

Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 10-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
10	S360	18	2-7	

Siekmann Econosto GmbH & Co. KG

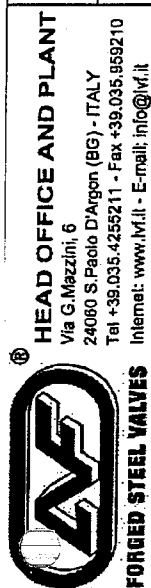
QM Meinold Oestreich 12.5.05

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

[illegible]



HEAD OFFICE AND PLANT
Via G. Mazzini, 6
24060 S. Paolo D'Argon (BG) - ITALY
Tel +39.035.4255211 - Fax +39.035.959210
Internet: www.af.it - E-mail: info@af.it

Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 i.v.

Registro Imprese BG 03076750169 - R.E.A. 347477

VAT Registration Number: IT 03076750169

Società all'ordine di direzione e coordinamento della società ALBEL s.r.l. Reg. Imp. BG n° 0260260169

OUR JOB N° **045931** POSITION **001** Q.TY **18**

YOUR P.O. N°

90045660PIZAGROS II -LURGI-

ITEM: 1

DESCRIPTION
GATE VALVE BB FB FL
WCB/1.4006 RFS

GATE VALVE SM.F. flex #150 2"

TAG : S 360 - 00010

Serial Number:

TEST PRESSURES		TEST RESULT	
☒ BAR	☐ PSI	TEST	☒ CONFORM
HYDROSTATIC BODY & BACKSEAT	PNEUM.	HYDROSTATIC AND PNEUMATIC	☐ NOT CONFORM
	SEAT	VISUAL AND DIMENSIONAL	☒ CONFORM
35	25	6	☐ NOT CONFORM

NOTES

REF.LURGI:4567580-000/1.69690

WEDGES OVERLAIED WITH 1,6[mm] THICKNESS OF 13Cr ON SURFACE

SEATS OVERLAIED WITH 1,6 [mm] THICKNESS OF STELLITED N°6 ON SURFACE

SECTION CERTIFICATE according to

☒ UNI EN 10204 - 3.1 B ☐

TEST PROCEDURE & SPECIFICATION

☒ API 598 ☒ ANSI/ASME B 16.34 ☐

☒ MSS SP.61 ☒ BS 6755 ☐

☐ DIN 3230 T.3 ☒ EN 12266-1 ☐

CERTIFICATE

N° **C 045931-001/01**

Page No. 003 / 006

CUSTOMER

SEKMANN ECONOSTO GMBH & CO. KG

FREIGRAFENWEG 2

D-44357 DORTMUND ()

COMPONENT

PART NAME

MATERIAL

HEAT NR

BONNET

A216 Gr.WCB

10453

BONNET

A216 Gr.WCB

10498

BONNET

A216 Gr.WCB

10503

BONNET

A216 Gr.WCB

Z0689

BONNET

A216 Gr.WCB

Z0688

BONNET

A216 Gr.WCB

Z0938

BONNET

A216 Gr.WCB

Z1192

CHEMICAL ANALYSIS

C Mn Si S P Nb Cr Sn Mo Ni Ti Cu Fe

Al Co N V Nb CE

10453

10498

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

10503

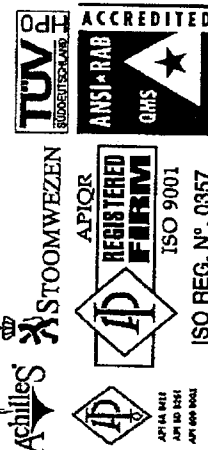
10503

10503

10503

10503

10503



EACH SINGLE COMPONENT OF THE VALVE WHICH IS MENTIONED IN THIS CERTIFICATE HAS BEEN MANUFACTURED, HEAT TREATED AND TESTED FULLY IN ACCORDANCE WITH ITS OWN MATERIAL SPECIFICATION AS ABOVE INDICATED

THE REPORTED VALUES ARE STRICTLY IN ACCORDANCE WITH THE ORIGINAL MILL CERTIFICATES

THIRD AUTHORITY

CLIENT INSPECTION DEPT

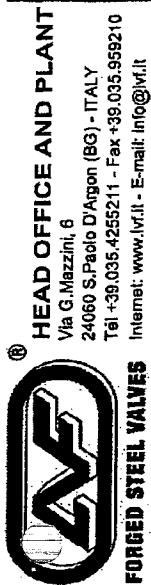
INSPECTION DEPT.

ISO S.p.A.
QUALITY MANAGER
C. Nembrini

DATE

DATE

DATE 28/04/2005



HEAD OFFICE AND PLANT
Via G. Mazzini, 6
24060 S. Paolo D'Argon (BG) - ITALY
Tel +39.035.4255211 - Fax +39.035.959210
Internet: www.lvr.it - E-mail: info@lvr.it

FORGED STEEL VALVES

Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 I.v.

Registro Imprese BG 03076750169 - R.E.A. 347477

VAT Registration Number: IT 03076750169

Seguete alla attività di direzione e coordinamento della società ALBEL srl Reg. Imp. BG n° 02985260169

OUR JOB N° **045931** POSITION **001** Q.TY **18**

YOUR P.O. N° **90045660P/ZAGROS II -LURGI-**

ITEM: 1

DESCRIPTION

**GATE VALVE BB FB FL
WCB/1.4006 RFS**

GATE VALVE SM.F. flex #150 2"

TAG : S 360 - 00010

Serial Number:

TEST PRESSURES		TEST RESULT	
☒ BAR	☐ PSI	TEST	☒ CONFORM
HYDROSTATIC BODY & BACKSEAT	PNEUM.	HYDROSTATIC AND PNEUMATIC	☐ NOT CONFORM
	SEAT	VISUAL AND DIMENSIONAL TEST	☒ CONFORM
35	25	6	☐ NOT CONFORM

NOTES
REF: LURGI:4567580-000/1.69690
WEDGES OVERLAIED WITH 1,6[mm] THICKNESS OF 13C: ON
SURFACE
SEATS OVERLAIED WITH 1,6 [mm] THICKNESS OF STELLITED
N°6 ON SURFACE

SECTION CERTIFICATE according to

☒ UNI EN 10204 - 3.1 B ☐

CERTIFICATE N°

C 045931-001/01

Page No. 005 / 006

TEST PROCEDURE & SPECIFICATION

☒ API 598 ☒ ANSI/ASME B 16.34 ☐

☒ MSS SP.61 ☒ BS 6755 ☐

☐ DIN 3230 T.3 ☒ EN 12266-1 ☐

CUSTOMER

SIEMANN ECONOSTO GMBH & CO. KG

FREIGRAFWEG 2

D-44357 DORTMUND ()

CHEMICAL ANALYSIS

COMPONENT MATERIAL

HEAT CODE HEAT NR

WEDGE A216 Gr.WCB

WEDGE 10503

WEDGE A216 Gr.WCB

WEDGE Z0520

WEDGE A216 Gr.WCB

WEDGE Z0949

WEDGE A216 Gr.WCB

WEDGE Z1000

WEDGE A216 Gr.WCB

WEDGE Z1069

WEDGE A216 Gr.WCB

WEDGE Z1104

WEDGE A216 Gr.WCB

WEDGE Z1184

MECHANICAL PROPERTIES, IMPACT TESTS

TENSILE YIELD N/mm² ELONGATION RED. OF AREA % 13 JOULE

12 JOULE

11 JOULE

10 JOULE

9 JOULE

8 JOULE

7 JOULE

6 JOULE

5 JOULE

4 JOULE

3 JOULE

2 JOULE

1 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE

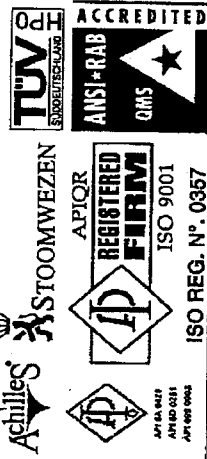
0 JOULE

0 JOULE

0 JOULE

0 JOULE

0 JOULE



THIRD AUTHORITY

CLIENT INSPECTION DEPT

INSPECTION DEPT.

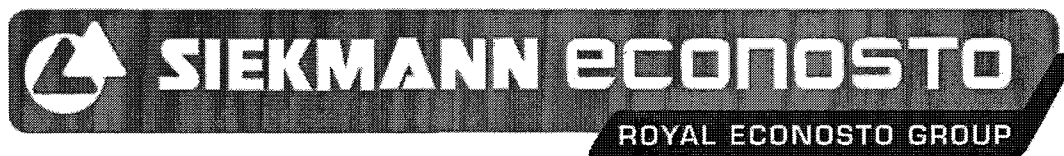
S.P.A.
C. Nembrini

DATE

DATE

DATE 28/04/2005

SECTION CERTIFICATE according to		CERTIFICATE		Page No. 006 / 006																																																																																																																																																							
☒ UNI EN 10204 - 3.1 B ☐		N° C 045931-001/01																																																																																																																																																									
HEAD OFFICE AND PLANT Via G. Mazzini, 6 24060 S. Paolo D'Argon (BG) - ITALY Tel +39.035.4256211 - Fax +39.035.959210 Internet: www.lvf.it - E-mail: info@lvf.it FORGED STEEL VALVES Cod. Fisc. e P. IVA 03076750169 - Cap. Soc. € 8.000.000,00 i.v. Registro Imprese BG 03076750169 - R.E.A. 347477 VAT Registration Number: IT 03076750169 Soggetta all'attività di direzione e coordinamento della società ALBEL di Reggio, BG n° 0280260169		CUSTOMER SIEMANN ECONOSTO GMBH & CO. KG FREIGRAFENWEG 2 D-44357 DORTMUND ()																																																																																																																																																									
TEST PROCEDURE & SPECIFICATION ☒ API 598 ☒ ANSI/ASME B 16.34 ☐ ☒ MSS SP.61 ☒ BS 6755 ☐ ☐ DIN 3230 T.3 ☒ EN 12266-1 ☐																																																																																																																																																											
COMPONENT PART NAME MATERIAL HEAT CODE HEAT NR WEDGE A216 Gr.WCB Z1209 EN 10272 (1-4006) X12Cr13 0404109 A105 0406104 A193 Gr.B7 0404201 A194 Gr.2H 0404201		CHEMICAL ANALYSIS <table border="1"> <thead> <tr> <th>C</th> <th>Mn</th> <th>Si</th> <th>S</th> <th>P</th> <th>Cr</th> <th>Mo</th> <th>Ni</th> <th>Ti</th> <th>Cu</th> <th>Fe</th> <th>MILL #</th> </tr> </thead> <tbody> <tr> <td>Al</td> <td>Co</td> <td>N</td> <td>V</td> <td>Nb</td> <td>Sn</td> <td>CE</td> <td>Nb-Ta</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		C	Mn	Si	S	P	Cr	Mo	Ni	Ti	Cu	Fe	MILL #	Al	Co	N	V	Nb	Sn	CE	Nb-Ta					MECHANICAL PROPERTIES, IMPACT TESTS <table border="1"> <thead> <tr> <th>TENSILE</th> <th>YIELD</th> <th>ELONGATION</th> <th>RED. OF AREA</th> <th>1 JOULE</th> <th>2 JOULE</th> <th>3 JOULE</th> <th>TEST TEMP</th> <th>HARDNESS</th> </tr> <tr> <th>N/mm²</th> <th>N/mm²</th> <th>%</th> <th>%</th> <th></th> <th></th> <th></th> <th>°C</th> <th>HRC</th> </tr> </thead> <tbody> <tr> <td>0.230</td> <td>0.740</td> <td>0.420</td> <td>0.027</td> <td>0.026</td> <td>0.022</td> <td>0.008</td> <td>0.021</td> <td>0.028</td> </tr> <tr> <td>0.024</td> <td></td> <td></td> <td>0.005</td> <td>0.003</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>512,00</td> <td>286,00</td> <td>25,00</td> <td>38,00</td> <td></td> <td></td> <td></td> <td></td> <td>183,00</td> </tr> <tr> <td>0.092</td> <td>0.450</td> <td>0.440</td> <td>0.024</td> <td>0.022</td> <td>12,220</td> <td></td> <td>0.150</td> <td></td> </tr> <tr> <td>670,00</td> <td>405,00</td> <td>25,00</td> <td>70,00</td> <td></td> <td></td> <td></td> <td></td> <td>223,00</td> </tr> <tr> <td>0.200</td> <td>0.690</td> <td>0.210</td> <td>0.025</td> <td>0.012</td> <td>0.060</td> <td>0.008</td> <td>0.140</td> <td>0.018</td> </tr> <tr> <td>0.020</td> <td></td> <td></td> <td>0.030</td> <td>0.001</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>525,00</td> <td>385,00</td> <td>23,00</td> <td>60,00</td> <td></td> <td></td> <td></td> <td></td> <td>175,00</td> </tr> <tr> <td>0.430</td> <td>0.730</td> <td>0.230</td> <td>0.020</td> <td>0.014</td> <td>1,000</td> <td>0.230</td> <td>0.050</td> <td></td> </tr> <tr> <td>889,00</td> <td>734,00</td> <td>21,00</td> <td>56,00</td> <td></td> <td></td> <td></td> <td></td> <td>283,00</td> </tr> <tr> <td>0.420</td> <td>0.510</td> <td>0.220</td> <td>0.009</td> <td>0.006</td> <td>0.150</td> <td></td> <td>0.070</td> <td></td> </tr> <tr> <td>724,00</td> <td>426,00</td> <td>23,00</td> <td>56,00</td> <td></td> <td></td> <td></td> <td></td> <td>241,00</td> </tr> </tbody> </table>		TENSILE	YIELD	ELONGATION	RED. OF AREA	1 JOULE	2 JOULE	3 JOULE	TEST TEMP	HARDNESS	N/mm ²	N/mm ²	%	%				°C	HRC	0.230	0.740	0.420	0.027	0.026	0.022	0.008	0.021	0.028	0.024			0.005	0.003					512,00	286,00	25,00	38,00					183,00	0.092	0.450	0.440	0.024	0.022	12,220		0.150		670,00	405,00	25,00	70,00					223,00	0.200	0.690	0.210	0.025	0.012	0.060	0.008	0.140	0.018	0.020			0.030	0.001					525,00	385,00	23,00	60,00					175,00	0.430	0.730	0.230	0.020	0.014	1,000	0.230	0.050		889,00	734,00	21,00	56,00					283,00	0.420	0.510	0.220	0.009	0.006	0.150		0.070		724,00	426,00	23,00	56,00					241,00
C	Mn	Si	S	P	Cr	Mo	Ni	Ti	Cu	Fe	MILL #																																																																																																																																																
Al	Co	N	V	Nb	Sn	CE	Nb-Ta																																																																																																																																																				
TENSILE	YIELD	ELONGATION	RED. OF AREA	1 JOULE	2 JOULE	3 JOULE	TEST TEMP	HARDNESS																																																																																																																																																			
N/mm ²	N/mm ²	%	%				°C	HRC																																																																																																																																																			
0.230	0.740	0.420	0.027	0.026	0.022	0.008	0.021	0.028																																																																																																																																																			
0.024			0.005	0.003																																																																																																																																																							
512,00	286,00	25,00	38,00					183,00																																																																																																																																																			
0.092	0.450	0.440	0.024	0.022	12,220		0.150																																																																																																																																																				
670,00	405,00	25,00	70,00					223,00																																																																																																																																																			
0.200	0.690	0.210	0.025	0.012	0.060	0.008	0.140	0.018																																																																																																																																																			
0.020			0.030	0.001																																																																																																																																																							
525,00	385,00	23,00	60,00					175,00																																																																																																																																																			
0.430	0.730	0.230	0.020	0.014	1,000	0.230	0.050																																																																																																																																																				
889,00	734,00	21,00	56,00					283,00																																																																																																																																																			
0.420	0.510	0.220	0.009	0.006	0.150		0.070																																																																																																																																																				
724,00	426,00	23,00	56,00					241,00																																																																																																																																																			
NOTES REF. LURGI: 4567580-000/1.69690 WEDGES OVERLAIED WITH 1,6 [mm] THICKNESS OF 13Cr ON SURFACE SEATS OVERLAIED WITH 1,6 [mm] THICKNESS OF STELLITED N°6 ON SURFACE		THIRD AUTHORITY CLIENT INSPECTION DEPT INSPECTION DEPT.		DATE DATE																																																																																																																																																							
ACHILLES REGISTERED APIQ ISO 9001 ISO REG. N° 0357		TUV ACCREDITED ANSI-RAB QMS		ISO S.P.A. Gen. Manager C. Nembrini DATE 28/04/2005																																																																																																																																																							



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 20-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
20	S360	4	2-4	

Siekmann Econosto GmbH & Co. KG

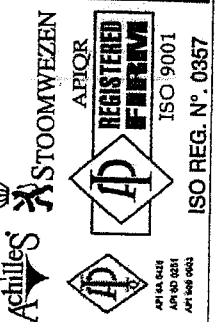
QM Meinold Oestreich 12.5.05

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

INSPICTION CERTIFICATE according to		CERTIFICATE																																														
☒ UNI EN 10204 - 3.1 B ☐		N° C 045931-002/01 Page No. 001 / 003																																														
HEAD OFFICE AND PLANT Via G. Mazzini, 6 24060 S. Paolo D'Argon (BG) - ITALY Tel +39.035.4256211 - Fax +39.035.959210 Internet: www.lvfi.it - E-mail: info@lvfi.it FORGED STEEL VALVES Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 i.v. Registro Imprese BG 03076750169 - R.E.A. 347477 VAT Registration Number: IT 03076750169 Soggetta all'attività di direzione e coordinamento da parte della società ALBEL srl Reg. Imp. BG n° 02805260169		CUSTOMER STIEKMANN ECONOSTO GMBH & CO. KG FREIGRAFWEG 2 D-44357 DORTMUND ()																																														
TEST PROCEDURE & SPECIFICATION ☒ API 59E ☐ ANSI/ASME B 16.34 ☐ ☒ MSS SF 51 ☐ BS 6755 ☐ ☐ DIN 323 T.3 ☒ EN 12266-1 ☐																																																
POINENT MATERIAL HEAT NR BODY BODY BODY BODY BODY BONNET BONNET BONNET BONNET		CHEMICAL ANALYSIS <table border="1"> <thead> <tr> <th>C</th> <th>Mn</th> <th>Si</th> </tr> </thead> <tbody> <tr> <td>0,180</td> <td>0,790</td> <td>0,380</td> </tr> <tr> <td>0,020</td> <td>286,00</td> <td>25,00</td> </tr> <tr> <td>0,180</td> <td>0,790</td> <td>0,420</td> </tr> <tr> <td>0,020</td> <td>286,00</td> <td>26,00</td> </tr> <tr> <td>0,210</td> <td>0,780</td> <td>0,400</td> </tr> <tr> <td>0,020</td> <td>328,00</td> <td>27,00</td> </tr> <tr> <td>0,190</td> <td>0,830</td> <td>0,510</td> </tr> <tr> <td>0,020</td> <td>286,00</td> <td>24,00</td> </tr> <tr> <td>0,200</td> <td>0,720</td> <td>0,370</td> </tr> <tr> <td>0,025</td> <td>284,00</td> <td>25,00</td> </tr> <tr> <td>0,200</td> <td>0,780</td> <td>0,310</td> </tr> <tr> <td>0,025</td> <td>279,00</td> <td>24,00</td> </tr> <tr> <td>0,180</td> <td>0,790</td> <td>0,420</td> </tr> <tr> <td>0,025</td> <td>286,00</td> <td>26,00</td> </tr> </tbody> </table>		C	Mn	Si	0,180	0,790	0,380	0,020	286,00	25,00	0,180	0,790	0,420	0,020	286,00	26,00	0,210	0,780	0,400	0,020	328,00	27,00	0,190	0,830	0,510	0,020	286,00	24,00	0,200	0,720	0,370	0,025	284,00	25,00	0,200	0,780	0,310	0,025	279,00	24,00	0,180	0,790	0,420	0,025	286,00	26,00
C	Mn	Si																																														
0,180	0,790	0,380																																														
0,020	286,00	25,00																																														
0,180	0,790	0,420																																														
0,020	286,00	26,00																																														
0,210	0,780	0,400																																														
0,020	328,00	27,00																																														
0,190	0,830	0,510																																														
0,020	286,00	24,00																																														
0,200	0,720	0,370																																														
0,025	284,00	25,00																																														
0,200	0,780	0,310																																														
0,025	279,00	24,00																																														
0,180	0,790	0,420																																														
0,025	286,00	26,00																																														
MECHANICAL PROPERTIES TENSILE Yld N/mm ² HEAT NR BODY BODY BODY BODY BODY BONNET BONNET BONNET BONNET		IES. IMPACT TESTS 1 JOULE 2 JOULE 3 JOULE TEST TEMP °C HARDNESS MILL #																																														
ITEM: 2 DESCRIPTION GATE VALVE BB FB FL WCB/1.4006 RFS GATE VALVE SM.F. flex #300 2" TAG : S 360 - 00020 Serial Number:		0,023 0,024 0,025 0,007 0,026 0,029 0,003 0,001 0,005 0,021 158,00 42,00 0,022 0,025 0,005 0,036 0,003 0,001 0,018 0,030 143,00 42,00 0,020 0,035 0,350 0,018 0,035 0,003 0,001 0,029 0,032 0,119 0,063 39,00 0,018 0,026 0,009 0,027 0,036 0,020 0,010 0,024 0,005 0,027 0,032 38,00 0,022 0,025 0,005 0,021 0,036 0,020 0,010 0,020 0,025 0,021 143,00																																														
TEST PRESSURES ☒ BAR ☐ PSI TEST RESULT HYDROSTATIC TEST ☒ CONFORM ☐ NOT CONFORM PNEUM. TEST ☐ CONFORM ☐ NOT CONFORM BODY & SEAT BACKSEAT 80 60 6		NOTES WEDGES OVERLAIED WITH 1,6[mm] THICKNESS OF 13Cr ON SURFACE SEATS OVERLAIED WITH 1,6 [mm] THICKNESS OF STELLITED N°6 ON SURFACE																																														
THIRD AUTHORITY DATE		CLIENT INSPECTION DEPT DATE																																														
INSPECTION DEPT DATE		INSPECTION DEPT DATE																																														



