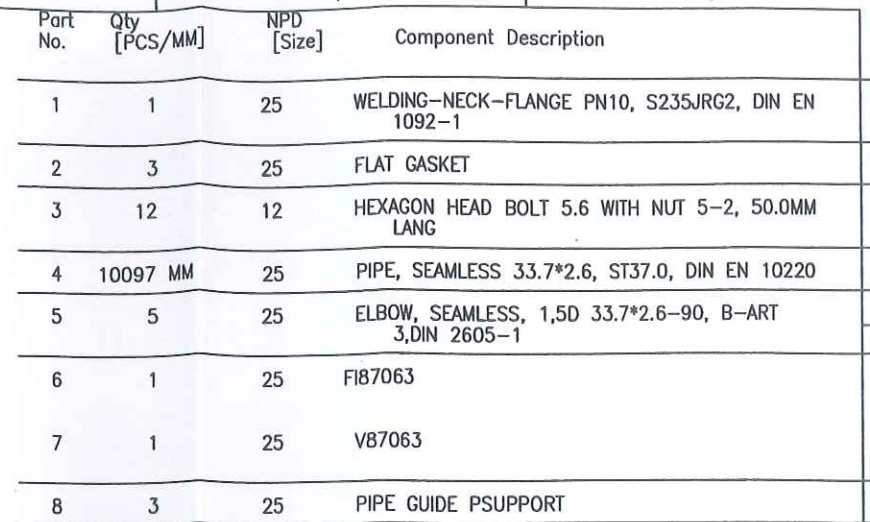
Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	17816 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
2	3	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1
3	7	25	PIPE GUIDE PSUPPORT

### CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	42	25			BEVEL	RN
<2>	5649	25		BEVEL	BEVEL	RN
<3>	2344	25		BEVEL	BEVEL	RN
<4>	9781	25		BEVEL	BEVEL	RN







CUT PIPE LENGTH			REMARKS	END ONE	END TWO	ITEM CODE
PIECE NO	LENGTH (MM)	NPD (MM)				
<1>	5730	25		BEVEL	BEVEL	RN
<2>	2016	25		BEVEL	BEVEL	RN
<3>	1876	25		BEVEL	BEVEL	RN
<4>	174	25		BEVEL	BEVEL	RN
<5>	301	25		BEVEL	BEVEL	RN

NUR ZUR INFORMATION!  
FOR INFORMATION ONLY

LEVELS:

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

**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 AGS GmbH

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

Date:	Name:	Checked:	History file:	
17-OCT-2005	Lesum / HGH	05-10-20		
Job Code: K70101			Scale --:--	Original format DIN A3
Reference: ASU No. 9, Kosice			Sheet: 2	Sheets: 2
Title:			Drawing No:	Rev.
25 N 87005 AA10C1			1792.878260	



Preis-Stückliste 0 25N87006AA10C1 0 25 N 87006 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	12,00				0,00
B0516	12	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		18,00				0,00
IF187062	25	0	FI87062		1,00				0,00
IV87062	25	0	V87062		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	26,97				0,00
P0157	25	0	BEND 1.0254	0,12 kg	2,00				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
P2935	25	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 33,7	1,00 kg	1,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	8,00				0,00
SC3	25	0	Segment cut 33,7		10,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		4,00				0,00
SPS399	0	0	SUPPORT PS-399, H 100, L=700	10,88 kg	2,00				0,00

Preis-Stückliste 0 25N87006AA10C1 0 25 N 87006 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1 NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Summe: 0 25N87006AA10C1 0			139,27 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	139,27 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT







As built

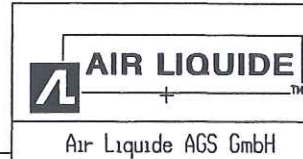
SEE ISO  
25 N 87006B0  
Y 11139958  
X 3064500  
EL +227650

SEE ISO  
SHT 2

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



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

Date:	17-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:	2	
Title:	25 N 87006 AA10C1			Drawing No:	792.878260		Rev.	

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	17716 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	6	25	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	42	25		BEVEL	BEVEL	RN
<2>	5514	25		BEVEL	BEVEL	RN
<3>	2244	25		BEVEL	BEVEL	RN
<4>	9916	25		BEVEL	BEVEL	RN

NUR ZUR INFORMATION  
FOR INFORMATION

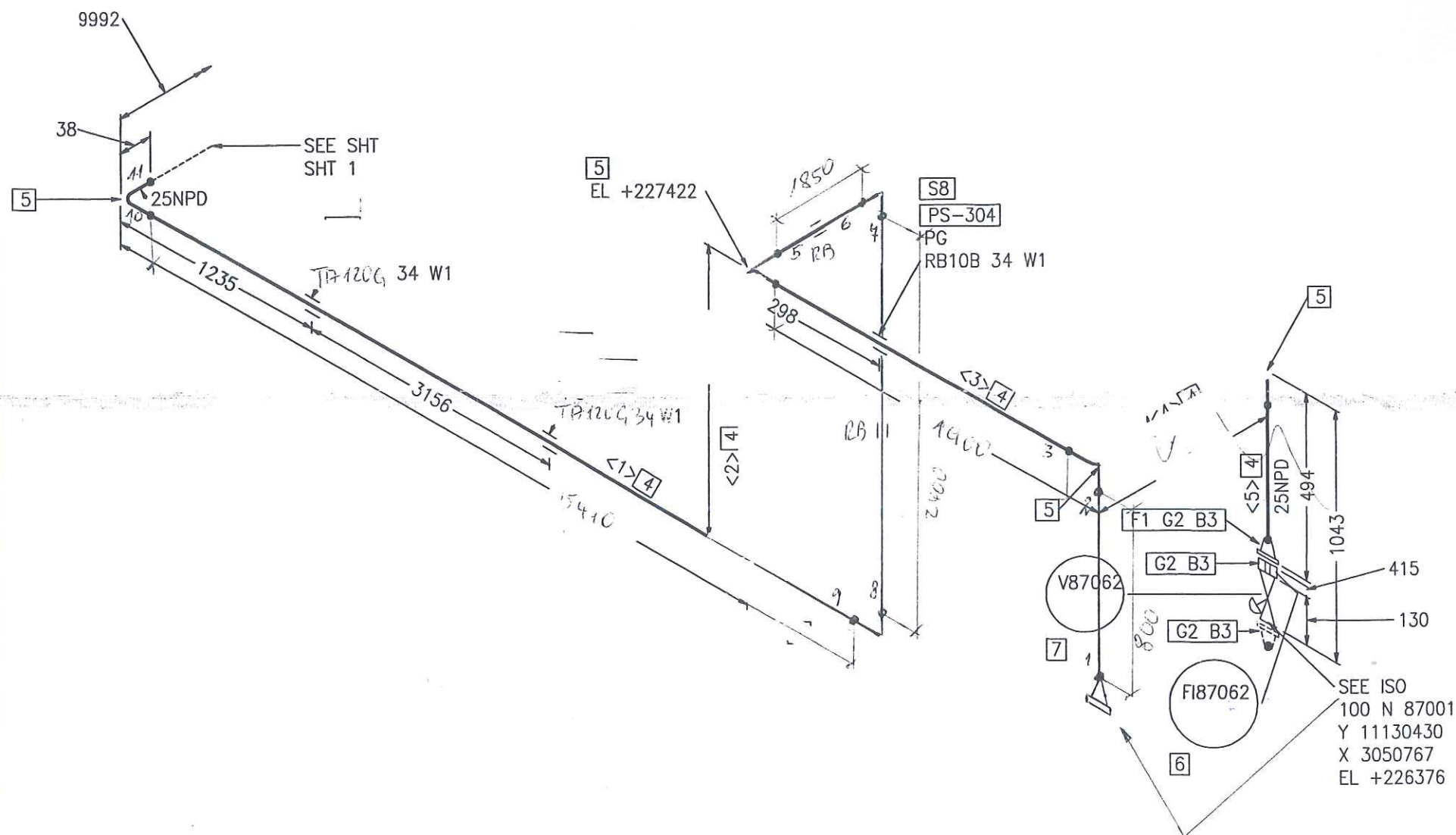
2.1.0KT. 2005

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





 N



CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	5865	25		BEVEL	BEVEL	RN
<2>	2016	25		BEVEL	BEVEL	RN
<3>	2126	25		BEVEL	BEVEL	RN
<4>	309	25		BEVEL	BEVEL	RN
<5>	416	25		BEVEL	BEVEL	RN

FOR INFORMATION USE

21 OCT 1965

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

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**  
+  
Air Liquide AGS GmbH

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

Date:	Name:	Checked:	History file:
17-OCT-2005	Lesum / HGH	05-10-20 <i>2/</i>	
Job Code: K70101			Scale ---
Reference: ASU No. 9, Kosice			Original format DIN A3
			Sheet: 2
Title:			Sheets: 2
25 N 87006 AA10C1792.878260			Drawing No:
			Rev.



