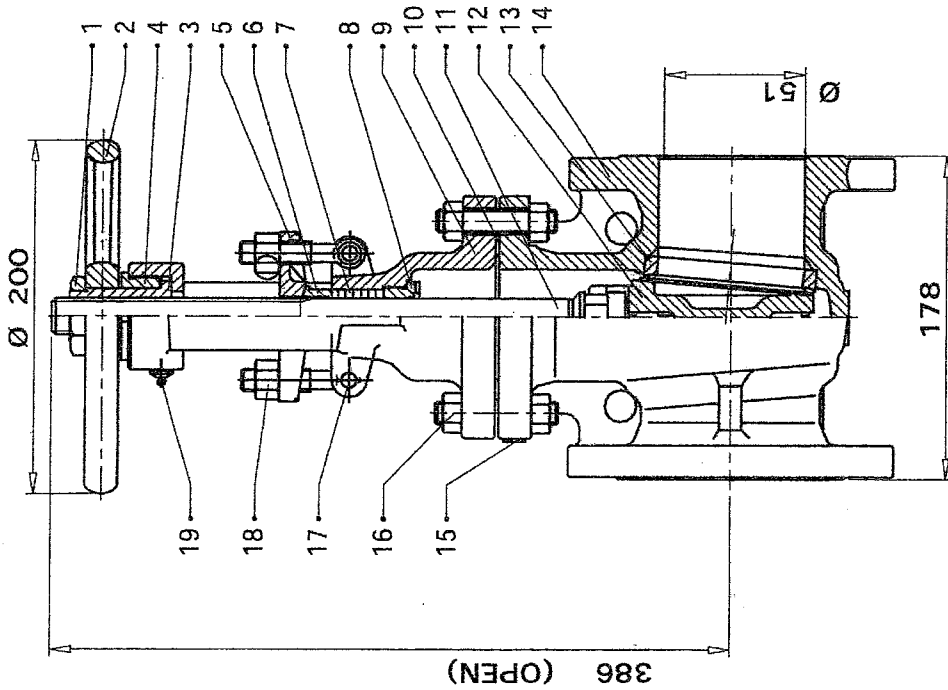




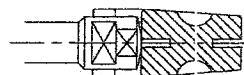
GATE VALVES
FLEX WEDGE
DETAIL

POS	PART NAME	MATERIAL	No.
1	NUT	1035	1
2	HANDWHEEL	604018	1
3	YOKE SLEEVE	D2	1
4	YOKE NUT	1035	1
5	GLAND FLANGE	WCB	1
6	PACKING GLAND	A276 410	1
7	PACKING	FLEXIBLE GRAPHITE	1
8	BUSCHING	A476 410	1
9	BONNET	WCB	1
10	GASKET	FLEXIBLE GRAPHITE	1
11	STEM	A276 410	1
12	WEDGE	WCB+F6	1
13	SEAT	A105+HF	2
14	BODY	WCB	1
15	NAMEPLATE	304	1
16	B/B NUT	A194 GR.2H	8
17	GLAND STUD	A193 B7	2
18	GLAND NUT	A194 GR.2H	4
19	GREASE INJECTOR	A570 GR.4	1

Lurgi order no.: 4567581- S360
Pos. 0010 2"

General Notes
-FLANGES ACCORDING TO ANSI B16.5.

REV.	DATE:	REV.	DATE:	REV.	DATE:	REV.	DATE:
0	12/11/2004	1	13/12/2004				
CUSTOMER: SIEKMANN ECONOSTO GMBH & P.O. No.: 9004566OP ZAGROS II -LURGI- TAG No.: S 360 - 00010 ITEM No.: 1				DESCRIPTION: GATE VALVE BB FB FL WCB RFS			
DOCUMENT: 045931 SHEET: 001				CLASS: 150 SIZE: 2" WEIGHT: 17 KG			
DRAW: RAOUL-PARSAN CHECKED: Fogaroli				API 6A 0425 API SD 0264 API 600 0003			
ACCREDITED ANS-ONE TUV				API 6A 0425 API SD 0264 API 600 0003			
Lurgi				FORGED STEEL VALVES			
JOB: 045931				POS: 001			
GATE #150-2"							

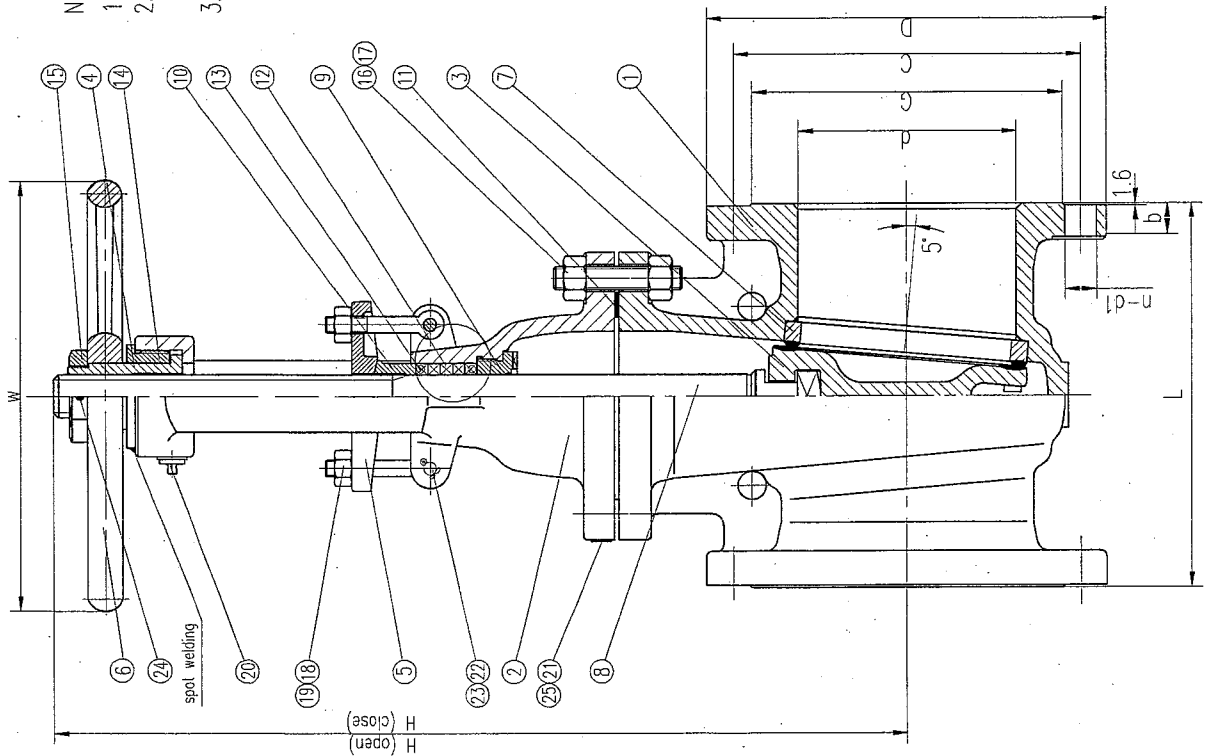


Lurgi order no.: 4567581- S360
Pos. 0020 2"

-FLANGES ACCORDING TO ANSI B16.5.

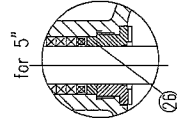
POS	PART NAME	MATERIAL	No.
1	NUT	1035	1
2	HANDWHEEL	604018	1
3	YOKE SLEEVE	D2	1
4	YOKE NUT	1035	1
5	GLAND FLANGE	WCB	1
6	PACKING GLAND	A276 410	1
7	PACKING	FLEXIBLE GRAPHITE	1
8	BUSHING	A476 410	1
9	BONNET	WCB	1
10	GASKET	FLEXIBLE GRAPHITE	1
11	STEM	A276 410	1
12	WEDGE	WCB+F6	1
13	SEAT	A105+HF	2
14	BODY	WCB	1
15	NAMEPLATE	304	1
16	B/B NUT	A194 GR.2H	8
17	GLAND STUD	A193 B7	2
18	GLAND NUT	A194 GR.2H	4
19	GREASE INJECTOR	A570 GR.4	1

[illegible]

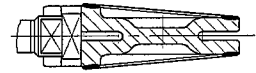


NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.



up to sizes 5"

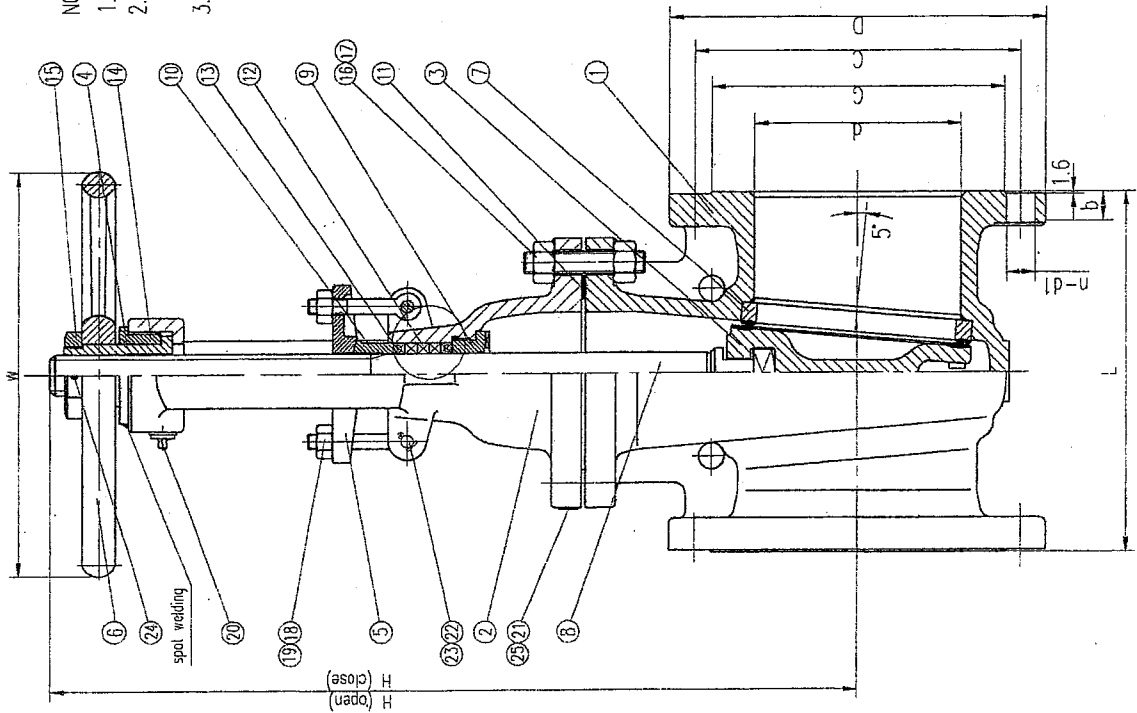


Size	L	W	d	G	C	D	I	n-d1	H(open)	H(close)	Wt(kg)
2"	178	200	51	92	120.5	152	15.9	4-19	387	327	18
2-1/2"	190	200	64	105	139.5	178	17.6	4-19	435	360	28
3"	203	250	76	127	152.5	190	19.1	4-19	481	394	32
3-1/2"	216	300	89	140	178	216	21	8-19	601	491	491
4"	229	250	102	157	190.5	229	23.9	8-19	585	471	50
5"	254	300	127	186	216	254	23.9	8-22	681	541	71
6"	267	300	152	216	241.5	279	25.4	8-22	765	601	77
8"	292	350	203	270	290.5	343	28.5	8-22	956	738	121
10"	330	400	254	324	362	406	30.3	12-25	1149	879	178
12"	356	450	305	381	432	483	31.8	12-25	1350.5	1028	265

Lurgi Order Nr. 4567581- S360
Pos. 0030 3"

26	SPACER RING	1	ASTM A276-420								
25	NAME PLATE	1	ALUMINUM OR S.S.								
24	SCREW	1	CARBON STEEL								
23	SPLIT PIN	2	CARBON STEEL								
22	PIN	2	CARBON STEEL								
21	RVET	2	CARBON STEEL								
20	GREASE FITTING	1	S.S.								
19	NUT	2	ASTM A194-2H								
18	EYE BOLT	2	ASTM A193-B7								
17	NUT		ASTM A194-2H								
16	STUD		ASTM A193-B7								
15	HANDWHEEL NUT	1	CARBON STEEL								
14	RETAINING NUT	1	CARBON STEEL								
13	PACKING	2	DIE FORMED GRAPHITE								
12	PACKING	3	BRAIDED GRAPHITE								
11	GASKET	1	REINFORCED GRAPHITE								
10	GLAND	1	ASTM A276-420								
9	BACK SEAT	1	ASTM A276-420								
8	STEM	1	ASTM A182 F6a								
7	SEAT RING	2	ASTM A105/STL. OVERLAY								
6	HANDWHEEL	1	DUCTILE IRON								
5	GLAND FLANGE	1	ASTM A216-WCB								
4	STEM NUT	1	ASTM A439 D-2								
3	WEDGE	1	ASTM A216-WCB/CRT13 OVERLAY								
2	BONNET	1	ASTM A216-WCB								
1	BODY	1	ASTM A216-WCB								
No.	PART NAME	QTY	MATERIAL								REMARK

Stan.	API 600	Shell Test	3.2 MPa	Draft	
Class	150LB	Seat Test (Hyd.)	2.3 MPa	Check	
Size	2"~12"	Seat Test (Air)	0.6 MPa	Appr.	
Weight		Scale		Man. Fig.	G1RA8
Type	CAST STEEL GATE VALVE				
User Fig.					



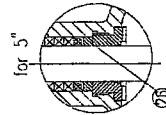
NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.

Lurgi Order Nr. 4567581- S360
Pos. 0040 4"

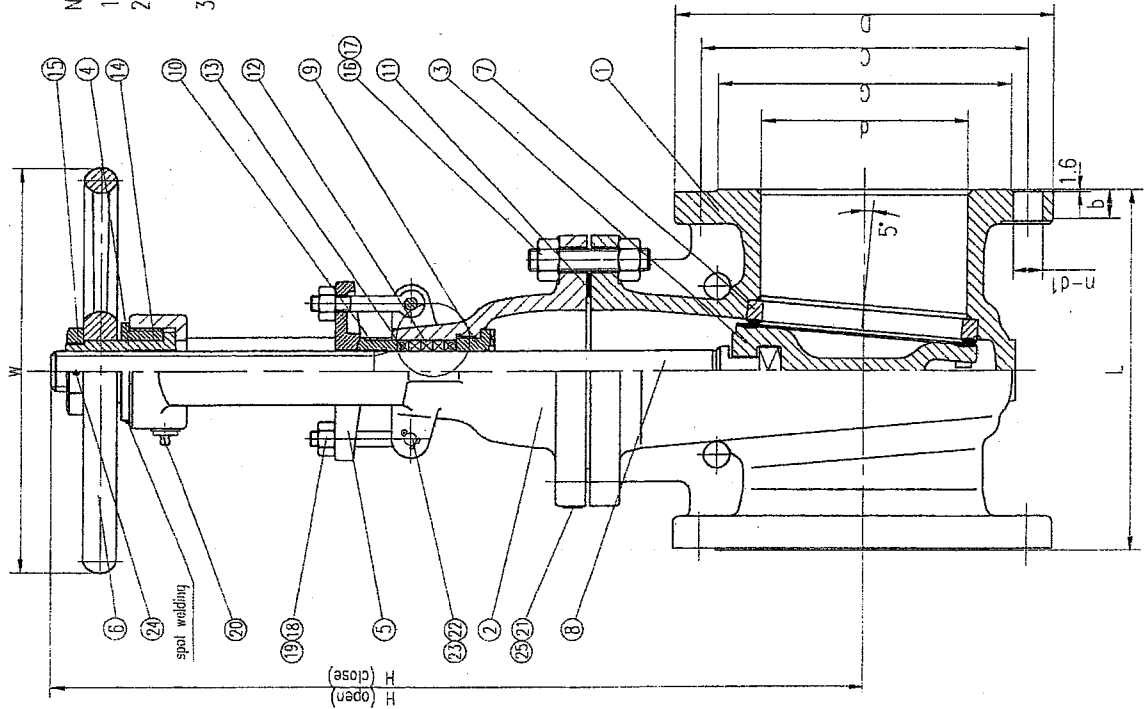
Size	L	W	u	G	C	D	I	a-dl	H (open)	H (close)	Wt (kg)
2"	178	200	51	92	120.5	152	15.9	4-19	387	327	18
2-1/2"	190	200	64	105	139.5	178	17.6	4-19	435	360	28
3"	203	250	76	127	152.5	190	19.1	4-19	481	394	32
3-1/2"	216	300	89	140	178	216	21	8-19	601	491	491
4"	229	350	102	157	190.5	229	23.9	8-19	685	471	50
5"	254	390	127	185	215	254	25.5	8-22	681	541	71
6"	267	500	152	216	241.5	279	25.4	8-22	765	601	77
8"	292	350	203	270	298.5	343	28.5	8-22	956	738	121
10"	330	400	254	324	362	406	30.3	12-25	1149	879	178
12"	356	450	305	381	432	483	31.8	12-25	1350.5	1028	265

