

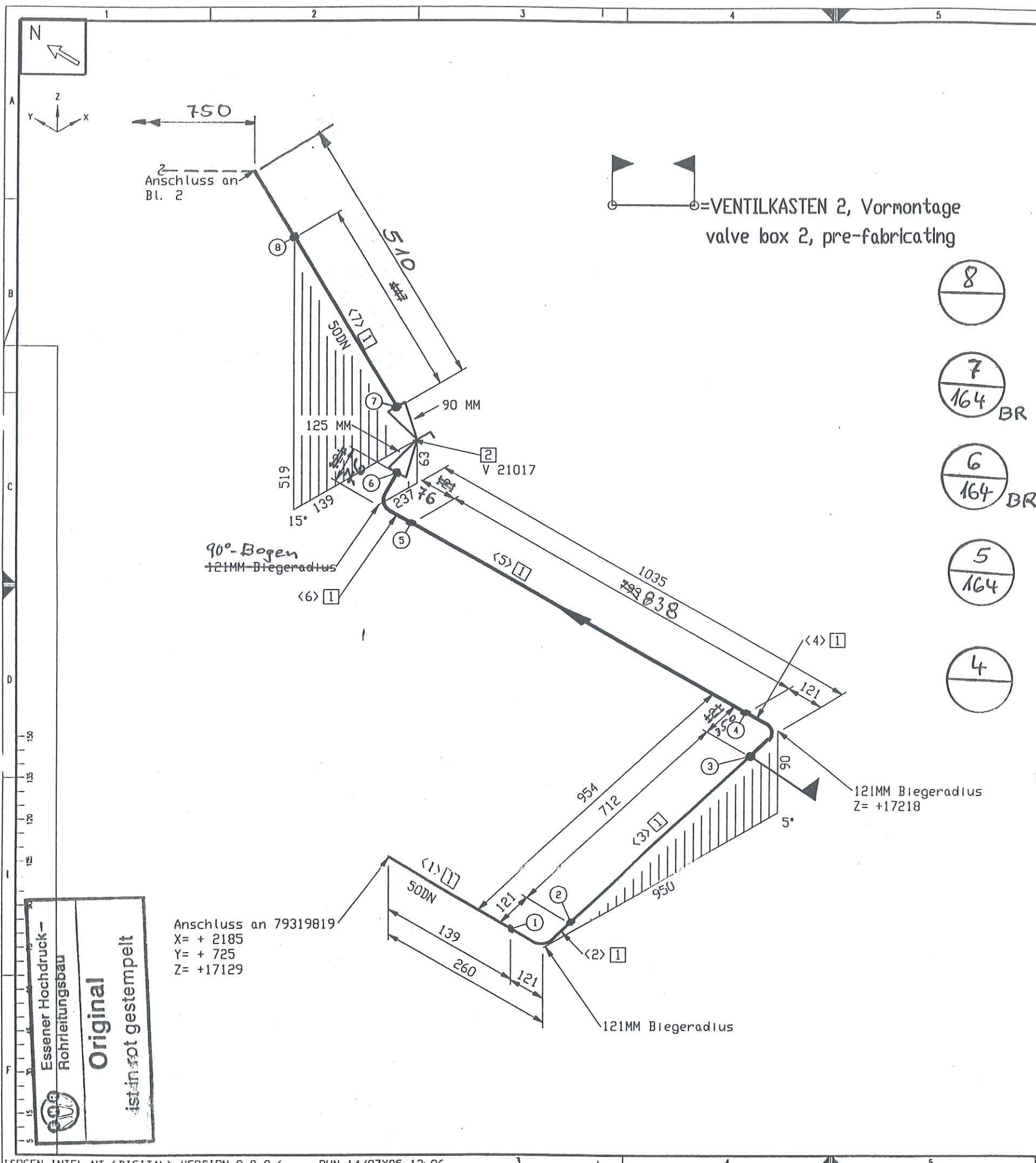
Originale zur  
weiteren Bearbei-  
tung nach Kosice  
unter unserer  
Kom.-Nr. C 13035

07. 10. 05

Bren.



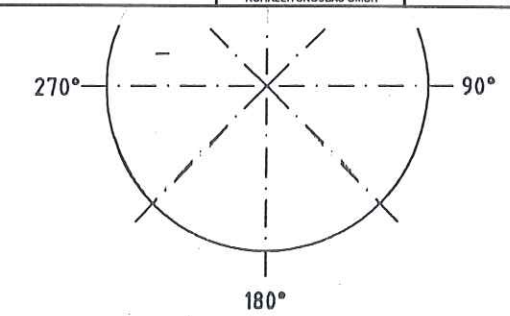




Stückliste						
Lfd Nr.	Benennung	DN (MM)	Sachnummer	Menge	Gewicht (kg)	
	<u>Rohr</u>					
1	ROHR 60,3 X 3,9 ALMG4,5MN W27	50	77038146	13848 MM	25.8	
	<u>Ventil</u>					
2	Eck-Ventil AL DN 50 / PN 40 Handrad	50	770.38860	1	50.0	
	<u>Halterung</u>					
3	Rohrführung gezeichnet auf 79319400	50	79319428	1	0.4	
4	Rohrhalterung gezeichnet auf 79312892	50	79319419	1	0.3	
Summe Masse					76.5	

Rohrzuschnitt						
Rohr Stk.	Länge (MM)	DN (MM)	Bemerkung	Rohr Ende 1	Rohr Ende 2	Sachnummer
<1>	139	50				77038146
<2>	190	50	PLD BEND(1)			77038146
<3>	712	50				77038146
<4>	190	50	PLD BEND(1)			77038146
<5>	793	50				77038146
<6>	190	50	PLD BEND(1)			77038146
<7>	447	50				77038146
<8>	158	50	PLD BEND(1)			77038146
<9>	601	50				77038146
<10>	201	50	PLD BEND(1)			77038146
<11>	527	50				77038146
<12>	224	50	PLD BEND(1)			77038146
<13>	3531	50				77038146
<14>	179	50	PLD BEND(1)			77038146
<15>	357	50				77038146
<16>	190	50	PLD BEND(1)			77038146
<17>	1241	50				77038146
<18>	190	50	PLD BEND(1)			77038146
<19>	571	50				77038146
<20>	180	50	PLD BEND(1)			77038146
<21>	2468	50				77038146
<22>	190	50	PLD BEND(1)			77038146
<23>	379	50				77038146

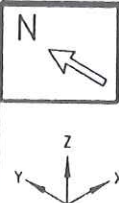
MATERIAL KONTR.	✓	
CHECK OF MAT.	✓	
SCHWEISSEN	✓	EHR 66
WELDING	✓	
MECHAN. FERTIGST.	✓	
MECHAN. COMPL.	✓	
DRUCKPROBE		
PRESSURE TEST		
EHR-PROJ.-NO.:	C-13005	
	ESSENER HOCHDRUCK-ROHRLEITUNGSBAU GMBH	Air Liquide AGS GmbH