Preis-Stückliste 0 25N87007AA10C1 0 25 N 87007 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	12,00				0,00
B0516	12	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		18,00				0,00
IF187061	25	0	FI87061		1,00				0,00
IV87061	25	0	V87061		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	26,06				0,00
P0157	25	0	BEND 1.0254	0,12 kg	2,00				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
P2935	25	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 33,7	1,00 kg	1,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	8,00				0,00
SC3	25	0	Segment cut 33,7		10,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		4,00				0,00
SPS400	0	0	SUPPORT PS-400, H 100, L=1100	23,04 kg	1,00				0,00

Preis-Stückliste 0 25N87007AA10C1 0 25 N 87007 AA10C1 Revision:

(Fortsetzung)										
Teilenummer	NW1	NW2	Teilebezeichnung		Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SPS401	0	0	SUPPORT PS-401, H 100, L=1200		25,08 kg	1,00				0,00
Summe: 0 25N87007AA10C1 0					163,82 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	163,82 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT





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

Title: 25 N 87007

Drawing No.:

792.87826 - 00

Maker's No.:

(Kunde / TÜV, ...)

geprüft

Schweisstechnologie VAM

**Datum / Unterschrift**

24.02.06 RLL  
Pelzeder Erich

[illegible]

N As built


SEE ISO  
25 N 87007B0  
Y 11139958  
X 3064500  
EL +227550

SEE ISO  
SHT 2

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

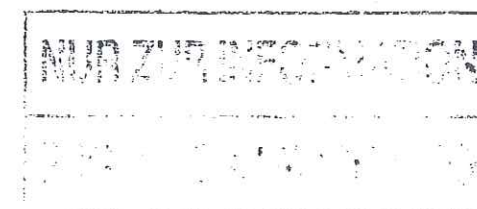
Rev.	Revisions	Date	Name	checked

 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: 2	
Title: 25 N 87007 AA10C1792.878260		Drawing No:		Rev.

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	17985 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	6	25	PIPE GUIDE PSUPPORT

# CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	176	25			BEVEL	RN
<2>	5649	25		BEVEL	BEVEL	RN
<3>	2244	25		BEVEL	BEVEL	RN
<4>	9916	25		BEVEL	BEVEL	RN



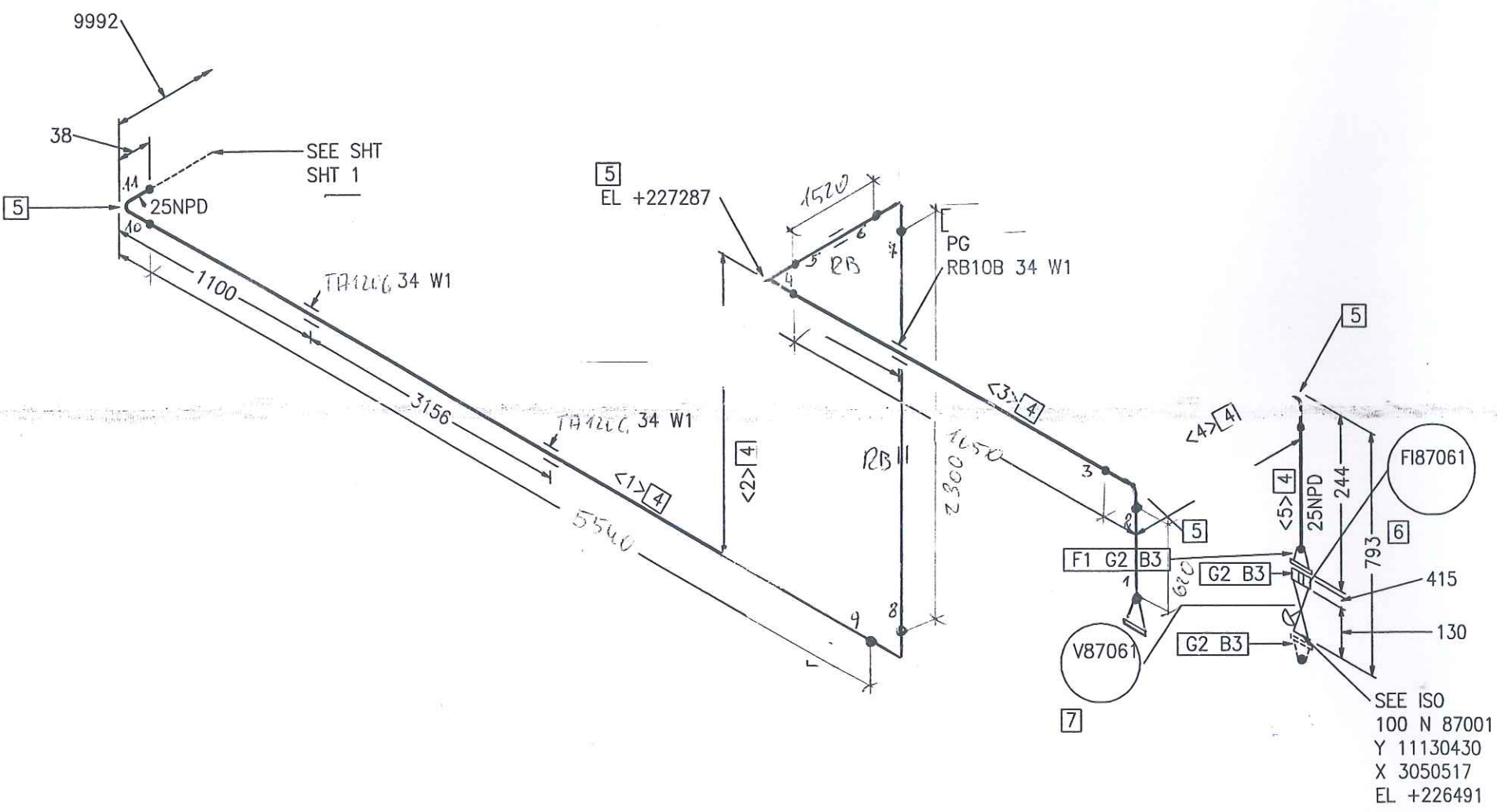
21 OCT. 2005

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





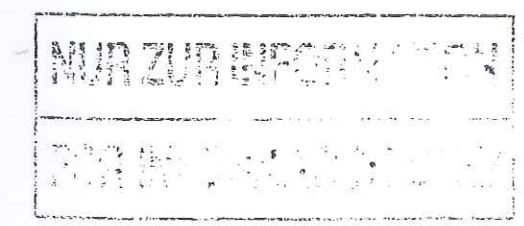
As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25	WELDING-NECK-FLANGE PN10, S235JRG2, DIN EN 1092-1
2	3	25	FLAT GASKET
3	12	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 50.0MM LANG
4	10427 MM	25	PIPE, SEAMLESS 33.7*2.6, ST37.0, DIN EN 10220
5	5	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1
6	1	25	F187061
7	1	25	V87061
8	3	25	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH					
PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO
<1>	5830	25		BEVEL	BEVEL
<2>	1981	25		BEVEL	BEVEL
<3>	2276	25		BEVEL	BEVEL
<4>	174	25		BEVEL	BEVEL
<5>	166	25		BEVEL	BEVEL

SEE ISO  
100 N 87001  
Y 11130430  
X 3050517  
EL +226491



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

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 N 87007 AA10C1792.878260			Sheet: 2, Sheets: 2, Drawing No., Rev.