26	SPACER RING	1	ASTM A276-420
25	NAME PLATE	1	ALUMINUM OR S.S.
24	SCREW	1	CARBON STEEL
23	SPLIT PIN	2	CARBON STEEL
22	PIN	2	CARBON STEEL
21	RVET	2	CARBON STEEL
20	ORCASE FITTING	1	S.S.
19	NUT	2	ASTM A194-2H
18	EYE BOLT	2	ASTM A193-B7
17	NUT	2	ASTM A194-2H
16	STUD	2	ASTM A193-B7
15	HANDWHEEL NUT	1	CARBON STEEL
14	RETAINING NUT	1	CARBON STEEL
13	PACKING	2	DIF FORMED GRAPHITE
12	PACKING	3	BRAIDED GRAPHITE
11	GASKET	1	REINFORCED GRAPHITE
10	GLAND	1	ASTM A276-420
9	BACK SEAT	1	ASTM A276-420
8	STEM	1	ASTM A182 F6a
7	SEAT RING	2	ASTM A105/STL. OVERLAY
6	HANDWHEEL	1	DUCTILE IRON
5	GLAND FLANGE	1	ASTM A216-WCB
4	STEM NUT	1	ASTM A439 D-2
3	WEDGE	1	ASTM A216-WCB/CR13 OVERLAY
2	BONNET	1	ASTM A216-WCB
1	BODY	1	ASTM A216-WCB
No.	PART NAME	QTY	MATERIAL
Slon.	API 600	Shell Test	3.2 MPa
Class	150LB	Seal Test (hyd.)	2.3 MPa
Size	2"~12"	Seal Test (Air)	0.6 MPa
Weight		Scale	
Type	CAST STEEL GATE VALVE		
User Fig.			
			REMARK
			Man. Fig. C1RA8



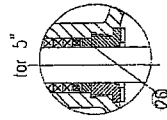
up to sizes"



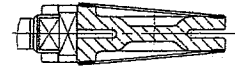


NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.



up to sizes 5"



Size	L	W	d	G	C	D	I	n-d1	H(open)	H(close)	W(kg)
2"	178	200	51	92	120.5	152	15.9	4-19	387	327	18
2-1/2"	190	200	64	105	139.5	176	17.6	4-19	435	360	28
3"	203	250	76	127	152.5	190	19.1	4-19	481	394	32
3-1/2"	216	300	89	140	178	216	21	8-19	601	491	491
4"	229	250	102	157	190.5	229	23.9	8-19	585	471	50
5"	254	300	127	186	216	254	25.9	8-22	691	541	71
6"	267	300	152	210	241.5	279	25.4	8-22	765	601	77
8"	292	350	203	270	298.5	343	28.5	8-22	956	738	121
10"	330	400	254	324	362	406	30.3	12-25	1149	879	178
12"	356	450	305	381	432	483	31.8	12-25	1350.5	1028	265

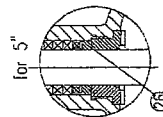
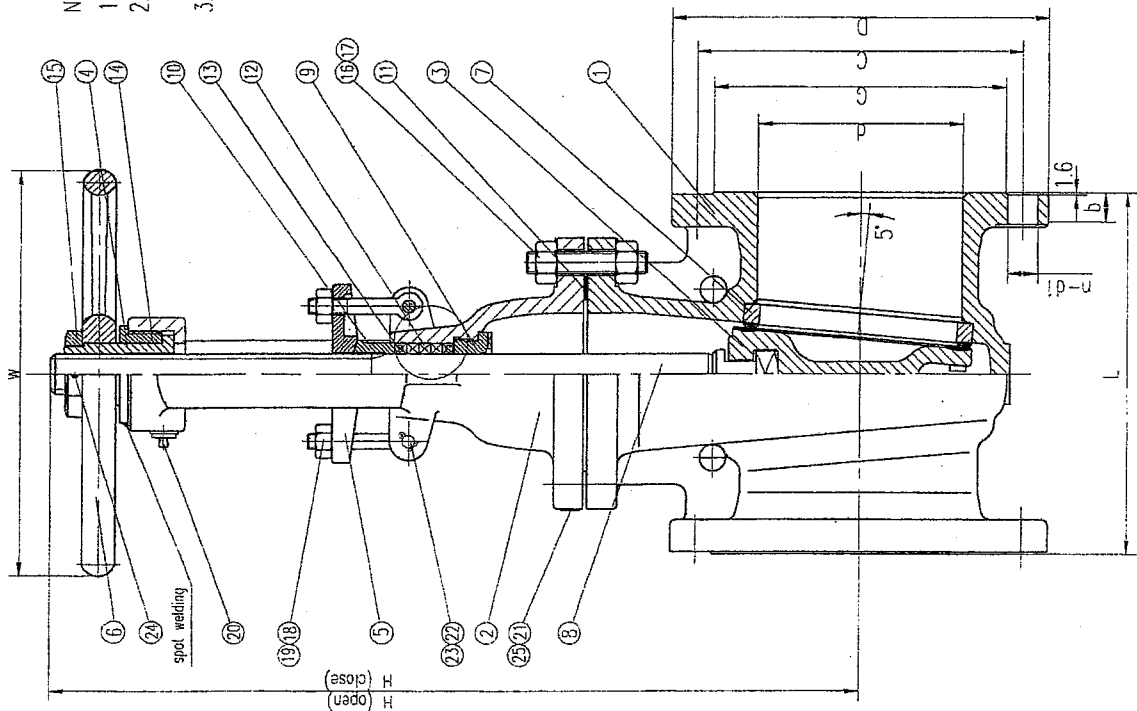
Lurgi Order Nr. 4567581- S360
Pos. 0050 6"

26	SPACER RING	1	ASTM A276-420
25	NAME PLATE	1	ALUMINUM OR S.S.
24	SCREW	1	CARBON STEEL
23	SPLIT PIN	2	CARBON STEEL
22	PIN	2	CARBON STEEL
21	RVET	2	CARBON STEEL
20	GREASE FITTING	1	S.S.
19	NUT	2	ASTM A194-2H
18	EYE BOLT	2	ASTM A193-B7
17	NUT	2	ASTM A194-2H
16	STUD	1	ASTM A193-B7
15	HANDWHEEL NUT	1	CARBON STEEL
14	RETAINING NUT	1	CARBON STEEL
13	PACKING	2	DIE FORMED GRAPHITE
12	PACKING	3	BRAIDED GRAPHITE
11	GASKET	1	REINFORCED GRAPHITE
10	GLAND	1	ASTM A276-420
9	BACK SEAT	1	ASTM A276-420
8	STEM	1	ASTM A182 F6a
7	SEAT RING	2	ASTM A105/STL OVERLAY
6	HANDWHEEL	1	DUCTILE IRON
5	GLAND FLANGE	1	ASTM A216-WCB
4	STEM NUT	1	ASTM A439 D-2
3	WEDGE	1	ASTM A216-WCB/CR13 OVERLAY
2	BONNET	1	ASTM A216-WCB
1	BODY	1	ASTM A216-WCB

No.	PART	NAME	QTY	MATERIAL	REMARK
1	API 600	Shell Test			
2	150LB	Seat Test (hyd.)			
3	2" ~ 12"	Seat Test (Air)			
4	Weight	Scale			
5	Type	CAST STEEL GATE VALVE			
6	User Fig.				







up to sizes"



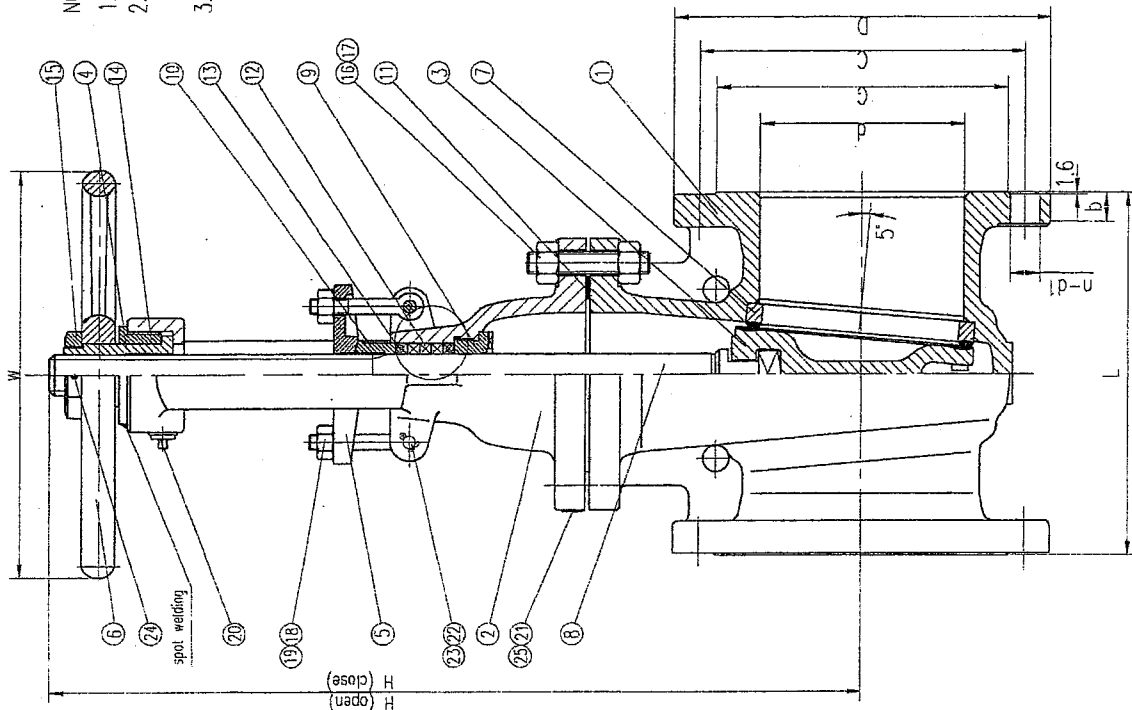
NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.

Lurgi Order Nr. 4567581- S360
Pos. 0070 10"

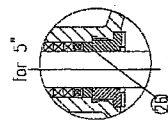
Size	L	W	d	G	C	D	I	n-d	H(open)	H(close)	W(kg)
2"	178	200	51	92	120.5	152	15.9	4-19	387	327	18
2-1/2"	190	200	64	105	139.5	178	17.6	4-19	435	380	28
3"	203	250	76	127	152.5	190	19.1	4-19	481	394	32
3-1/2"	216	300	89	140	178	216	21	8-19	601	491	491
4"	229	250	102	157	190.5	229	23.9	8-19	585	471	50
5"	254	300	127	185	215	254	25.5	8-22	681	541	71
6"	267	300	152	216	241.5	279	28.4	8-22	785	601	77
8"	292	350	203	270	298.5	343	28.5	8-22	956	738	121
10"	330	400	254	324	362	406	30.3	12-25	1149	879	178
12"	356	450	305	381	432	483	31.8	12-25	1350.5	1028	265

No.	PART	NAME	QTY	MATERIAL	REMARK
26	SPACER RING	1	ASTM A276-420		
25	NAME PLATE	1	ALUMINUM OR S.S.		
24	SCREW	1	CARBON STEEL		
23	SPLIT PIN	2	CARBON STEEL		
22	PIN	2	CARBON STEEL		
21	RIVET	2	CARBON STEEL		
20	GREASE FITTING	1	S.S.		
19	NUT	2	ASTM A194-2H		
18	EYE BOLT	2	ASTM A193-B7		
17	NUT	2	ASTM A194-2H		
16	STUD	2	ASTM A193-B7		
15	HANDWHEEL NUT	1	CARBON STEEL		
14	RETAINING NUT	1	CARBON STEEL		
13	PACKING	2	DIE FORMED GRAPHITE		
12	PACKING	3	BRAIDED GRAPHITE		
11	GASKET	1	REINFORCED GRAPHITE		
10	GLAND	1	ASTM A276-420		
9	BACK SEAT	1	ASTM A276-420		
8	STEM	1	ASTM A182 F6a		
7	SEAT RING	2	ASTM A105/STL OVERLAY		
6	HANDWHEEL	1	DUCHE'S IRON		
5	GLAND FLANGE	1	ASTM A216-WCB		
4	STEM NUT	1	ASTM A439 D-2		
3	WEDGE	1	ASTM A216-WCB/CRI13 OVERLAY		
2	BONNET	1	ASTM A216-WCB		
1	BODY	1	ASTM A216-WCB		
No.	PART	NAME	QTY	MATERIAL	REMARK
Slon.	API 600	Shell Test		3.2 MPa	Draft
Class	150LB	Seal Test (Hyd.)		2.3 MPa	Check
Size	2"~12"	Seal Test (Air)		0.6 MPa	Appr.
Weight		Scale			Mon. Fig.
Type	CAST STEEL GATE VALVE				G1RA8
User Fig.					



NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.



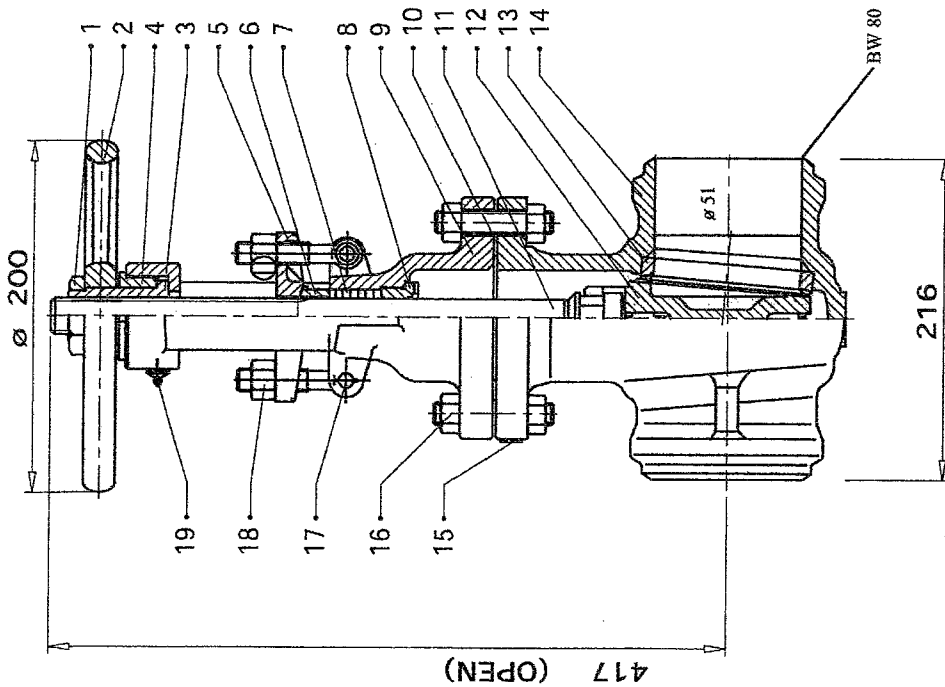
up to sizes 5"



Size	L	W	d	G	C	D	I	n-d	h (open)	h (close)	W (kg)
2	178	200	51	92	120.5	152	15.9	4-19	387	327	18
2-1/2"	190	200	64	105	139.5	178	17.6	4-19	435	350	28
3"	203	250	76	127	152.5	190	19.1	4-19	481	394	32
3-1/2"	216	300	89	140	178	216	21	8-19	601	491	491
4"	229	250	102	157	190.5	229	23.9	8-19	585	471	50
5"	254	300	127	185	215	254	25.5	8-22	631	541	71
6"	267	300	152	216	241.5	279	25.4	8-22	765	601	77
8"	292	350	203	270	298.5	343	28.5	8-22	956	738	121
10"	330	400	254	324	362	406	30.3	12-25	1149	879	178
12"	356	450	305	381	432	483	31.8	12-25	1350.5	1028	265

Lurgi Order Nr. 4567581- S360
Pos. 0080 12"

No.	PART	NAME	QTY	MATERIAL	REMARK
26	SPACER RING	1	ASTM A276-420		
25	NAME PLATE	1	ALUMINUM OR S.S.		
24	SCREW	1	CARBON STEEL		
23	SPLIT PIN	2	CARBON STEEL		
22	PIN	2	CARBON STEEL		
21	RIVET	2	CARBON STEEL		
20	GREASE FITTING	1	S.S.		
19	NUT	2	ASTM A194-2H		
18	EYE BOLT	2	ASTM A193-B7		
17	NUT		ASTM A194-2H		
16	STUD		ASTM A193-B7		
15	HANDWHEEL NUT	1	CARBON STEEL		
14	RETAINING NUT	1	CARBON STEEL		
13	PACKING	2	DIE FORMED GRAPHITE		
12	PACKING	3	BRAIDED GRAPHITE		
11	GASKET	1	REINFORCED GRAPHITE		
10	CLAND	1	ASTM A276-420		
9	BACK SEAT	1	ASTM A276-420		
8	STEM	1	ASTM A182 F6a		
7	SEAL RING	2	ASTM A105/SIL. OVERLAY		
6	HANDWHEEL	1	DUCTILE IRON		
5	GLAND FLANGE	1	ASTM A216-WCB		
4	STEM NUT	1	ASTM A439 D-2		
3	WEDGE	1	ASTM A216-WCB/CRT13 OVERLAY		
2	BONNET	1	ASTM A216-WCB		
1	BODY	1	ASTM A216-WCB		
					REMARK
Slon.	API 600	Shell Test	3.2 MPa	Draft	
Class	150LB	Seal Test (Hys.)	2.3 MPa	Check	
Size	2"~12"	Seal Test (Air)	0.6 MPa	Appr.	
Weight		Scale		Mon. Fig.	G1R8
Type	CAST STEEL GATE VALVE				
User Fig.					