LVF S.p.A.
 Quality Control Dept.
 TRUE CERTIFIED COPY

[Signature]

LVF S.p.A.
[Signature]
 C. Nembrini

DATE 28/04/2005

DATE

DATE

ISO REG. N° 0357



HEAD OFFICE AND PLANT
Via G. Mazzini, 6
24060 S. Paolo D'Argon (BG) - ITALY
Tel +39.035.4255211 - Fax +39.035.959210
Internet: www.af.it - E-mail: info@af.it

FORGED STEEL VALVES

Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 i.v.
Registro Imprese BG 03076750169 - R.E.A. 347477
VAT Registration Number: IT 03076750169
Soggetta all'attività di direzione e coordinamento del gruppo della società ALLBEL srl Reg. Imp. BG n° 0208520169

OUR JOB N° **045931** POSITION **002** Q.TY **4**

YOUR P.O. N°

90045660PZAGROS II - LURGI-

ITEM: 2

DESCRIPTION

**GATE VALVE BB FB FL
WCB/1.4006 RFS**

GATE VALVE SM.F. flex #300 2"

TAG : S 360 - 00020

Serial Number:

TEST PRESSURES		TEST RESULT	
☒ BAR	☐ PSI	TEST	☒ CONFORM
HYDROSTATIC BODY & BACKSEAT	PNEUM. SEAT	HYDROSTATIC	☐ NOT CONFORM
		PNEUMATIC	☐ NOT CONFORM
80	60	VISUAL AND DIMENSIONAL	☒ CONFORM
		TEST	☐ NOT CONFORM

NOTES

REF.LURGI:4567580-000/1.69690
WEDGES OVERLAIED WITH 1,6[mm] THICKNESS OF 13Cr ON
SURFACE
SEATS OVERLAIED WITH 1,6 [mm] THICKNESS OF STELLITED
N°6 ON SURFACE

INSPECTION CERTIFICATE according to

☒ UNI EN 10204 - 3.1 B ☐

CERTIFICATE

N° **C 045931-002/01**

Page No. 003 / 003

TEST PROCEDURE & SPECIFICATION

☒ API 598 ☐ ANSI/ASME B 16.34 ☐
☒ MSS SP.61 ☐ BS 6755 ☐
☐ DIN 3230 T.3 ☐ EN 12286-1 ☐

CUSTOMER
SIEKMANN ECONOSTO GMBH & CO. KG

**FREIGRAFENWEG 2
D-44357 DORTMUND ()**

CHEMICAL ANALYSIS

COMPONENT
MATERIAL

HEAT CODE

HEAT NR

BOLTS

NUT

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

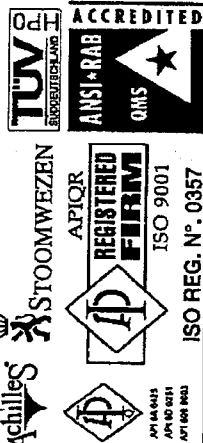
0404201

0404201

0404201

0404201

0404201



- EACH SINGLE COMPONENT OF THE VALVE WHICH IS MENTIONED IN THIS CERTIFICATE HAS BEEN MANUFACTURED, HEAT TREATED AND TESTED FULLY IN ACCORDANCE WITH ITS OWN MATERIAL SPECIFICATION AS ABOVE INDICATED

- THE REPORTED VALUES ARE STRICTLY IN ACCORDANCE WITH THE ORIGINAL MILL CERTIFICATES

THIRD AUTHORITY

CLIENT INSPECTION DEPT

INSPECTION DEPT.

S.P.A.
C. Nembrini

DATE 28/04/2005

Siekman - Econosto
GmbH & Co KG
Freigrafenweg 2
D-44357 Dortmund

Certificate
DIN EN 10204 / 3.1B

Page 1 of 2



Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 360
Item : 00030
QTY : 1 PCS

Description :
3 " 150LB Gate Valve, WCB Body, API Trim
No.8, RF ends

Applicable Standard :

Basic Design: API 600
Face to Face Dimension: ASME B16.10
End Flange Dimension: ASME B16.5

Test according to API 598 / BS EN 12266

Rating 150LB	Pres.(MPa)	Time (S)	RSLT.
Hyd. Shell Test	3,2	60	OK
Hyd.Seat/Backseat	2,3	60	OK
Air seat Test	0,6	60	OK
Other Inspection	View – Dim. – Oper.		OK

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-010-1	DT657	A5314	C4855

Remarks: _____

Datum, 15/02/2005
Siekman Econosto GmbH & Co. KG



QM Meinold Oestreich

We hereby certify, that all tests were satisfactory and that the material described above complies with the order contract. This copy is true copy of the original certificate.



Code : S 360	Description : 3 " 150LB Gate Valve, WCB Body, API Trim No.8, RF ends
Item : 00030	
QTY : 1 PCS	

[illegible]

Siekmann - Econosto
GmbH & Co KG
Freigrafenweg 2
D-44357 Dortmund

Certificate
DIN EN 10204 / 3.1B

Page 1 of 2



Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 360
Item : 00040
QTY : 10 PCS

Description :
4" 150LB Gate Valve, WCB Body, API Trim
No.8, RF ends

Applicable Standard :

Basic Design: API 600
Face to Face Dimension: ASME B16.10
End Flange Dimension: ASME B16.5

Test according to API 598 / BS EN 12266

Rating 150LB	Pres.(MPa)	Time (S)	RSLT.
Hyd. Shell Test	3,2	60	OK
Hyd.Seat/Backseat	2,3	60	OK
Air seat Test	0,6	60	OK
Other Inspection	View – Dim. – Oper.		OK

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-020-1	E7656	W4955	C4603
C305-020-2	DT716	W4956	C4615
C305-020-3	DT694	W4952	C4768
C305-020-4	DT716	W4958	C4884
C305-020-5	E9544	W4715	C4821
C305-020-6	DT695	W4952	C4734
C305-020-7	E9544	W4954	C4734
C305-020-8	E9544	W4952	C4739
C305-020-9	DT716	W4957	C4768
C305-020-10	DT716	W4958	C4750

Remarks: _____

Datum, 15/02/2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

We hereby certify, that all tests were satisfactory and that the material described above complies with the order contract. This copy is true copy of the original certificate.



Code : S 360	Description : 4" 150LB Gate Valve, WCB Body, API Trim No.8, RF ends
Item : 00040	
QTY : 10 PCS	

[illegible]

Siekmann - Econosto
GmbH & Co KG
Freigrafenweg 2
D-44357 Dortmund

Certificate
DIN EN 10204 / 3.1B

Page 1 of 2



Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 360
Item : 00050
QTY : 5 PCS

Description :
6" 150LB Gate Valve, WCB Body, API Trim
No.8, RF ends

Applicable Standard :

Basic Design: API 600
Face to Face Dimension: ASME B16.10
End Flange Dimension: ASME B16.5

Test according to API 598 / BS EN 12266

Rating 150LB	Pres.(MPa)	Time (S)	RSLT.
Hyd. Shell Test	3,2	60	OK
Hyd.Seat/Backseat	2,3	60	OK
Air seat Test	0,6	60	OK
Other Inspection	View – Dim. – Oper.		OK

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-030-1	B1824	W5504	C4488
C305-030-2	E8937	W5505	C4765
C305-030-3	DT750	W5506	C4795
C305-030-4	DT448	0E248	C4807
C305-030-5	B1793	0E237	C4437

Remarks: _____

Datum: 15/02/2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

We hereby certify, that all tests were satisfactory and that the material described above complies with the order contract. This copy is true copy of the original certificate.



Code : S 360	Description : 6" 150LB Gate Valve, WCB Body, API Trim No.8, RF ends
Item : 00050	
QTY : 5 PCS	

[illegible]

Siekmann - Econosto
GmbH & Co KG
Freigrafenweg 2
D-44357 Dortmund

Certificate
DIN EN 10204 / 3.1B

Page 1 of 2



Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 360 Item : 00060 QTY : 1 PCS	Description : 8" 150LB Gate Valve, WCB Body, API Trim No.8, RF ends	
---	---	--

Applicable Standard : Basic Design: API 600 Face to Face Dimension: ASME B16.10 End Flange Dimension: ASME B16.5	Test according to API 598 / BS EN 12266 Rating 150LB Pres.(MPa) Time (S) RSLT. Hyd. Shell Test 3,2 180 OK Hyd.Seat/Backseat 2,3 120 OK Air seat Test 0,6 120 OK Other Inspection View – Dim. – Oper. OK
--	---

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-040-1	W4625	B1795	C4790

Remarks: _____

Datum, 15/02/2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

We hereby certify, that all tests were satisfactory and that the material described above complies with the order contract. This copy is true copy of the original certificate.



Code : S 360	Description : 8" 150LB Gate Valve, WCB Body, API Trim No.8, RF ends
Item : 00060	
QTY : 1 PCS	

[illegible]

Siekmann - Econosto
GmbH & Co KG
Freigrafenweg 2
D-44357 Dortmund

Certificate
DIN EN 10204 / 3.1B

Page 1 of 2



Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 360
Item : 00070
QTY : 3 PCS

Description :
10" 150LB Gate Valve, WCB Body, API Trim
No.8, RF ends

Applicable Standard :

Basic Design: API 600
Face to Face Dimension: ASME B16.10
End Flange Dimension: ASME B16.5

Test according to API 598 / BS EN 12266

Rating 150LB	Pres.(MPa)	Time (S)	RSLT.
Hyd. Shell Test	3,2	180	OK
Hyd.Seat/Backseat	2,3	120	OK
Air seat Test	0,6	120	OK
Other Inspection	View – Dim. – Oper.		OK

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-050-1	B0715	B2017	C4106
C305-050-2	B1776	B2017	C4908
C305-050-3	B1776	B1940	C4275

Remarks: _____

Datum, 15/02/2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

We hereby certify, that all tests were satisfactory and that the material described above complies with the order contract. This copy is true copy of the original certificate.

Code : S 360	Description : 10" 150LB Gate Valve, WCB Body, API Trim No.8, RF ends
Item : 00070	
QTY : 3 PCS	

[illegible]

Siekmann - Econosto
GmbH & Co KG
Freigrafenweg 2
D-44357 Dortmund

Certificate
DIN EN 10204 / 3.1B

Page 1 of 2



Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 360
Item : 00080
QTY : 1 PCS

Description :
12 " 150LB Gate Valve, WCB Body, API Trim
No.8, RF ends

Applicable Standard :

Basic Design: API 600
Face to Face Dimension: ASME B16.10
End Flange Dimension: ASME B16.5

Test according to API 598 / BS EN 12266

Rating	150LB	Pres.(MPa)	Time (S)	RSLT.
Hyd. Shell Test	3,2		180	OK
Hyd.Seat/Backseat	2,3		120	OK
Air seat Test	0,6		120	OK
Other Inspection	View – Dim. – Oper.			OK

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-060-1	B1503	J3690	C4946

Remarks: _____

Datum, 15/02/2005

Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

We hereby certify, that all tests were satisfactory and that the material described above complies with the order contract. This copy is true copy of the original certificate.

Certificate
DIN EN 10204 / 3.1B



Code : S 360	Description : 12 " 150LB Gate Valve, WCB Body, API Trim No.8, RF ends
Item : 00080	
QTY : 1 PCS	

[illegible]



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 90-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
90	S361	2	2,3	

Siekmann Econosto GmbH & Co. KG

QM Meinold Oestreich 12.5.05

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

[illegible]



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 100-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
100	S361	2		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

Ein-Punkt-System v. 1974: Tausch gegen zwei Zylinder

It is hereby certified that the material described above has been tested and complies the terms of the contract.

Wir bestreuen, dass die Lieferung den Bestandsbedingungen entspricht.

Podnikový záznam výroby:

Sachverständiger des Herstellers:

Producer's works expert:

This document and pictures original. This document is valid as an original. Dieses Dokument ist ein Original.
VERBODEN TOEGANG
 Restricted access (by name) - Restricted/Sensitive (by name)

25403760, 000, 000,000

100

[illegible]

KRÁLOVOPOLSKÁ SLEVARNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700

fax +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No.

09/22/05

Page

1

Customer	VITAS		Project No.	BODY GATE 3"300BW							
Const & MFR			Item Name	040330 IT. 01							
Project Name	BODY GATE 3"300BW		Material Thickness	ASTM A-216-WCB T.H302							
Item No.	040330 IT. 01		Dwg. No.	Rev.							
Material Form	Weld	Casting	Other	I.Q.I	ASME 25 ASTM						
X-Ray Equip	No. / Actual :	kvp N/A	mA	I.Q.I Placement Sensitivity	S Side F. Side						
Radioisotope	IR 192 20 u		Film	GEVAERT 37							
Focal size	2 x 1		Screen	Pb							
Exposure Time			Shim Thickness	0.10 mm							
FFD / SFD			Development Condition	AUTOMATIC +25°C							
Density	Single 1.8 ÷ 4	Double 2 ÷ 4	Procedure	ASME VART 2							
EXP. TECHNIQUE	TWSV DWCV		DWSV PANORAMIC	ANSI B16-34							
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL	SHRINKAGE type	CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
ANSI B16-34 ANNEX B				CA CB CC CD							
Accepted severity level	2	✓	3	2	3	3	3	NA	NA	NA	NA
Casting N.	Progressive N. Films										
SB 9140	1-2			✓							B1
HEAT 3156	2-3			✓							B1
	3-4	✓									A2
	4-5			✓							B1
	5-6			✓							B1
	6-4			✓							B1
	7										7
Examined by	 Division of VALVITALIA S.p.A. GIOCONDO ORFANO II° LIVELLO RT-PT-UT-RT 29/10/05 Level II			Date of Examination							
Approved by				☐ Witnessed by ☐ Reviewed by							

fax: +420 5 712 1723:



REPORT OF RADIOGRAPHIC EXAMINATION

NDT

Report No.

03/22/05

Page

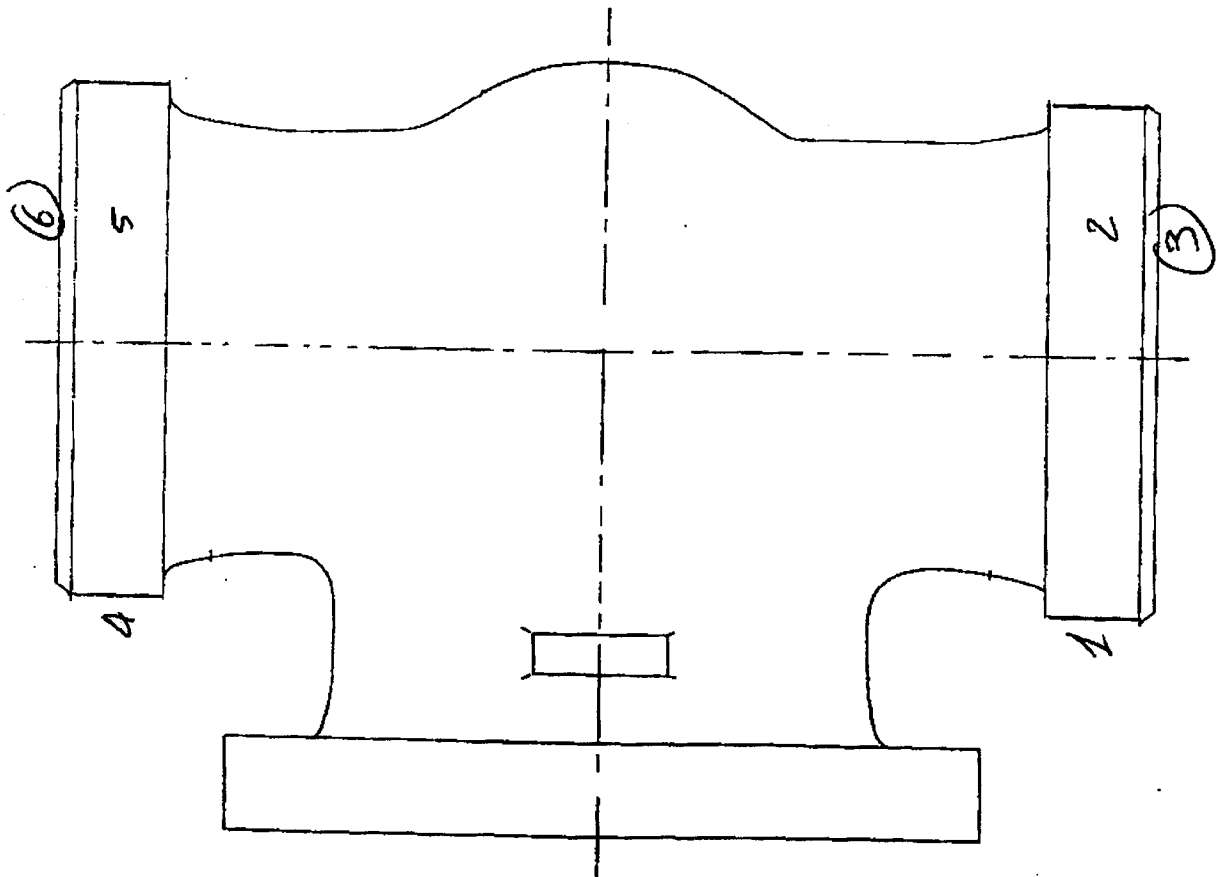
2 - 3

[illegible]

UNITAS
Division of VALITALIA S.p.A.
GIOCONDO ORFANO
1° AVELLO MT-PT-UT-RI
20/01/05

BODY GATE 3'300 BW

RT M. 5B-9140



VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
24/11/05

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 3	di di 9



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 110-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
110	S362	72	2-6	

Siekmann Econosto GmbH & Co. KG

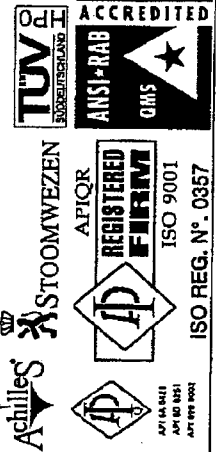
QM Memold Oestreich 12.5.05

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

INSPECTION CERTIFICATE according to		CERTIFICATE	
☒ UNI EN 10204 - 3.1 B ☐		N° C 045931-004/01	
TEST PROCEDURE & SPECIFICATION		CUSTOMER	
☒ API 598 ☒ ANSI/ASME B 16.34 ☐ ☒ MSS SP.61 ☒ BS 6755 ☐ ☐ DIN 3230 T.3 ☒ EN 12266-1 ☐		STIEKMANN ECONOSTO GMBH & CO. KG FREIGRAFENWEG 2 D-44357 DORTMUND ()	
HEAD OFFICE AND PLANT Via G. Mazzini, 6 24080 S. Paolo D'Argon (BG) - ITALY Tel +39.035.4255211 - Fax +39.035.959210 Internet: www.IV.it - E-mail: info@IV.it FORGED STEEL VALVES Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 I.V. Registro Imprese BG 03076750169 - R.E.A. 347477 VAT Registration Number: IT 03076750169 Soggetta all'attività di direzione e coordinamento da parte della società ALUBEL srl Reg. Imp. BG n° 02905260169		Page No. 001 / 005	
OUR JOB N° 045931		POSITION 004	
Q.TY 72		YOUR P.O. N° 90045660P/ZAGROS II -LURGI-	
ITEM: 4		DESCRIPTION GATE VALVE BB FB FL WCB/1.4006/1.4006* RFS GATE VALVE SM.F. flx #600 2"	
TAG: S 362 - 00110		Serial Number:	
TEST PRESSURES ☒ BAR ☐ PSI		TEST RESULT ☒ CONFORM ☐ NOT CONFORM	
HYDROSTATIC BODY & SEAT BACKSEAT		HYDROSTATIC AND PNEUMATIC ☐ CONFORM ☐ NOT CONFORM	
155		115	
6		6	
NOTES * HARD FACING OVERLAY: AWS R Co Cr A (STELLITE GR. 6) REF. LURGI: 4567580-000/1.69690 WEDGES OVERLAIED WITH 1,6[mm] THICKNESS OF STELLITED N°6 ON SURFACE SEATS OVERLAIED WITH 1,6 [mm] THICKNESS OF STELLITED N°6 ON SURFACE		THIRD AUTHORITY CLIENT INSPECTION DEPT INSPECTION DEPT.	
DATE		DATE	
DATE		DATE	