Preis-Stückliste 0 25N87008AA10C1 0 25 N 87008 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	12,00				0,00
B0516	12	0	Hexagon nuts 5-2 DIN EN ISO 898-2 / DIN EN ISO 4032	0,02 kg	12,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		3,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		18,00				0,00
IF187060	25	0	F187060		1,00				0,00
IV87060	25	0	V87060		1,00				0,00
P0038	25	0	pipe, seamless 1.0254 ( St 37.0 ) DIN 1629 33,7x2,6	1,99 kg	25,30				0,00
P0157	25	0	BEND 1.0254	0,12 kg	2,00				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
P2935	25	0	Welding neck flanges; PN 40 1.0038 ( S235JRG2 ) DIN EN 1092-1 33,7	1,00 kg	1,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	8,00				0,00
SC3	25	0	Segment cut 33,7		10,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		4,00				0,00
SPS402	0	0	SUPPORT PS-402, H 100, L=1200	25,08 kg	1,00				0,00

Preis-Stückliste 0 25N87008AA10C1 0 25 N 87008 AA10C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
SPS403	0	0	SUPPORT PS-403, L 70, L=950	8,45 kg	1,00				0,00
Summe: 0 25N87008AA10C1 0				147,72 kg		0,00	0,00		0,00

Liefersumme:  
Montagesumme:  
Gesamtsumme:  
Gesamtgewicht: 147,72 kg  
\*\* Ende der Ausgabe

AS BUILT





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

Title: 25 N 87008

**Drawing No.:**

792.87826 - 00

Maker's No.:

---

No.:  
Welder

## Material

Dimension

**Protocol No.:**

15

RT

Wärme-  
behandlung

Remerk

Pelzeder Erich, 24.02.06

1

Kosice

# As built

SEE ISO  
25 N 87008BO  
Y 11139958  
X 3064500  
EL +227450

PS403  
L=950  
B2 150/150/10  
+RB

PS402  
HEB 100 L=1200  
TA120G 34W1

TA120G 34W1

S3  
PS  
PG  
RB10B 34 W1

S3  
PS  
PG  
RB10B 34 W1

S3  
PS  
PG  
RB10B 34 W1

S3  
PS  
PG  
RB10B 34 W1

SEE ISO  
SHT 2

## 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

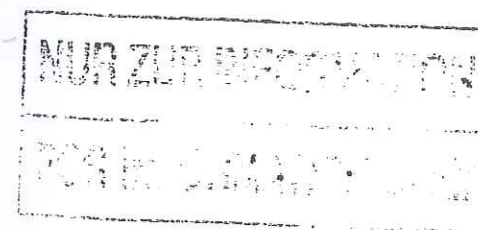
Rev.	Revisions	Date	Name	checked

<b>AIR LIQUIDE</b> 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: 2
Title: 25 N 87008 AA10C1792.878260		Drawing No:		Rev.

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	17885 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	6	25	PIPE GUIDE PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	176	25			BEVEL	RN
<2>	5514	25		BEVEL	BEVEL	RN
<3>	2144	25		BEVEL	BEVEL	RN
<4>	10051	25		BEVEL	BEVEL	RN

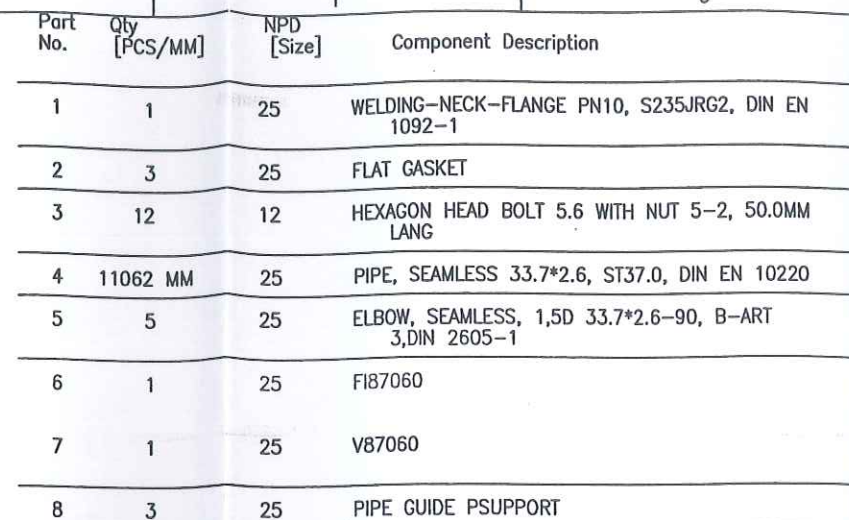


21. OCT. 2005

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







CUT PIPE LENGTH			REMARKS	END ONE	END TWO	ITEM CODE
PIECE NO	LENGTH (MM)	NPD (MM)				
<1>	5965	25		BEVEL	BEVEL	RN
<2>	1981	25		BEVEL	BEVEL	RN
<3>	2526	25		BEVEL	BEVEL	RN
<4>	309	25		BEVEL	BEVEL	RN
<5>	281	25		BEVEL	BEVEL	RN

SEE ISO  
100 N 87001  
Y 11130430  
X 3050267  
EL +226376

100-443886-100

21. OKT. 2005

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

**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:	Name:	Checked:	History file:	
17-OCT-2005	Lesum / HGH	05-10-20	JF	
Job Code: K70101			Scale --:--	Original format DIN A3
Reference: ASU No. 9, Kosice			Sheet: 2	Sheets: 2
Title:			Drawing No:	Rev.
25 N 87008 AA10C1			792.878260	0



**Preis-Stückliste 0 80OL90001ZB16C1 0 80 OL 90001 ZB16C1 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	24,00				0,00
B0534	16	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,03 kg	24,00				0,00
G0103	80	0	Flat packings Graphite with CrNi-insert Standard 40002 142x2x90		3,00				0,00
GW11	50	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 60,3x2		16,00				0,00
GW15	80	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 88,9x2,3		10,00				0,00
GW4	25	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 33,7x2		3,00				0,00
GW8	40	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 48,3x2		4,00				0,00
IHV90014	80	0	HV90014 supplied by AGS		1,00				0,00
IZ90014	40	25	Z90014 supplied by AGS 25		1,00				0,00
P0131	25	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 33,7x2	1,58 kg	0,10				0,00
P0133	40	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 48,3x2	2,31 kg	0,10				0,00
P0134	50	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 60,3x2	2,92 kg	6,15				0,00

Preis-Stückliste 0 800L90001ZB16C1 0 80 OL 90001 ZB16C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0136	80	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 88,9x2,3	4,98 kg	0,80				0,00
P0286	40	0	Elbow 90° R=1,5 DA, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 48,3x2	0,21 kg	1,00				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
P1026	50	25	Tee made of welded pipe 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 60,3x2,9x33,7x2,6	0,60 kg	2,00				0,00
P1054	80	40	Tee made of welded pipe 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 88,9x2,3x48,3x2	0,97 kg	1,00				0,00
P1057	80	50	Tee made of welded pipe 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 88,9x2,3x60,3x2	1,00 kg	2,00				0,00
P1063	80	80	Tee made of welded pipe 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 88,9x2,3x88,9x2,3	1,06 kg	1,00				0,00
P1743	50	40	Reducer, concentric, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 60,3x2x48,3x2	0,20 kg	1,00				0,00
P2676	80	0	Caps 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 88,9x2,3	0,29 kg	1,00				0,00
P3001	80	0	Welding neck flanges; PN 16 1.4541 ( X 6 CrNiTi 18 10 ) DIN EN 1092- 88,9	4,00 kg	3,00				0,00