GATE VALVES
FLEX WEDGE
DETAIL

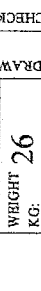
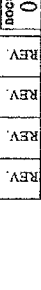
POS	PART NAME	MATERIAL	No.
1	NUT	1035	1
2	HANDWHEEL	604018	1
3	YOKE SLEEVE	D2	1
4	YOKE NUT	1035	1
5	GLAND FLANGE	WCB	1
6	PACKING GLAND	A276 410	1
7	PACKING	FEXIBLE GRAPHITE	1
8	BUSCHING	A476 410	1
9	BONNET	WCB	1
10	GASKET	FEXIBLE GRAPHITE	1
11	STEM	A276 410	1
12	WEDGE	WCB+P6	1
13	SEAT	A105+HF	2
14	BODY	WCB	1
15	NAMEPLATE	304	1
16	B/B NUT	A194 GR.2H	8
17	GLAND STUD	A193 B7	2
18	GLAND NUT	A194 GR.2H	4
19	GREASE INJECTOR	A570 GR.4	1

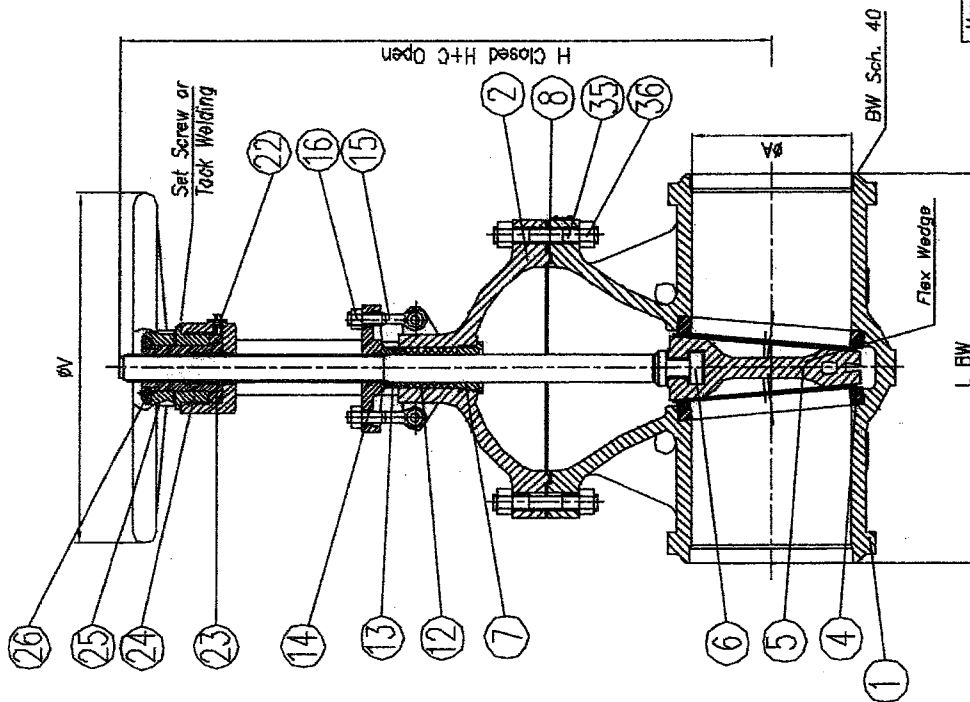
Lurgi order no.: 4567581- S361

Pos. 0090 2"

General Notes

-BW ACCORDING TO ANSI B16.25.

REV.	DATE:	REV.	DATE:	REV.	DATE:	REV.	DATE:
REV.	1	DATE:	13/12/2004	REV.	0	DATE:	12/11/2004
CUSTOMER: SIEKMANN ECONOSTO GMBH &							
P.O. No.: 90045660P ZAGROS II -LURGI-							
TAG No.: S 361 - 00090							
ITEM No.: 3							
DOCUMENT: 045931							
BRIEF: 003							
SIZE: 2"				WEIGHT 26 KG.			
CLASS: 300							
DESCRIPTION: GATE VALVE BB FB FL WCB BW80							
DRAW: RAUL-PARSAN							
CHECKED: Fogaroli							
							
							
							
							
							
JOB: 045931							
POS. 003							
GATE #300-2"BW80							
							



- 1 BODY
2 BONNET
4 SEAT
5 WEDGE
6 STEM
7 BACK SEAT
8 BONNET GASKET
12 PACKING
13 GLAND PACKING
14 GLAND FLANGE
15 GLAND BOLTS
16 NUTS FOR DITTO
22 GREASE FITTING
23 YOKE BUSHING
24 THRUST RING
25 HANDWHEEL NUT
26 HANDWHEEL
35 BONNET STUD BOLTS
36 NUTS FOR DITTO
- ASTM A 216 Gr. WCB
ASTM A 216 Gr. WCB
ASTM A 105 + Stainless 6
ASTM A 216 Gr. WCB + 13%Cr
ASTM A 182 F6a
ASTM A 182 F6a
SPW. AISI 316 + graphite
Graphite + braided graphite filled
ASTM A 276 410
ASTM A 216 Gr. WCB
ASTM A 193 B7
ASTM A 194 2H
COMMERCIAL
ASTM A 439-D2C
AISI 1035
CARBON STEEL
CARBON STEEL
ASTM A 193 B7
ASTM A 194 2H

Lurgi Order Nr. 4567591 S361
Pos. 0100 3"

Tag	Steel Item	Vitas Item	Size	# A	C	H	H-C	LBN	LRF	L RU	# V	Weight (kg)
S361-00100 MS221M	1,000	1	3"	74	90	580	283	283	11.13"	11.73"	230	56
				2.87"	3.94"	23.22"	18.77"					46

Marking according to MSS-SP-25
Design according to API 600 - BS 1414
Butt welding ends according to ANSI B 16.25
Flange from 2" to 24" according to ANSI B 16.5
Flange 26" and larger by customer's request

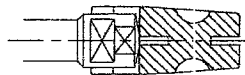
CERTIFIED DRAWING	
CUSTOMER:	SIEMANN ECONOSTO GMBH & CO. KG
P.O. N°:	90045640P
PRJ:	LURGI PROJECT : ZAGROS 2
ITEM & TAG N°:	SEE ABOVE

VITAS

SIEMANN ECONOSTO

TYPE VALVE	GATE BOLTED BONNET OSY	REV.	A
CLASS	300	DATE	24/11/04
DWG. N°	0430H1629	DRAW.	FR
FIG. N°	030H 100 GBM AZ	VER.	PZ
VITAS REF.	040330	APPR.	SG

THIS DRAWING IS VITAS DIVISION OF VALVITALIA S.p.A. PROPERTY. REPRODUCTION IS STRICTLY PROHIBITED

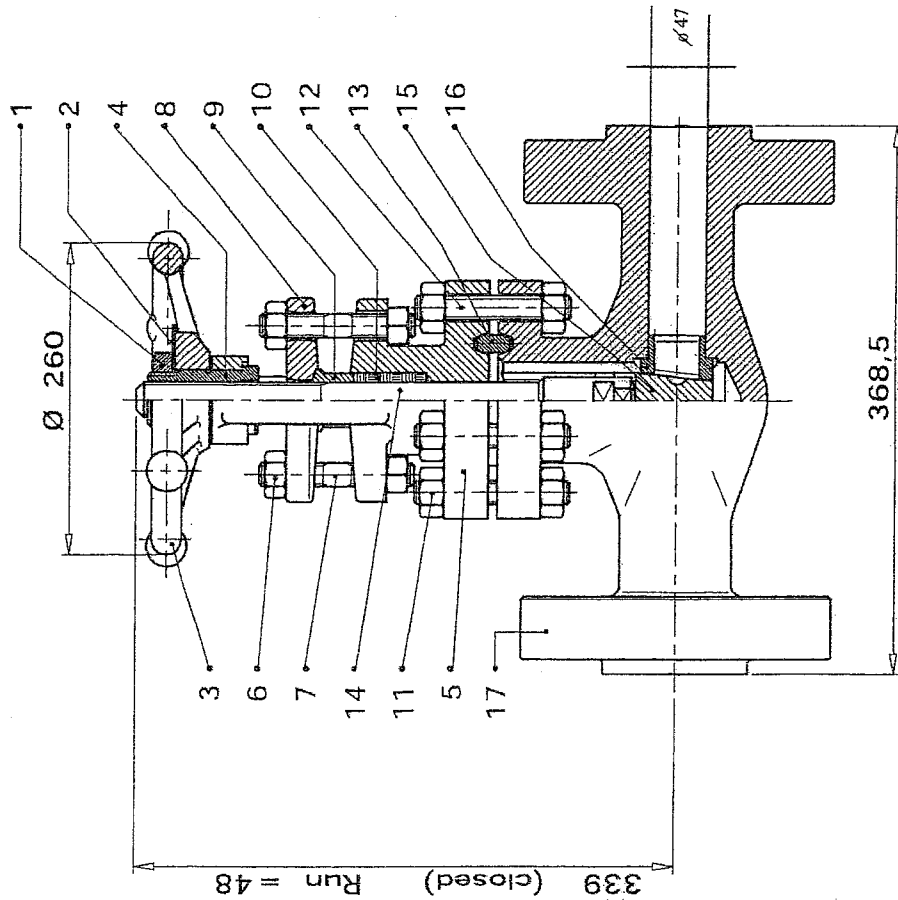


Lurgi order no.: 4567581- S362
Pos. 0110 2"

General Notes

POS	PART NAME	MATERIAL	No.
1	NUT	1035	1
2	HANDWHEEL	604018	1
3	YOKE SLEEVE	D2	1
4	YOKE NUT	1035	1
5	GLAND FLANGE	WCB	1
6	PACKING GLAND	A276 410	1
7	PACKING	FEXIBLE GRAPHITE	1
8	BUSHING	A476 410	1
9	BONNET	WCB	1
10	GASKET	FEXIBLE GRAPHITE	1
11	STEM	A276 410	1
12	WEDGE	WCB+F6+HF	1
13	SEAT	A105+HF	2
14	BODY	WCB	1
15	NAMEPLATE	304	1
16	B/B NUT	A194 GR.2H	8
17	GLAND STUD	A193 B7	2
18	GLAND NUT	A194 GR.2H	4
19	GREASE INJECTOR	A570 GR.4	1

[illegible]



GATE VALVES
FLEX WEDGE
DETAIL

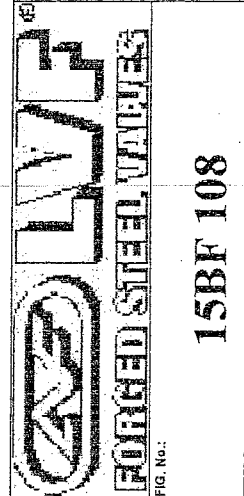
POS	PART NAME	MATERIAL	No.
1	NUT	CARBON STEEL	1
2	NAMEPLATE	ALUMINIO	1
3	HANDWHEEL	ASTM A105N	1
4	YOKE SLEEVE	AISI416	1
5	BONNET	ASTM A105N	1
6	GLAND NUT	A194 Gr.2H	4
7	GLAND STUD	A193 B7	2
8	GLAND FLANGE	ASTM A105N	1
9	PACKING GLAND	A479 Tp410	1
10	PACKING	GTJ+TE.GRAFFITE	1
11	B/B NUT	A194 Gr.2H	16
12	B/B STUDS	A193 B7	8
13	RING JOINT	SOFT IRON	1
14	STEM	A479 Tp410	1
15	WEDGE	A182 F6a Cl. 2+ST.6	1
16	SEAT	A479 Tp410 +ST.6	2
17	BODY	ASTM A105N	1

Lurgi Order Nr. 4567581- S362
Pos. 0120 2"

General Notes

- FLANGES ACCORDING TO ANSI B16.5.
- VALVE WITH FLEX WEDGE.

REV.	DATE:	REV.	DATE:	REV.	DATE:	REV.	DATE:
0	12/11/2004						
CUSTOMER: SIEKMANN ECONOSTO GMBH &				DESCRIPTION: GATE VALVE OS&Y BB FB FL			
P.O. No.: 9004566OP ZAGROS II -LURGI-				2" A105N/F6/F6* 1500 LBS RFS			
TAG No.: S 362 - 00120				CLASS: 1500			
ITEM No.: 5				SIZE: 2"			
DOCUMENT: 045931				WEIGHT: 70 KG			
REV. 0				SHEET: 005			

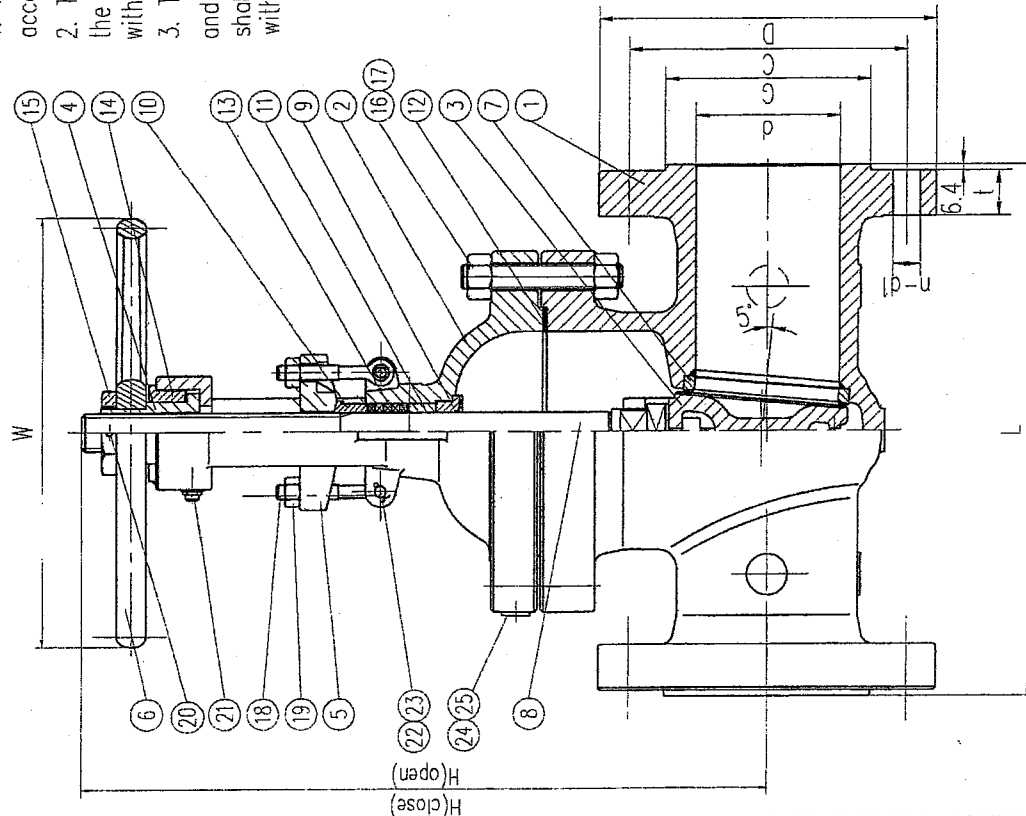


POS. 005
JOB: 045931

1057826

NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.