S.P.A.
MANAGER
C. Nembrini

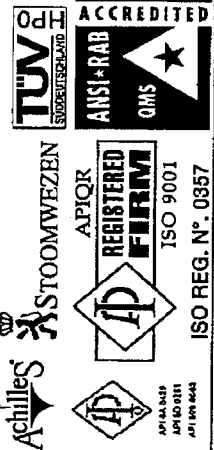
DATE 28/04/2005

INSPECTION CERTIFICATE according to		CERTIFICATE	
☒ UNI EN 10204 - 3.1 B ☐		N° C 045931-004/01	
TEST PROCEDURE & SPECIFICATION ☒ API 598 ☒ ANSI/ASME B 16.34 ☐ ☒ MSS SP.61 ☒ BS 6755 ☐ DIN 3230 T.3 ☒ EN 12266-1		CUSTOMER SIEKMANN ECONOSTO GMBH & CO. KG FREIGRAFENWEG 2 D-44357 DORTMUND ()	
HEAD OFFICE AND PLANT Via G. Mazzini, 6 24060 S. Paolo D'Argon (BG) - ITALY Tel +39.035.4255211 - Fax +39.035.959210 Internet: www.lv.it - E-mail: info@lv.it FORGED STEEL VALVES Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 i.v. Registro Imprese BG 03076750169 - R.E.A. 347477 VAT Registration Number: IT 03076750169 Soggetta all'attività di direzione e coordinamento da parte della società ALL BEL srl Reg. Imp. BG n° 0205580169		Page No. 002 / 005	
OUR JOB N°	POSITION	Q.TY	
045931	004	72	
YOUR P.O. N°			
9004566OP/IZAGROS II -LURGI-			
ITEM: 4			
DESCRIPTION			
GATE VALVE BB FB FL			
WCB/1.4006/1.4006* RFS			
GATE VALVE SM.F. flex #600 2"			
TAG : S 362 - 00110			
Serial Number:			
TEST PRESSURES		TEST RESULT	
☒ BAR	☐ PSI	☒ CONFORM ☐ NOT CONFORM	
HYDROSTATIC BODY & BACKSEAT	PNEUMATIC SEAT	☒ CONFORM ☐ NOT CONFORM	
155	115	6	
NOTES			
* HARD FACING OVERLAY: AWS R Co Cr A (STELLITE GR. 6) REF. LURGI: 4597580-000/1.69690 WEDGES OVERLAIED WITH 1,6[mm] THICKNESS OF STELLITED N°6 ON SURFACE SEATS OVERLAIED WITH 1,6 [mm] THICKNESS OF STELLITED N°6 ON SURFACE			
ACHILLES S TOOMWEZEN APIQ REGISTERED FIRM ISO 9001 ISO REG. N° 0357 AP-CA 9418 AP-CA 0351 AP-CA 9403		TUV SÜDDEUTSCHLAND ACCREDITED ANSI-RAB QMS OHS	
THIRD AUTHORITY		CLIENT INSPECTION DEPT	
DATE		DATE	
		INSPECTION DEPT. S.P.A. G. Nembrini	
		DATE 28/04/2005	

EACH SINGLE COMPONENT OF THE VALVE WHICH IS MENTIONED IN THIS CERTIFICATE HAS BEEN EXAMINED, HEAT TREATED AND TESTED FULLY IN ACCORDANCE WITH ITS OWN MATERIAL SPECIFICATION AS ABOVE INDICATED

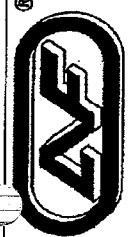
THE REPORTED VALUES ARE STRICTLY IN ACCORDANCE WITH THE ORIGINAL MILL CERTIFICATES

INSPECTION CERTIFICATE according to		CERTIFICATE																																																																																																																																																																																																																
☒ UNI EN 10204 - 3.1 B ☐		N° C 045931-004/01																																																																																																																																																																																																																
HEAD OFFICE AND PLANT Via G. Mazzini, 6 24060 S. Paolo D'Argon (BG) - ITALY Tel +39.035.4255211 - Fax +39.035.950210 Internet: www.jvf.it - E-mail: info@jvf.it FORGED STEEL VALVES		CUSTOMER SIEMANN ECONOSTO GMBH & CO. KG FREIGRAFWEG 2 D-44357 DORTMUND ()																																																																																																																																																																																																																
Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 i.v. Registro Imprese BG 03076750169 - R.E.A. 347477 VAT Registration Number: IT 03076750169 Soggetta all'attività di direzione e coordinamento da parte della società ALLUCET srl Reg. Imp. BG n° 0205560169		Page No. 003 / 005																																																																																																																																																																																																																
TEST PROCEDURE & SPECIFICATION ☒ API 598 ☒ ANSI/ASME B 16.34 ☐ ☒ MSS SP.61 ☒ BS 6755 ☐ ☐ DIN 3230 T.3 ☒ EN 12266-1																																																																																																																																																																																																																		
CHEMICAL ANALYSIS <table border="1"> <thead> <tr> <th>C</th> <th>Mn</th> <th>Si</th> <th>S</th> <th>P</th> <th>Cr</th> <th>Mo</th> <th>Ni</th> <th>Ti</th> <th>Cu</th> <th>Fe</th> <th>MILL #</th> </tr> </thead> <tbody> <tr> <td>Al</td> <td>Co</td> <td>N</td> <td>V</td> <td>Nb</td> <td>Sn</td> <td>CE</td> <td>Nb+Ta</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		C	Mn	Si	S	P	Cr	Mo	Ni	Ti	Cu	Fe	MILL #	Al	Co	N	V	Nb	Sn	CE	Nb+Ta																																																																																																																																																																																													
C	Mn	Si	S	P	Cr	Mo	Ni	Ti	Cu	Fe	MILL #																																																																																																																																																																																																							
Al	Co	N	V	Nb	Sn	CE	Nb+Ta																																																																																																																																																																																																											
MECHANICAL PROPERTIES, IMPACT TESTS <table border="1"> <thead> <tr> <th>TENSILE</th> <th>Yield</th> <th>ELONGATION</th> <th>RED. OF AREA</th> <th>1 JOULE</th> <th>2 JOULE</th> <th>3 JOULE</th> <th>TEST TEMP</th> <th>HARDNESS</th> </tr> <tr> <th>N/mm²</th> <th>N/mm²</th> <th>%</th> <th>%</th> <th></th> <th></th> <th></th> <th>°C</th> <th>HRC</th> </tr> </thead> <tbody> <tr> <td>0.200</td> <td>0.710</td> <td>0.370</td> <td>0.026</td> <td>0.030</td> <td>0.027</td> <td>0.008</td> <td>0.032</td> <td>0.025</td> </tr> <tr> <td>0.025</td> <td></td> <td></td> <td>0.020</td> <td>0.010</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>510.00</td> <td>277.00</td> <td>25.00</td> <td>38.00</td> <td></td> <td></td> <td></td> <td></td> <td>160.00</td> </tr> <tr> <td>0.200</td> <td>0.740</td> <td>0.350</td> <td>0.027</td> <td>0.030</td> <td>0.030</td> <td>0.006</td> <td>0.028</td> <td>0.031</td> </tr> <tr> <td>0.025</td> <td></td> <td></td> <td>0.020</td> <td>0.010</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>516.00</td> <td>270.00</td> <td>25.00</td> <td>39.00</td> <td></td> <td></td> <td></td> <td></td> <td>162.00</td> </tr> <tr> <td>0.200</td> <td>0.680</td> <td>0.350</td> <td>0.030</td> <td>0.025</td> <td>0.027</td> <td>0.008</td> <td>0.025</td> <td>0.024</td> </tr> <tr> <td>0.025</td> <td></td> <td></td> <td>0.020</td> <td>0.010</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>525.00</td> <td>283.00</td> <td>25.00</td> <td>39.00</td> <td></td> <td></td> <td></td> <td></td> <td>160.00</td> </tr> <tr> <td>0.200</td> <td>0.650</td> <td>0.320</td> <td>0.030</td> <td>0.024</td> <td>0.029</td> <td>0.006</td> <td>0.025</td> <td>0.028</td> </tr> <tr> <td>0.025</td> <td></td> <td></td> <td>0.020</td> <td>0.010</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>524.00</td> <td>280.00</td> <td>25.00</td> <td>40.00</td> <td></td> <td></td> <td></td> <td></td> <td>161.00</td> </tr> <tr> <td>0.210</td> <td>0.660</td> <td>0.340</td> <td>0.030</td> <td>0.032</td> <td>0.030</td> <td>0.006</td> <td>0.028</td> <td>0.027</td> </tr> <tr> <td>0.024</td> <td></td> <td></td> <td>0.005</td> <td>0.003</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>525.00</td> <td>284.00</td> <td>26.00</td> <td>40.00</td> <td></td> <td></td> <td></td> <td></td> <td>157.00</td> </tr> <tr> <td>0.200</td> <td>0.690</td> <td>0.380</td> <td>0.031</td> <td>0.028</td> <td>0.240</td> <td>0.007</td> <td>0.026</td> <td>0.027</td> </tr> <tr> <td>0.024</td> <td></td> <td></td> <td>0.005</td> <td>0.003</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>507.00</td> <td>284.00</td> <td>25.00</td> <td>38.00</td> <td></td> <td></td> <td></td> <td></td> <td>156.00</td> </tr> <tr> <td>0.200</td> <td>0.740</td> <td>0.350</td> <td>0.031</td> <td>0.028</td> <td>0.200</td> <td>0.030</td> <td>0.007</td> <td>0.027</td> </tr> <tr> <td>0.024</td> <td></td> <td></td> <td>0.005</td> <td>0.003</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>520.00</td> <td>270.00</td> <td>26.00</td> <td>39.00</td> <td></td> <td></td> <td></td> <td></td> <td>162.00</td> </tr> </tbody> </table>		TENSILE	Yield	ELONGATION	RED. OF AREA	1 JOULE	2 JOULE	3 JOULE	TEST TEMP	HARDNESS	N/mm ²	N/mm ²	%	%				°C	HRC	0.200	0.710	0.370	0.026	0.030	0.027	0.008	0.032	0.025	0.025			0.020	0.010					510.00	277.00	25.00	38.00					160.00	0.200	0.740	0.350	0.027	0.030	0.030	0.006	0.028	0.031	0.025			0.020	0.010					516.00	270.00	25.00	39.00					162.00	0.200	0.680	0.350	0.030	0.025	0.027	0.008	0.025	0.024	0.025			0.020	0.010					525.00	283.00	25.00	39.00					160.00	0.200	0.650	0.320	0.030	0.024	0.029	0.006	0.025	0.028	0.025			0.020	0.010					524.00	280.00	25.00	40.00					161.00	0.210	0.660	0.340	0.030	0.032	0.030	0.006	0.028	0.027	0.024			0.005	0.003					525.00	284.00	26.00	40.00					157.00	0.200	0.690	0.380	0.031	0.028	0.240	0.007	0.026	0.027	0.024			0.005	0.003					507.00	284.00	25.00	38.00					156.00	0.200	0.740	0.350	0.031	0.028	0.200	0.030	0.007	0.027	0.024			0.005	0.003					520.00	270.00	26.00	39.00					162.00		
TENSILE	Yield	ELONGATION	RED. OF AREA	1 JOULE	2 JOULE	3 JOULE	TEST TEMP	HARDNESS																																																																																																																																																																																																										
N/mm ²	N/mm ²	%	%				°C	HRC																																																																																																																																																																																																										
0.200	0.710	0.370	0.026	0.030	0.027	0.008	0.032	0.025																																																																																																																																																																																																										
0.025			0.020	0.010																																																																																																																																																																																																														
510.00	277.00	25.00	38.00					160.00																																																																																																																																																																																																										
0.200	0.740	0.350	0.027	0.030	0.030	0.006	0.028	0.031																																																																																																																																																																																																										
0.025			0.020	0.010																																																																																																																																																																																																														
516.00	270.00	25.00	39.00					162.00																																																																																																																																																																																																										
0.200	0.680	0.350	0.030	0.025	0.027	0.008	0.025	0.024																																																																																																																																																																																																										
0.025			0.020	0.010																																																																																																																																																																																																														
525.00	283.00	25.00	39.00					160.00																																																																																																																																																																																																										
0.200	0.650	0.320	0.030	0.024	0.029	0.006	0.025	0.028																																																																																																																																																																																																										
0.025			0.020	0.010																																																																																																																																																																																																														
524.00	280.00	25.00	40.00					161.00																																																																																																																																																																																																										
0.210	0.660	0.340	0.030	0.032	0.030	0.006	0.028	0.027																																																																																																																																																																																																										
0.024			0.005	0.003																																																																																																																																																																																																														
525.00	284.00	26.00	40.00					157.00																																																																																																																																																																																																										
0.200	0.690	0.380	0.031	0.028	0.240	0.007	0.026	0.027																																																																																																																																																																																																										
0.024			0.005	0.003																																																																																																																																																																																																														
507.00	284.00	25.00	38.00					156.00																																																																																																																																																																																																										
0.200	0.740	0.350	0.031	0.028	0.200	0.030	0.007	0.027																																																																																																																																																																																																										
0.024			0.005	0.003																																																																																																																																																																																																														
520.00	270.00	26.00	39.00					162.00																																																																																																																																																																																																										
COMPONENT <table border="1"> <thead> <tr> <th>PART NAME</th> <th>MATERIAL</th> <th>HEAT NR</th> </tr> </thead> <tbody> <tr> <td>BONNET</td> <td>A216 Gr. WCB</td> <td>F7328</td> </tr> <tr> <td>BONNET</td> <td>A216 Gr. WCB</td> <td>F7333</td> </tr> <tr> <td>BONNET</td> <td>A216 Gr. WCB</td> <td>F7338</td> </tr> <tr> <td>BONNET</td> <td>A216 Gr. WCB</td> <td>F7342</td> </tr> <tr> <td>WEDGE</td> <td>A216 Gr. WCB</td> <td>F7128</td> </tr> <tr> <td>WEDGE</td> <td>A216 Gr. WCB</td> <td>F7320</td> </tr> <tr> <td>WEDGE</td> <td>A216 Gr. WCB</td> <td>F7325</td> </tr> </tbody> </table>		PART NAME	MATERIAL	HEAT NR	BONNET	A216 Gr. WCB	F7328	BONNET	A216 Gr. WCB	F7333	BONNET	A216 Gr. WCB	F7338	BONNET	A216 Gr. WCB	F7342	WEDGE	A216 Gr. WCB	F7128	WEDGE	A216 Gr. WCB	F7320	WEDGE	A216 Gr. WCB	F7325																																																																																																																																																																																									
PART NAME	MATERIAL	HEAT NR																																																																																																																																																																																																																
BONNET	A216 Gr. WCB	F7328																																																																																																																																																																																																																
BONNET	A216 Gr. WCB	F7333																																																																																																																																																																																																																
BONNET	A216 Gr. WCB	F7338																																																																																																																																																																																																																
BONNET	A216 Gr. WCB	F7342																																																																																																																																																																																																																
WEDGE	A216 Gr. WCB	F7128																																																																																																																																																																																																																
WEDGE	A216 Gr. WCB	F7320																																																																																																																																																																																																																
WEDGE	A216 Gr. WCB	F7325																																																																																																																																																																																																																
NOTES * HARD FACING OVERLAY: AWS R Co A (STELLITE GR. 6) REF. LURGI: 4587580-0001.69690 WEDGES OVERLAIED WITH 1.6 [mm] THICKNESS OF STELLITE N°6 ON SURFACE SEATS OVERLAIED WITH 1.6 [mm] THICKNESS OF STELLITE N°6 ON SURFACE																																																																																																																																																																																																																		
THIRD AUTHORITY DATE		CLIENT INSPECTION DEPT. DATE																																																																																																																																																																																																																
INSPECTION DEPT. DATE		INSPECTION DEPT. DATE																																																																																																																																																																																																																



S.p.A.
 C. Nembrini

[illegible]



HEAD OFFICE AND PLANT
Via G. Mazzini, 6
24080 S. Paolo D'Argon (BG) - ITALY
Tel +39 035 4255211 - Fax +39 035 959210
Internet: www.af.it - E-mail: info@af.it

FORGED STEEL VALVES

Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 i.v.
Registro Imprese BG 03076750169 - R.E.A. 347477
VAT Registration Number: IT 03076750169
Società a attività di direzione e coordinamento della società ALLBEL srl Reg. Imp. BG n° 02805260169

OUR JOB N°		POSITION	Q.TY
045931		004	72
YOUR P.O. N°			
90045660P/ZAGROS II -LURGI-			
ITEM: 4			
DESCRIPTION			
GATE VALVE BB FB FL			
WCB/1.4006/1.4006* RFS			
GATE VALVE SM.F. flex #600 2"			
TAG : S 362 - 00110			
Serial Number:			
TEST PRESSURES		TEST RESULT	
☒ BAR ☐ PSI HYDROSTATIC PNEUM. BODY & SEAT SEAT BACKSEAT BACKSEAT 155 115 6		☒ CONFORM ☐ NOT CONFORM TEST HYDROSTATIC AND PNEUMATIC VISUAL AND DIMENSIONAL TEST	

NOTES

* HARD FACING OVERLAY: AWS R Co Cr A (STELLITE GR. 6)
REF. LURGI: 4567580-000/1.69690
WEDGES OVERLAPPED WITH 1,6 [mm] THICKNESS OF STELLITE
N°6 ON SURFACE
SEATS OVERLAPPED WITH 1,6 [mm] THICKNESS OF STELLITE
N°6 ON SURFACE

INSPECTION CERTIFICATE according to

☒ UNI EN 10204 - 3.1 B ☐

CERTIFICATE

N° **C 045931-004/01**

Page No. 005 / 005

TEST PROCEDURE & SPECIFICATION

☒ API 598 ☒ ANSI/ASME B 16.34 ☐
☒ MSS SP.61 ☒ BS 6755 ☐
☐ DIN 3230 T.3 ☒ EN 12286-1 ☐

CUSTOMER

SIEMANN ECONOSTO GMBH & CO. KG

FREIGRAFENWEG 2
D-44357 DORTMUND ()

CHEMICAL ANALYSIS

C	Mn	Si	S	P	Cr	Mo	Ni	Ti	Cu	Fe
Al	Co	N	V	Nb	Sn	CE	Nb+Ta			

COMPONENT

PART NAME	MATERIAL
HEAT CODE	HEAT NR

STEM
EN 10272 (1.4006)
X12Cr13

SEAT
A105

BOLTS
A193 Gr. B7

NUT
A194 Gr. 2H

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

0404201

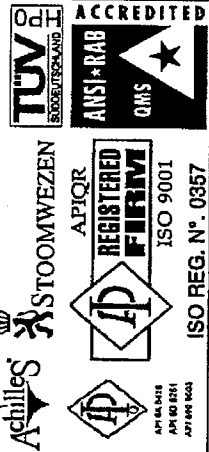
0404201

0404201

0404201

0404201

0404201



• EACH SINGLE COMPONENT OF THE VALVE WHICH IS MENTIONED IN THIS CERTIFICATE HAS BEEN MANUFACTURED, HEAT TREATED AND TESTED FULLY IN ACCORDANCE WITH ITS OWN MATERIAL SPECIFICATION AS ABOVE INDICATED
 • THE REPORTED VALUES ARE STRICTLY IN ACCORDANCE WITH THE ORIGINAL MILL CERTIFICATES

THIRD AUTHORITY

CLIENT INSPECTION DEPT

INSPECTION DEPT.