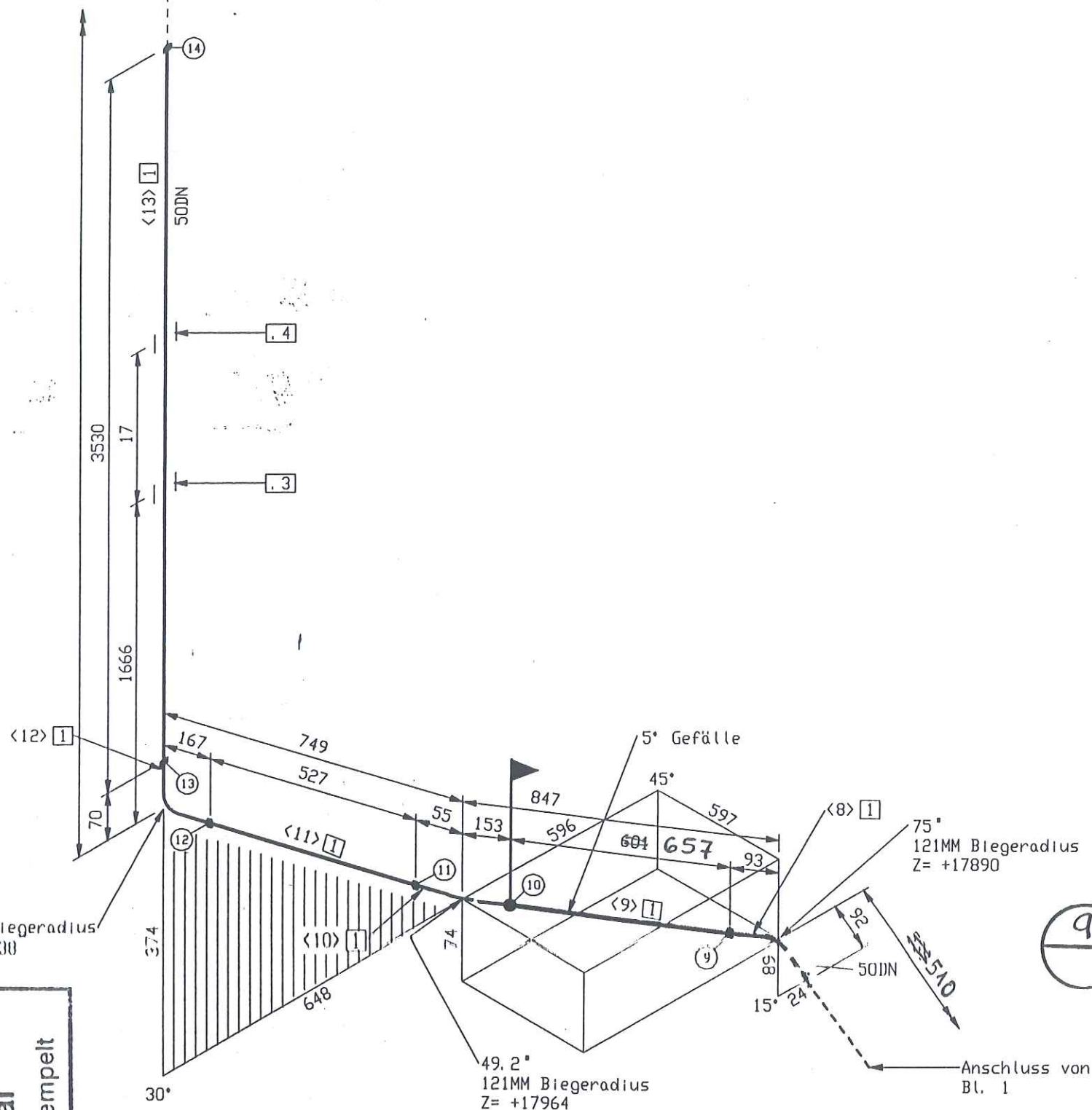
Rohr DN (MM) 50  
CL Länge (MM) 14063

MATERIAL: HANAU AL			All components cleaned for oxygen		
Workpiece edges	1:0.3	SCALE	TOLERANCES:	Similar:	MASS
outside	1:0.3		DIN 28005	Subst.:	kg
			DIN 8570	Replaced:	
			DIN 7168 mittel		
ISO-Methode E	DATE: 12.07.2005	NAME: H.Schneider	AIR LIQUIDE		
	CHECK: Frickhöfer 14/07/05				
This drawing is not to be reproduced, copied or used directly or indirectly in any way detrimental to our interests unless specifically authorized in writing by			SHEET: 1 OF SHEET: 3		
Air Liquide AGS GmbH Hanau			DRAWING No.: 79319825		
JOB CODE / REFERENCE: K70101, ASU No.9 Kosice			Title: N 21021		

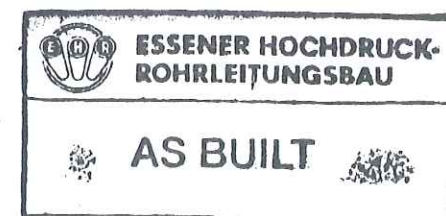




Anschluss an  
Bl. 3

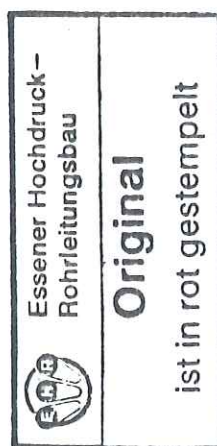
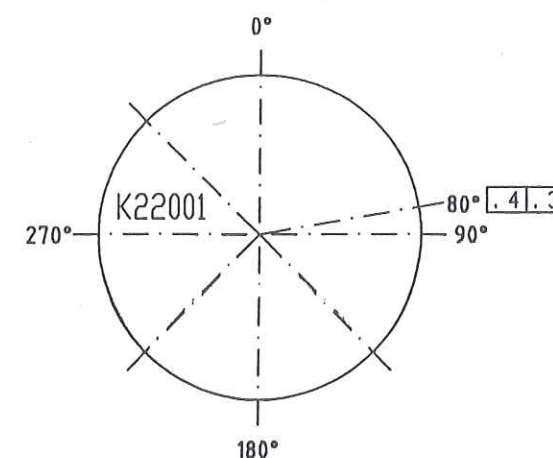


MATERIAL KONTR.		
CHECK OF MAT.		
SCHWEISSEN	EHR 66	
WELDING		
MECHAN. FERTIGST.		
MECHAN. COMPL.		
DRUCKPROBE		
PRESSURE TEST		
EHR-PROJ.-NO.:	C-13005	
	ESSENER HOCHDRUCK- ROHRLEITUNGSBAU GMBH	AIR LIQUIDE



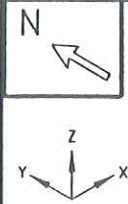
VENTILKASTEN 2, Vormontage  
valve box 2, pre-fabricating

pipng support, piping guides  
View from top



MATERIAL : HANAU AL		All components cleaned for oxygen	
Workplace edges	SCALE	TOLERANCES :	Shrinker:
1-0.5		DN 28005	Subel:
outside		DN 8570	Replacat:
		DN 7168 mittel	
ISO- Methode E	DATE : 14.07.2005	NAME : H.Schneider	
	CHECK : Frickhöfer 14/07/05	JOB CODE / REFERENCE :	
		2 6. 7. 05	
		K70101, ASU No.9 Kosice	
		Title :	
		N 21021	
		SHEET : 2 OF SHEET : 3	
		DRAWING No.:	
		79319825	
		AIR LIQUIDE	





121MM Biegeradius  
Z= +17999

<17> 1  
50DN

Anschluss an  
Bl. 3

15°  
121MM Biegeradius  
Z= +16634

75°  
121MM Biegeradius  
Z= +16476

+ Paßlänge


Anschluss von  
Bl. 1

Essener Hochdruck-  
Rohrleitungsbau  
**Original**  
ist in rot gestempelt

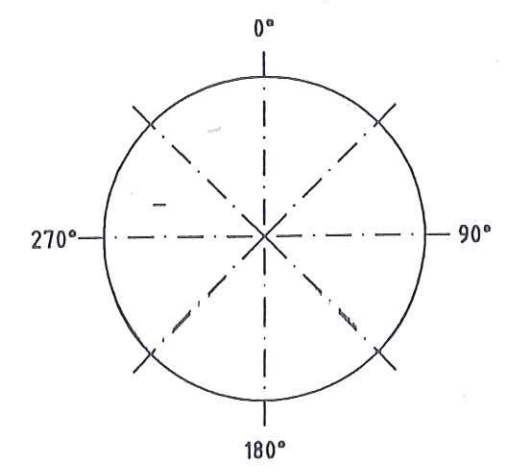
MATERIAL KONTR.		
CHECK OF MAT.		
SCHWEISSEN		
WELDING		
MECHAN. FERTIGST.		
MECHAN. COMPL.		
DRUCKPROBE		
PRESSURE TEST		
EHR-PROJ.-NO.:	C-13005	