## Preis-Stückliste 0 80OL90001ZB16C1 0 80 OL 90001 ZB16C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
PW13	80	25	Pipe weld-in 1.4541 ( X 6 CrNiTi 18 10 ) 88,9x2,3x33,7x2		1,00				0,00
S0032	80	0	T-support, 1.4541, TA 120B 89 W3 1.4 Hesterberg 89	4,10 kg	1,00				0,00
S0042	50	0	T-support, 1.4541, TA 120G 61 W3 1.4 Hesterberg 61	8,30 kg	2,00				0,00
SC3	25	0	Segment cut 33,7		1,00				0,00
SC4	40	0	Segment cut 48,3		1,00				0,00
SC5	50	0	Segment cut 60,3		7,00				0,00
SC6	80	0	Segment cut 88,9		2,00				0,00
SCP02	50	0	PIPE CLAMP, RB10A 61 W3 HESTERBERG 60,3		1,00				0,00
SPS158	0	0	SUPPORT PS-158	144,97 kg	1,00				0,00
SPS387	0	0	SUPPORT PS-387, H 100, L=1300	27,12 kg	1,00				0,00
SPS388	0	0	SUPPORT PS-388, H 100, L=750	25,90 kg	1,00				0,00
SPS389	0	0	SUPPORT PS-398, H 100, L=1800	37,32 kg	1,00				0,00
XZB08	20	0	MUFFEN 1.4571		1,00				0,00
XZB15	40	0	HOLLÄNDER 1.4571		1,00				0,00
XZB23	40	0	THREAD END 1.4541		1,00				0,00

VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 800L90001ZB16C1 0 80 OL 90001 ZB16C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
XZB24	25	0	THREAD END 1.4541		1,00				0,00
Summe: 0 800L90001ZB16C1 0				301,86 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	301,86 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: 80 OL 90001

Sheet 1

Drawing No.:

Project No.: 9050300

Maker's No.:

(Kunde / TÜV, ...)

geprüft



Schweisstechnologie VAM

Datum / Unterschrift

erstellt:

24.02.2006  
Pelzeder Erich

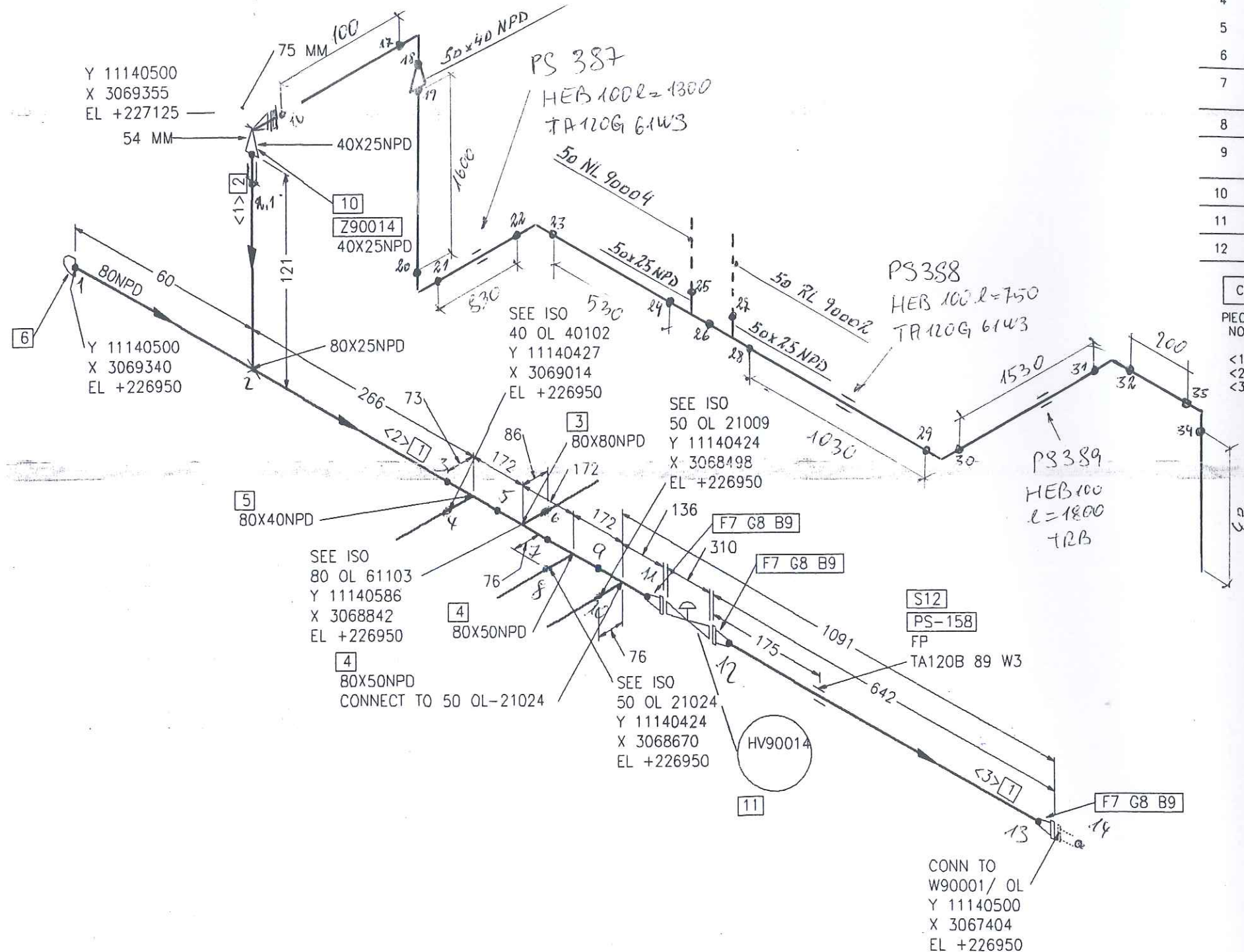
Datum / Unterschrift

Seam No.:	Welder No.:	Material	Dimension	Protocol No.:				
				Wärme- behandlung	RT	UT	MT/PT	SP
1	V2	1.4541	88,9*2,3		R0438			
2	V2	1.4541	NPD25				12/ 2006	
2,1	V2	1.4541	33,7*2		R0579			
3	V2	1.4541	88,9*2,3		R0439			
4	V2	1.4541	48,3*2		R0492			
5	V2	1.4541	88,9*2,3		R0440			
6	V9	1.4541	88,9*2,3		R0441			
7	V2	1.4541	88,9*2,3		R0442			
8	V9	1.4541	60,3*2		R0443			
9	V2	1.4541	88,9*2,3		R0444			
10	V9	1.4541	60,3*2		R0445			
11	V2	1.4541	88,9*2,3		R0446			
12	V2	1.4541	88,9*2,3		R0447			
13	V2	1.4541	88,9*2,3		R0448			
14	V2	1.4541	88,9*2,3		R0449			
16	V2	1.4541	48,3*2					
17	V2	1.4541	48,3*2					
18	V2	1.4541	48,3*2					
19	V2	1.4541	60,3*2					
20	V2	1.4541	60,3*2					
21	V2	1.4541	60,3*2					
22	V2	1.4541	60,3*2					
23	V2	1.4541	60,3*2					
24	V2	1.4541	60,3*2					
25	V2	1.4541	60,3*2					
26	V2	1.4541	60,3*2					
27	V2	1.4541	60,3*2					

[illegible]



# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	781 MM	80	PIPE, WELDED 88.9 * 2.3 , 1.4541, DIN EN ISO 1127
2	80 MM	25	PIPE, WELDED 33.7 * 2.0 , 1.4541, DIN EN ISO 1127
3	1	80X80	TEE, WELDED 88.9*2.3/88.9*2.3, 1.4541, DIN 2615-1
4	2	80X50	TEE, WELDED 88.9*2.3/60.3*2.0, 1.4541, DIN 2615-1
5	1	80X40	TEE, WELDED 88.9*2.3/48.3*2.0, 1.4541, DIN 2615-1
6	1	80	CAP 88.9*51 DIN 2617
7	3	80	WELDING-NECK-FLANGE PN16, 1.4541, DIN EN 1092-1
8	3	80	FLAT GASKET
9	24	16	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 65.0MM LANG
10	1	40X25	Z90014
11	1	80	HV90014 HV90014
12	1	80	FIX POINT PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	80	25		SHAPED	BEVEL	RG1
<2>	240	80		BEVEL	BEVEL	RG1
<3>	541	80		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 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: 24-AUG-2005	Name: Lesum / HGH	Checked: 05-09-15	History file:
	Job Code: K701C1			Scale: ---
Reference: ASU No. 9, Kosice			Sheet: 1	Sheets: 1
Title: 80 OL 90001 ZB16C1			Drawing No. 1792.87826	Rev. 01

LEVELS:

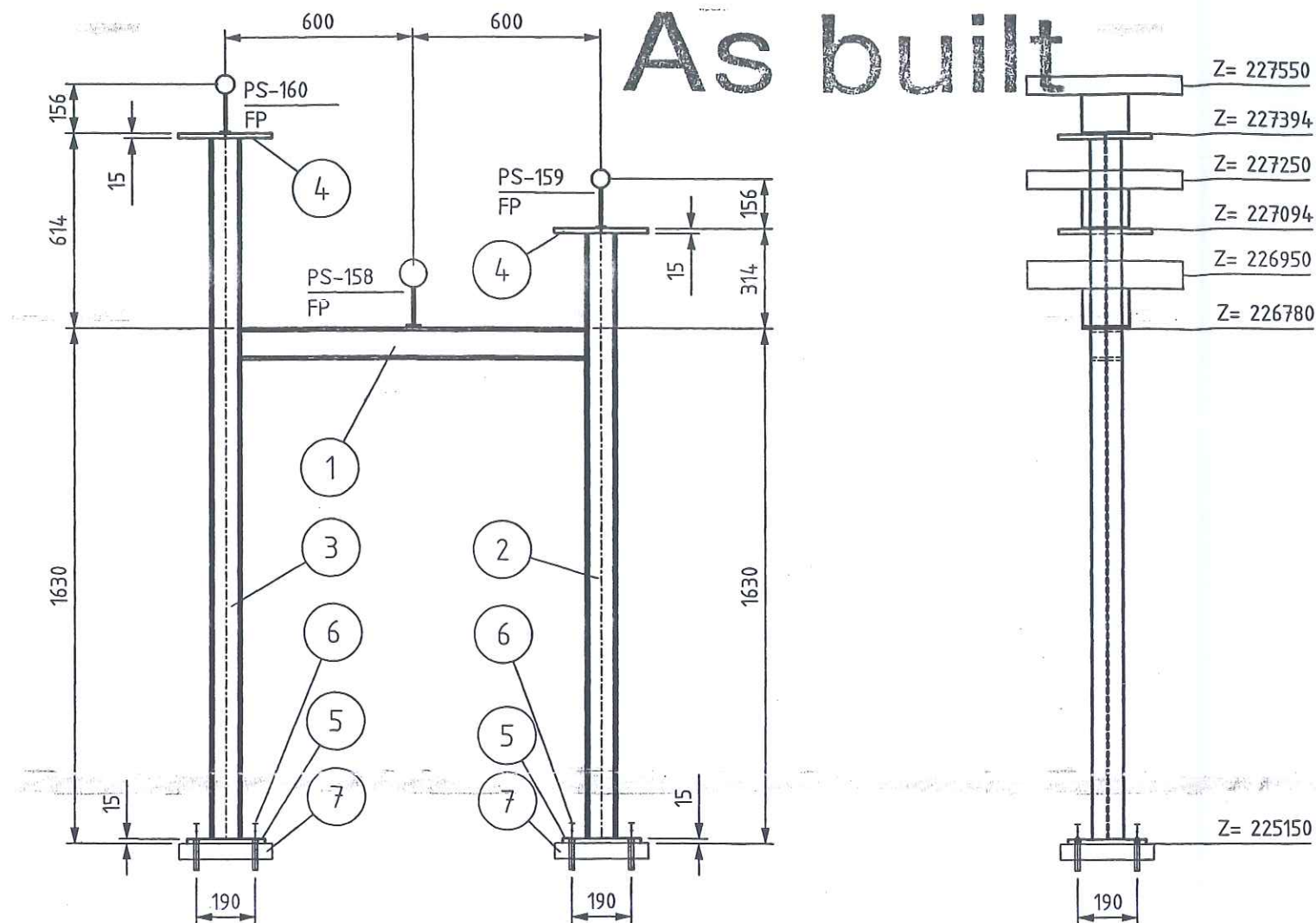
TOP OF INTERNAL ROADS: 225.00m n.m.

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.



#### 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: 142.61 kg

Item	No. Off	Unit	Description	Dimension	Material	Weight kg	Remark
1	1	pcs	PROFILE	HE100B, L=1.100	RST37-2	22.446	
2	1	pcs	PROFILE	HE100B, L=1.914	RST37-2	39.066	
3	1	pcs	PROFILE	HE100B, L=2.214	RST37-2	45.189	
4	2	pcs	PLATE 300x300x15	PLATE 15x300x300	RST37-2	21.196	
5	2	pcs	PLATE 250	PLATE 250x250x15	RST37-2	14.718	
6	8	pcs	ANCHOR BOLT HST(-R)M16/100	HST(-R) 16-0-M16	1.4401	0.000	24
7	2	pcs	BASE	300x300x50	CONCRETE	0.000	144,97

Approved by	Date	Name	Signature
Checked by		Gans	
Checked by	20. JUL. 2005	Zut	
Drawn checked by			



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-158		
Scale:	1:20	Original Format	DIN A3
Sheet:	1 of 1	Drawing-No.	792.87926
Rev.	a		



Preis-Stückliste 0 50RL90002ZB16C1 0 50 RL 90002 ZB16C1 Revision:

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0107	16	60	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	0,12 kg	8,00				0,00
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	16,00				0,00
G0100	50	0	Flat packings Graphite with CrNi-insert Standard 40002 107x2x61		2,00				0,00
G0103	80	0	Flat packings Graphite with CrNi-insert Standard 40002 142x2x90		1,00				0,00
GW11	50	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 60,3x2		8,00				0,00
GW15	80	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 88,9x2,3		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		4,00				0,00
IHV90015	50	0	HV90015 supplied by AGS		1,00				0,00
IZ90015	25	20	Z90015 supplied by AGS 20		1,00				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

Preis-Stückliste 0 50RL90002ZB16C1 0 50 RL 90002 ZB16C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0131	25	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 33,7x2	1,58 kg	2,57				0,00
P0134	50	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 60,3x2	2,92 kg	0,70				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	1,00				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	2,00				0,00
P1022	50	20	Tee made of welded pipe 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 60,3x2x26,9x1,6	0,40 kg	1,00				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
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
P2674	50	0	Caps 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 60,3x2	0,12 kg	1,00				0,00
P2996	50	0	Welding neck flanges; PN 16 1.4541 ( X 6 CrNiTi 18 10 ) DIN EN 1092- 60,3	3,00 kg	2,00				0,00
P3001	80	0	Welding neck flanges; PN 16 1.4541 ( X 6 CrNiTi 18 10 ) DIN EN 1092- 88,9	4,00 kg	1,00				0,00