S.p.A.
C. Nembrini

DATE 28/04/2005

DATE

DATE



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 120-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
120	S362	2		

Date 31.09.2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

160,00	73,00	34,20	514,00	283,00	422,00	192,00
We declare that this product is in compliance with the directive 97/23/EC and was subjected to the conformity assessment procedure H (for Category III). The monitoring is performed by TÜV Italy srl Notified Body 0948.						
THIRD AUTHORITY			CLIENT INSPECTION DEPT		INSPECTION DEPT.	
DATE			DATE		DATE 09/03/2005	
- EACH SINGLE COMPONENT OF THE VALVE WHICH IS MENTIONED IN THIS CERTIFICATE HAS BEEN MANUFACTURED, HEAT TREATED AND TESTED FULLY IN ACCORDANCE WITH ITS OWN MATERIAL SPECIFICATION AS ABOVE INDICATED - THE REPORTED VALUES ARE STRICTLY IN ACCORDANCE WITH THE ORIGINAL MILL CERTIFICATES						

Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 362
Item : 00130
QTY : 43 PCS

Description :
3" 600LB Gate Valve, WCB Body, API Trim
No.5, RF ends

Applicable Standard :

Basic Design: API 600
Face to Face Dimension: ASME B16.10
End Flange Dimension: ASME B16.5

Test according to API 598 / BS EN 12266

Rating	600LB	Pres.(MPa)	Time (S)	RSLT.
Hyd. Shell Test	15,4	60	OK	
Hyd.Seat/Backseat	11,4	60	OK	
Air seat Test	0,6	60	OK	
Other Inspection	View – Dim. – Oper.	OK		

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-070-1	FA044	FA004	C4163
C305-070-2	FA045	FA024	C4544
C305-070-3	FA044	FA003	C4544
C305-070-4	FA045	FA018	C4544
C305-070-5	FA042	V4191	C4163
C305-070-6	FA045	FA011	C4163
C305-070-7	FA045	FA015	C4544
C305-070-8	FA045	FA017	C4544
C305-070-9	FA043	FA010	C4544
C305-070-10	FA043	V4430	C4544
C305-070-11	FA043	FA005	C4652
C305-070-12	FA044	FA043	C4163
C305-070-13	FA043	FA033	C4544
C305-070-14	FA043	FA044	C4544
C305-070-15	FA044	FA045	C4544
C305-070-16	FA044	FA007	C4544

C305-070-17	FA043	FA043	C4652
C305-070-18	FA044	FA018	C4652
C305-070-19	FA046	FA044	C4652
C305-070-20	FA043	FA036	C4652
C305-070-21	FA039	FA021	C4652
C305-070-22	FA044	FA043	C4163
C305-070-23	FA044	FA044	C4652
C305-070-24	FA040	FA044	C4652
C305-070-25	FA046	FA043	C4652
C305-070-26	FA043	FA017	C4652
C305-070-27	FA039	FA044	C4652
C305-070-28	FA045	FA017	C4652
C305-070-29	FA045	FA045	C4652
C305-070-30	FA043	FA045	C4652
C305-070-31	FA040	FA043	C4652
C305-070-32	FA046	FA007	C4652
C305-070-33	FA037	FA012	C4652
C305-070-34	FA048	FA023	C4800
C305-070-35	FA044	FA023	C4800
C305-070-36	FA046	FA003	C4800
C305-070-37	FA046	FA026	C4800
C305-070-38	FA045	FA023	C4800
C305-070-39	FA046	FA046	C4800
C305-070-40	FA046	E9592	C4800
C305-070-41	FA045	FA048	C4800
C305-070-42	FA043	FA047	C4652
C305-070-43	FA042	FA043	C4800

Remarks: _____

Datum: 16/03/2005
Siekmann Econosto GmbH & Co. KG

QM Meinold Oestreich

Code : S 362	Description :
Item : 00130	3" 600LB Gate Valve, WCB Body, API Trim
QTY : 43 PCS	No.5, RF ends

Part Name	Mat.	Heat No.	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	V	C.E	MPa TS	MPa YS	E %	R %	HB
Body	WCB	FA044	0,210	0,760	0,511	0,026	0,033	0,070	0,046	0,011	0,049	0,010	0,360	574	277	33	43	149
Body	WCB	FA045	0,200	0,743	0,443	0,025	0,030	0,043	0,063	0,028	0,070	0,010	0,350	581	276	30	42	150
Body	WCB	FA042	0,200	0,816	0,500	0,028	0,033	0,049	0,017	0,026	0,070	0,010	0,360	578	282	32	44	142
Body	WCB	FA043	0,210	0,818	0,486	0,024	0,031	0,047	0,039	0,020	0,083	0,010	0,370	576	281	28	41	148
Body	WCB	FA046	0,210	0,780	0,495	0,026	0,032	0,061	0,051	0,017	0,051	0,010	0,360	575	283	26	41	148
Body	WCB	FA039	0,190	0,856	0,554	0,025	0,030	0,042	0,010	0,023	0,026	0,022	0,350	580	275	32	43	145
Body	WCB	FA040	0,200	0,760	0,491	0,026	0,033	0,033	0,021	0,020	0,071	0,010	0,350	576	284	29	44	141
Body	WCB	FA037	0,200	0,849	0,500	0,028	0,032	0,070	0,046	0,020	0,056	0,010	0,370	575	280	34	42	148
Body	WCB	FA048	0,190	0,791	0,506	0,028	0,034	0,040	0,038	0,040	0,066	0,010	0,350	580	275	31	44	150
Bonnet	WCB	FA004	0,200	0,914	0,516	0,028	0,033	0,031	0,028	0,026	0,049	0,010	0,370	580	275	33	44	144
Bonnet	WCB	FA024	0,200	0,760	0,478	0,026	0,030	0,036	0,026	0,028	0,046	0,028	0,350	581	276	31	44	146
Bonnet	WCB	FA003	0,200	0,789	0,501	0,026	0,030	0,044	0,031	0,028	0,041	0,010	0,350	583	281	26	41	143
Bonnet	WCB	FA018	0,210	0,839	0,464	0,028	0,032	0,041	0,048	0,040	0,058	0,010	0,380	576	278	31	42	148
Bonnet	WCB	FA191	0,220	0,870	0,520	0,037	0,019	0,060	0,090	0,010	0,050	0,001	0,390	530	336	25	46	153
Bonnet	WCB	FA011	0,210	0,803	0,541	0,031	0,034	0,040	0,040	0,028	0,030	0,010	0,360	581	276	28	42	146
Bonnet	WCB	FA015	0,190	0,705	0,435	0,029	0,033	0,039	0,056	0,015	0,082	0,010	0,330	580	277	29	43	149
Bonnet	WCB	FA017	0,210	0,794	0,480	0,029	0,031	0,049	0,033	0,026	0,070	0,010	0,370	581	275	29	43	144
Bonnet	WCB	FA010	0,220	0,779	0,446	0,025	0,030	0,059	0,051	0,031	0,049	0,010	0,380	575	278	33	41	149
Bonnet	WCB	V4430	0,220	0,960	0,510	0,027	0,030	0,070	0,090	0,030	0,040	0,001	0,410	536	334	26	45	155
Bonnet	WCB	FA005	0,210	0,810	0,456	0,025	0,031	0,172	0,029	0,041	0,025	0,010	0,390	576	278	29	42	145
Bonnet	WCB	FA043	0,210	0,818	0,486	0,024	0,031	0,047	0,039	0,020	0,083	0,010	0,370	576	281	28	41	148
Bonnet	WCB	FA033	0,230	0,904	0,493	0,025	0,031	0,072	0,040	0,021	0,037	0,010	0,410	577	283	33	44	158
Bonnet	WCB	FA044	0,210	0,760	0,511	0,026	0,033	0,070	0,046	0,011	0,049	0,010	0,360	574	277	33	43	149
Bonnet	WCB	FA045	0,200	0,743	0,443	0,025	0,030	0,043	0,063	0,028	0,070	0,010	0,350	581	276	30	42	150



Code : S 362	Description :
Item : 00130	3" 600LB Gate Valve, WCB Body, API Trim
QTY : 43 PCS	No.5, RF ends

Part Name	Mat.	Heat No.	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	V	C.E	MPa TS	MPa YS	E %	R %	HB
Bonnet	WCB	FA007	0,230	0,792	0,425	0,026	0,032	0,052	0,050	0,018	0,046	0,010	0,380	584	284	31	41	146
Bonnet	WCB	FA036	0,220	0,760	0,483	0,025	0,031	0,077	0,051	0,019	0,063	0,010	0,380	579	283	29	44	158
Bonnet	WCB	FA021	0,230	0,776	0,463	0,024	0,030	0,038	0,051	0,020	0,070	0,010	0,380	575	275	33	44	158
Bonnet	WCB	FA012	0,230	0,761	0,490	0,028	0,031	0,070	0,036	0,040	0,038	0,010	0,390	576	283	31	41	140
Bonnet	WCB	FA023	0,220	0,846	0,500	0,029	0,033	0,046	0,073	0,036	0,077	0,010	0,390	580	279	34	42	145
Bonnet	WCB	FA026	0,210	0,990	0,530	0,025	0,030	0,073	0,025	0,027	0,045	0,010	0,400	576	281	26	43	143
Bonnet	WCB	FA046	0,210	0,780	0,495	0,026	0,032	0,061	0,051	0,017	0,051	0,010	0,360	575	283	26	41	148
Bonnet	WCB	E9592	0,180	0,700	0,410	0,016	0,028	0,028	0,028	0,020	0,026	0,003	0,310	549	357	29	55	145
Bonnet	WCB	FA048	0,190	0,791	0,506	0,028	0,034	0,040	0,038	0,040	0,066	0,010	0,350	580	275	31	44	150
Bonnet	WCB	FA047	0,210	0,805	0,534	0,023	0,031	0,050	0,040	0,026	0,040	0,010	0,370	584	282	34	42	149
Disc	CA15	C4163	0,100	0,670	0,750	0,021	0,021	13,180	0,500	0,330				726	521	23	42	265
Disc	CA15	C4544	0,100	0,730	0,780	0,019	0,020	12,160	0,500	0,340				722	523	26	36	265
Disc	CA15	C4652	0,110	0,700	0,870	0,019	0,020	13,100	0,500	0,310				720	521	26	36	272
Disc	CA15	C4800	0,120	0,770	1,000	0,016	0,019	12,440	0,480	0,310				726	524	25	39	269

Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 362 Item : 00140 QTY : 15 PCS	Description : 4 " 600LB Gate Valve, WCB Body, API Trim No.5, RF ends	
--	--	--

Applicable Standard : Basic Design: API 600 Face to Face Dimension: ASME/ANSI B16.10 End Flange Dimension: ASME/ANSI B16.5	Test according to API 598 / BS EN 12266 Rating 600LB Pres.(MPa) Time (S) RSLT. Hyd. Shell Test 15,4 60 OK Hyd.Seat/Backseat 11,4 60 OK Air seat Test 0,6 60 OK Other Inspection View – Dim. – Oper. OK
--	--

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-080-1	B1864	B1936	C4050
C305-080-2	B1864	R8813	C4054
C305-080-3	B1859	B1909	C3976
C305-080-4	B1859	R8750	C4281
C305-080-5	R8762	B1909	C4050
C305-080-6	B1864	R8640	C4050
C305-080-7	B1864	R8999	C4292
C305-080-8	B1864	B1861	C4050
C305-080-9	B1864	R8998	C4292
C305-080-10	B1864	R8640	C3976
C305-080-11	B1864	B1894	C4050
C305-080-12	B1864	R8998	C4054
C305-080-13	B1859	R8747	C4054
C305-080-14	B1864	R8747	C4292
C305-080-15	B1864	R8849	C4292

Remarks: _____

Datum: 13/03/2005

Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

Siekmann - Econosto
GmbH & Co KG
Freigrafenweg 2
D-44357 Dortmund

Certificate
DIN EN 10204 / 3.1B

Page 1 of 2



Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 362
Item : 00150
QTY : 8 PCS

Description :
6 " 600LB Gate Valve, WCB Body, API Trim
No.5, RF ends

Applicable Standard :

Basic Design: API 600
Face to Face Dimension: ASME/ANSI
B16.10
End Flange Dimension: ASME/ANSI
B16.5

Test according to API 598 / BS EN 12266

Rating	600LB	Pres.(MPa)	Time (S)	RSLT.
Hyd. Shell Test	15,4	60	OK	
Hyd.Seat/Backseat	11,4	60	OK	
Air seat Test	0,6	60	OK	
Other Inspection	View – Dim. – Oper.	OK		

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-090-1	B1777	B0858	C4839
C305-090-2	B1777	B1426	C4839
C305-090-3	B1777	B1778	C4839
C305-090-4	B1776	B1937	C4172
C305-090-5	B1776	B1776	C4172
C305-090-6	B1776	B1937	C4170
C305-090-7	B1776	B1937	C4172
C305-090-8	B1777	B1795	C4865

Remarks: _____

Datum, 15/02/2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

We hereby certify, that all tests were satisfactory and that the material described above complies with the order contract. This copy is true copy of the original certificate.

Code : S 362	Description : 6 " 600LB Gate Valve, WCB Body, API Trim No.5, RF ends
Item : 00150	
QTY : 8 PCS	

[illegible]

Siekmann - Econosto
GmbH & Co KG
Freigrafenweg 2
D-44357 Dortmund

Certificate
DIN EN 10204 / 3.1B

Page 1 of 2



Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 362
Item : 00160
QTY : 5 PCS

Description :
8 " 600LB Gate Valve, WCB Body, API Trim
No.5, RF ends

Applicable Standard :

Basic Design: API 600
Face to Face Dimension: ASME/ANSI
B16.10
End Flange Dimension: ASME/ANSI
B16.5

Test according to API 598 / BS EN 12266

Rating	600LB	Pres.(MPa)	Time (S)	RSLT.
Hyd. Shell Test	15,4	180	OK	
Hyd.Seat/Backseat	11,4	120	OK	
Air seat Test	0,6	120	OK	
Other Inspection	View – Dim. – Oper.	OK		

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-100-1	B1784	B1394	C3962
C305-100-2	B1777	B1411	C3961
C305-100-3	B1779	B1059	C3962
C305-100-4	B1785	B1176	C3965
C305-100-5	B1779	B1170	C3956

Remarks: _____

Datum: 15/02/2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

We hereby certify, that all tests were satisfactory and that the material described above complies with the order contract. This copy is true copy of the original certificate.

[illegible]

Siekmann - Econosto
GmbH & Co KG
Freigrafenweg 2
D-44357 Dortmund

Certificate
DIN EN 10204 / 3.1B

Page 1 of 2



Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 362
Item : 00170
QTY : 4 PCS

Description :
10 " 600LB Gate Valve, WCB Body, API Trim
No.5, RF ends

Applicable Standard :

Basic Design: API 600
Face to Face Dimension: ASME/ANSI
B16.10
End Flange Dimension: ASME/ANSI
B16.5

Test according to API 598 / BS EN 12266

Rating	600LB	Pres.(MPa)	Time (S)	RSLT.
Hyd. Shell Test	15,4		180	OK
Hyd.Seat/Backseat	11,4		120	OK
Air seat Test	0,6		120	OK
Other Inspection	View – Dim. – Oper.			OK

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-110-1	B1776	B1832	C4022
C305-110-2	B1779	B1855	C4022
C305-110-3	B1777	B1924	C4157
C305-110-4	B1780	B1940	C0154

Remarks: _____

Datum, 15/02/2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

We hereby certify, that all tests were satisfactory and that the material described above complies with the order contract. This copy is true copy of the original certificate.



Code : S 362	Description : 10 " 600LB Gate Valve, WCB Body, API Trim No.5, RF ends
Item : 00170	
QTY : 4 PCS	

[illegible]



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 180-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
180	S307	3		

Date 31.03.2005
Siekmann Econosto GmbH & Co. KG

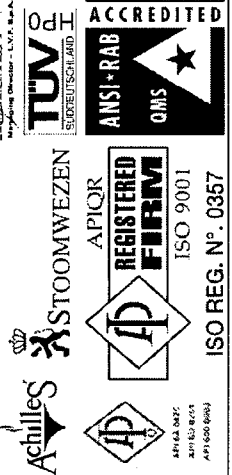

QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

 HEAD OFFICE AND PLANT Via G. Mazzini, 6 24060 S. Paolo D'Argon (BG) - ITALY Tel +39 035 4255211 - Fax +39 035 459210 Internet: www.af.it - E-mail: info@af.it FORGED STEEL VALVES Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 i.v. Registro Imprese BG 03076750169 - R.E.A. 347477 VAT Registration Number: IT 03076750169 Soggetta a attività di direzione e coordinamento da parte della: xdelta ALBEL srl Reg. Imp. BG n° 028056016		INSPECTION CERTIFICATE according to ☒ UNI EN 10204 - 3.1 B ☐ TEST PROCEDURE & SPECIFICATION ☒ API 598 ☒ ANSI/ASME B 16.34 ☐ ☒ MSS SP.61 ☒ BS 6755 ☐ ☐ DIN 3230 T.3 ☒ EN 12266-1		INSPECTION CERTIFICATE according to N° C 045931-006/01 CUSTOMER STIEKMANN ECONOSTO GMBH & CO. KG FREIGRAFENWEG 2 D-44357 DORTMUND () 10. MRZ. 2005		Page No. 001 / 001																																																																																																																																																																																																																																																												
OUR JOB N° 045931 YOUR P.O. N° 90 J4566OP/ZAGROS II - LURCI		POSITION 006 QTY 3		CERTIFICATE N° C 045931-006/01 CUSTOMER STIEKMANN ECONOSTO GMBH & CO. KG FREIGRAFENWEG 2 D-44357 DORTMUND () 10. MRZ. 2005																																																																																																																																																																																																																																																														
DESCRIPTION GATE VALVE OS&Y BB FB 2" A105N/F6/F6* 1500 LBS B1V160 153 108 BW160 sc.368 flex TAG: S 307 - 00180 Serial Number:		COMPONENT MATERIAL HEAT NR HEAT CODE BONNET R-M13 NUT 816183 A193 B7 ARO630 A479 Tp410 445022 A479 Tp410 WEDGE 422017 A479 Tp410 SEAT 4M071000 BODY A105N IR-ABP 8503		CHEMICAL ANALYSIS <table border="1"> <thead> <tr> <th>C</th> <th>Mn</th> <th>Si</th> <th>S</th> <th>P</th> <th>Cr</th> <th>Mo</th> <th>Ni</th> <th>Ti</th> <th>Cu</th> <th>Fe</th> <th>MILL #</th> </tr> </thead> <tbody> <tr> <td>0.180</td> <td>0.920</td> <td>0.200</td> <td>0.007</td> <td>0.008</td> <td>0.050</td> <td>0.010</td> <td>0.050</td> <td>0.022</td> <td>0.140</td> <td></td> <td>020621</td> </tr> <tr> <td>0.020</td> <td></td> <td></td> <td>0.020</td> <td>0.001</td> <td>0.080</td> <td>0.373</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>502.00</td> <td>309.00</td> <td>33.40</td> <td>58.80</td> <td></td> <td></td> <td></td> <td></td> <td>150.00</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0.440</td> <td>0.800</td> <td>0.250</td> <td>0.029</td> <td>0.008</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>020268</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>0.410</td> <td>0.760</td> <td>0.240</td> <td>0.027</td> <td>0.008</td> <td>1.040</td> <td>0.200</td> <td></td> <td></td> <td></td> <td></td> <td>020458</td> </tr> <tr> <td>0.025</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>974.00</td> <td>911.00</td> <td>18.00</td> <td>64.00</td> <td></td> <td></td> <td></td> <td></td> <td>299.00</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0.106</td> <td>0.460</td> <td>0.420</td> <td>0.023</td> <td>0.019</td> <td>12.090</td> <td>0.340</td> <td></td> <td></td> <td>0.108</td> <td></td> <td>021640</td> </tr> <tr> <td>0.023</td> <td>0.055</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>713.00</td> <td>562.00</td> <td>22.00</td> <td>71.00</td> <td></td> <td></td> <td></td> <td></td> <td>216.00</td> <td></td> <td></td> <td>021049</td> </tr> <tr> <td>0.116</td> <td>0.370</td> <td>0.380</td> <td>0.024</td> <td>0.021</td> <td>12.050</td> <td>0.330</td> <td></td> <td></td> <td></td> <td></td> <td>021240</td> </tr> <tr> <td>0.018</td> <td>0.053</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>691.00</td> <td>554.00</td> <td>24.00</td> <td>68.00</td> <td></td> <td></td> <td></td> <td></td> <td>210.00</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0.105</td> <td>0.380</td> <td>0.380</td> <td>0.023</td> <td>0.022</td> <td>12.030</td> <td>0.330</td> <td></td> <td></td> <td>0.171</td> <td></td> <td></td> </tr> <tr> <td>0.025</td> <td>0.053</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>774.00</td> <td>651.00</td> <td>21.00</td> <td>69.00</td> <td></td> <td></td> <td></td> <td></td> <td>223.00</td> <td></td> <td></td> <td></td> </tr> <tr> <td>0.170</td> <td>1.140</td> <td>0.200</td> <td>0.008</td> <td>0.008</td> <td>0.094</td> <td>0.046</td> <td>0.200</td> <td></td> <td>0.200</td> <td></td> <td>021381</td> </tr> <tr> <td>0.020</td> <td></td> <td></td> <td>0.020</td> <td>0.002</td> <td></td> <td>0.400</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>512.00</td> <td>324.00</td> <td>34.40</td> <td>69.00</td> <td></td> <td></td> <td></td> <td></td> <td>159.00</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			C	Mn	Si	S	P	Cr	Mo	Ni	Ti	Cu	Fe	MILL #	0.180	0.920	0.200	0.007	0.008	0.050	0.010	0.050	0.022	0.140		020621	0.020			0.020	0.001	0.080	0.373						502.00	309.00	33.40	58.80					150.00				0.440	0.800	0.250	0.029	0.008							020268													0.410	0.760	0.240	0.027	0.008	1.040	0.200					020458	0.025												974.00	911.00	18.00	64.00					299.00				0.106	0.460	0.420	0.023	0.019	12.090	0.340			0.108		021640	0.023	0.055											713.00	562.00	22.00	71.00					216.00			021049	0.116	0.370	0.380	0.024	0.021	12.050	0.330					021240	0.018	0.053											691.00	554.00	24.00	68.00					210.00				0.105	0.380	0.380	0.023	0.022	12.030	0.330			0.171			0.025	0.053											774.00	651.00	21.00	69.00					223.00				0.170	1.140	0.200	0.008	0.008	0.094	0.046	0.200		0.200		021381	0.020			0.020	0.002		0.400						512.00	324.00	34.40	69.00					159.00			
C	Mn	Si	S	P	Cr	Mo	Ni	Ti	Cu	Fe	MILL #																																																																																																																																																																																																																																																							
0.180	0.920	0.200	0.007	0.008	0.050	0.010	0.050	0.022	0.140		020621																																																																																																																																																																																																																																																							
0.020			0.020	0.001	0.080	0.373																																																																																																																																																																																																																																																												
502.00	309.00	33.40	58.80					150.00																																																																																																																																																																																																																																																										
0.440	0.800	0.250	0.029	0.008							020268																																																																																																																																																																																																																																																							
0.410	0.760	0.240	0.027	0.008	1.040	0.200					020458																																																																																																																																																																																																																																																							
0.025																																																																																																																																																																																																																																																																		
974.00	911.00	18.00	64.00					299.00																																																																																																																																																																																																																																																										
0.106	0.460	0.420	0.023	0.019	12.090	0.340			0.108		021640																																																																																																																																																																																																																																																							
0.023	0.055																																																																																																																																																																																																																																																																	
713.00	562.00	22.00	71.00					216.00			021049																																																																																																																																																																																																																																																							
0.116	0.370	0.380	0.024	0.021	12.050	0.330					021240																																																																																																																																																																																																																																																							
0.018	0.053																																																																																																																																																																																																																																																																	
691.00	554.00	24.00	68.00					210.00																																																																																																																																																																																																																																																										
0.105	0.380	0.380	0.023	0.022	12.030	0.330			0.171																																																																																																																																																																																																																																																									
0.025	0.053																																																																																																																																																																																																																																																																	
774.00	651.00	21.00	69.00					223.00																																																																																																																																																																																																																																																										
0.170	1.140	0.200	0.008	0.008	0.094	0.046	0.200		0.200		021381																																																																																																																																																																																																																																																							
0.020			0.020	0.002		0.400																																																																																																																																																																																																																																																												
512.00	324.00	34.40	69.00					159.00																																																																																																																																																																																																																																																										
TEST PRESSURES ☒ BAR ☐ PSI HYDROSTATIC PNEUM. BODY & SEAT BACKSEAT 385 285 6		TEST RESULT TEST HYDROSTATIC AND PNEUMATIC VISUAL AND DIMENSIONAL TEST ☒ CONFORM ☐ NOT CONFORM		We declare that this product is in compliance with the directive 97/23/EC and was subjected to the conformity assessment procedure H (for Category III). The monitoring is performed by TUV Italy srl Notified Body 0948.																																																																																																																																																																																																																																																														
NOTES * HARD FACING OVERLAY: AWS F1 Co Cr A (STELLITE GR. 8) REF. LURGI : 4567580-000/1.69690		THIRD AUTHORITY CLIENT INSPECTION DEPT INSPECTION DEPT.		DATE 09/03/2005																																																																																																																																																																																																																																																														





Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 190-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
190	S331	2		

Date 31.03.2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

INSPECTION CERTIFICATE according to		CERTIFICATE		Page No. 001 / 001									
☒ UNI EN 10204 - 3.1 B ☐		N° C 045931-007/01											
TEST PROCEDURE & SPECIFICATION		CUSTOMER											
☐ API 598 ☒ ANSI/ASME B 16.34 ☐		SIEKMANN ECONOSTO GMBH & CO. KG											
☐ MSS SP.61 ☒ BS 6755 ☐		FREIGRAFWEG 2											
☐ DIN 3230 T.3 ☒ EN 12286-1 ☐		D-44357 DORTMUND ()											
10. MRZ. 2005													
CHEMICAL ANALYSIS													
COMPONENT	MATERIAL	C	Mn	Si	S	P	Cr	Mo	Ni	Ti	Cu	Fe	MILL #
PART NAME	HEAT NR	Al	Co	N	V	Nb	Sn	CE	Nb+Ta				
HEAT CODE		TENSILE N/mm ²	Yield N/mm ²	ELONGATION % OF AREA	1 JOULE	2 JOULE	3 JOULE	TEST TEMP. °C	HARDNESS HB				
BONNET	A105N	0.180	0.920	0.200	0.007	0.008	0.050	0.010	0.022	0.140			020521
R-M13	03174794	0.020	309.00	33.40	0.020	0.001	0.080	0.373	150.00				
NUT	A194 2H	0.440	0.800	0.250	0.029	0.008							020268
B/E STUDS	816183												
	A193 B7	0.410	0.760	0.240	0.027	0.008	1.040	0.200	259.00				020458
	AR0630	0.025	974.00	18.00	64.00				299.00				
STEM	A479 Tp410	0.106	0.460	0.420	0.023	0.019	12.090	0.340	0.108				021640
	445022	0.023	0.055										
	713.00	562.00	22.00	71.00					216.00				
WEDGE	A479 Tp410	0.135	0.720	0.360	0.029	0.021	12.260	0.140					021829
	414044	683.00	529.00	28.00	70.00				210.00				
SEAT	A479 Tp410	0.109	0.450	0.370	0.024	0.018	12.030	0.340	0.122				021621
	427021	0.020	0.059										
	685.00	530.00	25.00	72.00					205.00				
BODY	A105N	0.170	1.140	0.200	0.008	0.008	0.094	0.046	0.200	0.200			021381
	8503	0.020	0.020	0.020	0.020	0.002		0.400					
IF-ABP		512.00	324.00	34.40	69.00				159.00				
W3 declare that this product is in compliance with the directive 97/23/EC and was subjected to the conformity assessment procedure H (for Category III). The monitoring is performed by TÜV Italy srl Notified Body 0548. Each single component of the valve which is mentioned in this certificate has been manufactured, heat treated and tested fully in accordance with its own material. Specification as above indicated. The reported values are strictly in accordance with the original mill certificates.													
THIRD AUTHORITY CLIENT INSPECTION DEPT INSPECTION DEPT.													
DATE 09/03/2005													

AF

HEAD OF FICE AND PLANT

Via G. Mazzini, 3
24060 S. Paolo D'Argon (BG) - ITALY
Tel +39.035.4235211 - Fax +39.035.959210
Internet: www.af.it - E-mail: info@af.it

FORGED STEEL VALVES

Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 i.v.

Registro Imprese BG 03076750169 - R.E.A. 347477

VAT Registration Number: IT 03076750169

Soggetta all'attività di direzione e coordinamento da parte della società ALL.BEL srl Reg. Imp. BG n° 02805280169

OUR JOB N° 045931 POSITION 007 / 9 QTY 2

YOUR P.O. N° 90045666OP/IZAGROS II-LURGI-

ITEM: 7

DESCRIPTION

GATE VALVE OS#Y BB FB

2" A105N/F6/F6* 1500 LBS BWXXS

15B 108 BWXXS sc.368 flex

TAG: S 331 - 00190

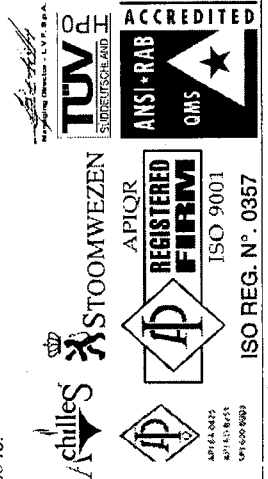
Serial Number:

TEST PRESSURES		TEST RESULT	
☒ BAR	☐ PSI	TEST	☒ CONFORM
HYDROSTATIC	PNEUM.	HYDROSTATIC	☐ NOT CONFORM
BODY & BACKSEAT	SEAT	AND PNEUMATIC	
385	285	VISUAL AND DIMENSIONAL	☒ CONFORM
	6	TEST	☐ NOT CONFORM

NOTES

* HARD FACING OVERLAY: AWS R Co Cr A (STELLITE GR. 6)

REF: LURGI: 4567580-000/1.59690





Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 200-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
200	S331	3		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

TEST CERTIFICATE (DECLARATION OF CONFORMITY)



VALVITALIA S.p.A. - VITAS Division
 Sede e stabilimento: 31033 - 36077 Abbadia San Salvatore (VI) - Italy
 Tel. +39 0444 310333 - 310334 - 310335 - 310336 - 310337
 Ufficio Clienti: 310338 - 310339 - 310340 - 310341 - 310342
 Ufficio Tecnico: 310343 - 310344 - 310345 - 310346 - 310347
 Tel. +39 0444 310348 - 310349 - 310350 - 310351 - 310352
 e-mail: qualita@valitalia.com - www.valitalia.com

YOUR PURCHASE ORDER NO.

900456407

REMARKS

15/09/04

22/09/04

DATE

☒ PARTIAL ORDER
☐ BALANCE ORDER

ADP 598
 65 9753

☒ EN 10904 2.1 B

LURSEL PROJECT : ZAGROS 2

10330 / 1

MATERIAL TESTED

ITEM	QTY	PART N°	DESCRIPTION	TEST			
				PSI	HYDROSTATIC	BAR	PNEUM.

2,00	3	751914	150R 103 CBM AZ	385	285	7	
------	---	--------	-----------------	-----	-----	---	--

GATE VALVE 3" 1500 LBS - BW
 THK 15,24mm - CASTINGS A216 WCB
 -F6 TRIM - STELLITE SEAT
 RINGS - FLEX WEDGE - GASKET RJ
 SOFT IRON - PACKING GRAFOIL +
 BRAIDED GRAPHITE - BOLTING
 87/2H

MARCATURA/TAG.: 9331 - 00200

AASR23K

-VISUAL EXAMINATION ACCORDING TO MSS SP 95 : SATISFACTORY.

-DIMENSIONAL EXAMINATION HAS BEEN CARRIED OUT WITH SATISFACTORY RESULT.

-ALL VALVES HAS BEEN MANUFACTURED ACCORDING TO RELEVANT VALVES SPECIFICATION.

-TRIM MATERIAL (DISC-SEAT-STEM) AND BOLTING ARE ACCORDING

TO THE P.O. MATERIAL SPECIFICATION.

-ALL VALVES HAVE BEEN HYDROTESTED WITH SATISFACTORY RESULT.

-MAGNETIC PARTICLE INSPECTION HAS BEEN CARRIED OUT ON ALL ACCESSIBLE CASTING

SURFACE ACCORDING TO CUSTOMER'S REQUIREMENTS.

-DYE PENETRANT INSPECTION HAS BEEN CARRIED OUT ON BUTT WELDING ENDS

AFTER MACHINING WITH SATISFACTORY RESULTS.

CHEMICAL ANALYSIS

MECHANICAL PROPERTIES

IMPACT TEST

YIELD STRESS

TENSILE STRESS

ELONGATION

REDUCTION OF AREA

TEST TEMP

HARDNESS

U.E

1.00ME

3.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

1.00ME

FOLLOWING TEST RESULT

HYDROSTATIC AND

PNEUMATIC TESTS SATISFACTORY

THIRD AUTHORITY

DATE

CLIENT INSPECTOR

DATE

INSPECTION DEPT

DATE

31 03 05

UIC

31 03 05

31 03 05

31 03 05

31 03 05

31 03 05

31 03 05

31 03 05

Polysulfone, its derivatives and/or polyimide products which exhibit activity, does hereby certify that the material described above has been tested and complies the terms of the contract.

**Podnikový značec výrobce:
Suchtverwandler des Herstellers:
Producer's works export:**

Tests document not photostatic original. This document is valid as an original. Please do not

KRALOVOPOLSKÁ SLEVARNA, s. r. o., Křížkova 88, CZ-660 90 Brno, tel.: +420 5 712 1700
fax +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION										NDT		Report No	09/25/05	
												Page	1 - 3	
Customer	VITAS				Project No.				BOHNET GATE 3"1500					
Const & MFR					Item Name				040330 IT 02					
Project Name	BOHNET GATE 3"1500				Material Thickness				ASTM A 216 WCB - 50"2					
Item No.	040330 IT 02				Dwg. No.				Rev.					
Material Form	Weld Casting Other				I.Q.I				ASME V 35 ASTM					
X-Ray Equip	No. Actual : 1 kVp N/A mA				I.Q.I Placement Sensitivity				S.Side F.Side					
Radioisotope	IR 192 20 u				Film				Gevaert 32					
Focal size	2 x 1				Screen				P6					
Exposure Time					Shim Thickness				0.10 mm					
FFD / SFD					Development Condition				AUTOMATIC + 25°C					
Density	Single Double : 1.8 ÷ 4 2 ÷ 4				Procedure				ASME V ART 2					
EXP. TECHNIQUE	RWSV DWDV				DWSV PANORAMIC				ANSI B16.34					
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
ANSI B16.34 ANNET B				CA	CB	CC	CD							
Accepted severity level	2	/	3	2	3	3	3	NA	NA	NA	NA			
Casting N.	Progressive N. Films													
5B-9142/1	1-2													0
HSM-6110	2-3			✓										B2
	3-1			✓										B2
5B-9143/1	1-2			✓										B1
HSM-6110	2-3			✓										B1
	3-1	✓												A1
Examined by	 GIOVANNI ORFANO II° LABELLO MT-PT-UT-RT Level I				Date of Examination									
Approved by	 GIOVANNI ORFANO Level II				☐ Witnessed by ☐ Reviewed by									



Report No.

03/25/05

Page

2 . 3

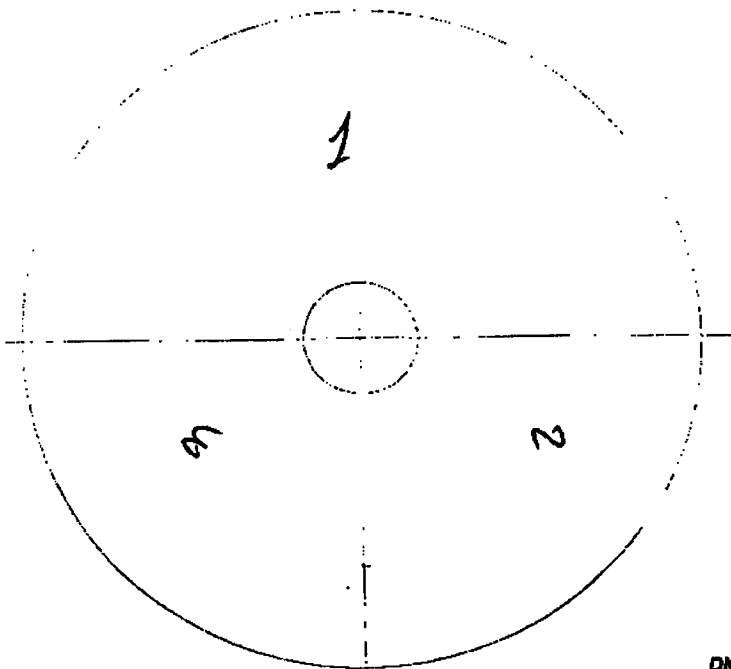
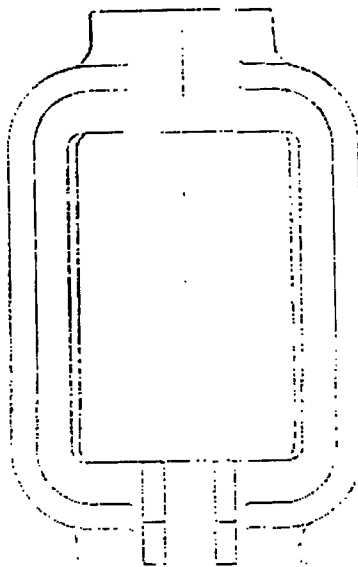
Casting N.	Progressive N. Films	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Remarks
					CA	CB	CC	CD							
		2	1	3	2	3	3	9	NA	NA	NA	NA			
58-91A4/1	1-2			✓											B2
HEAT-6111	2-3			✓											B2
	3-1														0

VITAS
 Division of VALITALIA S.p.A.
 GIOZONDO ORFANO
 II° LIVELLO MT-PIUT-RT
24/01/05

VITAS
Division of VALVITALIA S.p.A.
GIOZONDO ORFANO
II° LIVELLO MT-PT-UT-RN
7/2/1965

BONNET SR 3'500

RTN SB. 9142/1



VTAS
Division of VALVITALIA S.p.A.
GIACONDO ORFANO
II° LIVELLO MT-PT-UT-RT
20/11/03

Firma
Signature

Data
Date

UFFICIO CONTROLLO QUALITÀ

Quality Control Department

Rev.
Rev.

Sez.
Sec.

pag.
pag.

3

di
of

3

KRALOVOPOLSKÁ SLEVARNA, s. r. o., Křižíkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No. 03/23/05
Page 1 - 3

Customer	VITAS			Project No.	BODY GATE 3"1500 BW		
Const & MFR				Item Name	040330 IT 02		
Project Name	BODY GATE 3"1500 BW			Material Thickness	ASTM A 216 WCB - TH 30"2		
Item No.	040330 IT 02			Dwg. No.	Rev.		
Material Form	Weld	Casting	Other	I.Q.I	ASME, 25 ASTM		
X-Ray Equip	No.	Actual	kvp N/A	mA	I.Q.I Placement Sensitivity	S.Side F.Side	
Radioisotope	IR 192 20u			Film	GEVAERI 37		
Focal size	2x1			Screen	Pb		
Exposure Time				Shim Thickness	0.10"2		
FFD / SFD				Development Condition	AUTOMATIC +25 PC		
Density	Single	Double		Procedure	ANSI B16-34		
	1.8 ÷ 4	2 ÷ 4					
EXP. TECHNIQUE	RWSV DWDV			DWSV PANORAMIC		ASME V PART 2	

Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
				CA	CB	CC	CD							
ANSI B16-34 ANNEX B														
Accepted severity level	2	/	3	2	3	3	3	NA	NA	NA	NA			
Casting N.	Progressive N. Films													
SB 4142	1-2													BA
HEAT-6110	2-3													0
	3-1													0
	4-5													11/82
	6-7													11/82
	8-9													11
	9-10													11
	10-8													0

Examined by

Date of Examination

VITAS
DINAMIT VÁLTA S.p.A.
GIORGIO ORFANO
1° LIVELLO MCT-PT-UT-RT

Witnessed by

Approved by

Level II

Reviewed by

KRÁLOVOPOLSKÁ SLEVARNA, a. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700

fax +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION

NDT

Report No.

09/27/05

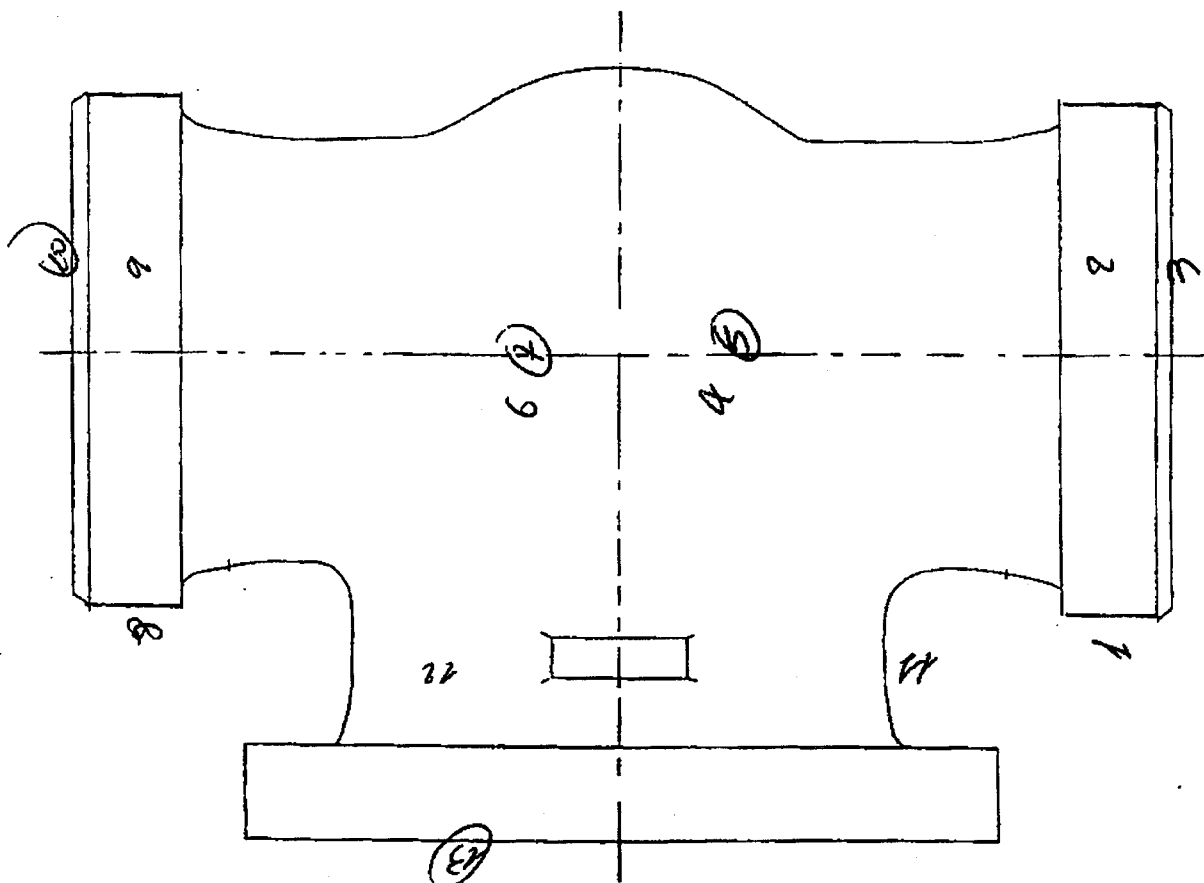
Page

2 - 9

Casting N.	Progressive N. Films	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Remarks
					CA	CB	CC	CD							
		2	✓	3	2	3	3	3	NA	NA	NA	NA			
	11-12			✓										B1	
	12-13			✓										B2	
	13-11	✓		✓										A1/B2	
SB-9143	1-2			✓										B1	
HEAT-6110	2-3													O	
	3-1													O	
	4-5					✓								CB2	
	6-7					✓								CB2	
	8-9	✓												A1	
	9-10	✓												A1	
	10-8													O	
	11-12	✓		✓										A1/B1	
	12-13	✓												A1	
	13-11			✓										B2	
SB-9144	1-2			✓										B1	
HEAT-6110	2-3			✓										B1	
	3-1			✓										B1	
	4-5					✓								CB2	
	6-7					✓								CA/B1	
	8-9			✓										B1	
	9-10	✓												A1	
	10-8													O	
	11-12			✓										B2	
	12-13	✓												A1	
	13-11	✓		✓										A1/B1	

VITAS
 Division of VALVITALIA S.p.A.
 GIOCONDO ORFANO
 II° LIVELLO MT-PT-UT-RT
 20/06/05

Body 82 8^u 1500BW
RT H. SB-Q147



VITALIS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 3	di di 9



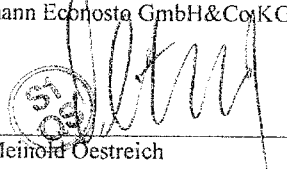
Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 210-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
210	S331	1		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG


QM Meinhart Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

**TEST CERTIFICATE
(DECLARATION OF CONFORMITY)**

N. 5000207/ 3

PAGE

205

2

STIEGMANN ECONOSTO GMBH & CO. KG
FREIGRAFENWEG 2
44387 DORTMUND D

YOUR PURCHASE ORIGINATES

007957006

OUR JOB NO.	REMARKS:
-------------	----------

40330/ 1 LURGI PROJECT : ZAGROS 2

MATERIAL TESTED

PART: N	DESCRIPTION
1	...
2	...
3	...
4	...
5	...
6	...
7	...
8	...
9	...
10	...
11	...
12	...
13	...
14	...
15	...
16	...
17	...
18	...
19	...
20	...
21	...
22	...
23	...
24	...
25	...
26	...
27	...
28	...
29	...
30	...
31	...
32	...
33	...
34	...
35	...
36	...
37	...
38	...
39	...
40	...
41	...
42	...
43	...
44	...
45	...
46	...
47	...
48	...
49	...
50	...
51	...
52	...
53	...
54	...
55	...
56	...
57	...
58	...
59	...
60	...
61	...
62	...
63	...
64	...
65	...
66	...
67	...
68	...
69	...
70	...
71	...
72	...
73	...
74	...
75	...
76	...
77	...
78	...
79	...
80	...
81	...
82	...
83	...
84	...
85	...
86	...
87	...
88	...
89	...
90	...
91	...
92	...
93	...
94	...
95	...
96	...
97	...
98	...
99	...
100	...