**ESSENER HOCHDRUCK-  
ROHRLEITUNGSBAU**

**AS BUILT**

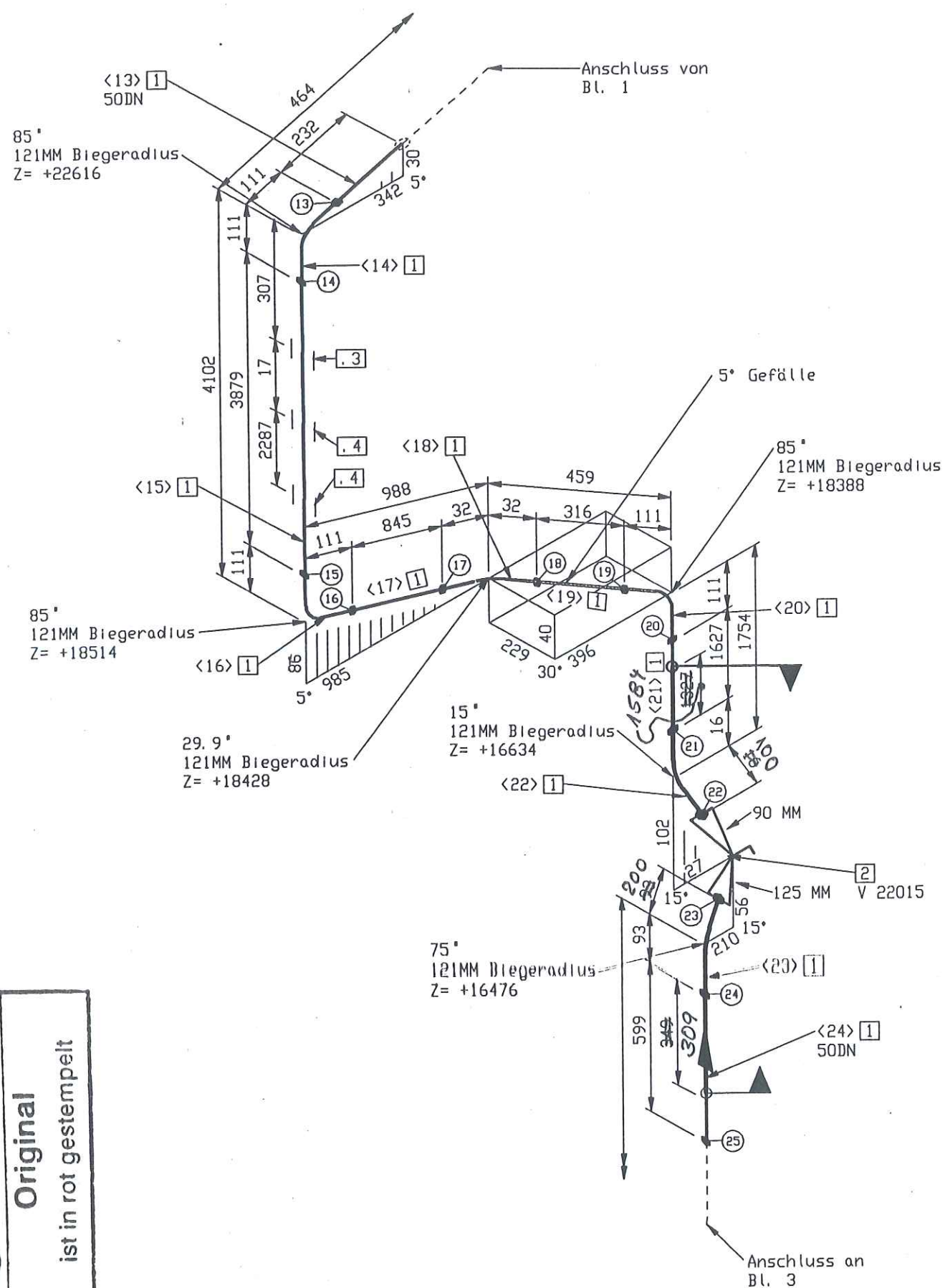
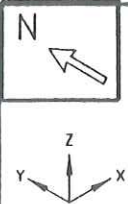
 = VENTILKASTEN 2, Vormontage  
valve box 2, pre-fabricating

piping support, piping guides  
View from top



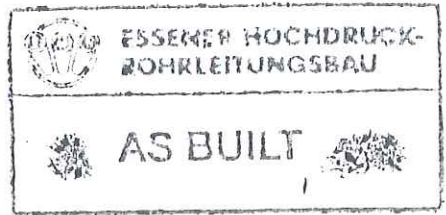
MATERIAL : HANAU AL			SCALE		TOLERANCES :		All components cleaned for oxygen	
Workpiece edges -0.5			+0.3		DN 28005 DN 8570 DN 7165 mittel		Simul:	MASS
ISO- Methode E			DATE : 15.07.2005		NAME : H.Schneider		Subst:	kg
JOB CODE / REFERENCE :			CHECK : Frickhöfer 15/07/05		26.7.05		Replaced:	
K70101, ASU No.9 Kosice			Title :		A 21004		<b>AIR LIQUIDE</b>	
Air Liquide AGS GmbH Hanau			DRAWING No.:		79319826		SHEET : 2 OF SHEET : 3	





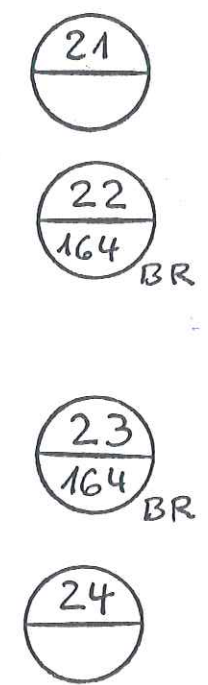
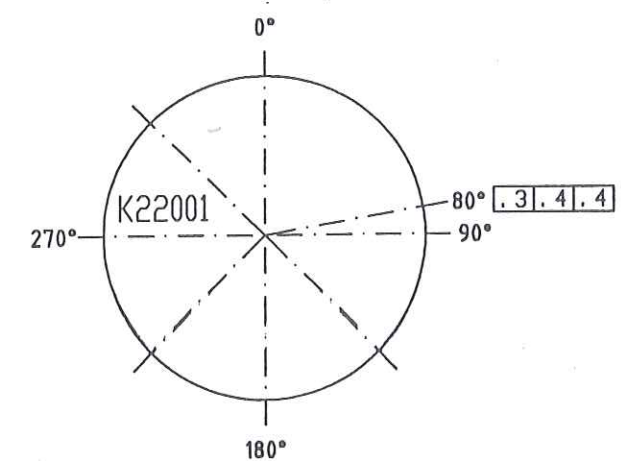
Essener Hochdruck-  
Rohrleitungsbau  
**Original**  
ist in rot gestempelt

MATERIAL KONTR.		
CHECK OF MAT.		
SCHWEISSEN		
WELDING		
MECHAN. FERTIGST.		
MECHAN. COMPL.		
DRUCKPROBE		
PRESSURE TEST		
EHR-PROJ.-NO.:	C-13005	