AS BUILT



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 50RL90002ZB16C1 0 50 RL 90002 ZB16C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
S0030	50	0	T-support, 1.4541, TA 120B 61 W3 1.4 Hesterberg 61	3,90 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
SC5	50	0	Segment cut 60,3		2,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		2,00				0,00
SPS390	0	0	SUPPORT PS-390 1.4541	0,33 kg	1,00				0,00
XZB08	20	0	MUFFEN 1.4571		1,00				0,00
XZB12	25	0	THREAD END 5,6 33,7		1,00				0,00
XZB14	25	0	HOLLÄNDER 1.4571		1,00				0,00
Summe: 0 50RL90002ZB16C1 0				25,04 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	25,04 kg
Gesamtgewicht:	
** Ende der Ausgabe	

AS BUILT





1 2 3 4 5 6 7 8



Y 11141100  
X 3068589  
EL +227469

50 MM  
25X20NPD

14  
Z90015  
25X20NPD

Y 11141100  
X 3068578  
EL +227250

5  
50X20NPD

64  
50NPD  
4  
50X25NPD  
SEE ISO:  
25 RL 43002  
Y 11141049  
X 3068386  
EL +227250

F9 G11 B12

HV90015

S16  
PS-159  
FP  
TA120B 61 W3

F9 G11 B12

3  
80X50NPD

7  
50NPD  
76  
216  
140  
F8 G10 B13  
CONN TO  
W90001/ RL  
Y 11140500  
X 3067404  
EL +227250

As built

PS 390  
BL 220-40-5 VA  
+ RB

80 DL 90001

Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	748 MM	50	PIPE, WELDED 60.3 * 2.0 , 1.4541, DIN EN ISO 1127
2	125 MM	20	PIPE, WELDED 26.9 * 1.6 , 1.4541, DIN EN ISO 1127
3	1	80X50	REDUCER, CONCENTRIC, WELDED 88.9*2.3/60.3*2.0, 1.4541, DIN 2616-1
4	1	50X25	TEE, WELDED 60.3*2.0/33.7*2.0, 1.4541, DIN 2615-1
5	1	50X20	TEE, WELDED 60.3*2.0/26.9*1.6, 1.4541, DIN 2615-1
6	1	50	CAP 60.3*38 DIN 2617
7	2	50	ELBOW, WELDED, 1,5D 60.3*2.0-90, B-ART 3,DIN 2605-1
8	1	80	WELDING-NECK-FLANGE PN16, 1.4541, DIN EN 1092-1
9	2	50	WELDING-NECK-FLANGE PN16, 1.4541, DIN EN 1092-1
10	1	80	FLAT GASKET
11	2	50	FLAT GASKET
12	8	16	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 60.0MM LANG
13	8	16	HEXAGON HEAD BOLT A2-70 WITH NUT A2-70, 65.0MM LANG
14	1	25X20	Z90015
15	1	50	HV90015 HV90015
16	1	50	FIX POINT PSUPPORT

CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	125	20		BEVEL	BEVEL	RG1
<2>	300	50		BEVEL	BEVEL	RG1
<3>	448	50		BEVEL	BEVEL	RG1

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 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: 24-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: 1
	Title: 50 RL 90002 ZB16C1792.8782601			Drawing No:	Rev.

**Preis-Stückliste 0 50NL90004ZB16C1 0 50 NL 90004 ZB16C1 Revision:**

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
B0107	16	60	Hexagon head screws A2-70 resp. A2-50 DIN EN ISO 3506	0,12 kg	12,00				0,00
B0534	16	0	Hexagon nuts A2-70 resp. A2-50 DIN EN ISO 3506	0,03 kg	12,00				0,00
G0100	50	0	Flat packings Graphite with CrNi-insert Standard 40002 107x2x61		3,00				0,00
GW11	50	0	girth weld 1.4541 ( X 6 CrNiTi 18 10 ) 60,3x2		13,00				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		5,00				0,00
IHV90013	50	0	HV90013 supplied by AGS		1,00				0,00
IZ90013	25	20	Z90013 supplied by AGS 20		1,00				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	4,15				0,00
P0134	50	0	pipe, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 17457 60,3x2	2,92 kg	0,80				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	1,00				0,00



## Preis-Stückliste 0 50NL90004ZB16C1 0 50 NL 90004 ZB16C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
P0287	50	0	Elbow 90° R=1,5 DA, welded 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 60,3x2	0,35 kg	2,00				0,00
P1022	50	20	Tee made of welded pipe 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 60,3x2x26,9x1,6	0,40 kg	1,00				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	2,00				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
P2674	50	0	Caps 1.4541 ( X 6 CrNiTi 18 10 ) DIN 2609 60,3x2	0,12 kg	1,00				0,00
P2996	50	0	Welding neck flanges; PN 16 1.4541 ( X 6 CrNiTi 18 10 ) DIN EN 1092- 60,3	3,00 kg	3,00				0,00
S0030	50	0	T-support, 1.4541, TA 120B 61 W3 1.4 Hesterberg 61	3,90 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
SC5	50	0	Segment cut 60,3		3,00				0,00
SCP03	25	0	PIPE CLAMP, RB10A 34 W3 HESTERBERG 33,7		1,00				0,00
XZB08	20	0	MUFFEN 1.4571		1,00				0,00

Preis-Stückliste 0 50NL90004ZB16C1 0 50 NL 90004 ZB16C1 Revision:

(Fortsetzung)

Teilenummer	NW1	NW2	Teilebezeichnung	Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
XZB14	25	0	HOLLÄNDER 1.4571		1,00				0,00
XZB24	25	0	THREAD END 1.4541		1,00				0,00
Summe: 0 50NL90004ZB16C1 0				26,33 kg		0,00	0,00		0,00

Liefersumme:	
Montagesumme:	
Gesamtsumme:	26,33 kg
Gesamtgewicht:	
** Ende der Ausgabe	