Size	L	W	d	G	C	D	t	n	d1	H(close)	H(open)	W1
2"	292	200	51	92	127	165	25.4	8	19	357	418	36
2-1/2"	330	250	64	105	149.5	190	28.5	8	22	401	476	52
3"	356	250	76	127	168	210	31.8	8	22	431	518	67
4"	432	300	102	157	216	273	31.8	6	25	531	646	112
5"	508	400	127	186	266.5	330	44.5	8	29	627	770	170
6"	559	450	152	216	292	356	47.8	12	29	671	839	234
8"	660	500	200	270	349	419	55.7	12	32	785	990	393

Lurgi Order Nr. 4567581- S362
Pos. 0130 3"

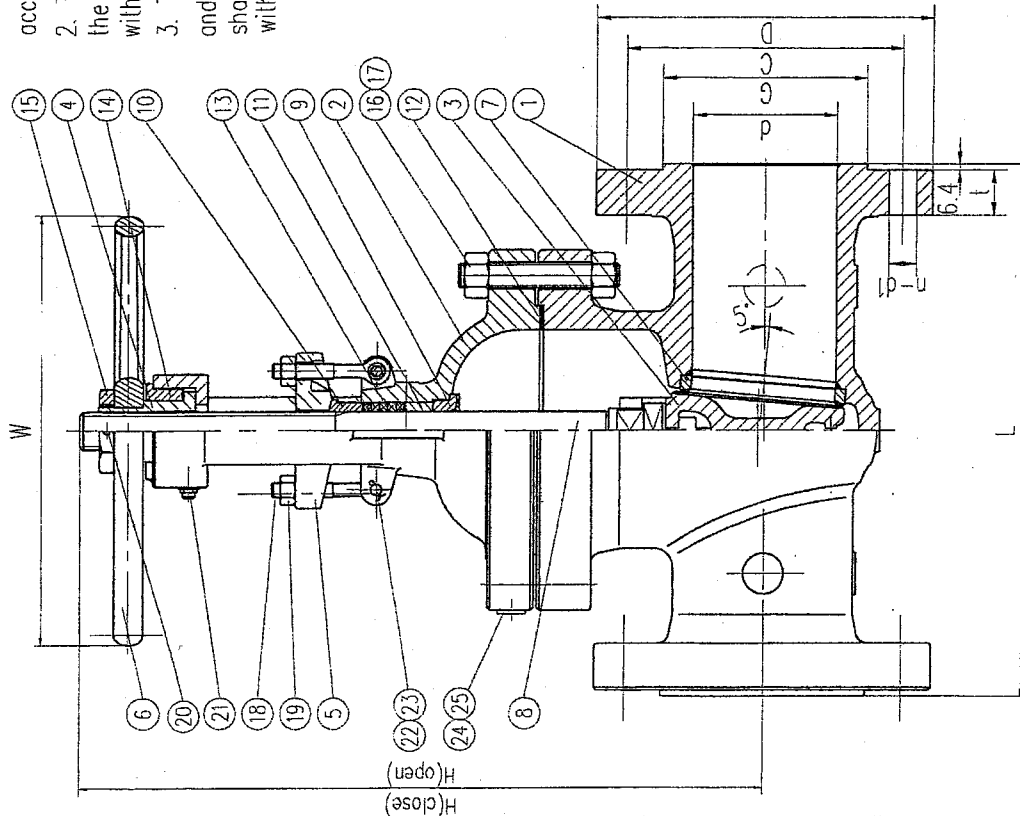
No.	PART NAME	QTY	MATERIAL	REMARK
25	NAME PLATE	1	ALUMINUM OR S.S.	
24	RIVET	2	CARBON STEEL	
23	SPLIT PIN	2	CARBON STEEL	
22	PIN	2	CARBON STEEL	
21	GREASE FITTING	1	S.S.	
20	SCREW	1	CARBON STEEL	
19	NUT	2	ASTM A194-2H	
18	EYE BOLT	2	ASTM A193-B7	
17	NUT	2	ASTM A194-2H	
16	STUD	2	ASTM A193-B7	
15	HANDWHEEL NUT	1	CARBON STEEL	
14	RETAINING NUT	1	CARBON STEEL	
13	PACKING	5	GRAPHITE	
12	CASKET	1	SPIRAL WOUND GRAPHITE	
11	SPACER RING	1	ASTM A276-420	
10	GLAND	1	ASTM A276-420	
9	BACK SEAT	1	ASTM A276-420	
8	STEM	1	ASTM A182 F60	
7	SEAT RING	2	ASTM A105	STL OVERLAY
6	HANDWHEEL	1	DUCTILE IRON	
5	GLAND FLANGE	1	ASTM A216-WCB	
4	STEM NUT	1	ASTM A439 D-2	
3	WEDGE	1	ASTM A217-CA15	STL OVERLAY
2	BONNET	1	ASTM A216-WCB	
1	BODY	1	ASTM A216-WCB	
No.	PART NAME	QTY	MATERIAL	REMARK
Slan.	API 600	Shell Test	15.4 MPa	Draft
Class	600LB	Seal Test (Hvd.)	11.4 MPa	Check
Size	2" ~ 8"	Seal Test (Air)	0.6 MPa	Appr.
Weight		Scale		Man. Fig.
Type	CAST STEEL GATE VALVE			C6RA8
User Fig.				

STIEGMANN ELECTRODSTO

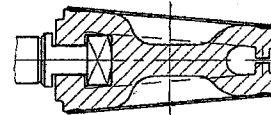
104 6757

NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.



size 6"



Lurgi Order Nr. 4567581- S362
Pos. 0140 4"

Size	L	W	d	C	D	I	n	d ₁	H(close)	H(open)	Wt
2"	292	200	51	92	127	165	25.4	8	19	357	418
2-1/2"	330	250	64	105	149.5	190	28.5	8	22	401	476
3"	356	250	76	127	168	210	31.8	8	22	431	518
4"	432	330	102	157	216	273	31.6	8	25	531	646
5"	508	400	127	186	266.5	330	44.5	8	29	627	770
6"	559	450	152	216	292	356	47.8	12	29	671	839
8"	660	500	200	270	349	419	55.7	12	32	785	990
											393

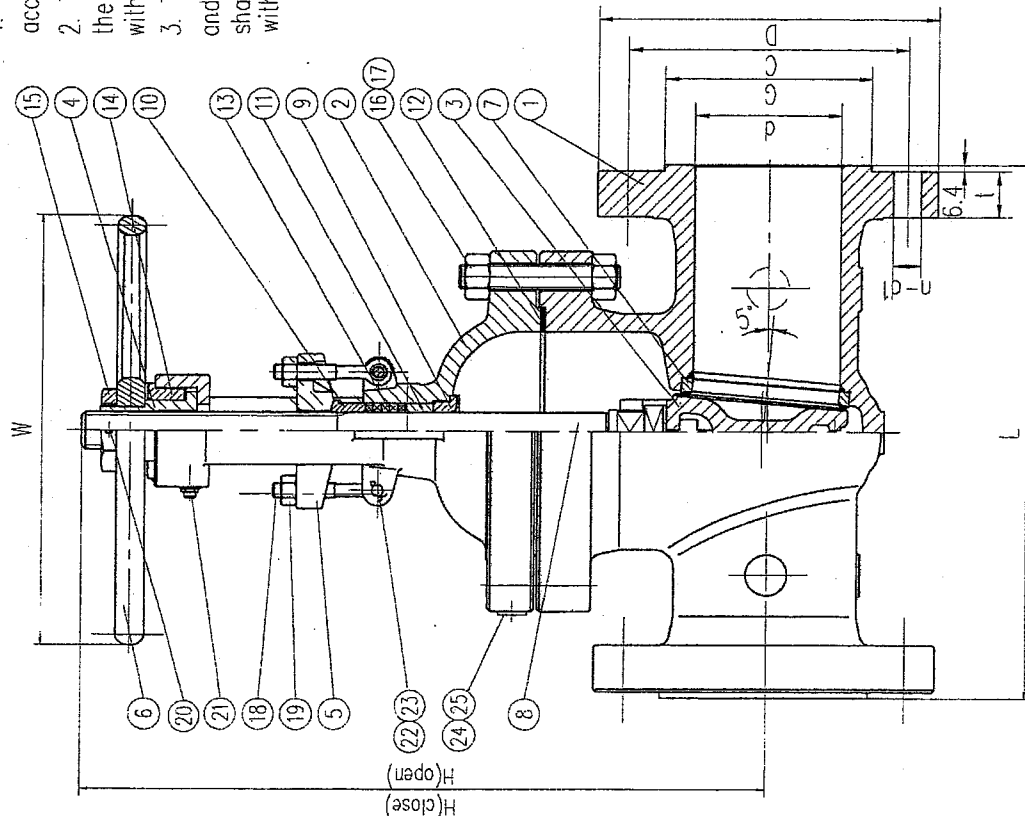
No.	PART	NAME	QTY	MATERIAL	REMARK
25	NAME PLATE	1	ALUMINUM OR S.S.		
24	RIVET	2	CARBON STEEL		
23	SPLIT PIN	2	CARBON STEEL		
22	PIN	2	CARBON STEEL		
21	GREASE FITTING	1	S.S.		
20	SCREW	1	CARBON STEEL		
19	NUT	2	ASTM A194-2H		
18	EYE BOLT	2	ASTM A193-B7		
17	NUT	2	ASTM A194-2H		
16	STUD	1	ASTM A193-B7		
15	HANDWHEEL NUT	1	CARBON STEEL		
14	RETAINING NUT	1	CARBON STEEL		
13	PACKING	5	GRAPHITE		
12	GASKET	1	SPIRAL WOUND GRAPHITE		
11	SPACER RING	1	ASTM A276-420		
10	GLAND	1	ASTM A276-420		
9	BACK SEAT	1	ASTM A276-420		
8	STEM	1	ASTM A182 F6a		
7	SEAT RING	2	ASTM A105		
6	HANDWHEEL	1	DUCTILE IRON		
5	GLAND FLANGE	1	ASTM A216-WCB		
4	STEM NUT	1	ASTM A439 D-2		
3	WEDGE	1	ASTM A217-CA15		
2	BONNET	1	ASTM A216-WCB		
1	BODY	1	ASTM A216-WCB		
STL OVERLAY					
STL OVERLAY					
REMARK					
Slan.	API 600	Shell Test	15.4 MPa	Draft	
Class	600LB	Seat Test (Hyd.)	11.4 MPa	Check	
Size	2" ~ 8"	Seat Test (Air)	0.6 MPa	Appr.	
Weight		Scale		Man. Fig.	C6RA8
Type	CAST STEEL GATE VALVE				
User Fig.					

STIEGMANN ECOTESTO

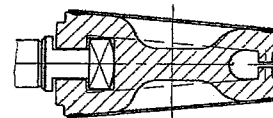
100 6760

NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.



size 6"



Size	L	W	d	C	D	t	n	d ₁	H(close)	H(open)	wt	
2"	292	200	51	92	127	165	25.4	8	19	357	418	36
2-1/2"	330	250	64	105	149.5	190	28.5	8	22	401	476	52
3"	356	250	76	127	168	210	31.8	8	22	431	518	67
4"	432	300	102	137	216	273	31.8	8	25	531	646	112
5"	508	400	127	186	266.5	330	44.5	8	29	627	770	170
6"	559	450	152	216	292	356	47.8	12	29	671	839	234
8"	660	500	200	270	349	419	55.7	12	32	785	990	393

Lurgi Order Nr. 4567581- S362
Pos. 0150 6"

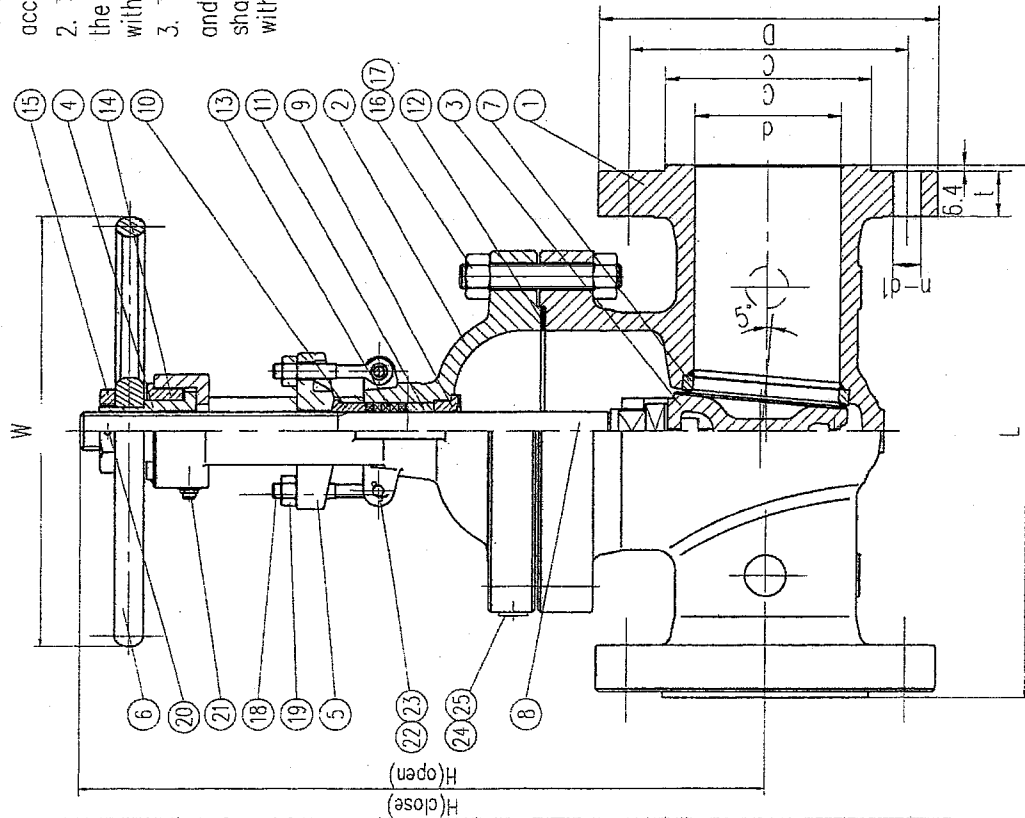
No.	PART	NAME	QTY	MATERIAL	REMARK
25	NAME PLATE	1	ALUMINUM OR S.S.		
24	RIVET	2	CARBON STEEL		
23	SPLIT PIN	2	CARBON STEEL		
22	PIN	2	CARBON STEEL		
21	GREASE FITTING	1	S.S.		
20	SCREW	1	CARBON STEEL		
19	NUT	2	ASTM A194-2H		
18	EYE BOLT	2	ASTM A193-B7		
17	NUT	2	ASTM A194-2H		
16	STUD	1	ASTM A193-B7		
15	HANDWHEEL NUT	1	CARBON STEEL		
14	RETAINING NUT	1	CARBON STEEL		
13	PACKING	5	GRAPHITE		
12	GASKET	1	SPIRAL WOUND GRAPHITE		
11	SPACER RING	1	ASTM A276-420		
10	GLAND	1	ASTM A276-420		
9	BACK SEAL	1	ASTM A276-420		
8	STEM	1	ASTM A182 F6a		
7	SEAL RING	2	ASTM A105		STL. OVERLAY
6	HANDWHEEL	1	DUCTILE IRON		
5	GLAND FLANGE	1	ASTM A216-WCB		
4	STEM NUT	1	ASTM A217-CA15		
3	WEDGE	1	ASTM A217-CA15		STL. OVERLAY
2	BONNET	1	ASTM A216-WCB		
1	BODY	1	ASTM A216-WCB		
No.	PART	NAME	QTY	MATERIAL	REMARK
Slan.	API 600	Shell Test.	15.4 MPa		
Class	600LB	Seal Test (Hyd.)	11.4 MPa		
Size	2"~8"	Seal Test (Air)	0.6 MPa		
Weight.		Scale			
Type	CAST STEEL GATE VALVE				
User Fig.					
					Man. Fig. G6RA8

SIEMANN ECO-TOOL
SIEKMAN ECO-TOOL

1046725

NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.