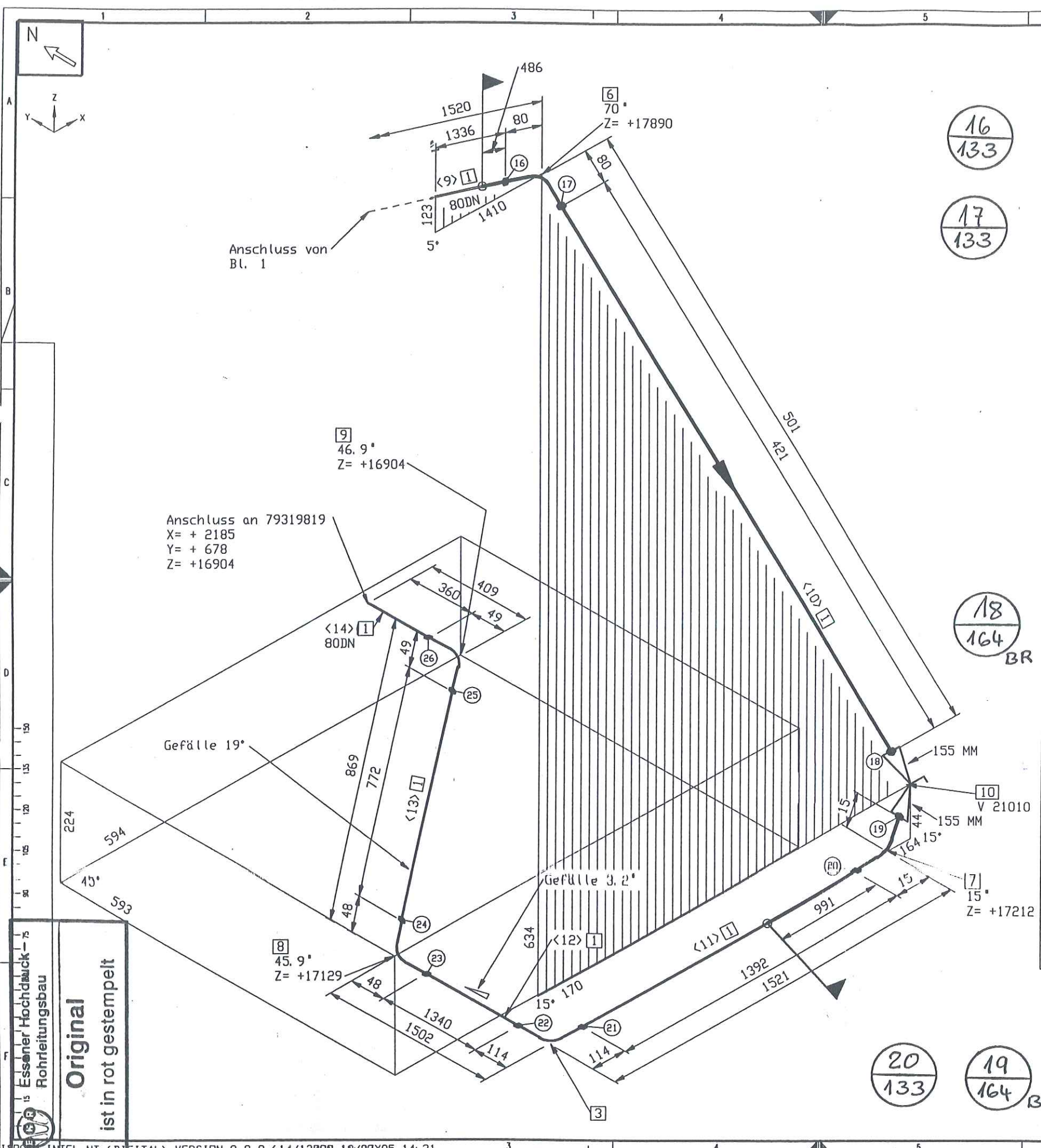
VENTILKASTEN 2, Vormontage  
valve box 2, pre-fabricating

pipng support, piping guides  
View from top



MATERIAL : HANAU AL	SCALE	TOLERANCES : DN 28005 DN 8570 DN 7168 mittel	All components cleaned for oxygen
Workplace edges -0.5 outside +0.3 inside	DATE : 18.07.2005	NAME : H.Schneider	Shaller: MASS Subst.: kg Replaced:
ISO- Methode E	CHECK : Frickhöfer 18/07/05	JOB CODE / REFERENCE : K70101, ASU No.9 Kosice	DRIVING No.: 79319827
This drawing is not to be reproduced, copied or used directly or indirectly in any way detrimental to our interests unless specifically authorized in writing by Air Liquide AGS GmbH Hanau	N 21027	SHEET : 2 OF SHEET : 3	F 2 C





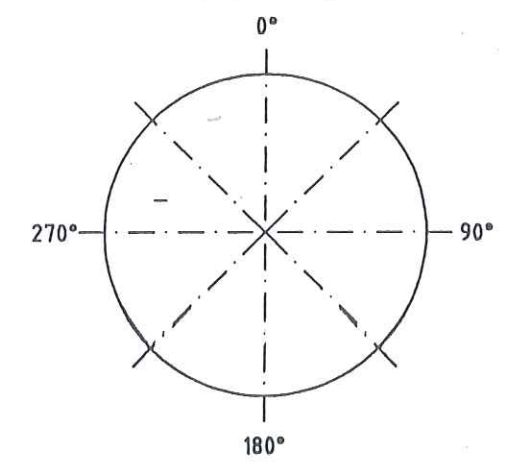
**ESSENER HOCHDRUCK-ROHRLEITUNGSBAU**

**AS BUILT**




MATERIAL KONTR.		
CHECK OF MAT.		
SCHWEISSEN		
WELDING		
MECHAN. FERTIGST.		
MECHAN. COMPL.		
DRUCKPROBE		
PRESSURE TEST		
EHR-PROJ.-NO.:	C-13005	
	ESSENER HOCHDRUCK-ROHRLEITUNGSBAU GMBH	Air Liquide AGS GmbH

= VENTILKASTEN 2, Vormontage  
valve box 2, pre-fabricating

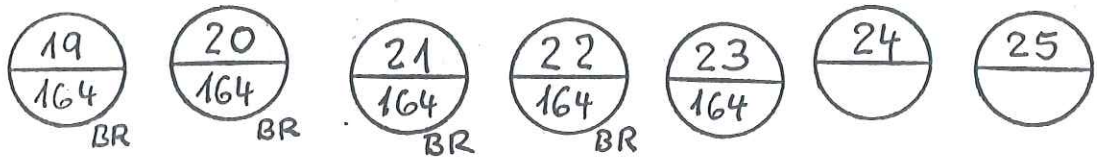
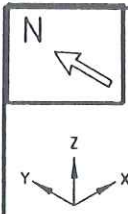
pipng support, piping guides  
View from top



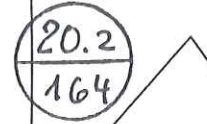
**Original**  
ist in rot gestempelt

E				MATERIAL : HANAU_AL	All components cleaned for oxygen			
D				Workpiece edges 	SCALE	TOLERANCES : DIN 28005 DIN 8570 DIN 7168 mitted	Shrink: Subst: Replaced:	MASS kg
C					DATE : 18.07.2005	NAME : H.Schneider		
B				ISO- Methode E 	JOB CODE / REFERENCE : 2 6. 7 05 K70101, ASU No.9 Kosice		 AIR LIQUIDE	
A				Rev. No.				
This drawing is not to be reproduced, copied or used directly or indirectly in any way detrimental to our interests unless specifically authorized in writing by  Air Liquide AGS GmbH Hanau				Title : N 21019		DRAWING No.: 79319828		F 2 C