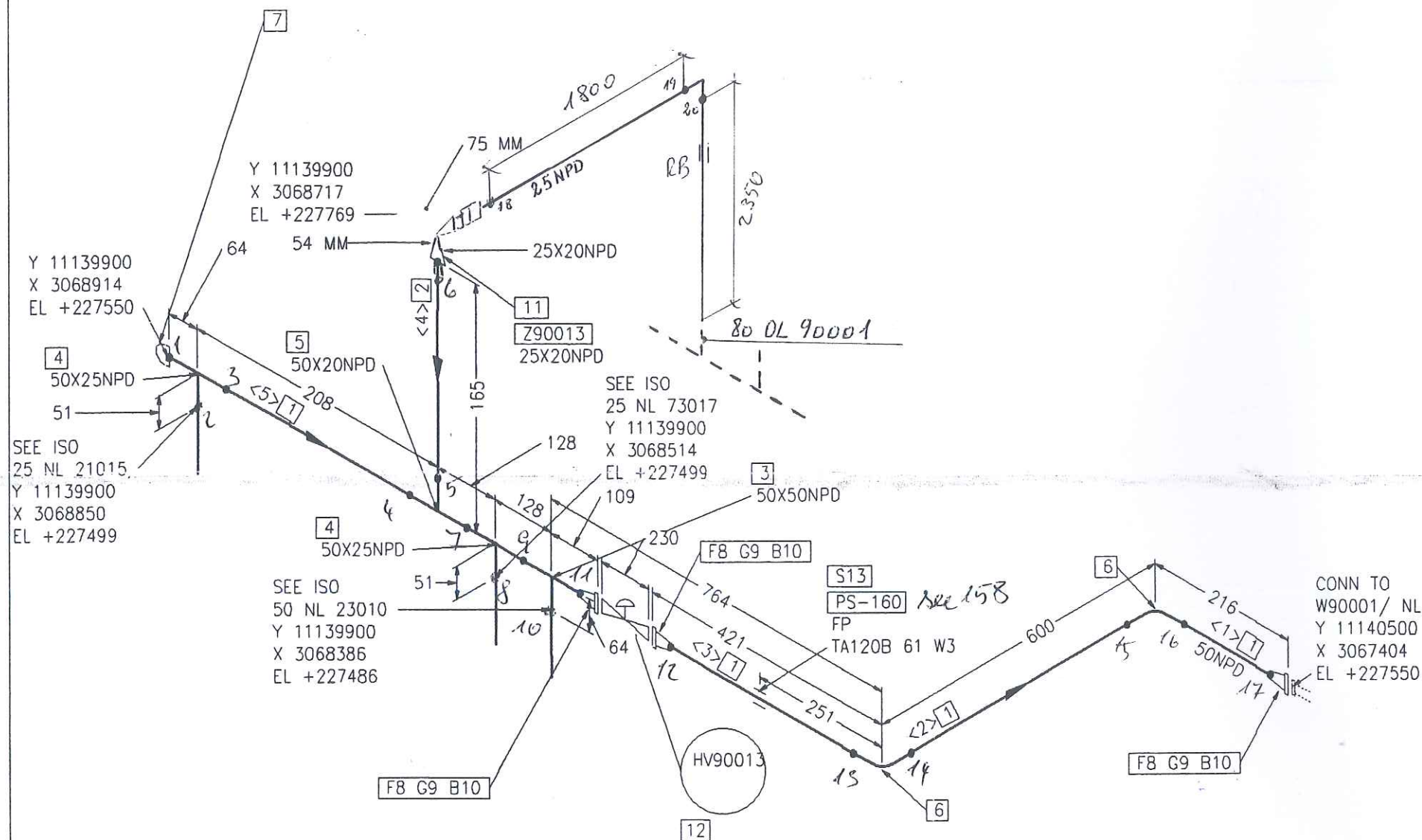
AS BUILT







N



CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	95	50		BEVEL	BEVEL	RG1
<2>	448	50		BEVEL	BEVEL	RG1
<3>	300	50		BEVEL	BEVEL	RG1
<4>	121	20		BEVEL	BEVEL	RG1
<5>	80	50		BEVEL	BEVEL	RG1

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	checked



Air Liquide AGS GmbH

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

Date:	Name:	Checked:	History file.	
24-AUG-2005	Lesum / HGH	05-09-15		
Job Code: K70101			Scale --:--	Original format DIN A3
Reference: ASU No. 9, Kosice			Sheet: 1	Sheets: 1
Title:			Drawing No.	Rev.
50 NL 90004 ZB16C1			792.87826	01

LEVELS:

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



VAM Anlagentechnik und Montagen  
01 - 5.6948 FELDVERROHRUNG KOSICE AIR LIQUIDE

Preis-Stückliste 0 25S900007BA25C1 0 25 S 90007 BA25C1 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
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		4,00				0,00
GW6	25	0	girth weld 1.0305 ( St 35.8 l ) (Leer) 33,7x2,6		10,00				0,00
IA90004	25	0	A90004		1,00				0,00
IV90082	25	0	V90082		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 l ) DIN 17175 33,7x2,6	1,99 kg	0,56				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 l ) DIN 2609 33,7x2,6	0,12 kg	2,00				0,00
P0788	25	25	Tee made of seamless pipe 1.0305 ( St 35.8 l ) DIN 2609 33,7x2,6x33,7x2,6	0,23 kg	1,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	4,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		4,00				0,00
SPS391	0	0	SUPPORT PS-391, H 100, L=550	12,42 kg	1,00				0,00
Summe: 0 25S900007BA25C1 0				26,88 kg		0,00	0,00		0,00

Preis-Stückliste 0 25S90007BA25C1 0. 25 S 90007 BA25C1 Revision:											
Teilenummer		NW1	NW2	Teilebezeichnung		Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt

Liefersumme:	
Montagesumme:	
Gesamtsumme:	
Gesamtgewicht:	26,88 kg
** Ende der Ausgabe	

AS BUILT





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

ce  
Oro

25 S 90007

Drawing No.:

\_\_\_\_\_

Maker's No.:

24.02.06

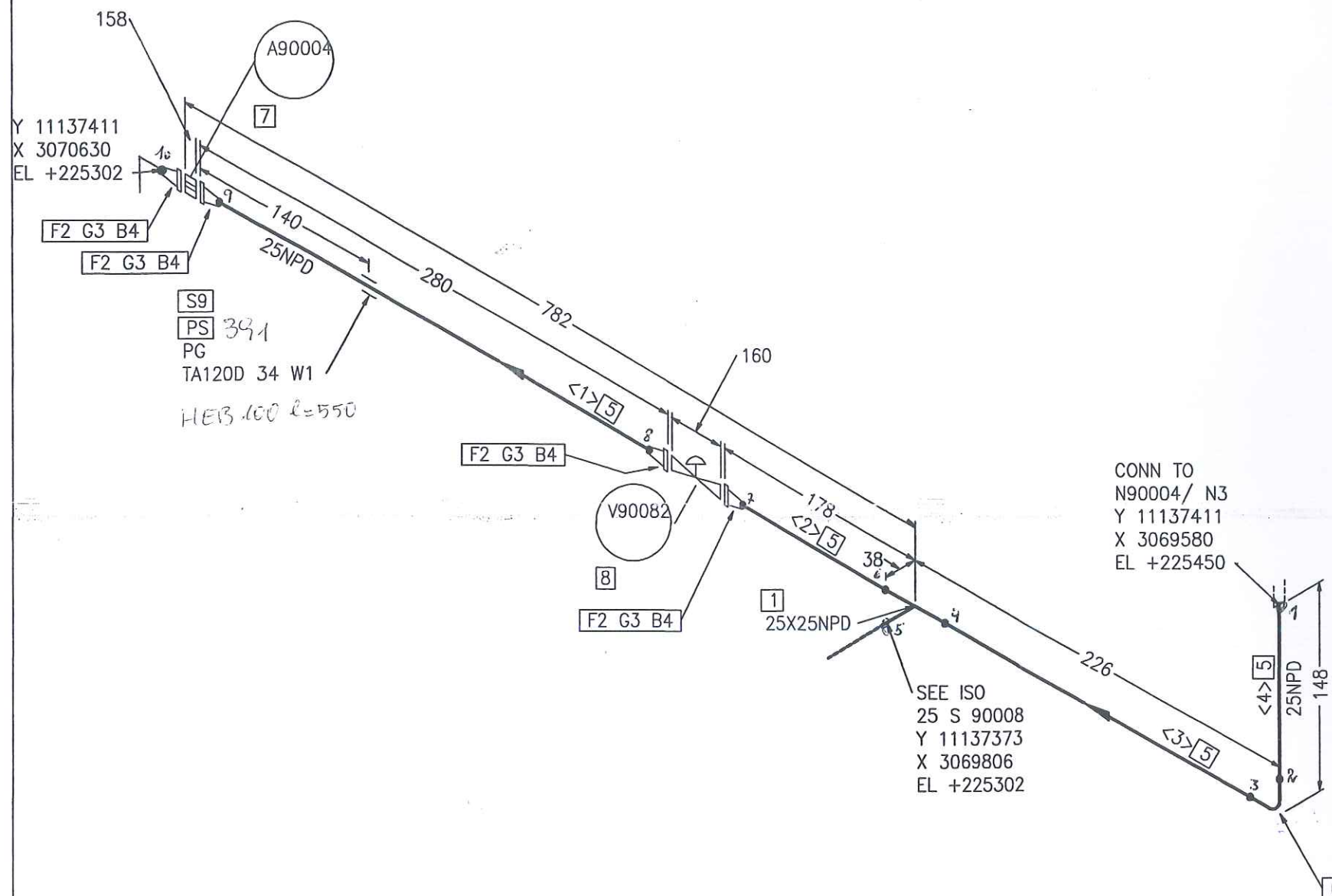
22

Schweisstechnologie VAM

(Kunde / TÜV, ...)