Lurgi Order Nr. 4567581- S362
Pos. 0160 8"

Size	L	W	d	G	C	D	t	n	d1	H(close)	H(open)	W1
2"	292	200	51	92	127	165	25.4	8	19	357	418	36
2-1/2"	330	250	64	105	149.5	190	28.5	8	22	401	476	52
3"	356	250	76	127	168	210	31.8	8	22	431	518	67
4"	432	260	102	157	216	273	31.6	6	25	531	646	112
5"	508	400	127	186	266.5	330	44.5	8	29	627	770	170
6"	559	450	152	216	292	356	47.8	12	29	671	839	234
8"	660	500	200	270	349	419	55.7	12	32	785	990	393

25	NAME PLATE	1	ALUMINIUM OR S.S.
24	RIVET	2	CARBON STEEL
23	SPLIT PIN	2	CARBON STEEL
22	PIN	2	CARBON STEEL
21	GREASE FITTING	1	S.S.
20	SCREW	1	CARBON STEEL
19	NUT	2	ASTM A194-2H
18	EYE BOLT	2	ASTM A193-B7
17	NUT	1	ASTM A194-2H
16	STUD	1	ASTM A193-B7
15	HANDWHEEL NUT	1	CARBON STEEL
14	RETAINING NUT	1	CARBON STEEL
13	PACKING	5	GRAPHITE
12	GASKET	1	SPIRAL WOUND GRAPHITE
11	SPACER RING	1	ASTM A276-420
10	CLAND	1	ASTM A276-420
9	BACK SEAT	1	ASTM A276-420
8	STEM	1	ASTM A182 F6a
7	SEAT RING	2	ASTM A105
6	HANDWHEEL	1	DUCTILE IRON
5	CLAND FLANGE	1	ASTM A216-WCB
4	STEM NUT	1	ASTM A439 D-2
3	WEDGE	1	ASTM A217-CA15
2	BONNET	1	ASTM A216-WCB
1	BODY	1	ASTM A216-WCB
No.	PART NAME	QTY	MATERIAL

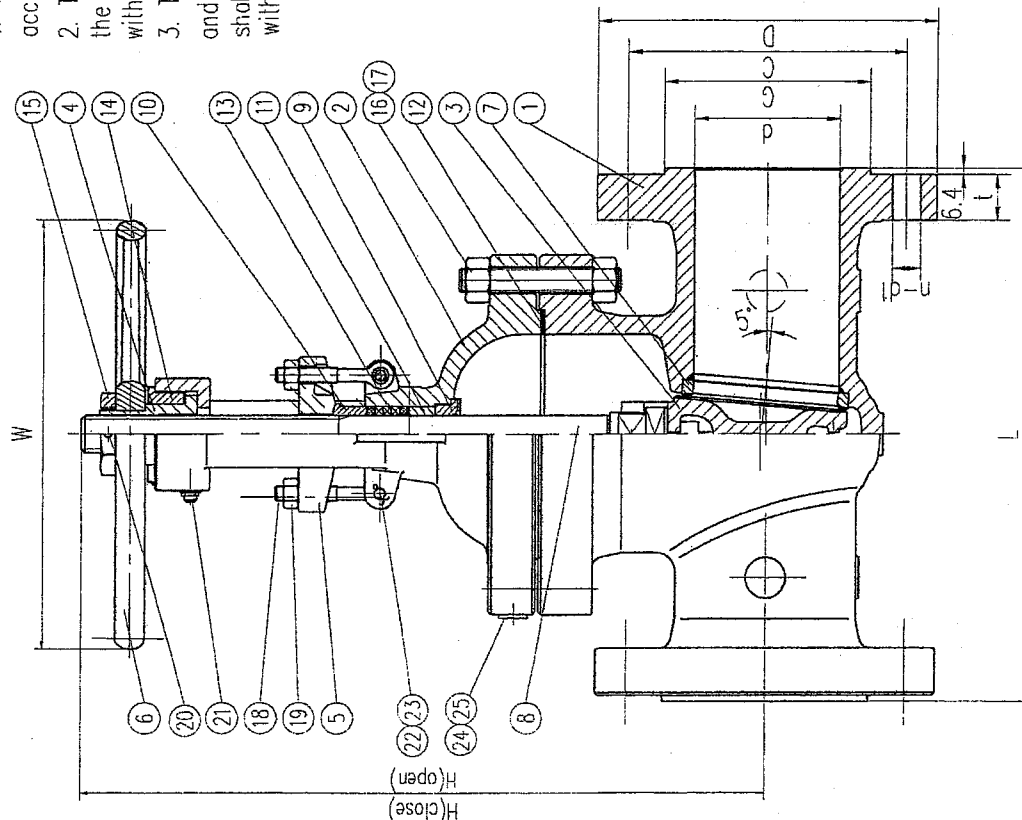
Slan.	API 600	Shell Test.	15.4 MPa	Draft	
Class	600LB	Seal Test (Hvd.)	11.4 MPa	Check	
Size	2"~8"	Seal Test (Air)	0.6 MPa	Appr.	
Weight		Scale		Man. Fig.	G6RA8
Type	CAST STEEL GATE VALVE				
User Fig.					

SIEMANN ELECTRODOSTO

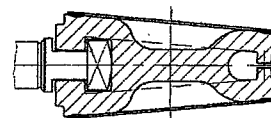
1046724

NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.



size 6"



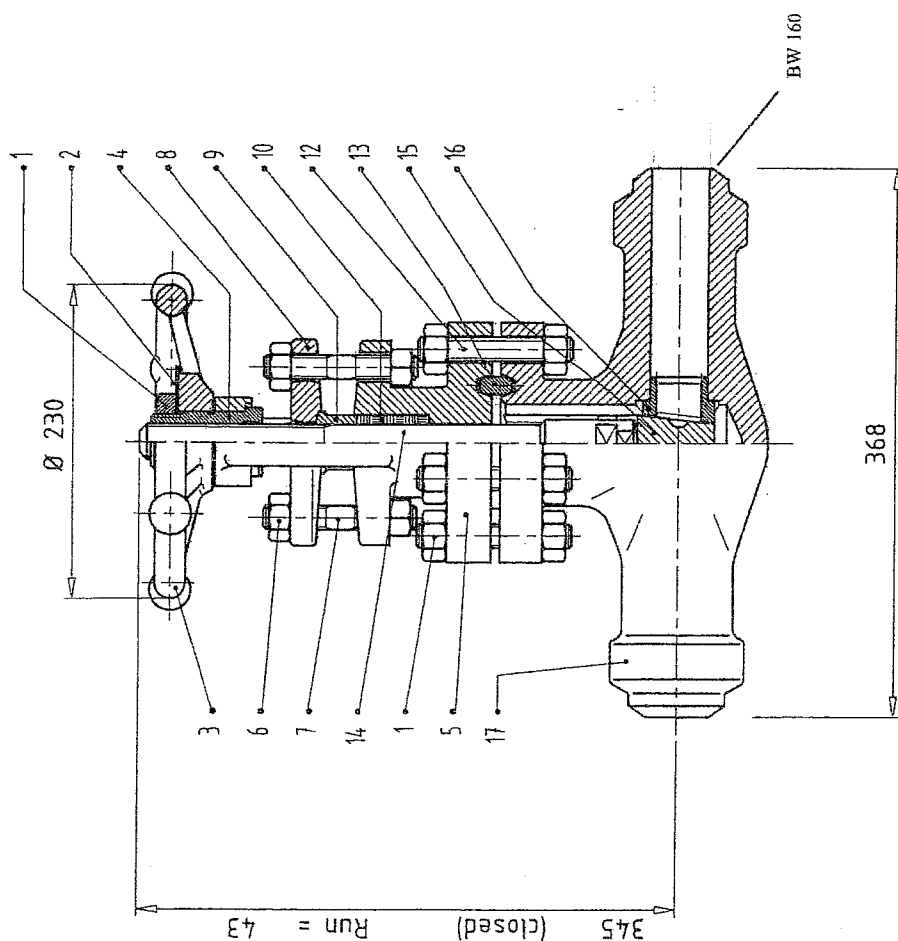
Size	L	W	d	C	C	D	t	n	d ₁	H _(close)	H _(open)	W ₁
10"	787	600	254	324	432	508	57.1	16	35.1	959	1229	610

Lurgi Order Nr. 4567581- S362
Pos. 0170 10"

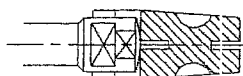
No.	PART	NAME	QTY	MATERIAL	REMARK
25	NAME PLATE	1	ALUMINIUM OR S.S.		
24	RIVET	2	CARBON STEEL		
23	SPLIT PIN	2	CARBON STEEL		
22	PIN	2	CARBON STEEL		
21	GREASE FITTING	1	S.S.		
20	SCREW	1	CARBON STEEL		
19	NUT	2	ASTM A194-2H		
18	EYE BOLT	2	ASTM A193-B7		
17	NUT		ASTM A194-2H		
16	STUD		ASTM A193-B7		
15	HANDWHEEL NUT	1	CARBON STEEL		
14	RETAINING NUT	1	CARBON STEEL		
13	PACKING	5	GRAPHITE		
12	CASKET	1	SPIRAL WOUND GRAPHITE		
11	SPACER RING	1	ASTM A276-420		
10	GLAND	1	ASTM A276-420		
9	BACK SEAT	1	ASTM A276-420		
8	STEM	1	ASTM A182 F6a		
7	SEAL RING	2	ASTM A105		STL OVERLAY
6	HANDWHEEL	1	DUCTILE IRON		
5	GLAND FLANGE	1	ASTM A216-WCB		
4	STEM NUT	1	ASTM A439 D-2		
3	WEDGE	1	ASTM A217-CA15		STL OVERLAY
2	BONNET	1	ASTM A216-WCB		
1	BODY	1	ASTM A216-WCB		
No.	PART	NAME	QTY	MATERIAL	REMARK
Stan.	API 600	Shell Test	15.4 MPa	Draft	
Class	600LB	Seat Test (Hyd.)	11.4 MPa	Check	
Size	10"	Seat Test (Air)	0.6 MPa	Appr.	
Weight		Scale		Man. Fig.	G6RA8
Type	CAST STEEL GATE VALVE				
User Fig.					



104 6764



POS	PART NAME	MATERIAL	No.
1	NUT	CARBON STEEL	1
2	NAMEPLATE	ALUMINIO	1
3	HANDWHEEL	ASTM A 105N	1
4	YOKE SLEEVE	AISI416	1
5	BONNET	ASTM A 105N	1
6	GLAND NUT	A194 Gr.2H	4
7	GLAND STUD	A193 B7	2
8	GLAND FLANGE	ASTM A 105N	1
9	PACKING GLAND	A479 Tp410	1
10	PACKING	GTI+TE.GRAFITE	1
11	B/B NUT	A194 Gr.2H	16
12	B/B STUDS	A193 B7	8
13	RING JOINT	SOFT IRON	1
14	STEM	A479 Tp410	1
15	WEDGE	A182 F6a CL 2 +ST.6	1
16	SEAT	A479 Tp410 +ST.6	2
17	BODY	ASTM A105N	1



GATE VALVES
 FLEX WEDGE
 DETAIL

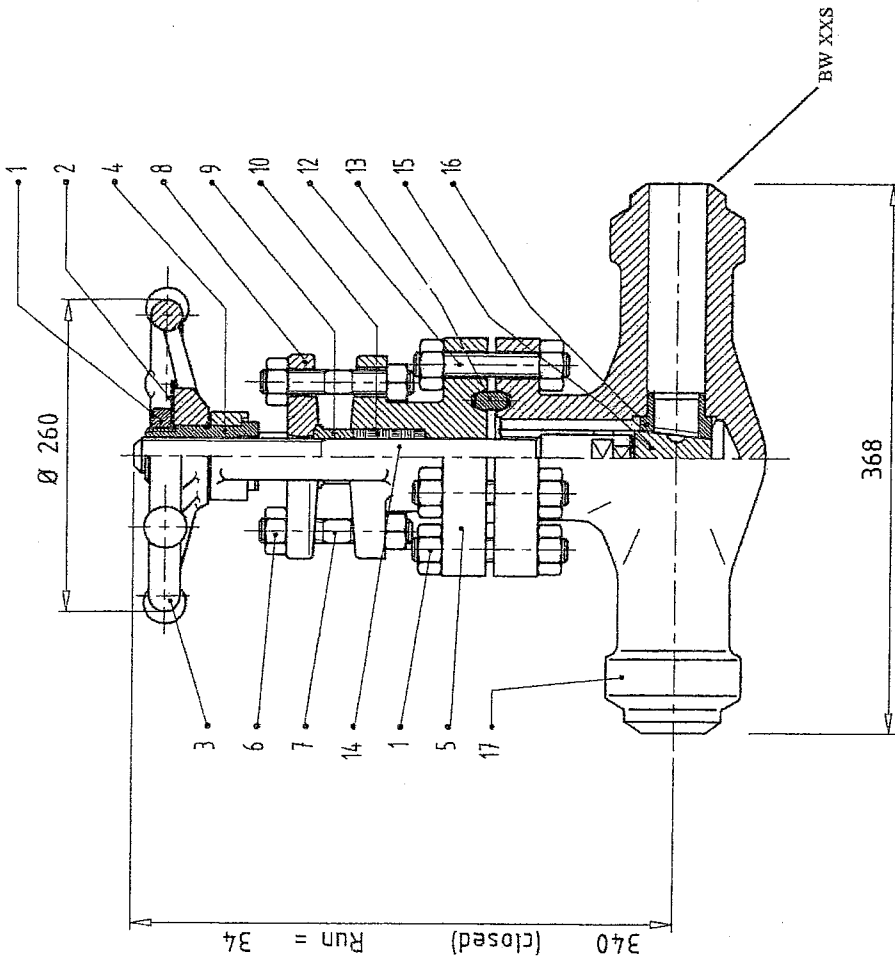
Lurgi Order Nr. 4567581- S307
Pos. 0180 2"

General Notes

-BW ACCORDING TO ANSI B16.25.
-VALVE WITH FLEX WEDGE.

[illegible]

1041425



POS	PART NAME	MATERIAL	No.
1	NUT	CARBON STEEL	1
2	NAMEPLATE	ALUMINIO	1
3	HANDWHEEL	ASTM A105N	1
4	YOKE SLEEVE	AISI416	1
5	BONNET	ASTM A105N	1
6	GLAND NUT	A194 Gr.2H	4
7	GLAND STUD	A193 B7	2
8	GLAND FLANGE	ASTM A105N	1
9	PACKING GLAND	A479 Tp410	1
10	PACKING	GTJ+TE.GRAFITE	1
11	B/B NUT	A194 Gr.2H	16
12	B/B STUDS	A193 B7	8
13	RING JOINT	SOFT IRON	1
14	STEM	A479 Tp410	1
15	WEDGE	A182 F6a Cl. 2+ST.6	1
16	SEAT	A479 Tp410+ST.6	2
17	BODY	ASTM A105N	1

Lurgi Order Nr. 4567581- S331
Pos. 0190 2"

General Notes

-BW ACCORDING TO ANSI B16.25.
-VALVE WITH FLEX WEDGE.