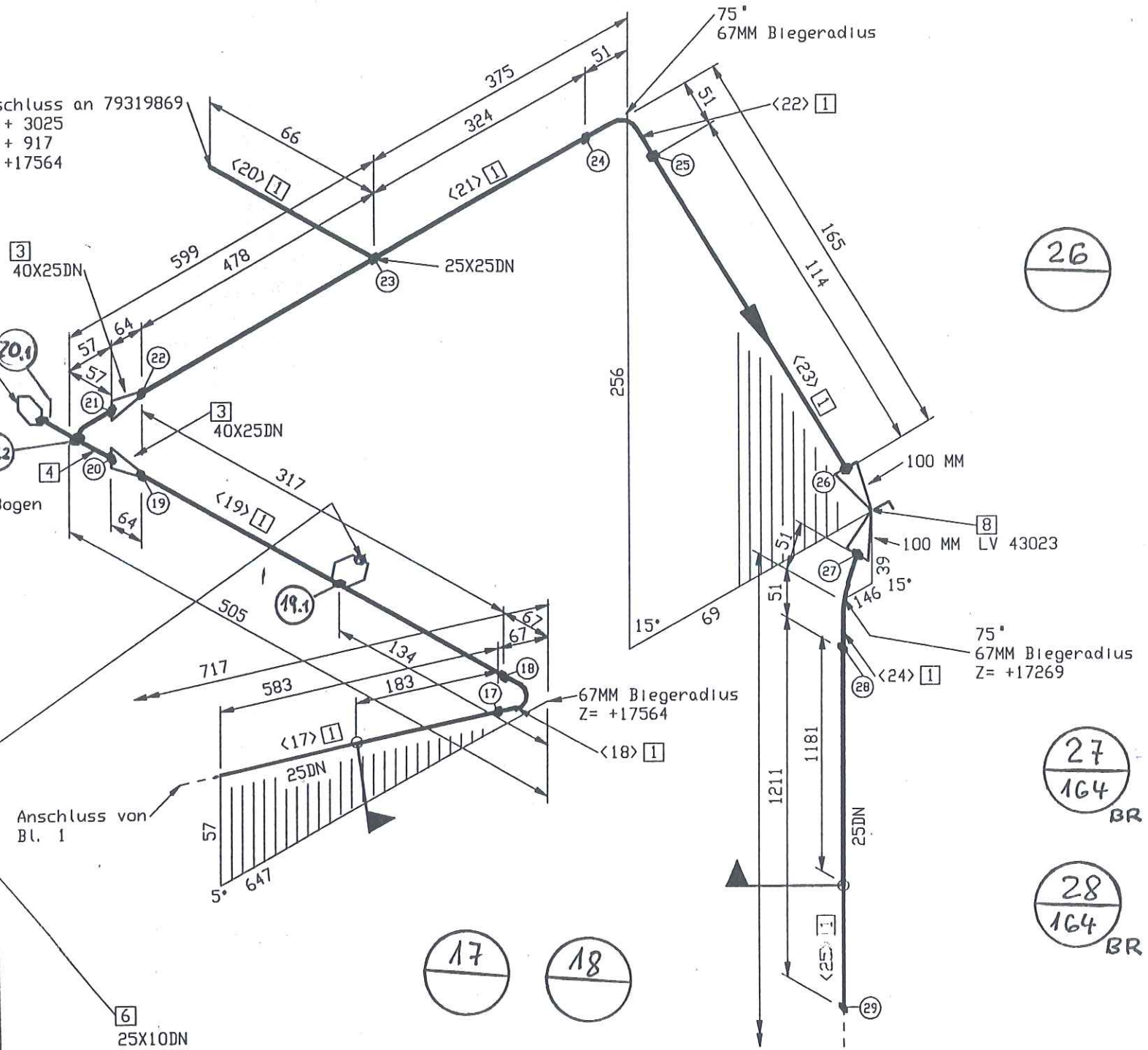




Anschluss an 79319869  
X= + 3025  
Y= + 917  
Z= +17564



7  
TE  
43034  
40X25DN  
Stützen am Bogen  
X= + 2426  
Y= + 861  
Z= +17564



Anschluss von  
Bl. 1

6  
25X10DN  
QE43033  
Abzweigrichtung  
nach Osten, 5° nach Oben  
X= + 2454  
Y= + 479  
Z= +17564  
Anschluss nach Konstruktionsrichtlinie  
79309150 E, Bild 2.3

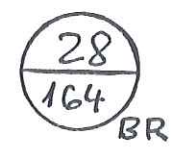
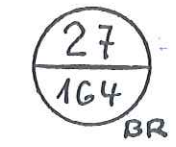
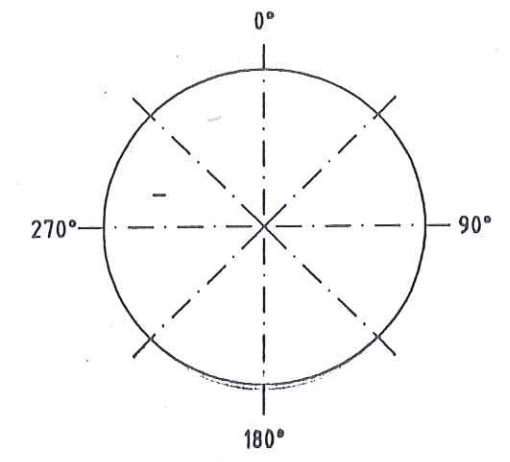
Essener Hochdruck  
Rohrleitungsbau  
Original  
ist in rot gestempelt




MATERIAL KONTR.		
CHECK OF MAT.		
SCHWEISSEN		
WELDING		
MECHAN. FERTIGST.		
MECHAN. COMPL.		
DRUCKPROBE		
PRESSURE TEST		
EHR-PROJ.-NO.:	C-13005	