[illegible]

# As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	1	25X25	TEE, SEAMLESS 33.7*2.6/33.7*2.6, ST35.8 I, DIN 2615-1
2	4	25	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
3	4	25	FLAT GASKET
4	16	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 55.0MM LANG
5	560 MM	25	PIPE, SEAMLESS 33.7*2.6, ST35.8 I, DIN EN 10220
6	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3, DIN 2605-1
7	1	25	A90004
8	1	25	V90082
9	1	25	PIPE GUIDE PSUPPORT

## CUT PIPE LENGTH

PIECE NO	LENGTH (MM)	NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
<1>	200	25		BEVEL	BEVEL	RN
<2>	100	25		BEVEL	BEVEL	RN
<3>	150	25		BEVEL	BEVEL	RN
<4>	110	25		BEVEL	SQ.CUT	RN

CONN TO  
N90004/ N3  
Y 11137411  
X 3069580  
EL +225450

SEE ISO  
25 S 90008  
Y 11137373  
X 3069806  
EL +225302

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 PIPIBRIDGE  
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 S 90007 BA25C1792.878260	Scale: ---:--- Sheet: 1 Drawing No:
Original format DIN A3	Replaces: 79____ Replaced by: 79____	Revs: 1	Rev.



**Preis-Stückliste 0 25S90008BA25C1 0 25 S 90008 BA25C1 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
B0500	12	0	HEXAGON HEAD NUTS Ck 35 ( 1.1181 ) DIN 267-13	0,02 kg	16,00				0,00
G0097	25	0	Flat packings Graphite with CrNi-insert Standard 40002 70x2x35		4,00				0,00
GW5	25	0	girth weld 1.0254 ( St 37.0 ) 33,7x2,6		5,00				0,00
IV90083	25	0	V90083		1,00				0,00
IV90085	25	0	V90085		1,00				0,00
P0057	25	0	pipe, seamless 1.0305 ( St 35.8 I ) DIN 17175 33,7x2,6	1,99 kg	0,50				0,00
P0213	25	0	Elbow 90° R=1,5 DA, seamless 1.0305 ( St 35.8 I ) DIN 2609 33,7x2,6	0,12 kg	2,00				0,00
P2967	25	0	Welding neck flanges; PN 40 C22.8 ( 1.0460 ) DIN 2519 33,7	1,00 kg	4,00				0,00
S0015	25	0	T-support TA 120G 34 W1 OZN 1.0 Hesterberg 34	7,60 kg	1,00				0,00
SC3	25	0	Segment cut 33,7		2,00				0,00
			Summe: 0 25S90008BA25C1 0	14,12 kg		0,00	0,00		0,00

AS BUILT

Liefersumme:  
Montagesumme:

Preis-Stückliste 0 25S900008BA25C1 0 .25 S 90008 BA25C1 Revision:												
Teilenummer			NW1	NW2	Teilebezeichnung		Einzelgew.	Menge	Lieferung	Montage	L + M	Gesamt
Gesamtsumme:					14,12 kg							
Gesamtgewicht:												
** Ende der Ausgabe												

AS BUILT





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

Title: 25 S 90008

**Drawing No.:**

792.87826 - 00

Maker's No.:

(Kunde / TÜV, ...)

geprüft

**erstellt:**

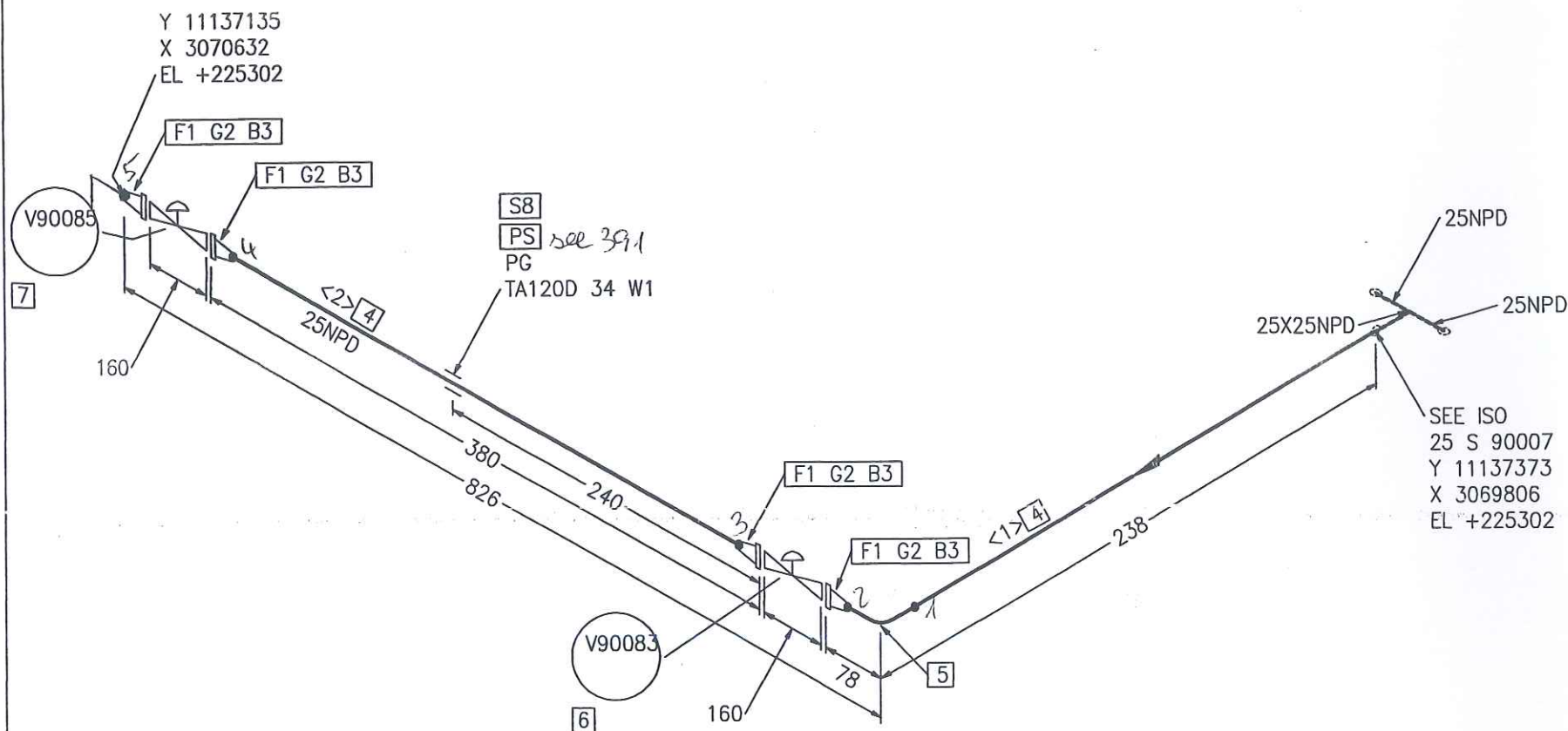
Schweisstechnologie VAM

*Pelzeder Erich*

**Datum / Unterschrift**

[illegible]

As built



Part No.	Qty [PCS/MM]	NPD [Size]	Component Description
1	4	25	WELDING-NECK-FLANGE PN40, C22.8, DIN EN 1092-1
2	4	25	FLAT GASKET
3	16	12	HEXAGON HEAD BOLT 5.6 WITH NUT 5-2, 55.0MM LANG
4	500 MM	25	PIPE, SEAMLESS 33.7*2.6, ST35.8 I, DIN EN 10220
5	1	25	ELBOW, SEAMLESS, 1,5D 33.7*2.6-90, B-ART 3,DIN 2605-1
6	1	25	V90083
7	1	25	V90085
8	1	25	PIPE GUIDE PSUPPORT

CUT PIPE LENGTH		NPD (MM)	REMARKS	END ONE	END TWO	ITEM CODE
PIECE NO	LENGTH (MM)					
<1>	200	25		BEVEL	BEVEL	RN
<2>	300	25		BEVEL	BEVEL	RN

NUR ZUR INFORMATION

FOR INFORMATION ONLY

21.04.2005

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
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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		Reference: ASU No. 9, Kosice		Scale: ---:---
Replaces: 79_		Replaced by: 79_		Original format DIN A3	
Title: 25 S 90008 BA25C1		Drawing No: 1792.878260		Rev. 1	