DOVE PENETRANT INSPECTION HAS BEEN CARRIED OUT ON HARD-FACE OF SEATS AND WEDGES ACCORDING TO CUSTOMER'S REQUIREMENTS.

-EC DECLARATION OF CONFORMITY.

SUPPLIER: VITAS - DIVISION OF VALTITALIA SPA
VIA OLMO 31/33, ALIATELLA VICENTINA (VICENZA)

ACCORDING TO ANNEX VII OF DIRECTIVE 97/23/CE,
HEREBY DECLARE THAT THE PRODUCTS DETAILED ABOVE
ARE IN COMPLIANCE WITH THE DIRECTIVE 97/23/CE (CERT. N.01 202 1/3-03-0710) AND
HAVE BEEN MANUFACTURED IN ACCORDANCE WITH CONFORMITY
ASSESSMENT MODULE H, CATEGORY II, FLUID GROUP 1.

-SIGNED :
-PRINT NAME : D. SALZAROTTI
-TITLE : GENERAL MANAGER

TEST RESULT

HYDROSTATIC AND
DYNAMIC TESTS SATISFACTORY

TRACER AUTHORITY

3143

CLIENT INSPECTION

21.00

THE NEW YORK PUBLIC LIBRARY

10-10-10

31 10305

Výrobce: Vitkovické slévárny s.r.o.		Číslo: 40001-549		Značka výrobce: VS																	
Manufacturer/Hersteller: Ostrava - Vítkovice		No./Nr.:		Mark of the manufacturer: VS																	
Zákazník: VITAS Division of VALVITALIA S.p.A		Datum: 12.07.2004		Značka značka: 																	
Customer/Besteller:		Date/Datum:		Inspector stamp: 																	
Objednávka: 041289		Dod. podmínky: QCP n° 40089		Stamp of the Sachverständigen:																	
Order No./Bestellung: 052852/108		Delivery terms/Lieferbedingungen:																			
Název: BODY GATE 4/1500	Počet: 24	Materiál: A216 WCB	Melt No.: 6111	Heat treatment: Norm. 920°C - Temp. 620°C	Remark: ASTM E 448																
Part name: BODY GATE 4/1500	Quantity: 24	Material: A216 WCB	Charge No.: 6111	TEST BAR No 588	Remarks: MT According to ANSI B16.34 annex C																
Bestandteil:	Stückzahl:	Werkstoff:	Stück Nr.:		USUAL: ACC. MSS SP 55																
DIMENSIONS: SATISFACTORY																					
Mechanické hodnoty - Mechanical properties - Mechanische Eigenschaften																					
Tavba	Melt No.:	C	Si	P	S	Cr	Ni	Mo	Cu	V	W	Ceq	Rp0.2	Rm	A	Z	ISO-V	ISO-V	ISO-V	ISO-V	HB
Charge Nr.:		%	%	%	%	%	%	%	%	%	%	%	N/mm ²	N/mm ²	%	%	(+20°)	(+20°)	(+20°)	(+20°)	
max.	0.25	1.28	0.6	0.04	0.045	0.5	0.5	0.2	0.3	0.03			250	655	22	35	21	21	21	27	
min.	0.19	0.92	0.43	0.02	0.02	0.03	0.04	0.05	0.04	0		0.36	305	510	28	50	40	38	41	40	163
6111																					
Rm - Pevnost v tahu - Tensile strength / Zugfestigkeit																					
Rp0.2 - Mezi kluzu - Yield point / Streckgrenze																					
A - Tážnost - Elongation / Bruchdehnung																					
Z - Zúžení - Reduction of area / Bruchquerschnitt																					

Potvrzujeme, že dodávka odpovídá podmínkám objednávky.
We hereby certify that the material described above has been tested and complies the terms of the contract.
Wir bestätigen, dass die Lieferung den Bestellungsbedingungen entspricht.

Podnikový znalec výrobce:

Sachverständiger des Herstellers:

Producer's works expert:

Division of VALVITALIA S.p.A.
QUALITY CONTROL

Tento dokument má platnost originálu. This document is valid as an original. Diese Dokument ist als Original gültig.

Razítka výrobce (Stamp of manufacturer)	
 VITAS Division of VALVITALIA S.p.A. CZ 705 02 Ostrava-Vitkovice Tel.: +420 595 044 500 Fax: +420 595 044 501	

KRALOVOPOLSKÁ SLÉVÁRNA, s. r. o., Křižkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No. 03/24/05
Page 1 - 3

Customer	VITAS			Project No.	BODY GATE 4" 1500 BW		
Const & MFR				Item Name	040330 IT 03		
Project Name	BODY GATE 4" 1500 BW			Material Thickness	ASTM A216 WCB - TH 40%.		
Item No.	040330 IT 03			Dwg. No.	Rev		
Material Form	Weld	Casting	Other	I.Q.I	ASME 90 ASTM		
X-Ray Equip	No. / Actual	kvp N/A	mA	I.Q.I Placement-Sensitivity	S.Side F.Side		
Radioisotope	IR 192 20 u			Film	GEVAERI 37		
Focal size	2x1			Screen	Pb		
Exposure Time	-			Shim Thickness	0.10 mm		
FFD / SFD	-			Development Condition	AUTOMATIC + 25°C.		
Density	Single 1.8 ÷ 4	Double 2 ÷ 4		Procedure	ASME V ART 2		
EXP. TECHNIQUE	RWSV DWDV			DWSV PANORAMIC	ANSI B16 34		

Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
				CA	CB	CC	CD							
ANSI B16.34 ANNEX B														
Accepted severity level	2	/	3	2	3	3	3	NA	NA	NA	NA			
Casting N.	Progressive N. Films													
5B-9242	1-2													B1
HEM-6111	2-3													B1
	3-4													0
	4-5													B1
	5-6													A1/B1
	7-8													B2
	8-9													A1
	10-11													B1

Examined by _____ Date of Examination _____
 Approved by _____
 Level II

VITAS
Division of VAUTALIA S.p.A.
GIORGIO ORFANO
II° LIVELLO MT-PT-UT-RT
24/05

☐ Witnessed by
☐ Reviewed by



NDT

03/24/05

2-3

Casting N.	Progressive N. Films	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Remarks
					CA	CB	CC	CD							
		2	/	3	2	3	3	3	NA	NA	NA	NA			
SB-9242	11-12			✓										AM	
HEAT-6111	12-10													O	
	13-14			✓										AB	
	14-15			✓										AM	
	15-16	✓												AD	
	16-13					✓								CB2	

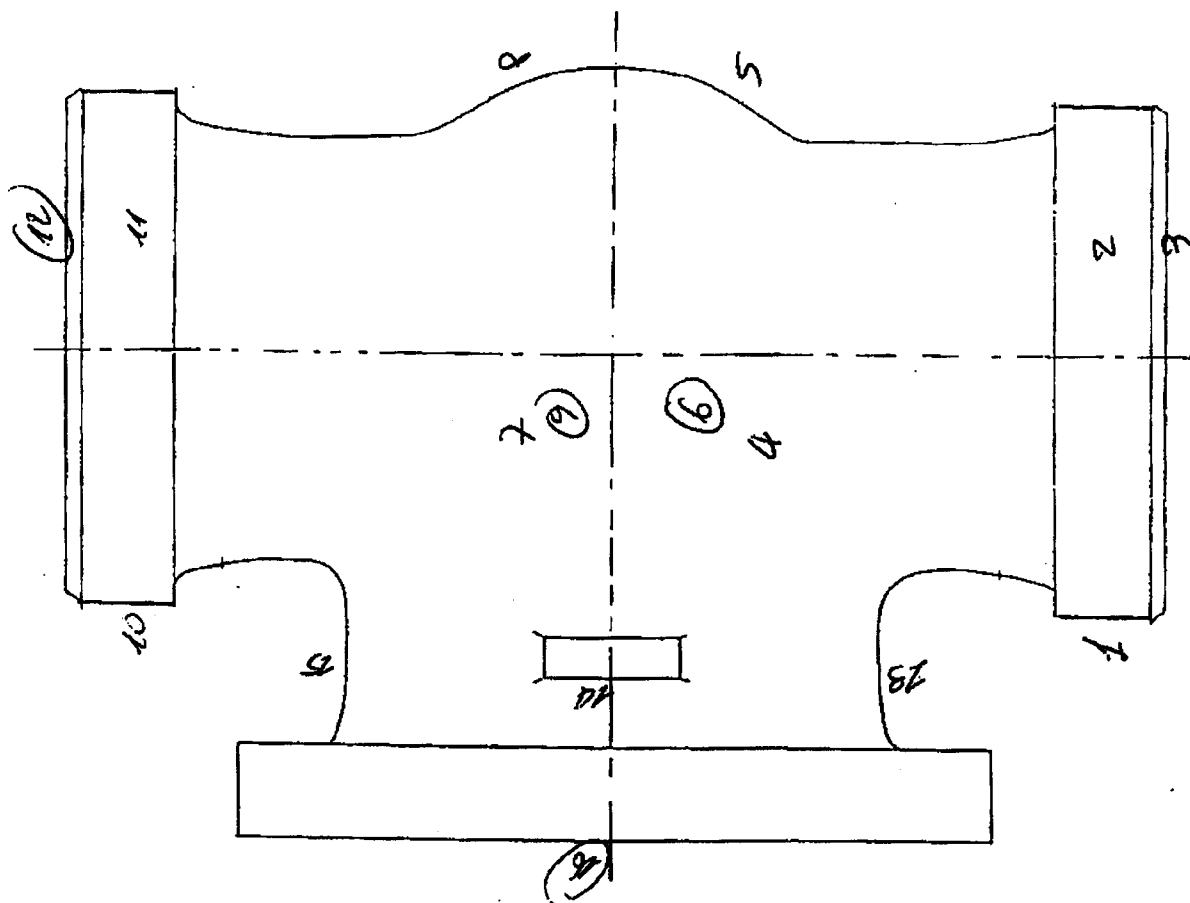


VITAS
 Division of VALVITALIA S.p.A.
GIACONDO ORFANO
 II° LIVELLO MT-PT-UT-RT
20/04/05

VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-R1

Body SR 4°1500BW

PT H. SB- 9242

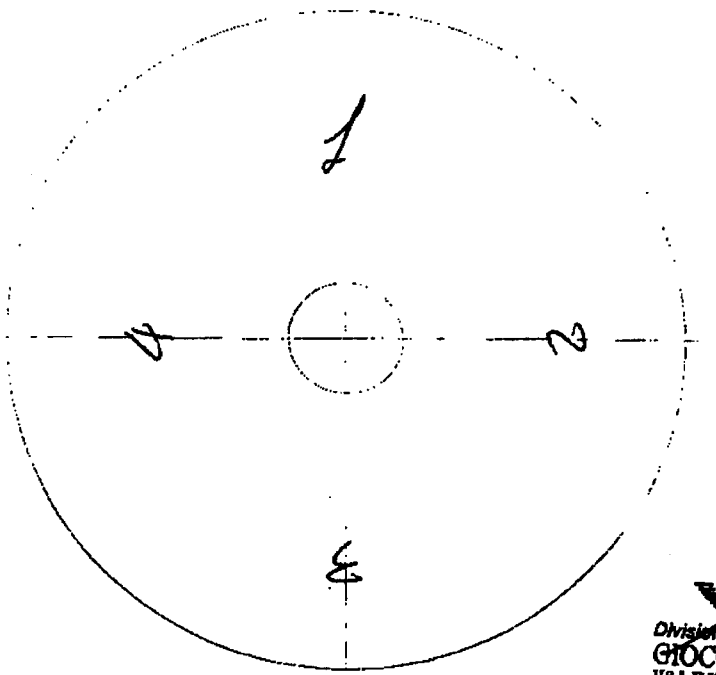
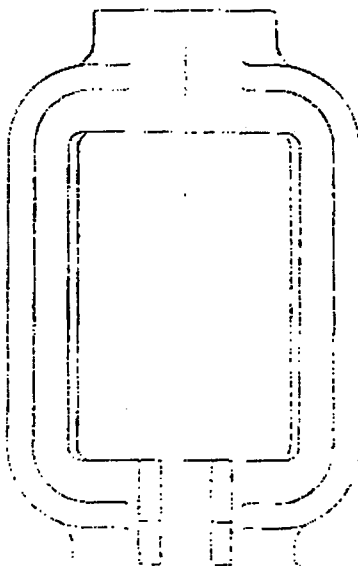


VITALIS
Division of VALITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
20/01/09

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 3	di di 7

BONNET 9R 4° 1500

RT H. 5B-92441



VITALIS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
29/01/05

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 2	di of 2



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 220-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
220	S421	14		

Date 31.03.2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:
Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

INSPECTION CERTIFICATE according to		CERTIFICATE	
☒ UNI EN 10204 - 3.1 B ☐		N°	C 045931-008/01
TEST PROCEDURE & SPECIFICATION		CUSTOMER	
☒ API 598 ☒ ANSI/ASME B 16.34 ☐ ☒ MSS SP.61 ☒ BS 6755 ☐ ☐ DIN 3230 T.3 ☒ EN 12266-1		SIEMANN ECONOSTO GMBH & CO. KG FREIGRAFENWEG 2 D-44357 DORTMUND () 10. MRZ 2005	
HEAD OFFICE AND PLANT Via G. Mazzini, 6 24060 S.P. solo D Argon (BG) - ITALY Tel +39.035.4251.211 - Fax +39.035.959210 Internet: www.lurgi.it - E-mail: info@lurgi.it FORCED STEEL VALVES Cod. Fisc. e P.IVA 03076750169 - Cap. Soc. € 8.000.000,00 i.v. Registro Imprese BG 03076750169 - R.E.A. 34747 VAT Registration Number: IT 03076750169 Soggetta all'attività di direzione e coordinamento della società ALLBEL 4 Reg. Imp. BG n° 02805260189		Page No. 001 / 001 10. MRZ 2005	
OUR JOB N°	POSITION	Q.TY	
045931	008	22	14
YOUR P.O. N°			
90045660P/ZAGROS II - LURGI-			
ITEM: 8			
DESCRIPTION			
GATE VALVE OS#Y BB FB			
2" F11/F6* 1500 LBS BW80			
15B 108 BW80 sc.368 flex			
TAG : S 421 - 00220			
Serial Number:			
TEST PRESSURES		TEST RESULT	
☒ BAR ☐ PSI		☒ CONFORM ☐ NOT CONFORM	
HYDROSTATIC		TEST	
BODY & BACKSEAT		HYDROSTATIC	
SEAT		ANOD	
390		PNEUMATIC	
285		VISUAL AND DIMENSIONAL	
6		TEST	
		☒ CONFORM ☐ NOT CONFORM	
NOTES			
* HARD FACING OVERLAY: AWS R Co Cr A (STELLITE GR. 6) REF. LURGI : 4567580-000/1.69690			
- EACH SINGLE COMPONENT OF THE VALVE WHICH IS MENTIONED IN THIS CERTIFICATE HAS BEEN MANUFACTURED, HEAT TREATED AND TESTED FULLY IN ACCORDANCE WITH ITS OWN MATERIAL SPECIFICATION AS ABOVE INDICATED - THE REPORTED VALUES ARE STRICTLY IN ACCORDANCE WITH THE ORIGINAL MILL CERTIFICATES			
THIRD AUTHORITY		CLIENT INSPECTION DEPT.	
TUV ANSIRAB QMS ACCREDITED ISO 9001 API Q1 REGISTERED ISO 9001 ISO REG. N° 0357		DATE 03/03/2005 DATE	



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 230-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
230	S421	1		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

Podávající znalec výrobce:
Sachverständiger des Herstellers:
Producer's words expert:

TESTAS
DANIELA TESTAS S.p.A.
QUALITY CONTROL

This document not plaintext originals. This document is valid as an original. Dieses Dokument ist als Original gültig.

[illegible]

KRALOVOPOLSKÁ SLÉVÁRNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No. 09/27/05
Page 1 - 3

Customer	VITAS			Project No.	BODY GATE 3"900 BW									
Const & MFR				Item Name	040930 IT 04									
Project Name	BODY GATE 3"900 BW			Material Thickness	ASTM A-213 WC6-TH 30"2									
Item No.	040930 IT 04			Dwg. No.	Rev.									
Material Form	Weld	Casting	Other	I.Q.I	ASME 25 ASTM									
X-Ray Equip	No. / Actual	kvp N/A	mA	I.Q.I Placement Sensitivity	S.Side F.Side 2									
Radioisotope	IR 192 20 u			Film	GEVAERT 37									
Focal size	2 x 1			Screen	PB									
Exposure Time				Shim Thickness	0.10"2									
FFD / SFD				Development Condition	AUTOMATIC + 25°C									
Density	Single 1.8 ÷ 4	Double 2 ÷ 4		Procedure	ASME VART2									
EXP. TECHNIQUE	RWSV DWDV		DWSV PANORAMIC		ANSI B16-34									
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
ANSI B16-34 ANNEX B				CA	CB	CC	CD							
Accepted severity level	2	1	3	2	3	3	3	NA	NA	NA	NA			
Casting N.	Progressive N. Films													
SB 9241	1-2													0
HEAT-0137	2-3													01
	3-1													01
	4-5													02
	6-7	✓		✓										11/01
	8-9			✓										01
	9-10	✓												01
	10-8	✓												11
Examined by	GIOCONDO ORFANO			Date of Examination										
Approved by	29.10.05			☐ Witnessed by ☐ Reviewed by										



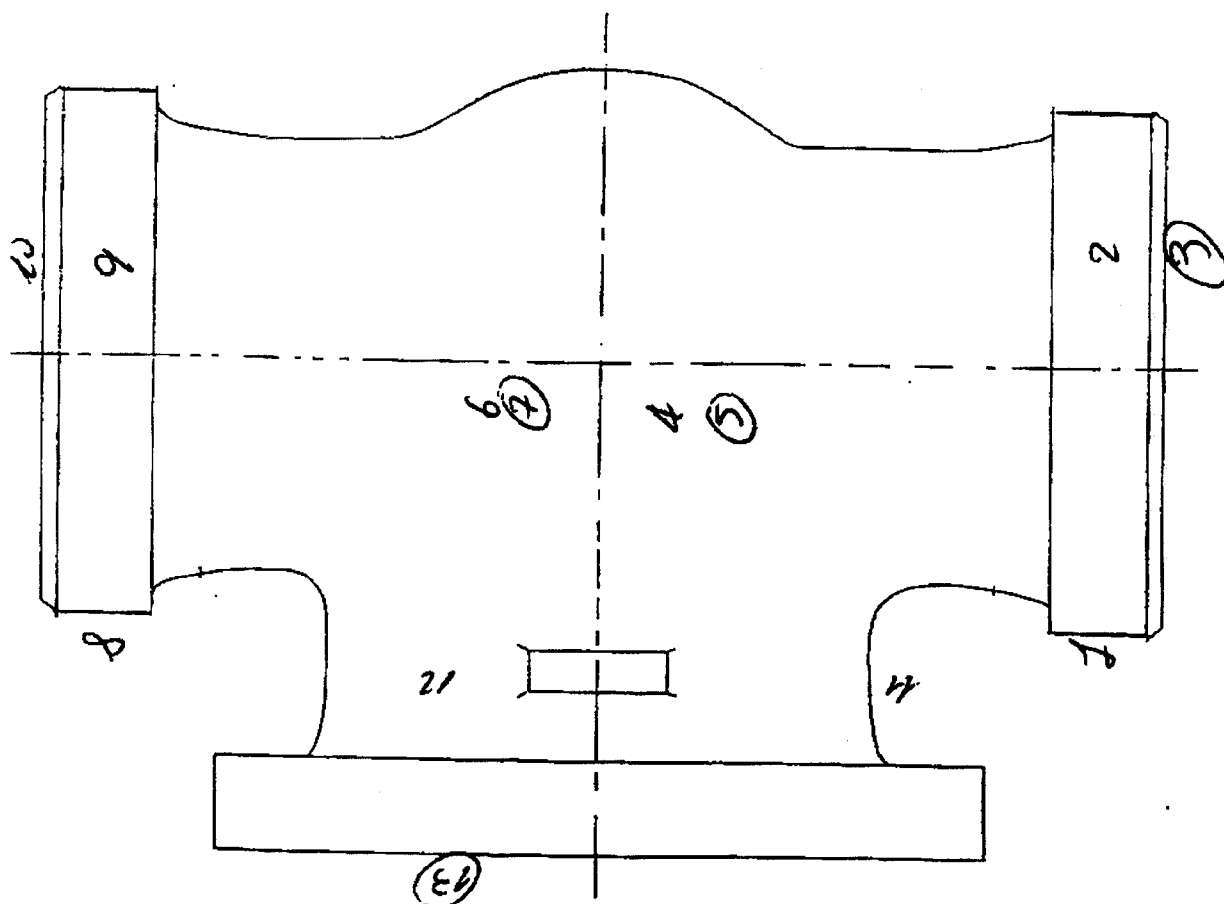
Report No.	03/27/05
Page	2 - 3

[illegible]


VITALIA
 Division of VITALIA S.p.A.
GIOCONDO ORFANO
 II° Livello MT-PT-UT-RT
 29/4/05

Body 92 3°900BW

RT H. 5B-9241



VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° MODELLO MT-PT-UT-RT
22/10/5

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 3	di di 3

KRÁLOVOPOLSKÁ

Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723

REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No.