ESSENER HOCHDRUCK-  
ROHRLEITUNGSBAU  
  
 AS BUILT

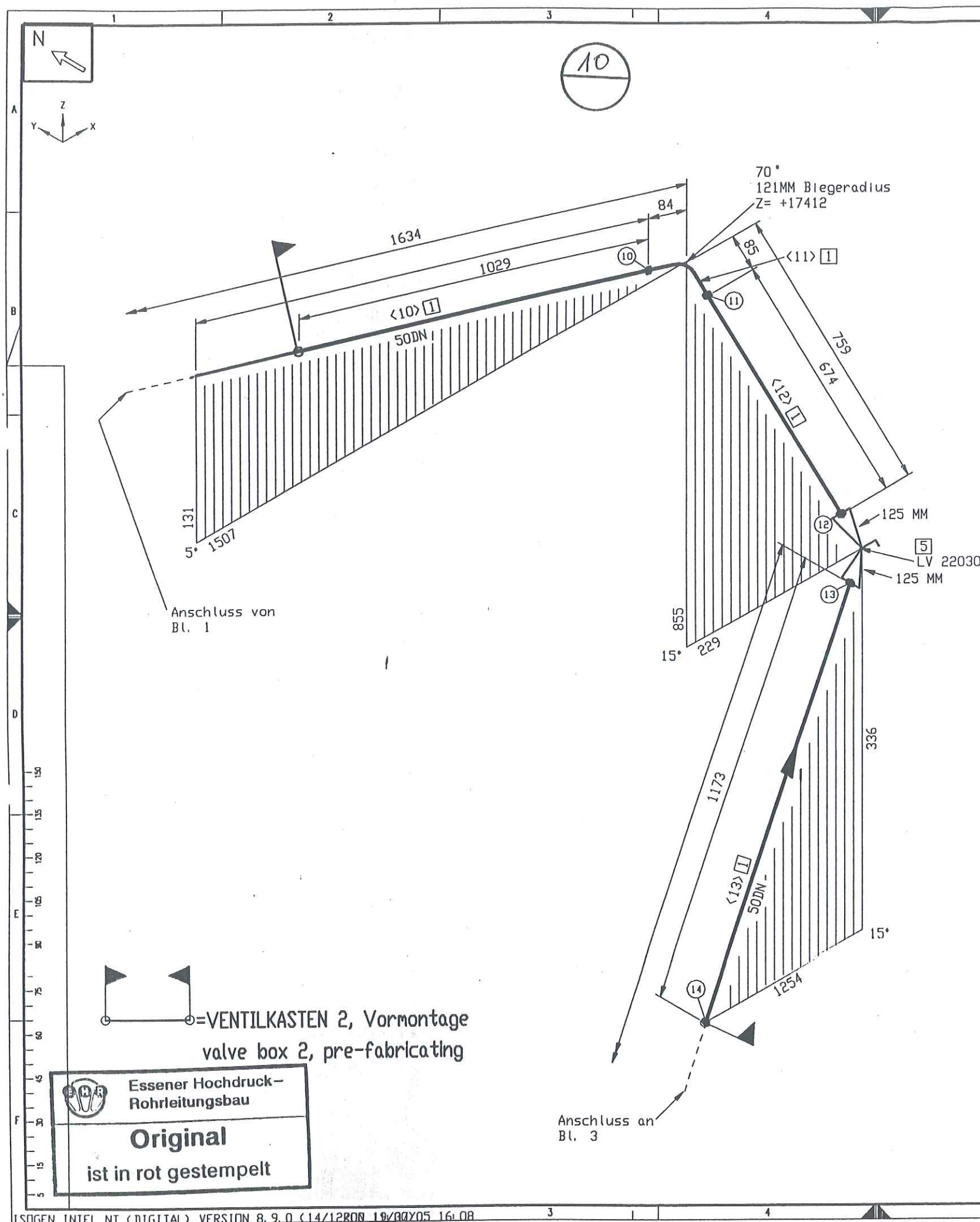
=VENTILKASTEN 2, Vormontage  
valve box 2, pre-fabricating

piping support, piping guides  
View from top



E				MATERIAL : HANAU AL		All components cleaned for oxygen					
D				Workpiece edges 	SCALE	TOLERANCES : DIN 28005 DIN 8570 DIN 7168 mittel	Similar: Subst.: Replaced:	MASS kg			
C											
B				ISO- Methode E 	DATE : 19.07.2005 NAME : H.Schneider CHECK : Frickhöfer 19/07/05						
A											
I	Rev. No.	Date	By	JOB CODE / REFERENCE : K70101, ASU No.9 Kosice					SHEET : 2	OF SHEET : 4	F 2 C
This drawing is not to be reproduced, copied or used directly or indirectly in any way detrimental to our interests unless specifically authorized in writing by				Title : RL 43001					DRAWING No.: 79319830		
Air Liquide AGS GmbH Hanau											





11

12  
164

13  
164

# Rohrzuschnitt

Rohr Stk.	Länge (MM)	DN (MM)	Bemerkung	Rohr Ende 1	Rohr Ende 2	Sachnummer
<1>	190	50	PLD BEND<1>			77038146
<2>	4194	50				77038146
<3>	179	50	PLD BEND<1>			77038146
<4>	1756	50				77038146
<5>	180	50	PLD BEND<1>			77038146
<6>	778	50				77038146
<7>	180	50	PLD BEND<1>			77038146
<8>	572	50				77038146
<9>	190	50	PLD BEND<1>			77038146
<10>	1429	50				77038146
<11>	147	50	PLD BEND<1>			77038146
<12>	674	50				77038146
<13>	1173	50				77038146
<14>	158	50	PLD BEND<1>			77038146
<15>	1043	50				77038146
<16>	159	50	PLD BEND<1>			77038146
<17>	862	50				77038146
<18>	159	50	PLD BEND<1>			77038146
<19>	6000	50				77038146
<20>	1050	50				77038146
<21>	158	50	PLD BEND<1>			77038146
<22>	298	50				77038146
<23>	182	50	PLD BEND<1>			77038146
<24>	597	50				77038146
<25>	183	50	PLD BEND<1>			77038146
<26>	639	50				77038146
<27>	159	50	PLD BEND<1>			77038146
<28>	1170	50				77038146
<29>	95	50	PLD BEND<1>			77038146
<30>	1489	50				77038146
<31>	127	50	PLD BEND<1>			77038146
<32>	1025	15				77038143
<33>	61	15	PLD BEND<1>			77038143
<34>	157	15				77038143
<35>	68	15	PLD BEND<1>			77038143
<36>	549	15				77038143
<37>	68	15	PLD BEND<1>			77038143
<38>	214	15				77038143
<39>	68	15	PLD BEND<1>			77038143
<40>	922	15				77038143
<41>	68	15	PLD BEND<1>			77038143
<42>	614	15				77038143
<43>	68	15	PLD BEND<1>			77038143
<44>	114	15				77038143
<45>	68	15	PLD BEND<1>			77038143
<46>	119	15				77038143
<47>	68	15	PLD BEND<1>			77038143
<48>	39	15				77038143
<49>	68	15	PLD BEND<1>			77038143
<50>	389	15				77038143
<51>	68	15	PLD BEND<1>			77038143
<52>	107	15				77038143
<53>	3759	50				77038146
<54>	190	50	PLD BEND<1>			77038146
<55>	307	50				77038146
<56>	159	50	PLD BEND<1>			77038146
<57>	208	50				77038146
<58>	187	50				77038146
<59>	500	50				77038146
<60>	248	50				77038146
<61>	179	50	PLD BEND<1>			77038146