REV.	DATE:	REV.	DATE:	REV.	DATE:	REV.	DATE:	REV.	DATE:
0	12/11/2004	0	12/11/2004	0	12/11/2004	0	12/11/2004	0	12/11/2004
CUSTOMER: SIEKMANN ECONOSTO GMBH & P.O. No.: 9004566OP ZAGROS II -LURGI- TAG No.: S 331 - 00190 ITEM No.: 7									
DESCRIPTION: GATE VALVE OS#Y BB FB 2" A105N/F6/F6* 1500 LBS BWXXS									
CLASS: 1500 SIZE: 2"									
WEIGHT KG: 66									
DRAW: RAOUL-PARSAN CHECKED: Fogaroli									
TUV ACCREDITED ANSI/ASME A105N/F6/F6*									
API 6A 0425 API 6D 0251 API 600 0803									
15BF 108 BWXXS FIG. No.:									
FORGED STEEL VALVES LWF									
JOB: 045931 POS. 007									

1062124

Tag	Cust. Item	Vitas Item	Size	Ø A	C Travel	H	H+C	L	L R	Ø V	Weight 18" Kg	Weight 24" Kg
S331-00200 AASR23K	2,000	2	3"	70	85	350	635	470	473	400	178	146
S331-00210 AASR23K	3,000	3	4"	92	111	725	863	546	549	520	288	254

Lurgi Order Nr. 4567581- S331

Pos. 0200 3"

Pos. 0210 4"

- 1 BODY
2 BONNET
4 SEAT
5 WEDGE
6 STEM
7 BACK SEAT
8 BONNET GASKET
12 PACKING
13 GLAND PACKING
14 GLAND FLANGE
15 GLAND BOLTS
16 BOLTS NUTS
22 GREASE FITTING
23 YOKE BUSHING
24 THRUST RING
25 HANDWHEEL
26 HANDWHEEL NUT
35 BONNET STUD BOLTS
36 BONNET NUTS
- ASTM A 216 Gr. WCB
ASTM A 216 Gr. WCB
ASTM A 105 + stellite
ASTM A 216 Gr. WCB + STL OVERLAY
ASTM A 182 F6a
ASTM A 182 F6a
RJ SOFT IRON
Graphite + braided graphite filled
ASTM A 278 410
ASTM A 216 Gr. WCB
ASTM A 193 B7
ASTM A 194 2H
COMMERCIAL
ASTM A 439 D-2C
AISI 1035
CARBON STEEL
CARBON STEEL
ASTM A 193 B7
ASTM A 194 2H



VITAS

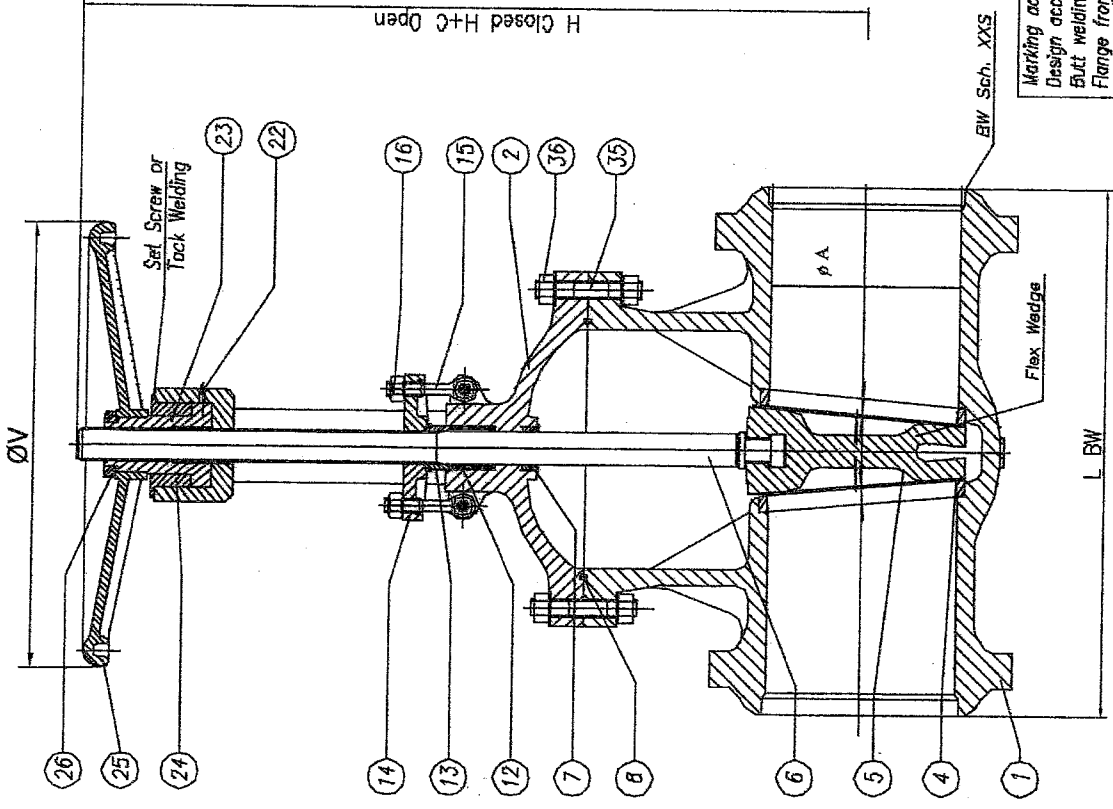
2. SIEKMAN ECONOSTO

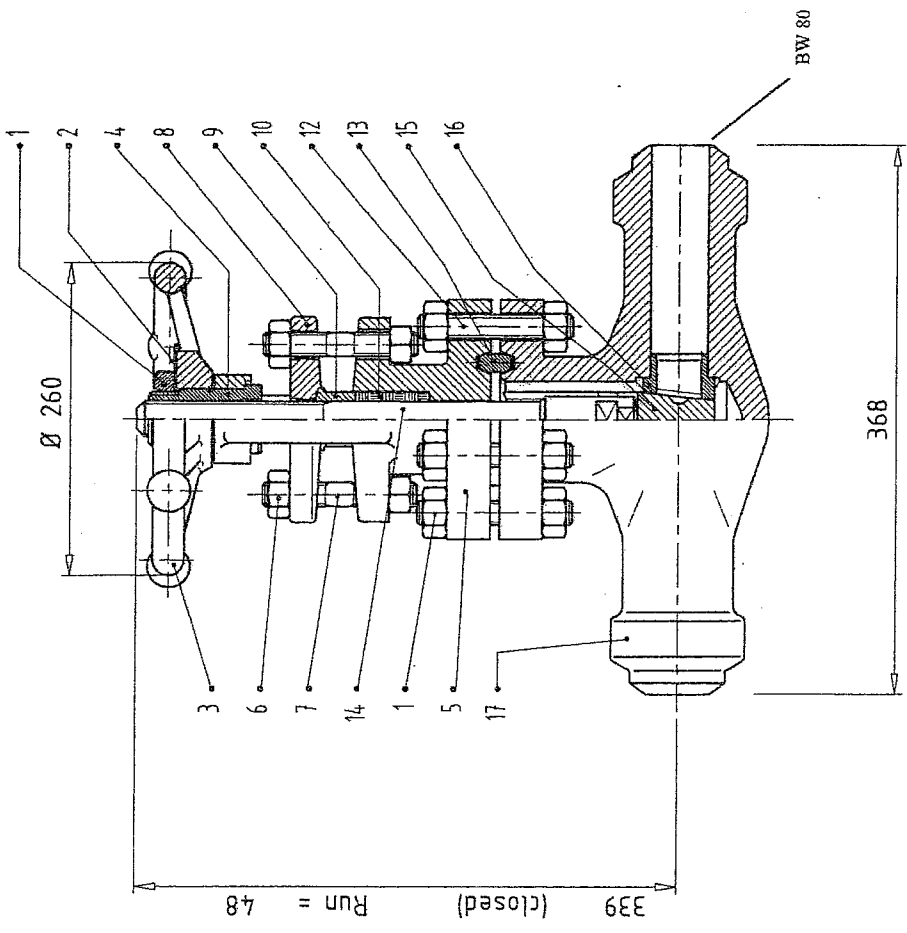
Marking according to MSS-SP-25
Design according to API 600 - BS 1414
Butt welding ends according to ANSI B 16.25
Flange from 2" to 24" according to ANSI B 16.5
Flange 26" and larger by customer's request

CERTIFIED DRAWING	
CUSTOMER:	SIEKMAN ECONOSTO GMBH&CO. KG
P.O. N°:	90045640P
PRJ:	LURGI PROJECT : ZAGROS 2
ITEM & TAG N°:	SEE ABOVE

TYPE VALVE	GATE BOLTED BONNET OSY	REV.	A
CLASS	1500	DATE	04/11/04
DWG. N°	04150R1630	DRAW.	FR
FIG. N°	Ø15R 100 RBM AZ	VER.	PZ
VITAS REF.	Ø40330	APPR.	SG

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GATE VALVES
FLEX WEDGE
DETAIL

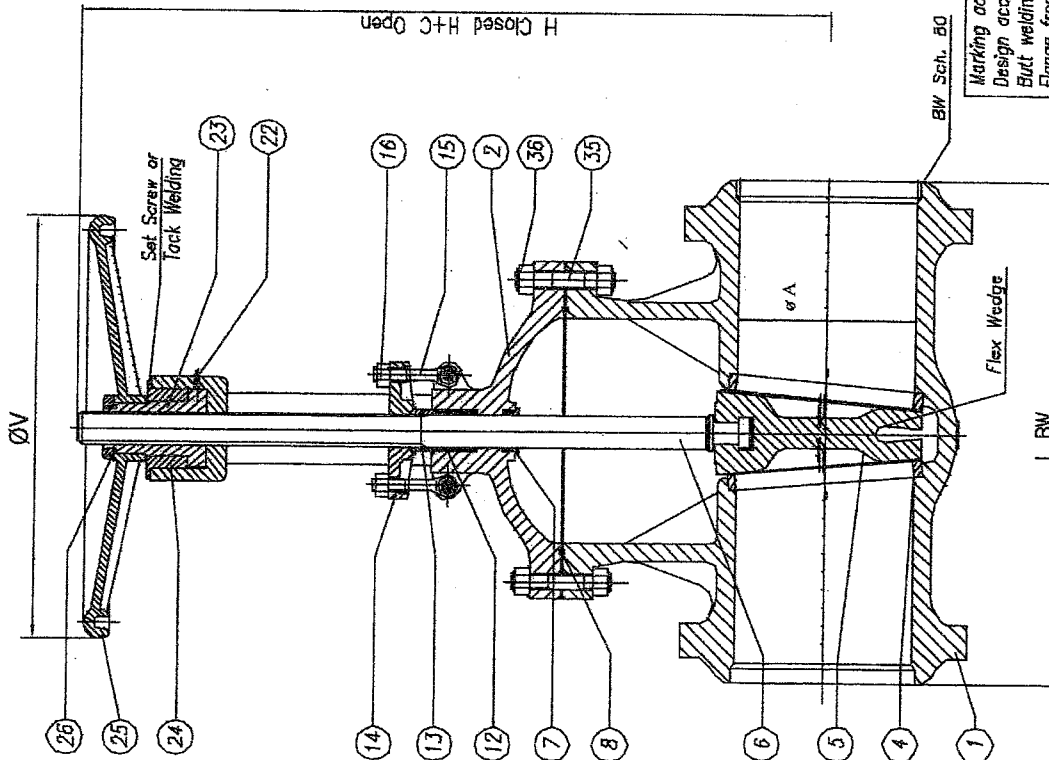
POS	PART NAME	MATERIAL	No.
1	NUT	CARBON STEEL	1
2	NAMEPLATE	ALUMINIO	1
3	HANDWHEEL	ASTM A105N	1
4	YOKE SLEEVE	AISI416	1
5	BONNET	A182 F11	1
6	GLAND NUT	A194 Gr.4	4
7	GLAND STUD	A193 B16	2
8	GLAND FLANGE	ASTM A105N	1
9	PACKING GLAND	A479 Tp316	1
10	PACKING	GTJ+TE.GRAFITE	1
11	B/B NUT	A194 Gr.4	16
12	B/B STUDS	A193 B16	8
13	RING JOINT	A182 F5	1
14	STEM	A479 Tp410	1
15	WEDGE	A182 F6a Cl. 2 +ST.6	1
16	SEAT	A479 Tp410 +ST.6	2
17	BODY	A182 F11	1

Lurgi Order Nr. 4567581- S421
Pos. 0220 2"

General Notes
-BW ACCORDING TO ANSI B16.25.
-VALVE WITH FLEX WEDGE.

REV.	DATE	REV.	DATE	REV.	DATE	REV.	DATE
0	12/11/2004						
CUSTOMER: SIEKMANN ECONOSTO GMBH & P.O. No.: 90045660P ZAGROS II -LURGI- TAG No.: S 421 - 00220 ITEM No.: 8				DESCRIPTION: GATE VALVE OS#Y BB FB 2" F11/F6* 1500 LBS BW80			
DATE: 0 DOCUMENT: 045031				CLASS: 1500 SIZE: 2" WEIGHT: 66 K.G.			
RAOUL-PARSAN CHECKED: Fogaroli				RAUL-PARSAN CHECKED: Fogaroli			
TUV ACCREDITED INSTITUTION FOR THE TESTING OF VALVES AND PIPE FITTINGS				API 6A 0425 API 6D 0251 API 600 0003			
15BF 108 BW80 FIG. No.: FORGED STEEL VALVES				008 POS. 045931			

1067874



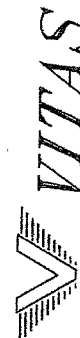
H Closed H+C Open

BW Sch. 80

L BW

Marking according to MSS-SP-25
Design according to API 600 - BS 1414
Butt welding ends according to ANSI B 16.25
Flange from 2" to 24" according to ANSI B 16.5
Flange 26" and larger by customer's request

CERTIFIED DRAWING	
CUSTOMER:	SIEKMAN ECDNOSTO GMBH & CO. KG
P.O. N°:	90045640P
PRJ:	LURGI PROJECT : ZAGROS 2
ITEM & TAG N°:	SEE ABOVE



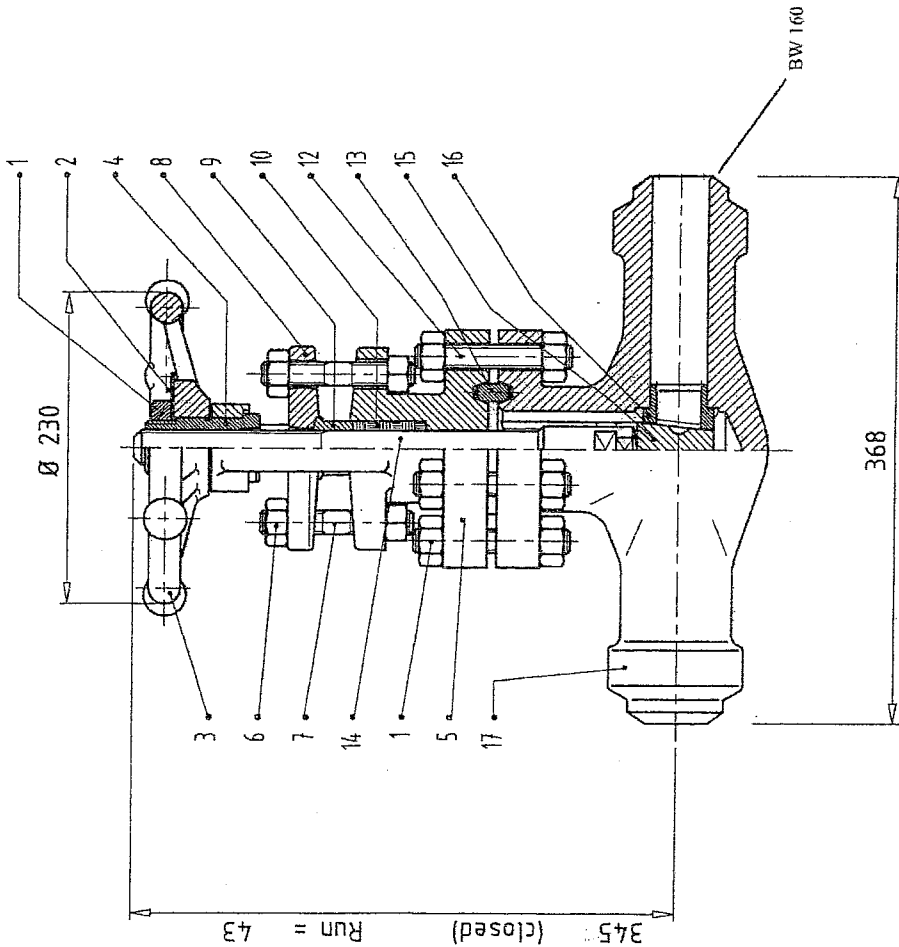
TYPE VALVE	CATE	BOLTED BONNET	- OSY	REV.	A
CLASS				DATE	04/11/04
DWG. N°				DRAW.	FR
FIG. N°				VER.	PZ
VITAS REF.				APPR.	SG