09/28/05

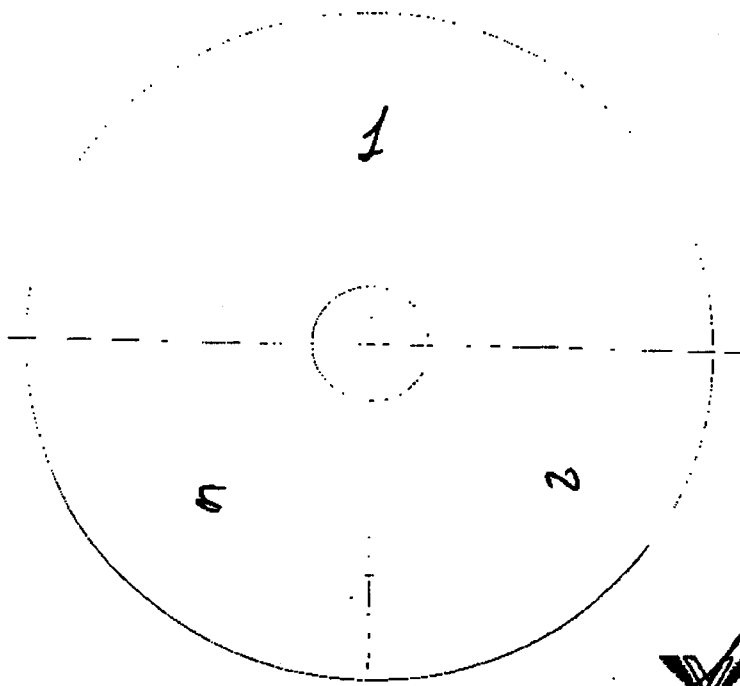
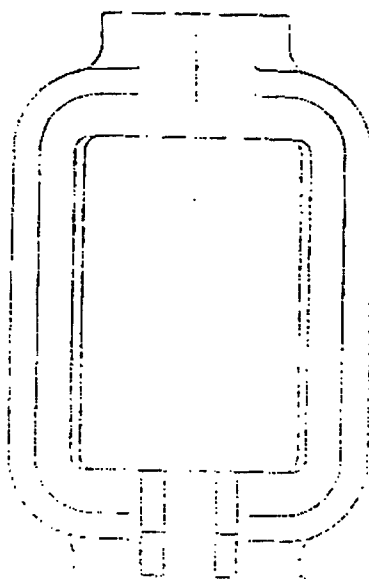
Page

1 - 2

Customer	VITAS			Project No.	BONNET GATE 3"900 BW									
Const & MFR				Item Name	040330 IT 04									
Project Name	BONNET GATE 3"900			Material Thickness	ASTM A 217-WC6-TH 50									
Item No.	040330 IT 04			Dwg No.	Rev									
Material Form	Weld	Casting	Other	I.Q.I	ASME V 35 ASTM									
X-Ray Equip	No. / Actual	kvp N/A	mA	I.Q.I Placement Sensitivity	S.Side F.Side									
Radioisotope	IR 192 200			Film	GEVAERT 51									
Focal size	2x1			Screen	PB									
Exposure Time				Shim Thickness	0.10 mm									
FFD / SFD				Development Condition	AUTOMATIC +25°C									
Density	Single 1.8 ÷ 4	Double 2 ÷ 4		Procedure	ASME V ART 2									
EXP. TECHNIQUE	TWSV DWOV			DWSV PANORAMIC			ANSI B16-34							
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
ANSI B16-34 ANNEX B				CA	CB	CC	CD							
Accepted severity level	2	1	3	2	3	3	3	HA	HA	HA	HA			
Casting N.	Progressive N. Films													
SD-9241/1	1-2													B2
HE-1170129	2-3													B1
	3-1													B1
Examined by Approved by VITAS DIVISION OF VALVITALIA S.p.A. GIOCONDO ORFANO N° 1 - BELLO MONTI UT-RT 29/08/05 Level II Date of Examination ☐ Witnessed by ☐ Reviewed by														

BONNET SR 3"90

RT H 58.9241/1



VITAS
 DIVISIONE VALVITALIA S.p.A.
 GIOCONDO ORFANO
 II° LIVELLO MT-PT-UT-RT
 24/11/05

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 2	di di 2



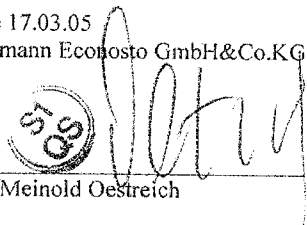
Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 240-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
240	S421	1		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG


QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

VITAS

STIERMANN ECONOSTO GMBH & CO. KG
FREIGRAFENWEG 2
44357 DORTMUND D

DATE	☒ PARTIAL ORDER ☐ BALANCE ORDER
------	---

15/09/04	22/09/04
----------	----------

LARGI PROJECT : ZAGROS 2		COMPO		
MATERIAL TESTED		NEAT COORD		
		NEAT NR.0		
QUALITY	PART N°	DESCRIPTION	TEST	
			☐ FCB ☒ BAR	
			<table border="1"> <tr> <td>HYDROSTATIC</td> <td>PNEUM</td> </tr> <tr> <td>SHELL</td> <td>SEATS</td> </tr> </table>	HYDROSTATIC
HYDROSTATIC	PNEUM			
SHELL	SEATS			
DYE PENETRANT INSPECTION HAS BEEN CARRIED OUT IN HARD-FACING (STELLITE) OF SEATS AND WEDGES ACCORDING TO CUSTOMER'S REQUIREMENTS.				

CHEMICAL ANALYSIS

BAR
☒ X
PSA
☐

PART, N.	DESCRIPTION

SMALL	SEATS	SEATS
11	11	11

INSPECTION HAS BEEN CARDED OUT IN PRO-
OF SEATS AND WEDGES ACCORDING TO CUSTOMER'S REQUIREMENTS.

-EC DECLARATION OF CONFORMITY.

SUPPLIER: VITAS - DIVISION OF VALTALIA SPA
VIA OLMO 31/33 ALTAVILLA VICENTINA (VICENZA)

ACCORDING TO ANNEX VII OF DIRECTIVE 97/23/CE,
 I HEREBY DECLARE THAT THE PRODUCTS DETAILED ABOVE
 ARE IN COMPLIANCE WITH THE DIRECTIVE 97/23/CE (CERT. N°
 ASSESSMENT MODEL 1) CATEGORY 1, REPEATING GROUP 1.

DEBITS

IDENT NAME: 084788111

THE

TEST RESULT

THIRD AUTHORITY

CLIENT INSPECTOR

DATE	
------	--

INSPECTOR DEPT.

DATE:

**HYDROSTATIC AND
PNEUMATIC TEST SATISFACTORY**

31 03/05

QUALITY CONTROL

Výrobce: Manufacturer/Hersteller		VITKOVSKÉ SLAVÁNY s.r.o. Ostrava - Vítkovice		MATERIALOVÉ OSVEDČENÍ Report of material tests Abnahmeprüfzeugnis		Cislo: No./Nr.		40001-411		Značka výrobce: Mark of the manufacturer Zeichen des Herstellers		VS	
Zákazník: Customer/Besteller		VITAS Division of VALVITALIA S.p.A.		defeclotach EN 10204 3.1.B		Datum: Date/Datum		12.03.2004		Značka značek: Inspector stamp Stempel des Sachverständigen			
Objednávka: Order No./Bestellung		041289		O52852/108		Dod. podmínky: Delivery terms/Lieferbedingungen		OCP n° 40099		Heslo: Werknummer		ASTM E 446	
Materiál: Part name: Bezeichnung		Počet: Quantity: Stückzahl		Materiál: Material: Werkstoff		Měřítko: Scale No.:		O112		Norm. 920° - Temp 870°C		MT According to ANSI B16.34 annex C	
BODY GATE 4/500		18		A217 WC6		TEST BAR No 580						VALU-ACC.MSS SP 56	

Chemical analysis - Chemical analysis - Chemische Analyse										Mechanical Analysis - Mechanical properties-Mechanische Eigenschaften											
Test No. Měř. No.:	C	Mn	Si	P	S	Gr	Ni	Mo	Cu	V	W	Co	Rp0.2 N/mm ²	Rm N/mm ²	A %	Z %	ISO-V (20°)	ISO-V (20°)	ISO-V (20°)	HB	
max.	0.2	0.8	0.6	0.4	0.045	1.5	0.5	0.85	0.8					885							5
min.	0.05	0.5				1		0.45					275	485	20	35					
O112	0.13	0.54	0.34	0.02	0.01	1.23	0	0.61	0	0		0	310	535	23	41					167

Potvrzujeme, že dodávka odpovídá podmínkám objednávky.

We hereby certify that the material described above has been tested and complies the terms of the contract.

Wir bestätigen, dass die Lieferung den Bestellungsbedingungen entspricht.

Podpis výrobce:

Sachverständiger des Herstellers:

Producer's works expert:

This document is valid as an original. This document is the original only.

Rm-Peovost v tahu-Tensile strength/Zugfestigkeit

Rp0.2- Max. kazu-Yield point/Sieckgrenz

A - Táhlost-Elongation/Bruchdehnung

Z - Získání-Rp0.208 of tensile strength

Podpis výrobce

Sachverständiger

Producer's works expert

VALVITALIA S.p.A.
Via S. Maria 20047
CZ 768 02 Ostrava-Vitkovice
tel.: + 420 595 994 828
fax: + 420 595 994 828
e-mail: valvitalia@valvitalia.cz

KRÁLOVOPOLSKÁ

Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700

fax +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No.

03/24/05

Page

1 3

Customer	VITAS		Project No.	BODY GATE 4" 900 BW							
Const & MFR			Item Name	040330 IT 05							
Project Name	BODY GATE 4" 900 BW		Material Thickness	ASTM A-213 WCB TH 40% Rev.							
Item No.	040330 IT 05		Dwg. No.								
Material Form	Weld	Casting	Other	I.O.I	ASME 290 ASTM						
X-Ray Equip	No. / Actual	kvp N/A	mA	I.Q.I Placement Sensitivity	S.Side F.Side γ						
Radioisotope	IR 192		200	Film	GEVAERT 32						
Focal size	2x1			Screen	Pb						
Exposure Time				Shim Thickness	0.10 mm						
FFD / SFD				Development Condition	AUTOMATIC + 25°C						
Density	Single 1.8 ÷ 4	Double 2 ÷ 4		Procedure	ANSI B16.34						
EXP TECHNIQUE	RWSV DWDV		DWSV PANORAMIC		ASME V PART 2						
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type CA CB CC CD	CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
ANSI B16.34 ANNET B											
Accepted severity level	2	1	3	2	3	3	3	NA	NA	NA	NA
Casting N.	Progressive N. Films										
56. 41 48	1. 2										A1
HEAT 12	2. 3										A1
	3. 1										0
	4. 5										B2
	5. 6										B1
	7. 8										B2
	8. 9										A1/B1
	10. 11										B1
Examined by	Level I		Date of Examination								
Approved by	Level II		VITAS DIVISION VALITALIA S.p.A. GIOCONDO ORFANO LIVELLO MT-PT-UT-RT 29/05/05								
			☐ Witnessed by ☐ Reviewed by								

KRÁLOVOPOLSKÁ SLÉVÁRNA, s. r. o., Křižíkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700

fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No.

03/29/05

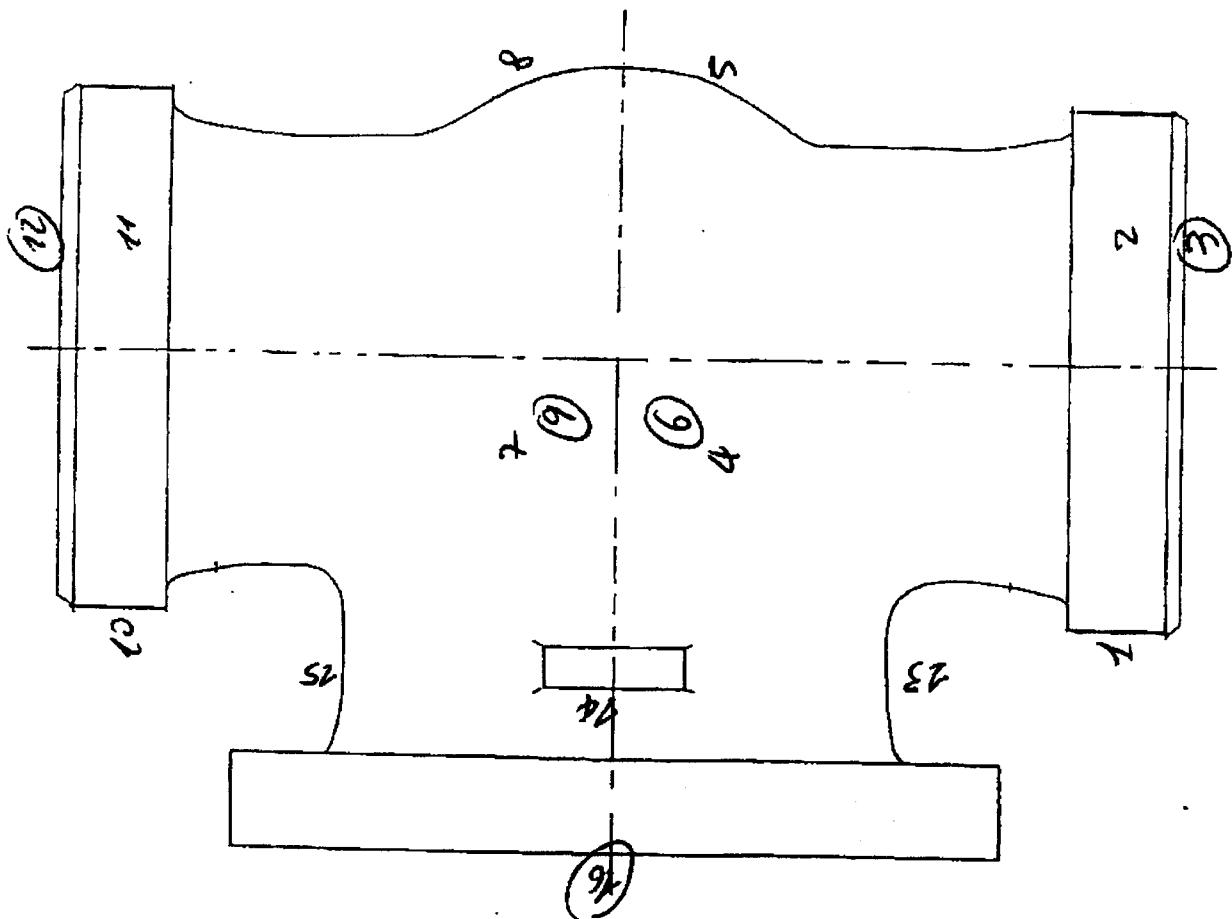
Page

2 9

Casting N.	Progressive N. Films	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Remarks
					CA	CB	CC	CD							
		2	—	3	2	3	3	3	NA	NA	NA	NA			
SB-9148	11-12													0	
HEAT/042	12-10			✓										RI	
	13-14	✓												AI	
	14-15	✓		✓										AI/RI	
	15-16			✓										RI	
	16-13	✓												AI	
										 DIVISION OF VALVITALIA S.p.A. GIOCONDO OREFANO II° LIVELLO MI-PT-UT-RT 03/29/05					

Bosy SR 4" 900 BW

Rt H. SB 9148



VITALIS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
IT-NOVELLO MT-PT-UT-RT
14315

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 3	di di 3

Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION N D T

Report No.

09/30/25

Page

1/2

Customer	VITAS		Project No.	BONNET GATE A ⁴ 900	
Const & MFR			Item Name	040330 IT 05	
Project Name	BONNET GATE A ⁴ 900		Material Thickness	ASTM A 213 WC6 - TH 552	
Item No.	040330 IT 05		Dwg. No.	Rev.	
Material Form	Weld	Casting ☒	Other	I.Q.I	ASME ☒ ASTM
X-Ray Equip	No. / Actual	kvp N/A	mA	I.Q.I Placement Sensitivity	S. Side ☒ F. Side
Radioisotope	IR 192		20 u	Film	GEVAERT 57
Focal size	2 x 1			Screen	Pb
Exposure Time	-			Shim Thickness	0.10 mm
FFD / SFD	-			Development Condition	AUTOMATIC +25°C
Density	Single 1.8 ÷ 4	Double 2 ÷ 4		Procedure	ASME VARI 2
EXP. TECHNIQUE	RWSV DWVDV		DWSV PANORAMIC		
ANSI B16.34	ANSI B16.34				

Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
				CA	CB	CC	CD							
ANSI B16.34 ANNEX B														
Accepted severity level	2	1	3	2	3	3	3	NA	NA	NA	NA			

Casting N.	Progressive N. Films													
SB 9148/1	1-2													B2
HEAT 10412	2-3													A1
	3-4													B2
	4-1													B1

Examined by _____

Approved by _____

Date of Examination _____

☐ Witnessed by _____

☐ Reviewed by _____

VITAS

DIVISION OF VALVETALIA S.p.A.