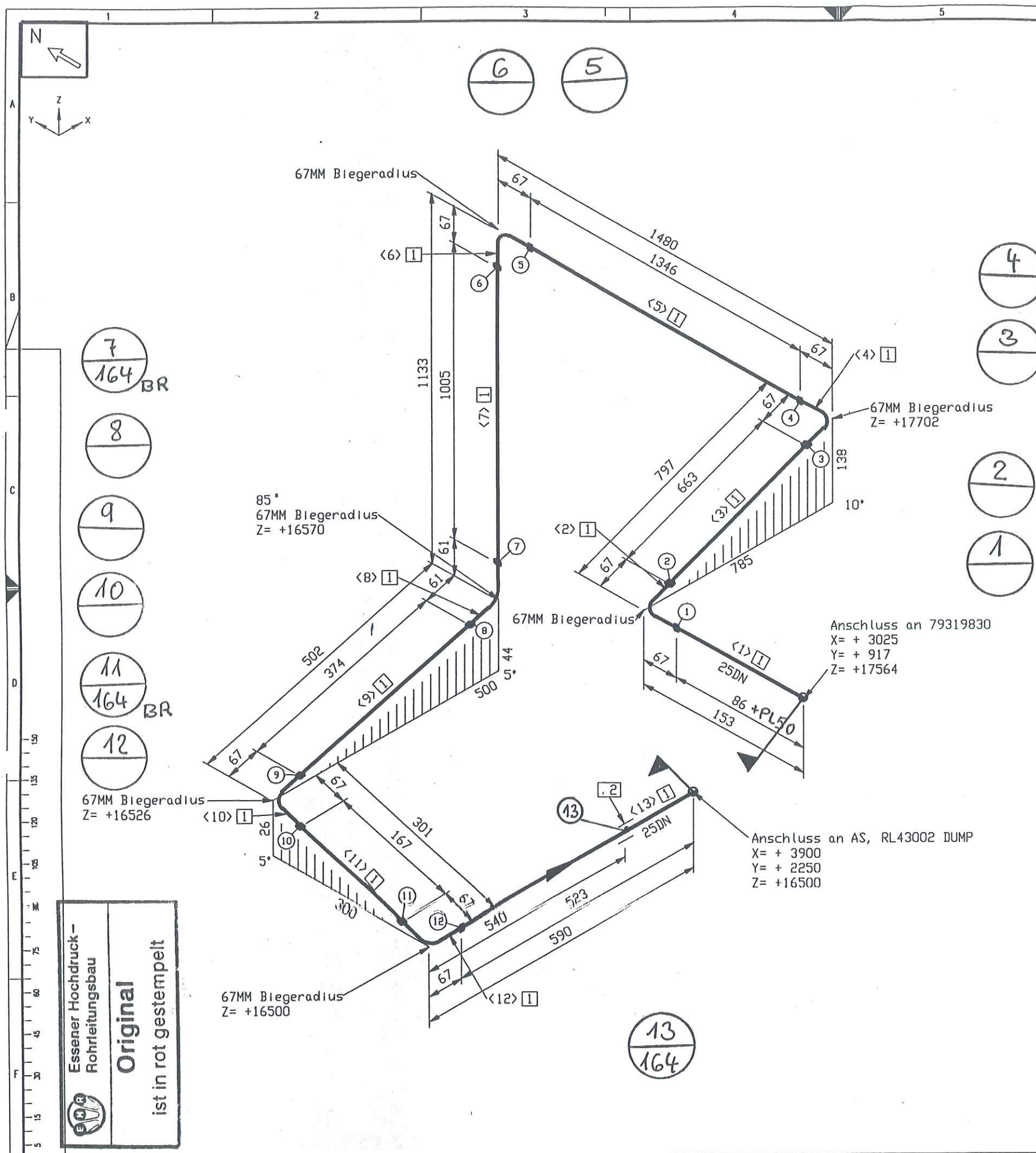
MATERIAL KONTR.	CECK OF MAT.	
SCHWEISSEN	WELDING	EHR 66
MECHAN. FERTIGST.	MECHAN. COMPL.	
DRUCKPROBE	PRESSURE TEST	
EHR-PROJ.-NO. C-13005		AIR LIQUIDE
ESSENER HOCHDRUCK-ROHRLEITUNGSBAU GMBH		Air Liquide AGS GmbH

MATERIAL: HANAU_AL		SCALE		TOLERANCES:		All components cleaned for oxygen	
Workpiece edges		±0.3		DIN 29005		Shrink:	
±0.5		±0.3		DIN 6570		Subst:	
±0.5		±0.3		DIN 7168 mittel		Replaced:	
ISO-Methode E		DATE: 19.07.2005		NAME: H.Schneider		AIR LIQUIDE	
JOB CODE / REFERENCE:		2 6. 7. 05		CECK: Frickhöfer 19/07/05		SHEET: 2 OF SHEET: 6	
K70101, ASU No.9 Kosice		Title:		DRAWING No:		F 2	
Air Liquide AGS GmbH Hanau		□ 61111		79319860		C	



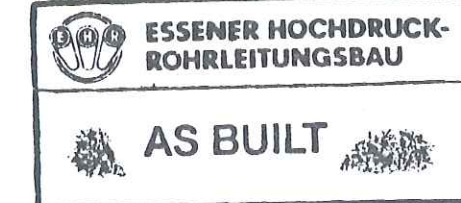






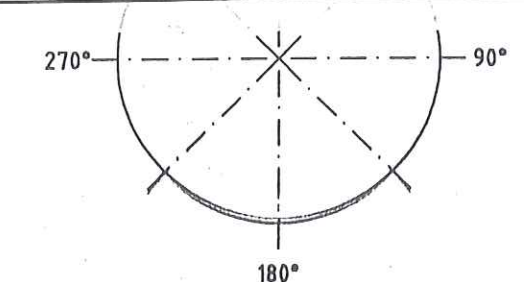
Stückliste					
Lfd. Nr.	Benennung	DN (MM)	Sachnummer	Menge	Gewicht (kg)
1	ROHR 33,4 X 3,4 ALMG4, 5MM W27	25	77038144	4788 MM	4.2
2	Bordscheibe gez. auf 79313040	25	79313040	1	0.3
Summe Masse					4.5

Rohrzuschnitt					
Rohr Stk.	Länge (MM)	DN (MM)	Bemerkung	Rohr Ende 1	Rohr Ende 2
<1>	86	25			
<2>	105	25	PLD BEND(1)		
<3>	663	25			
<4>	105	25	PLD BEND(1)		
<5>	1346	25			
<6>	105	25	PLD BEND(1)		
<7>	1005	25			
<8>	99	25	PLD BEND(1)		
<9>	374	25			
<10>	105	25	PLD BEND(1)		
<11>	167	25			
<12>	105	25	PLD BEND(1)		
<13>	323	25			



=VENTILKASTEN 2, Vormontage  
valve box 2, pre-fabricating

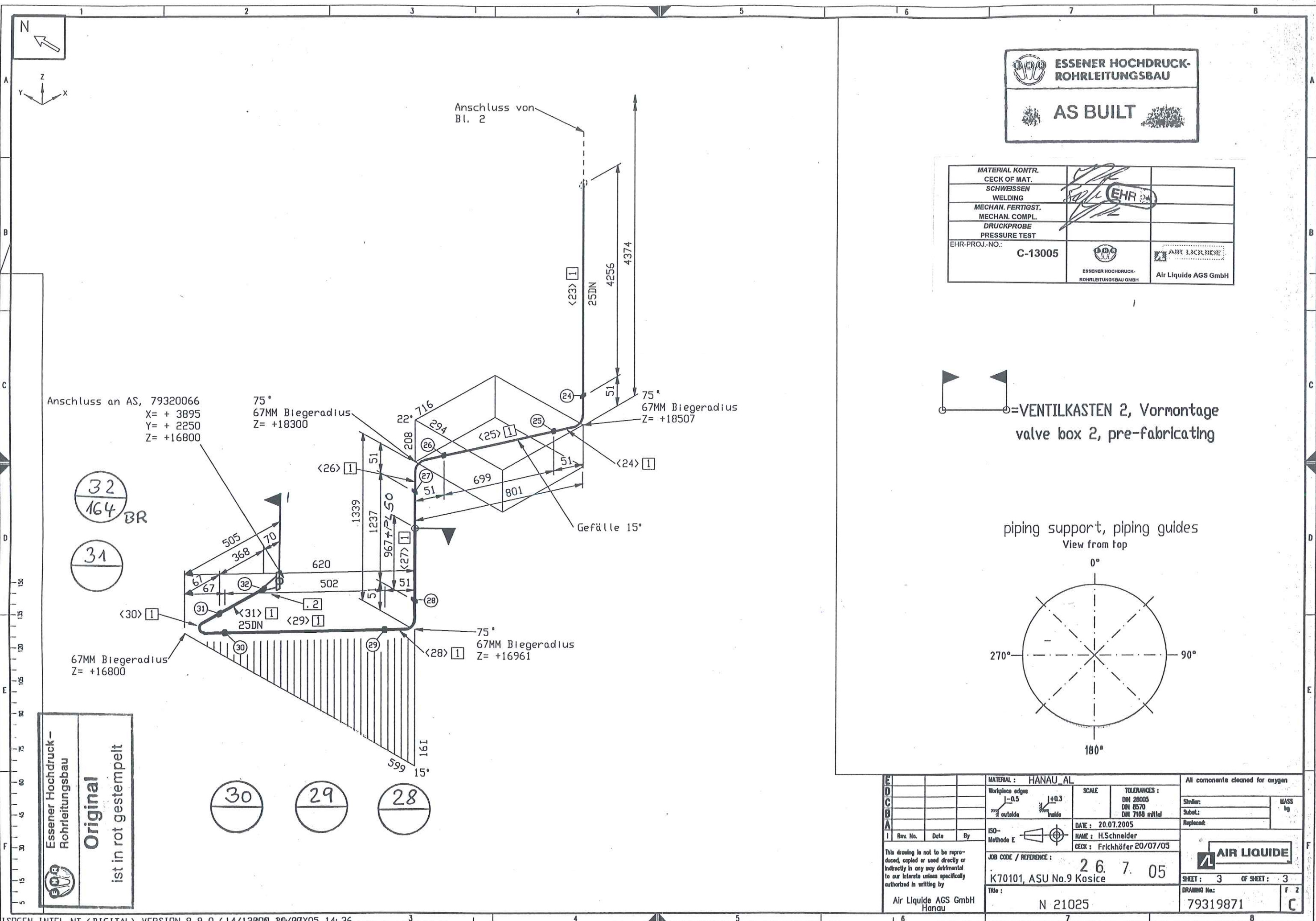
MATERIAL KONTR.	CECK OF MAT.	SCHWEISSEN	WELDING
MECHAN. FERTIGST.	MECHAN. COMPL.	DRUCKPROBE	PRESSURE TEST
EHR-PROJ.-NO.:	C-13005	ESSENER HOCHDRUCK-ROHRLEITUNGSBAU GMBH	Air Liquide AGS GmbH