THIS DRAWING IS VITAS DIVISION OF VALITALIA SPA PROPERTY. REPRODUCTION IS STRICTLY PROHIBITED

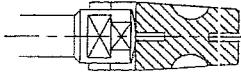
Tag	cust. item	Vitas item	Size	Ø A	C Travel	H	H+C	LR-LBW	L R/	Ø V	Weight m(kg)
S421-00230 AASR23K	4,000	4	3"	72 2,83"	87 3,42"	513 20,18"	800 31,50"	307 12,09"	384 15,1"	350 13,78"	116 4,51"
S421-00240 AASR23K	5,000	5	4"	99 3,94"	114 4,49"	613 24,13"	727 28,62"	457 18"	460 18,1"	400 15,74"	204 7,56"
S421-00250 AASR21E	6,00	6	6"	148 5,75"	180 7,09"	710 27,95"	870 34,25"	610 24"	613 24,1"	500 19,69"	415 15,01"

Lurgi Order Nr. 4567581- S421
Pos. 0230 3"
Pos. 0240 4"
Pos. 0250 6"

- 1 BODY
 - 2 BONNET
 - 4 SEAT
 - 5 WEDGE
 - 6 STEM
 - 7 BACK SEAT
 - 8 BONNET GASKET
 - 12 PACKING
 - 13 GLAND PACKING
 - 14 GLAND FLANGE
 - 15 GLAND BOLTS
 - 16 NUTS FOR DITTO
 - 22 GREASE FITTING
 - 23 YOKE BUSHING
 - 24 THRUST RING
 - 25 HANDWHEEL
 - 28 HANDWHEEL NUT
 - 35 BONNET STUD BOLTS
 - 36 NUTS FOR DITTO
- ASTM A 217 WC6
 - ASTM A 217 WC6
 - ASTM A 182 F11 + stellite
 - ASTM A 217 WC6 + stellite
 - ASTM A 182 F8a
 - ASTM A 182 F8a
 - ASTM A 182 F5
 - RJ ASTM A 182 F5
 - Graphite + braided graphite filled
 - ASTM A 182 F8a
 - ASTM A 217 WC6
 - ASTM A 193 B16
 - ASTM A 194 Gr. 4
 - COMMERCIAL
 - ASTM A 439-D2C
 - ASTM A 276 304
 - CARBON STEEL
 - CARBON STEEL
 - ASTM A 193 B16
 - ASTM A 194 Gr. 4



GATE VALVES
FLEX WEDGE
DETAIL



POS	PART NAME	MATERIAL	No.
1	NUT	CARBON STEEL	1
2	NAMEPLATE	ALUMINIO	1
3	HANDWHEEL	ASTM A105N	1
4	YOKE SLEEVE	AISI416	1
5	BONNET	A182 F22	1
6	GLAND NUT	A194 Gr.4	4
7	GLAND STUD	A193 B16	2
8	GLAND FLANGE	ASTM A105N	1
9	PACKING GLAND	A479 Tp410	1
10	PACKING	GTJ+TE.GRAFITE	1
11	B/B NUT	A194 Gr.4	16
12	B/B STUDS	A193 B16	8
13	RING JOINT	A182 F5	1
14	STEM	A479 Tp410	1
15	WEDGE	A182 F6a Cl. 2 +ST.6	1
16	SEAT	A479 Tp410 +ST.6	2
17	BODY	A182 F22	1

Lurgi Order Nr. 4567581- S485
Pos. 0260 2"

General Notes

- BW ACCORDING TO ANSI B16.25.
- VALVE WITH FLEX WEDGE.

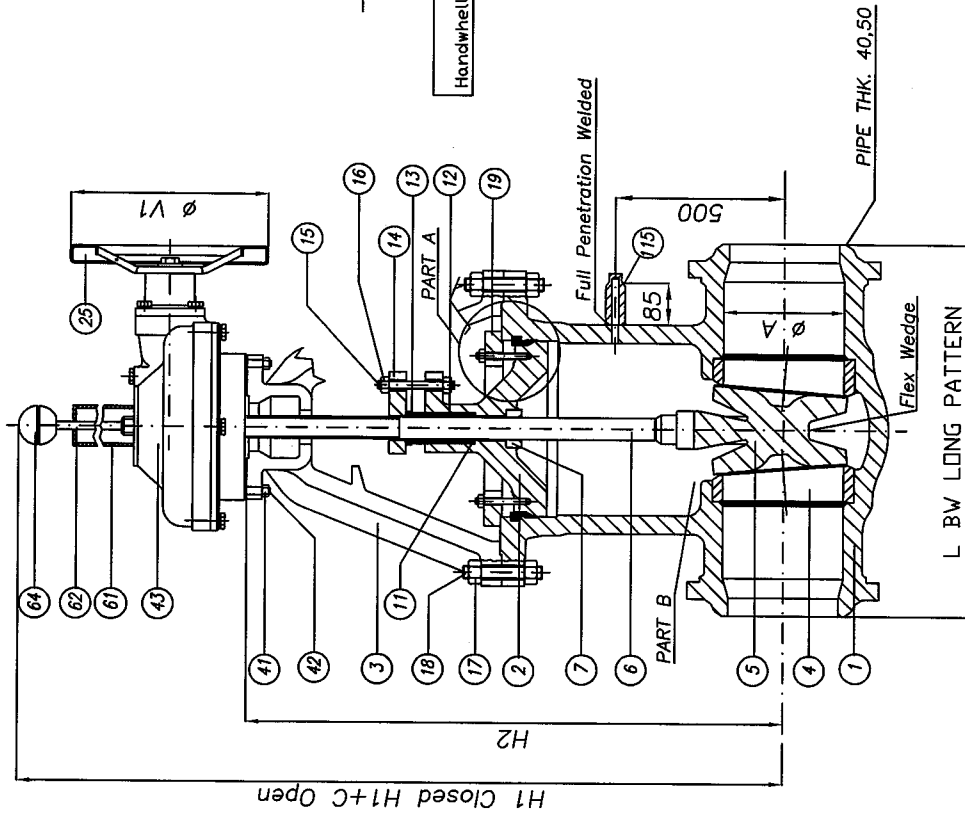
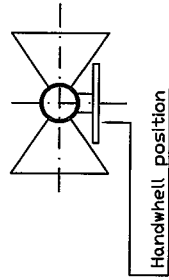
REV.	DATE:	REV.	DATE:	REV.	DATE:
0	DATE: 12/1/2004				
CUSTOMER: SIEKMANN ECONOSTO GMBH &					
P.O. No.: 9004566OP ZAGROS II -LURGI-					
TAG No.: S 485 - 00260					
ITEM No.: 9					
DESCRIPTION: GATE VALVE OS#Y BB FB					
2" F22/F6* 1500 LBS BW160					
CLASS: 1500				SIZE: 2"	WEIGHT 68 KG:
DOCUMENT: 045931		SHEET: 009			

104 1632

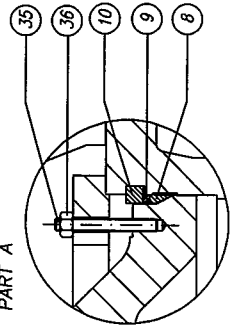
tag	item	VITAS item	Size	Ø A	C	H1	H2	L	BW	Ø V1	WEIGHT RT(kg)	WEIGHT BW(kg)
-	-	-	12"	263	330	2100	1358	1130	600	2185	2185	1650
S486G-00270 A4SR21E	7,000	7	14"	289	310	2182	1440	1257	800	2930	2930	2320
-	-	-	16"	330	342	2514	1574	1384	600	3805	3805	3800
-	-	-	18"	350	400	2750	1800	1536	600	-	-	-
-	-	-	20"	416	460	3060	1945	1664	600	7450	7450	6300

Lurgi Order Nr. 4567581- S486G

Pos. 0270 14"



PART A



- 1 BODY
 - 2 BONNET
 - 3 YOKE
 - 4 SEAT
 - 5 WEDGE
 - 6 STEM
 - 7 BACK SEAT
 - 8 BONNET GASKET
 - 9 SPACER RING
 - 10 GASKET RETAINER
 - 11 BOTTOM RING
 - 12 PACKING
 - 13 GLAND PACKING
 - 14 GLAND FLANGE
 - 15 GLAND BOLTS
 - 16 NUTS FOR DITTO
 - 17 YOKE STUD BOLTS
 - 18 NUTS FOR DITTO
 - 19 RETAINER RING
 - 25 HANDWHEEL
 - 35 BONNET STUD BOLTS
 - 36 BONNET NUTS
 - 41 FLANGE ADAPTOR BOLTS
 - 42 NUTS FOR DITTO
 - 43 BEVEL GEAR
 - 61 STEM PROTECTION
 - 62 ROD BAR
 - 64 INDEX BALL
 - 115 PIPE
- ASTM A 217 WC9 + S.S.
ASTM A 217 WC9
ASTM A 217 WC9
ASTM A 182 F22 + stellite
ASTM A 217 WC9 + stellite
ASTM A 479-XM19
ASTM A 182 F22 + stellite
AISI 304
ASTM A 182 F6a
ASTM A 182 F6a
ASTM A 182 F316
Graphite + braided graphite filled
ASTM A 182 F316
ASTM A 105
ASTM A 193 B16
ASTM A 194 Gr. 4
ASTM A 193 B7
ASTM A 194 2H
ASTM A 105
CARBON STEEL
ASTM A 193 B16
ASTM A 194 Gr. 4
ASTM A 193 B7
ASTM A 194 2H
COMMERCIAL
ASTM A 106
AISI 304
PLASTIC
(21.3x3.6mm) ASTM A182,94C,F22



Marking according to MSS-SP-25
Design according to ANSI B16.34
Butt welding ends according to ANSI B 16.25
Flange from 2" to 24" according to ANSI B 16.5
Flange 26" and larger by customer's request

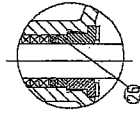
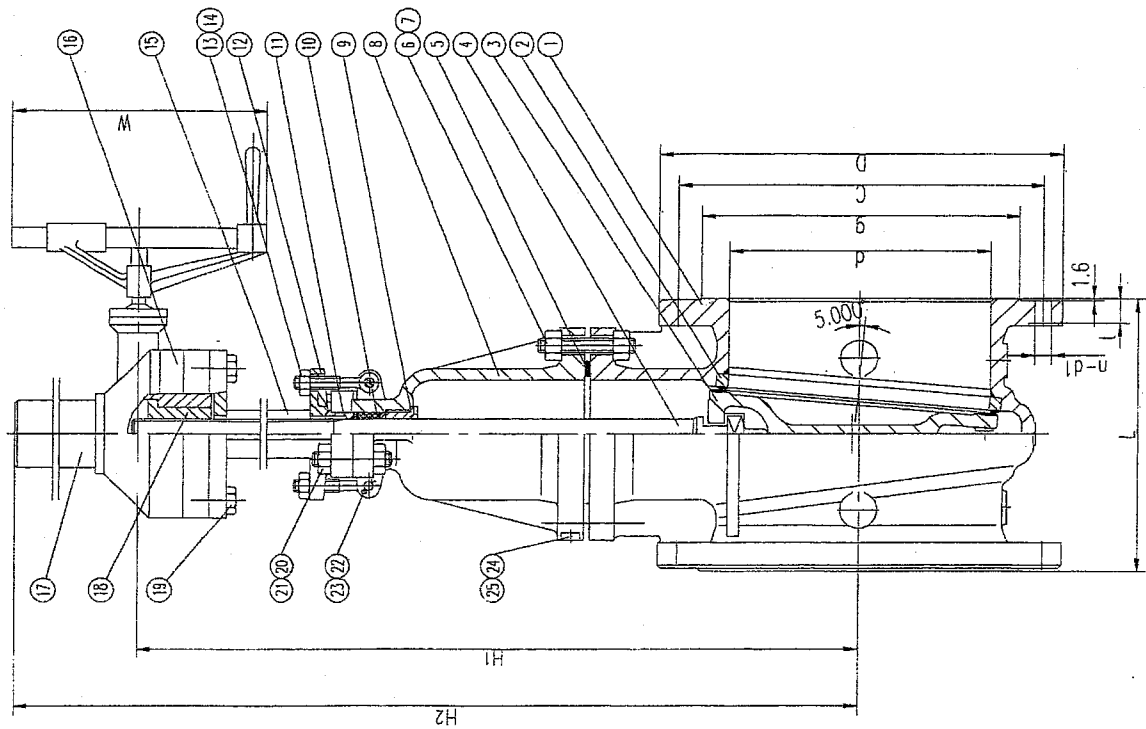
CERTIFIED DRAWING	
CUSTOMER:	SIEKMAN ECONOSTO GMBH&CO.KG
P.O. N°:	90045640P
PRJ:	LURGI PROJECT : ZAGROS 2
ITEM & TAG N°:	SEE ABOVE

TYPE VALVE	GATE PRESSURE SEAL-LONG PATTERN	REV.	B	C	D
CLASS	1500	DATE	17/12/04	18/05/05	19/05/05
DWG. N°	04150N1632	DRAW.	FR	FR	FR
FIG. N°	150N 100 ZKB	VER.	PZ	PZ	PZ
VITAS REF.	040330	APPR.	SG	SG	SG

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NOTES:

1. The valve is designed in accordance with API 600.
2. The inspection and test of the valve shall be in accordance with API 598.
3. The painting, protection and marking of the valve shall be in accordance with MSS SP-25.