Rohr DN (MM) 25  
CL Länge (MM) 4789

E		MATERIAL: HANAU AL		All components cleaned for oxygen	
D		Workpiece edges		TOLERANCES:	
C		-0.5		Similar:	
B		outside		Subst.:	
A		ISO-Methode E		Replacement:	
1		Rev. No. Date By		DATE: 20.07.2005	
				NAME: H.Schneider	
				CHECK: Frickhöfer 20/07/05	
				JOB CODE / REFERENCE:	
				K70101, ASU No.9 Kosice	
				This: 2 6. 7. 05	
				AIR LIQUIDE	
				SHEET: 1 OF SHEET: 1	
				DRAWING No.:	
				79319869	
				F 2	
				C	





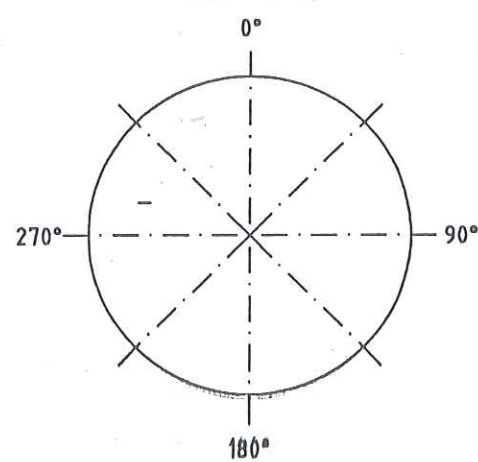
**ESSENER HOCHDRUCK-ROHRLEITUNGSBAU**

**AS BUILT**

MATERIAL KONTR.		
CHECK OF MAT.		
SCHWEISSEN		
WELDING		
MECHAN. FERTIGST.		
MECHAN. COMPL.		
DRUCKPROBE		
PRESSURE TEST		
EHR-PROJ.-NO.:	C-13005	
	ESSENER HOCHDRUCK-ROHRLEITUNGSBAU GMBH	Air Liquide AGS GmbH

**VENTILKASTEN 2, Vormontage**  
**valve box 2, pre-fabricating**

piping support, piping guides  
View from top



MATERIAL : HANAU AL			All components cleaned for oxygen	
Workpiece edges	SCALE	TOLERANCES :	Shiller:	MASS
1-0.5		DN 28005		by
outside		DN 6570		
		DN 7168 mittel		
ISO-Methode E	DATE : 20.07.2005	NAME : H.Schneider	Replaced:	
		CHECK : Frickhöfer 20/07/05		
JOB CODE / REFERENCE :			<b>AIR LIQUIDE</b>	
K70101, ASU No.9 Kosice			SHEET : 3	OF SHEET : 3
Title :			DRAWING No.:	F 2
Air Liquide AGS GmbH Hanau			79319871	C
N 21025				

**Essener Hochdruck-Rohrleitungsbau**

**Original**

ist in rot gestempelt

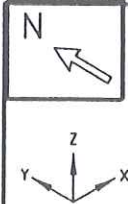












Anschluss an 79319829  
X= + 1993  
Y= + 2380  
Z= +18633

150DN  
[6]  
15°  
Z= +18603

[5]  
85.2°  
Z= +17744

[3]  
75°  
Z= +16935

[4]  
70°  
Z= +17636

12  
133

11  
160  
BR

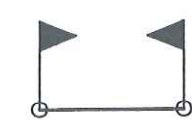
10  
160  
BR

9  
133

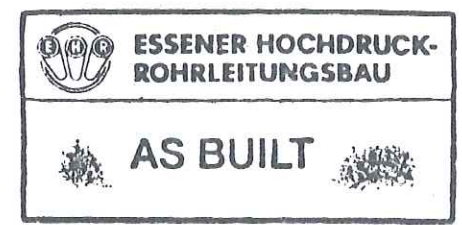
Anschluss von  
Bl. 1

Essener Hochdruck-  
Rohrleitungsbau  
**Original**  
ist in rot gestempelt

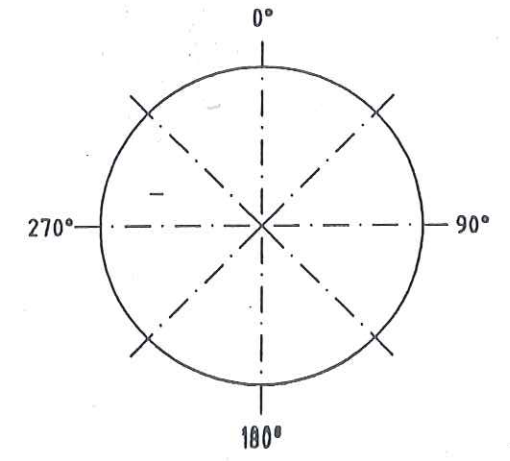
MATERIAL KONTR.		
CHECK OF MAT.		
SCHWEISSEN		
WELDING		
MECHAN. FERTIGST.		
MECHAN. COMPL.		
DRUCKPROBE		
PRESSURE TEST		
EHR-PROJ.-NO.:	C-13005	



=VENTILKASTEN 2, Vormontage  
valve box 2, pre-fabricating



pipng support, piping guides  
View from top



<div><div>E</div><div>D</div><div>C</div><div>B</div><div>A</div></div>				MATERIAL : HANAU AL				All components cleaned for oxygen					
				Workpiece edges		SCALE		TOLERANCES :		Similar:		MASS	
				<div><div>1-0.5</div><div>outside</div></div>		<div><div>1:0.3</div><div>inside</div></div>		DN 28005 DN 8570 DN 7168 mittel		Subst.:		by	
				ISO-		DATE : 30.06.2005		Replaced:					
1 Rev. No.    Date    By				Methode E		NAME : H.Schneider							
<div>This drawing is not to be reproduced, copied or used directly or indirectly in any way detrimental to our interests unless specifically authorized in writing by</div> <div>Air Liquide AGS GmbH Hanau</div>				JOB CODE / REFERENCE :  K70101, ASU No.9 Kosice		26.7.05		CHECK : Frickhöfer 25/07/05		<div> AIR LIQUIDE</div>			
				Title :		DRAWING No.:		SHEET : 2		OF SHEET : 2		F Z	
				□ 22002		79319911						C	