Lurgi Order Nr. 4567581- S366G
Pos. 0280 16"

Size	d	L	W	H1	H2	g	C	D	t	n-d1	W(kg)
14"	337	381	305	1140	1530	413	476	533	35.1	12-29	362
16"	387	406	305	1284	1734	470	539.5	597	36.6	16-29	463
18"	438	432	458	1423	1913	533	578	635	39.7	16-32	621
20"	489	457	458	1585	2145	584	635	698	43	20-32	792
24"	591	508	458	1860	2520	692	749.5	813	47.8	20-35	1250
30"	743	610	458	2344	3120	857	914.5	984	74.7	28-35	2024
32"	781	660	610	2411	3281	914	978	1060	80.8	28-41	2490
36"	876	711	610	2691	3721	1022	1086	1168	90.4	32-41	3310

26	SPACER RING	1	ASTM A276-420
25	RIVET	2	SS
24	NAMEPLATE	1	SS
23	SPLIT PIN	2	CARBON STEEL
22	PIN	2	CARBON STEEL
21	NUT	8	ASTM A194-2H
20	STUD	4	ASTM A193-B7
19	STUD	1	CARBON STEEL
18	STEM NUT	1	ASTM A439 D-2
17	STEM ENCLOSURE	1	CARBON STEEL
16	GEAR OPERATOR	1	
15	YOK	1	ASTM A216-WCB
14	NUT	2	ASTM A194-2H
13	EYEBOLT	2	ASTM A193-B7
12	CLAND FLANGE	1	ASTM A216-WCB
11	CLAND	1	ASTM A276-420
10	PACKING		GRAPHITE
9	BACK SEAT	1	ASTM A276-420
8	BONNET	1	ASTM A216-WCB
7	NUT	1	ASTM A194-2H
6	STUD	1	ASTM A193-B7
5	CASKET	1	REINFORCED GRAPHITE
4	STEM	1	ASTM A182-F6
3	WEDGE	1	ASTM A216-WCB/CR13 OVERLAY
2	SEAT RING	2	ASTM A105/STL OVERLAY
1	BODY	1	ASTM A216-WCB

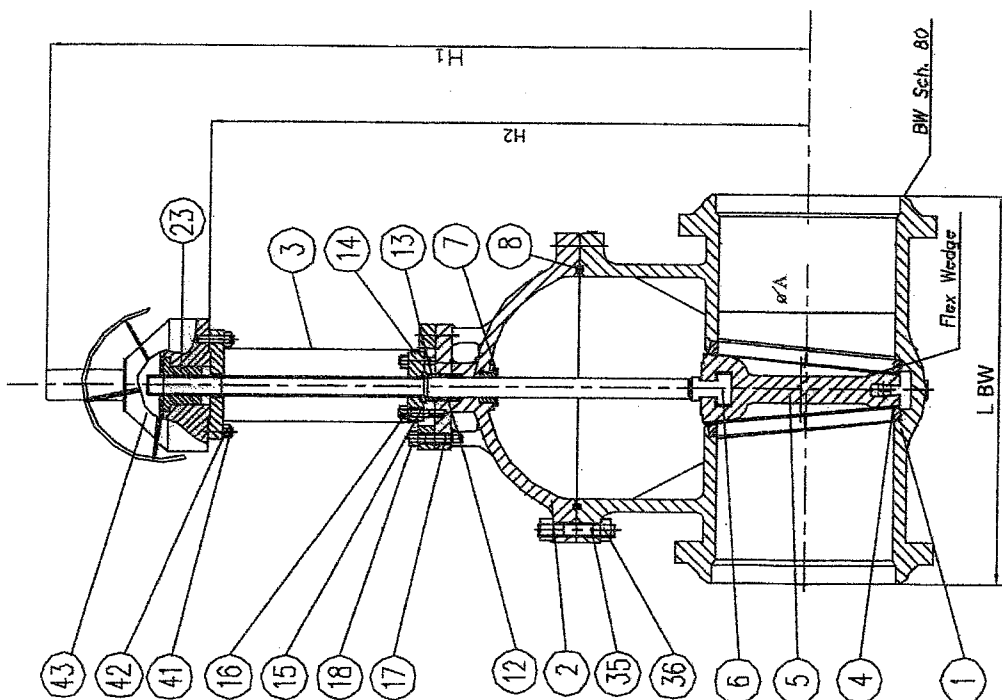
No.	PART NAME	QTY	MATERIAL	REMARK
Slam.	API 600	Shall Test	3.2 MPa	Draft
Class	150 LB	Seat Test (Hyd.)	2.3 MPa	Check
Size	14"-36"	Seat Test (Air)	0.6 MPa	Appr.
Weight		Scale		Mon. Fig. C1R48-C
Type	CAST STEEL GATE VALVE			
User fig.				



1050082

tag	cust item	VITAS item	Size	Ø A	C Travel	H1	H2	L RF-L BW	L R	Ø V1	Weight REF (kg)	Weight DW (kg)
S363G-00290 4456216	8,000	8	12"	303	330	1760	1730	888	847	460	1035	920
-	-	-	14"	334	350	1970	1480	889	892	460	1440	1310
S363G-00300 4456216	8,000	9	16"	365	420	2230	1555	991	994	600	1887	1610

Lurgi Order Nr. 4567581- S363G
Pos. 0290 12"
Pos. 0300 16"



- | | |
|-------------------------|------------------------------------|
| 1 BODY | ASTM A 216 Gr. WCB |
| 2 BONNET | ASTM A 216 Gr. WCB |
| 3 YOKE | ASTM A 216 Gr. WCB |
| 4 SEAT | ASTM A 105 + Stellite |
| 5 WEDGE | ASTM A 216 Gr. WCB + STL OVERLAY |
| 6 STEM | ASTM A 182 F8a |
| 7 BACK SEAT | ASTM A 182 F8a |
| 8 BONNET GASKET | RJ SOFT IRON |
| 12 PACKING | Graphite + braided graphite filled |
| 13 GLAND PACKING | ASTM A 278 410 |
| 14 GLAND FLANGE | ASTM A 216 Gr. WCB |
| 15 GLAND BOLTS | ASTM A 193 B7 |
| 16 NUTS FOR DITTO | ASTM A 194 2H |
| 17 YOKE STUD BOLTS | ASTM A 193 B7 |
| 18 YOKE NUTS | ASTM A 194 2H |
| 23 YOKE BUSHING | ASTM A 439 D2-C |
| 35 BONNET STUD BOLTS | ASTM A 193 B7 |
| 36 NUTS FOR DITTO | ASTM A 194 2H |
| 41 FLANGE ADAPTOR BOLTS | ASTM A 193 B7 |
| 42 NUTS FOR DITTO | ASTM A 194 2H |
| 43 BEVEL GEAR | COMMERCIAL |

Marking according to MSS-SP-25
Design according to API 600 - BS 1414
Butt welding ends according to ANSI B 16.25
Flange from 2" to 24" according to ANSI B 16.5
Flange 26" and larger by customer's request

CERTIFIED DRAWING
CUSTOMER: SIEKMAN ECDNOSTO GMBH & CO. KG
P.O. N°: 90045640P
PRJ: LURGI PROJECT : ZAGROS 2
ITEM & TAG N°: SEE ABOVE

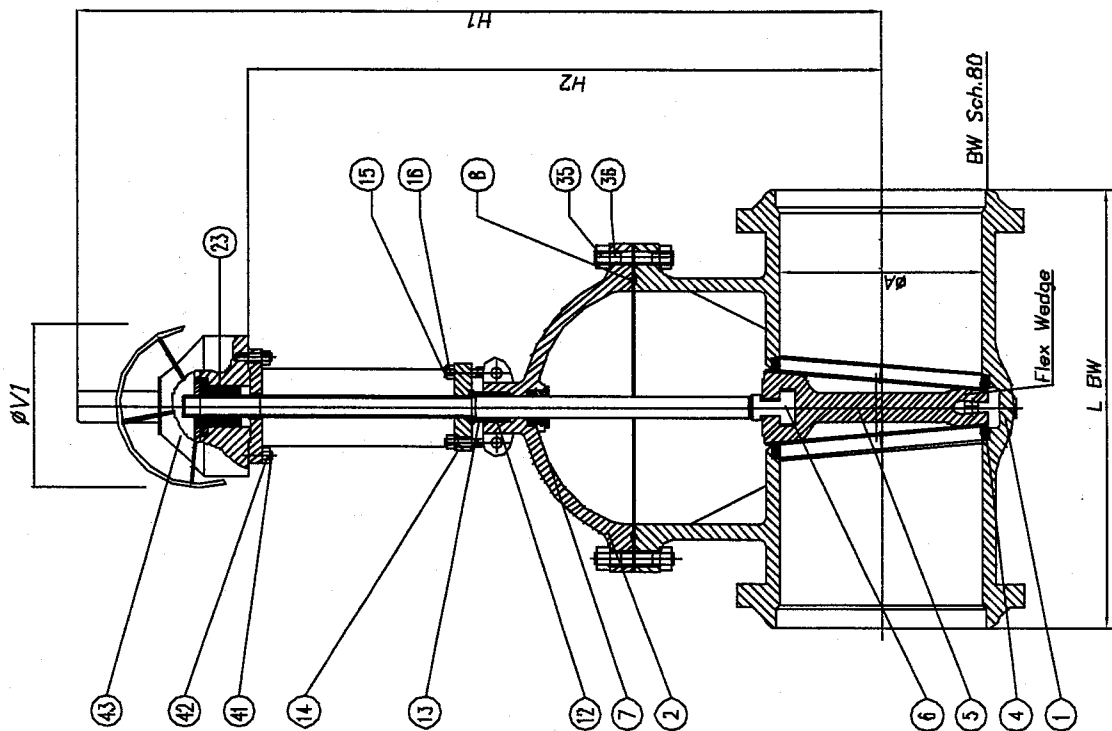
VITAS
SIEKMAN ECDNOSTO

TYPE VALVE	CATE BOLTED BONNET	REV.	A
CLASS	600	DATE	04/11/04
DWG. N°	0460R1633	DRAW.	FR
REF. B of M.	060R 100 IBB AZ	VER.	PZ
VITAS REF.	040330	APPR.	SG

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Tag	Cust. Ref.	Vitas Item	Size	Ø A	C Travel	H1	H2	LR-LBW	L RJ	Ø V1	Weight ASTM (kg)	Weight BW (kg)
S421G-00310 ASR21K	10.000	10	8"	180 7.48"	220 8.66"	862 33.93"	472 18.58"	717 29"	740 28.1"	480 18.1"	766	665

Lurgi Order Nr. 4567581- S421G
Pos. 0310 8"



- | | |
|-------------------------|------------------------------------|
| 1 BODY | ASTM A 217 WC6 |
| 2 BONNET | ASTM A 217 WC6 |
| 4 SEAT | ASTM A 182 F11 + stellite |
| 5 WEDGE | ASTM A 217 WC6 + stellite |
| 6 STEM | ASTM A 182 F6a |
| 7 BACK SEAT | ASTM A 182 F6a |
| 8 BONNET GASKET | RJ ASTM A 182 F5 |
| 12 PACKING | Graphite + braided graphite filled |
| 13 GLAND PACKING | ASTM A 182 F6a |
| 14 GLAND FLANGE | ASTM A 217 WC6 |
| 15 GLAND BOLTS | ASTM A 193 B16 |
| 16 NUTS FOR DITTO | ASTM A 194 Gr. 4 |
| 23 YOKE BUSHING | ASTM A 439-D2C |
| 35 BONNET STUD BOLTS | ASTM A 193 B16 |
| 36 NUTS FOR DITTO | ASTM A 194 Gr. 4 |
| 41 FLANGE ADAPTOR BOLTS | ASTM A 193 B7 |
| 42 NUTS FOR DITTO | ASTM A 194 2H |
| 43 BEVEL GEAR | COMMERCIAL |

Marking according to MSS-SP-25
Design according to API 600 - BS1414
Butt welding ends according to ANSI B 16.25
Flange from 2" to 24" according to ANSI B 16.5
Flange 26" and larger by customer's request

CERTIFIED DRAWING	
CUSTOMER:	SIEMANN ECONOSTO GMBH&CO.KG
P.O. N°:	90045640P
PRJ:	LURGI PROJECT : ZAGROS 2
ITEM & TAG N°:	SEE ABOVE



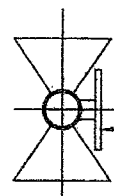
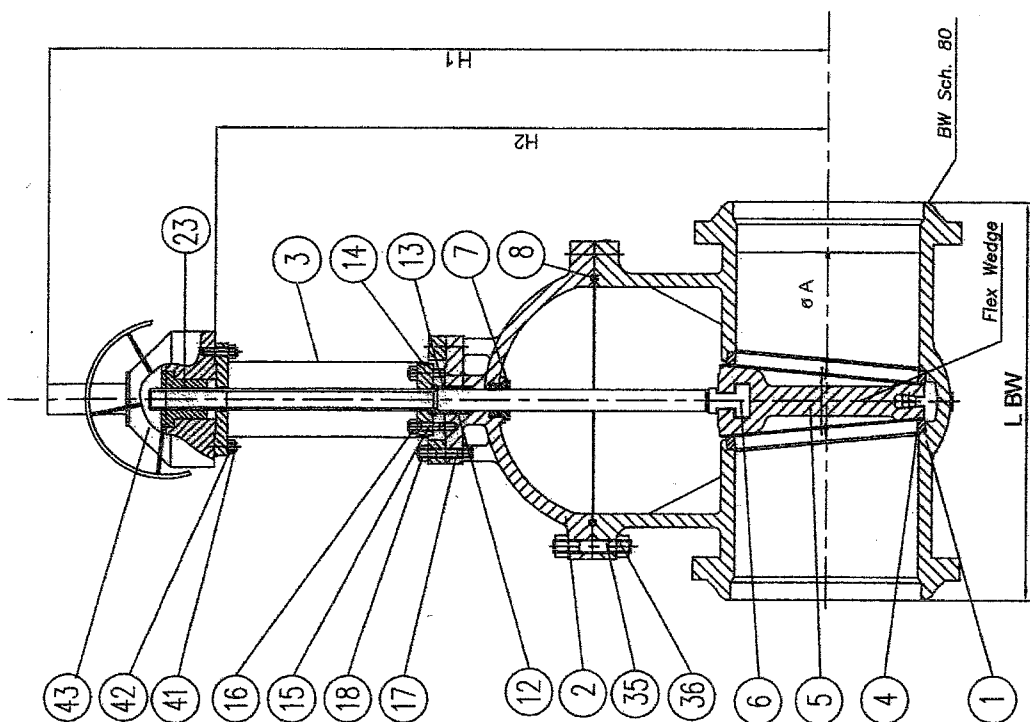
TYPE VALVE	GATE BOLTED BONNET - BGO	REV.	A
CLASS	900	DATE	04/11/04
DWG. N°	D490R1634	DRAW.	FR
FIG. N°	D90R100 IBB AZ	VER.	PZ
VITAS REF.	040330	APPR.	SG

THIS DRAWING IS VITAS DIMSION OF VALVITALIA S.P.A. PROPERTY, REPRODUCTION IS STRICTLY PROHIBITED

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tag	Qty. item	Vitas item	Size	φ A	C Travel	H1	LRF-LBW	L R/	φ V1	Weight RT (kg)	Weight BW (kg)
S421G-00320 44SR21K	11,0000	11	10"	238 9.37"	280 10.23"	804 31.7"	838 33"	841 33.1"	460 18.11"	1050	915
S421G-00330 44SR21K	12,0000	12	14"	311 12.24"	330 13"	760 29.92"	1029 40.5"	1038 40.86"	460 18.11"	1760	1410

Lurgi Order Nr. 4567561- S421G
Pos. 0320 10"
Pos. 0330 14"



- | | |
|-------------------------|------------------------------------|
| 1 BODY | ASTM A 217 WC6 |
| 2 BONNET | ASTM A 217 WC6 |
| 3 YOKE | ASTM A 217 WC6 |
| 4 SEAT | ASTM A 182 F11 + stellite |
| 5 WEDGE | ASTM A 217 WC6 + stellite |
| 6 STEM | ASTM A 182 F6a |
| 7 BACK SEAT | ASTM A 182 F6a |
| 8 BONNET GASKET | RJ ASTM A 182 F5 |
| 12 PACKING | Graphite + braided graphite filled |
| 13 GLAND PACKING | ASTM A 182 F6a |
| 14 GLAND FLANGE | ASTM A 217 WC6 |
| 15 GLAND BOLTS | ASTM A 193 B16 |
| 16 NUTS FOR DITTO | ASTM A 194 Gr. 4 |
| 17 YOKE STUD BOLTS | ASTM A 193 B16 |
| 18 YOKE NUTS | ASTM A 194 Gr. 4 |
| 23 YOKE BUSHING | ASTM A 439-D2C |
| 35 BONNET STUD BOLTS | ASTM A 193 B16 |
| 36 NUTS FOR DITTO | ASTM A 194 Gr. 4 |
| 41 FLANGE ADAPTOR BOLTS | ASTM A 193 B7 |
| 42 NUTS FOR DITTO | ASTM A 194 2H |
| 43 BEVEL GEAR | COMMERCIAL |

Marking according to MSS-SP-25
Design according to API 600 - BS 1414
Butt welding ends according to ANSI B 16.25
Flange from 2" to 24" according to ANSI B 16.5
Flange 26" and larger by customer's request

CERTIFIED DRAWING	
CUSTOMER:	SIEKMAN ECONOSTO GMBH&CO.KG
P.O. N°:	90045640P
PRJ:	LURGI PROJECT : ZAGROS 2
ITEM & TAG N°:	SEE ABOVE



TYPE VALVE	GATE BOLTED BONNET	REV.	A	B	C
CLASS	900	DATE	04/11/04	16/02/05	18/02/05
DWG. N°	0490R1635	DRAW.	FR	FR	FR
REF. B.of M.	090R 100 IBB AZ	VER.	PZ	PZ	PZ
VITAS REF.	040330	APPR.	SG	SG	SG

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