GIOCONDO ORFANO

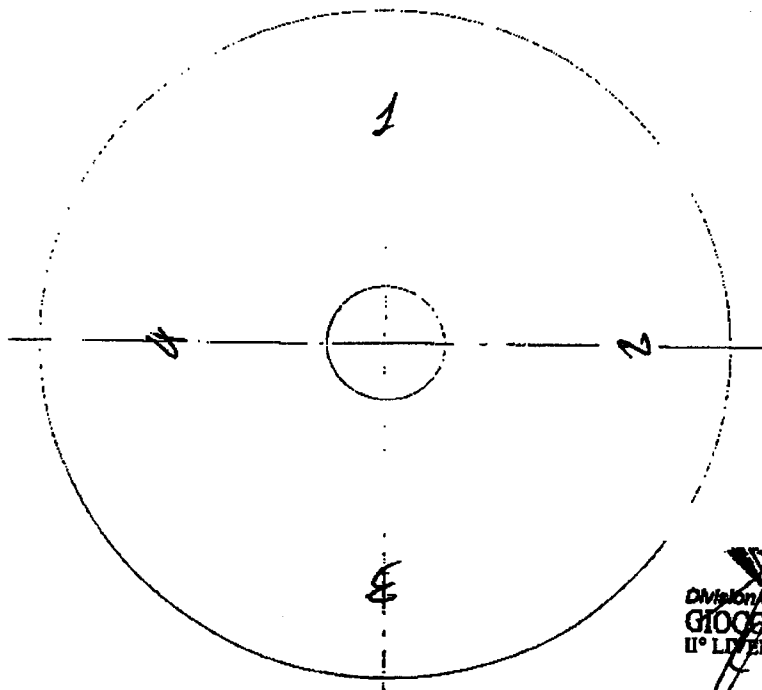
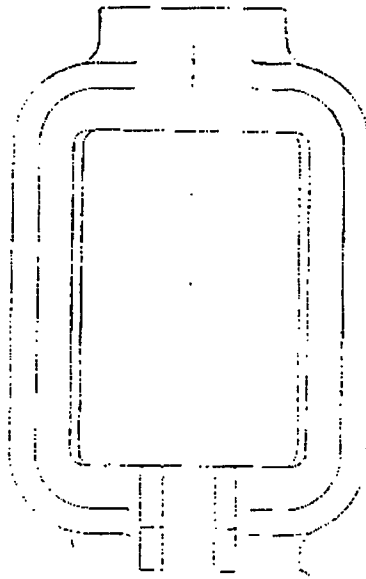
II° LIVELLO MT-PT-UT-RT

24/06/05

Level II

BONNET SR 4"900

RF SB-9148/1



VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
29/01/05

Firma Signature .	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 2	di di 2



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 250-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
250	S421	2		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG


QM Meindl Oestreich

If you need any Spare Parts or
technical support please contact:
Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

17.06

Výrobce: Manufacturer/Hersteller		Vilkovické slévárny s.r.o. Ostrava - Vítkovice		Značka výrobce: Mark of the manufacturer		VS	
Zákazník: Customer/Besteller		VITAS Division of VALVITALIA S.p.A.		Značka výrobce: Inspector stamp			
Objednávka: 041289		OS2852/108		Datum: Date/Datum		12.03.2004	
Order No./Bestellung				Dod. podmínky: QCP n° 40069		Delivery terms/Lieferbedingungen	
Materiál: Material		A217 WC6		Heat treatment: Wärmebehandlung:		ASTM E 448	
Předmět: Quantity		14		Place No.: Stock Nr.:		TEST BAR No 585	
Podstava: Stock/Teil:		412041		Norm. 920° - Temp 670°C		MT According to ANSI B16.34 annex C MATERIAL: ACC. MS8 SP 55 DIMENSIONS: GATE FACTORY	
BONNET GATE 6/900							

Chemická analýza - Chemical analysis - Chemische Analyse										Mechanické hodnoty - Mechanical properties - Mechanische Eigenschaften											
Číslo No.	C	Mn	Si	P	S	Cr	Ni	Mo	Cu	V	W	Ceq	Rp0.2 N/mm ²	Rm N/mm ²	A %	Z %	ISO-V (20°)	ISO-V (20°)	ISO-V (20°)	HB	
max.	0.2	0.8	0.6	0.4	0.045	1.5	0.5	0.85	0.5		0.1			275	655	20	35				
min.	0.05	0.6			1			0.45						315	485	27	43				163
412041	0.13	0.58	0.35	0.02	0.02	1.25	0	0.63	0	0											

Rm - Percent v tahu - Tensile strength / Zugfestigkeit

Rp0.2 - Mez kluzu - Yield point / Streckgrenze

A - Tažnost - Elongation / Bruchdehnung

Z - Zúžení - Reduction of area / Bruchminderung

Potvrzujeme, že dodávka odpovídá podmínkám objednávky.

We hereby certify that the material described above has been tested and complies the terms of the contract.

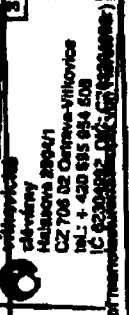
Wir bestätigen, dass die Lieferung den Bestellungsbedingungen entspricht.

Podpisový ználek výrobce:

Sachverständiger des Herstellers:

Producer's works expert:

Tento dokument má platnost originálu. This document is valid as an original. Diese Dokument ist als Original gültig.

Podpisový ználek výrobce: Sachverständiger des Herstellers: Producer's works expert:		Raziskov výrobce (Stamp of manufacturer):	
			

Výrobce: Manufacturer/Hersteller		Výkonnostní středisko s.r.o. Ostrava - Vítkovice		MATERIALOVÉ OSVĚDČENÍ Report of material tests Abnahmeprüfzeugnis		Celo: 40001-412 No.Nr.		Zařizovací výkres: Mark of the manufacturer Zeichen des Herstellers		VS	
Zákazník: Customer/Besteller		VITAS Division of VALVITALIA S.p.A		dle spec. křivka EN 10204 3.1.B		Datum: 12.03.2004 Date/Datum		Zařizovací výkres: Inspector stamp Stempel des Sachverständigen			
Objednávka: Order No./Bestellung		041289		052852/108		Dost. podmínky: OCP n° 40099 Delivery terms/Lieferbedingungen					
Materiál: Part name: Bestandteil:		Počet: Quantity: Stückzahl:		Materiál: Material: Werkstoff:		Měřítko: Scale No.: Stück Nr.:		Měřítko: Scale No.: Stück Nr.:		Norma: Standard: ASTM E 448	
BODY GATE 6/800		14		A217 WC8		412041		TEST BAR No 595		Norm. 920° - Temp 670°C	
Chemical analysis - Chemical analysis - Chemische Analyse											
Tab. No. Melt No.: Charge No.:	C %	Mn %	P %	S %	Cr %	Ni %	Mo %	Cu %	V %	W %	Co %
max 0,2 min 0,05 412041	0,2 0,05 0,13	0,8 0,5 0,56	0,6 0,35 0,02	0,4 0,02 0,02	1,5 1,25 1,25	0,5 0 0	0,55 0,46 0,83	0,5 0 0	0,1 0 0	0,1 0 0	0,1 0 0
Mechanical properties - Mechanical properties - Mechanische Eigenschaften											
Rp0.2 N/mm²	Rm N/mm²	A %	Z %	ISO-V (20°)	ISO-V (20°)	ISO-V (20°)	ISO-V (20°)	ISO-V (20°)	ISO-V (20°)	ISO-V (20°)	ISO-V (20°)
275	485	20	35								
315	525	27	43								
Fis-Formost v tahu-Tensile strength/Zugfestigkeit											
Rp0.2 - Mez kluzu-Yield point/ Streckgrenze											
A - Táhnutí-Elongation/Bruchdehnung											
Z - Zúžení-Reduction of area/ Bruchminderung											

Potvrzuje, že dodávka odpovídá podmínkám objednávky.
We hereby certify that the material described above has been tested and complies the terms of the contract.
Wir bestätigen, dass die Lieferung den Bestellungsbedingungen entspricht.

Podpisový zručný výrobce:

Sachverständiger des Herstellers:

Producer's works expert

Tento dokument má platnost originálu. This document is valid as an original. Diese Dokument ist als Original gültig.

Division of VALVITALIA S.p.A

vitkovice
střední
Hálovská 2804/1
CZ 708 02 Ostrava-Vitkovice
Razítka výrobce (Stempel des Herstellers)

KRALOVOPOLSKÁ

Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax +420 5 712 1723

REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No

09/31/05

Page

1

Customer	VITAS		Project No	BODY GATE 6" 900 BW	
Const & MFR			Item Name	040330 IT 06	
Project Name	BODY GATE 6" 900 BW		Material Thickness	ASTM A 213 WCB - T.H 352	
Item No.	040330 IT 06		Dwg. No.	Rev	
Material Form	Weld	Casting	Other	I.O.I	ASME 25 ASTM
X-Ray Equip	No. / Actual	kvp N/A	mA	I.O.I Placement Sensitivity	S.Side F.Sides
Radioisotope	IR 192		204	Film	GEVACR 57
Focal size	2x1			Screen	PB
Exposure Time				Shim Thickness	0.10 72
FFD / SFD				Development Condition	AUTOMATIC + 25% C.
Density	Single	Double		Procedure	ANSI B16.34
EXP TECHNIQUE	RWSV	DWDOV	DWSV	PANORAMIC	ASME V ART 2

Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOIT LING	SURFACE DEFECT	Grade	Note
				CA	CB	CC	CD							
ANSI B16.34 ART 2	2	/	3	2	3	3	3	NA	NA	NA	NA			
Accepted severity level	2	/	3	2	3	3	3	NA	NA	NA	NA			
Casting N.	Progressive N. Films													
SB 9146	1-2	r												A1
HEAT-812241	2-3													0
	3-4	r												A1
	4-5		r											B2
	5-6			r										CA1
	7-8		r											A1
	8-9		r											B1
	10-11	r												A1

Examined by	Level I	Date of Examination
Approved by	 GIOCONDO ORFANO H° LIVELLO MT-PT-UT-RT 24/11/05	☐ Witnessed by ☐ Reviewed by

KRÁLOVOPOLSKÁ SLÉVÁRNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700

fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION

N D T

Report No.

02/31/05

Page

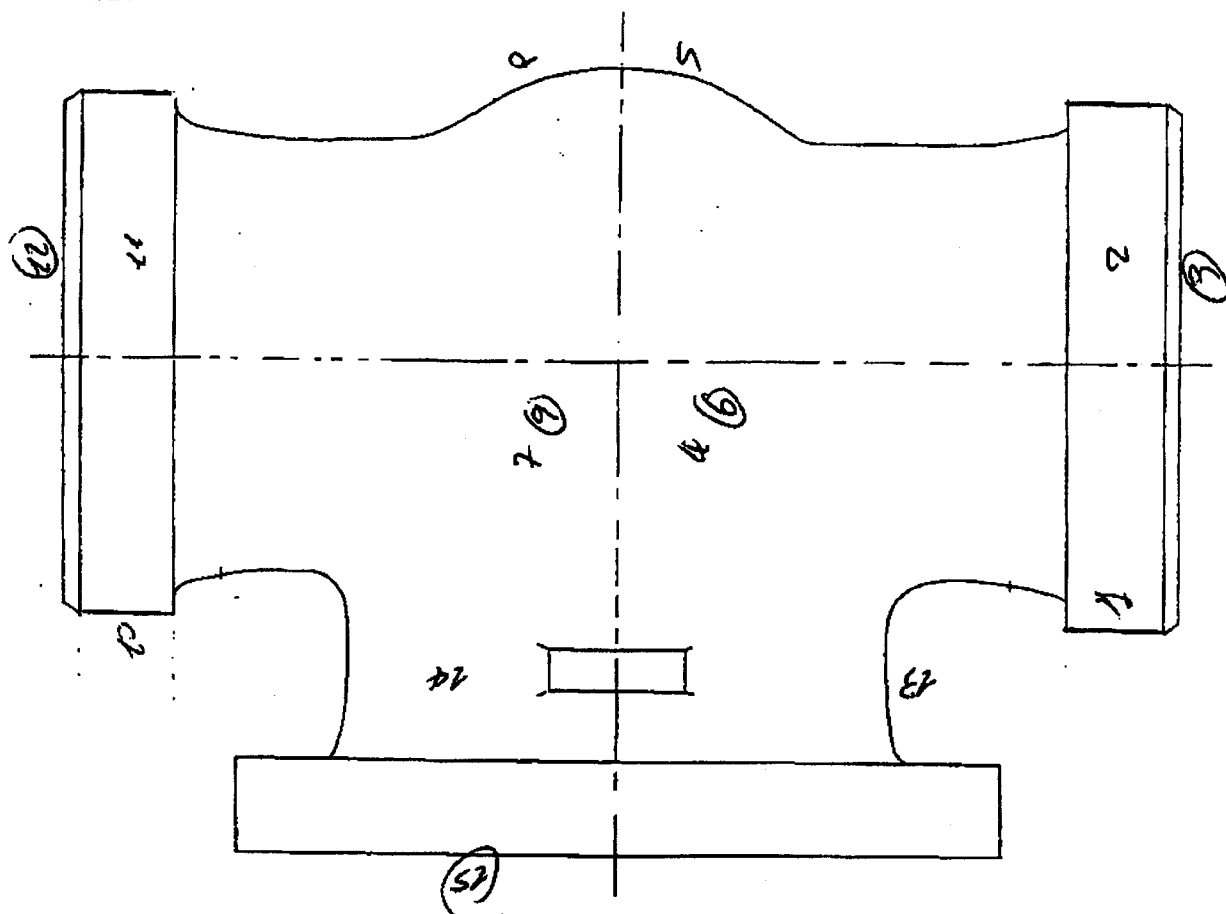
2

Casting N.	Progressive N. Films	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Remarks
					CA	CB	CC	CD							
		2	—	3	2	3	3	3	NA	NA	NA	NA			
SA-9146	11-12			✓										A1	
HEAT-412241	12-13	✓												A1	
	13-14			✓										B2	
	14-15			✓										B2	
	15-13	✓		✓										A1/B2	
SA-9147	1-2													0	
HEAT-412241	2-3	✓												A2	
	3-4	✓												A2	
	4-5					✓								B2	
	5-6			✓										A1	
	7-8			✓										A1	
	8-9			✓										B1	
	10-11	✓												A1	
	11-12	✓		✓										A1/A1	
	12-13			✓										A1	
	13-14			✓										B2	
	14-15			✓										A1	
	15-13	✓												A1	

GIOCONDO ORFANO
 IP-LEVELLO MT-PT-UT-RT
 22/04/05

Body SZR 6^a 90084

RX H SB-9146
9147



VITALIS
Division of VALVITALIA S.p.A.
GIACONDO ORFANO
11° LIVELLO MT-PT-UT-RT
20/11/25

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 3	di di 7

KRÁLOVOPOLSKÁ

Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700

fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No.

03/32/05

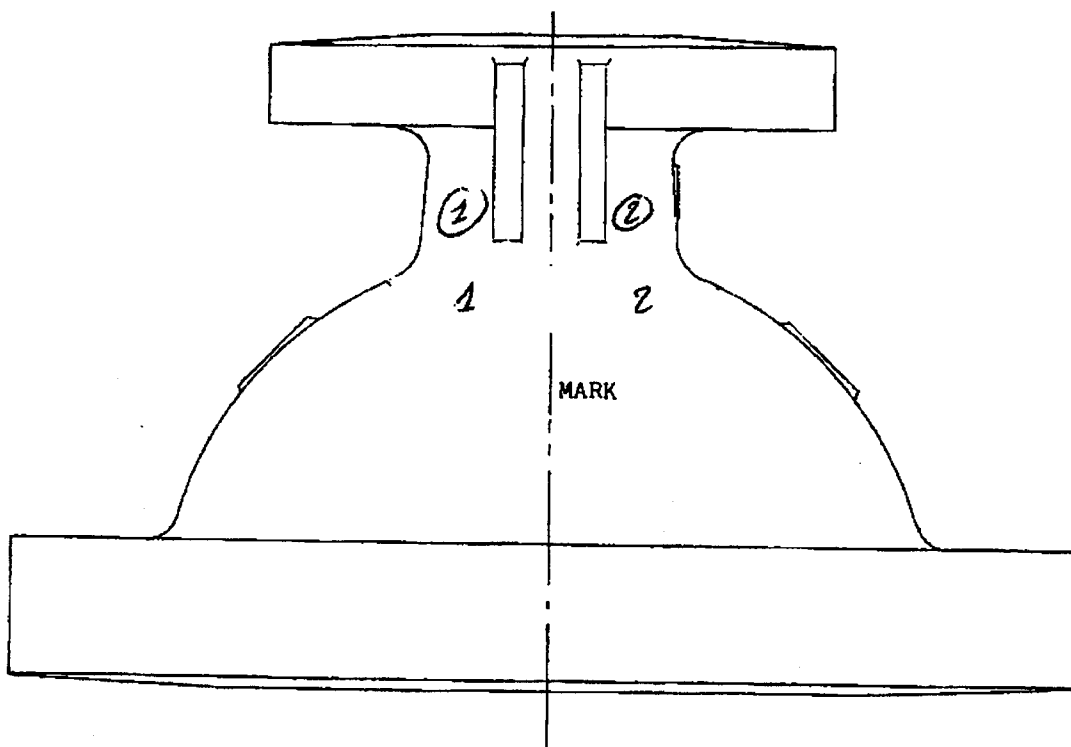
Page

1 2

Customer	VITAS		Project No.	BONNET GATE 6°900							
Const & MFR			Item Name	040330 17.06							
Project Name	BONNET GATE 6°900		Material Thickness	ASTM A-212 WCB TM35 12							
Item No.	040330 17.06		Dwg. No.	Rev.							
Material Form	Weld	Casting	Other	I.Q.I	ASME 125 ASTM						
X-Ray Equip	No. / Actual	kvp N/A	mA	I.Q.I Placement Sensitivity	3.Side F.Side						
Radioisotope	ir 192 200		Film	GEVAERI 57							
Focal size	2x1		Screen	P6							
Exposure Time			Shim Thickness	0.10 2							
FFD / SFD			Development Condition	AUTOMATIC +25°C							
Density	Single 1.8 ÷ 4	Double 2 ÷ 4	Procedure	ASTM V ART. 2							
EXP TECHNIQUE	RWSV DWDV		DWSV PANORAMIC	ANSI B16.34							
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL	SHRINKAGE type	CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
ANSI B16.34 ANNEX B				CA CB CC CD							
Accepted severity level	2	-	3	2 3 3 3	NA	NA	NA	NA			
Casting N.	Progressive N. Films										
SB-9146/1	1.2										B2
HEAT-412041	2.1										B2
SB-9147/1	1.2										A1
HEAT-412041	2.1										M/B2
Examined by GIOCONDO ORFANO II° LIVELLO MT-PT-UT-RT 29/06/05 Date of Examination											
Approved by ☐ Witnessed by ☐ Reviewed by Level II											

BONNET SR 6"90

RTH. SR-9147/1
9146/1



VITAS
Division of VALVITALIA S.p.A.
GIOZONDO OREFANO
IP° LIVELLO MT-PT-UT-RT
20/11/92

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 2	di or 2



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 260-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
260	S485	6		

Date 31.03.2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 270-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
270	S486G	2	2-19	

Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich 21.6.05

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de



TEST BAR NO. 051

Решение **1** **2** **3** **4** **5** **6** **7** **8** **9** **10** **11** **12** **13** **14** **15** **16** **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31** **32** **33** **34** **35** **36** **37** **38** **39** **40** **41** **42** **43** **44** **45** **46** **47** **48** **49** **50** **51** **52** **53** **54** **55** **56** **57** **58** **59** **60** **61** **62** **63** **64** **65** **66** **67** **68** **69** **70** **71** **72** **73** **74** **75** **76** **77** **78** **79** **80** **81** **82** **83** **84** **85** **86** **87** **88** **89** **90** **91** **92** **93** **94** **95** **96** **97** **98** **99** **100** **101** **102** **103** **104** **105** **106** **107** **108** **109** **110** **111** **112** **113** **114** **115** **116** **117** **118** **119** **120** **121** **122** **123** **124** **125** **126** **127** **128** **129** **130** **131** **132** **133** **134** **135** **136** **137** **138** **139** **140** **141** **142** **143** **144** **145** **146** **147** **148** **149** **150** **151** **152** **153** **154** **155** **156** **157** **158** **159** **160** **161** **162** **163** **164** **165** **166** **167** **168** **169** **170** **171** **172** **173** **174** **175** **176** **177** **178** **179** **180** **181** **182** **183** **184** **185** **186** **187** **188** **189** **190** **191** **192** **193** **194** **195** **196** **197** **198** **199** **200** **201** **202** **203** **204** **205** **206** **207** **208** **209** **210** **211** **212** **213** **214** **215** **216** **217** **218** **219** **220** **221** **222** **223** **224** **225** **226** **227** **228** **229** **230** **231** **232** **233** **234** **235** **236** **237** **238** **239** **240** **241** **242** **243** **244** **245** **246** **247** **248** **249** **250** **251** **252** **253** **254** **255** **256** **257** **258** **259** **260** **261** **262** **263** **264** **265** **266** **267** **268** **269** **270** **271** **272** **273** **274** **275** **276** **277** **278** **279** **280** **281** **282** **283** **284** **285** **286** **287** **288** **289** **290** **291** **292** **293** **294** **295** **296** **297** **298** **299** **300** **301** **302** **303** **304** **305** **306** **307** **308** **309** **310** **311** **312** **313** **314** **315** **316** **317** **318** **319** **320** **321** **322** **323** **324** **325** **326** **327** **328** **329** **330** **331** **332** **333** **334** **335** **336** **337** **338** **339** **340** **341** **342** **343** **344** **345** **346** **347** **348** **349** **350** **351** **352** **353** **354** **355** **356** **357** **358** **359** **360** **361** **362** **363** **364** **365** **366** **367** **368** **369** **370** **371** **372** **373** **374** **375** **376** **377** **378** **379** **380** **381** **382** **383** **384** **385** **386** **387** **388** **389** **390** **391** **392** **393** **394** **395** **396** **397** **398** **399** **400** **401** **402** **403** **404** **405** **406** **407** **408** **409** **410** **411** **412** **413** **414** **415** **416** **417** **418** **419** **420** **421** **422** **423** **424** **425** **426** **427** **428** **429** **430** **431** **432** **433** **434** **435** **436** **437** **438** **439** **440** **441** **442** **443** **444** **445** **446** **447** **448** **449** **450** **451** **452** **453** **454** **455** **456** **457** **458** **459** **460** **461** **462** **463** **464** **465** **466**

Patrzysz, że dzisiaj uporządkowałem podmioty obywateli.

We hereby certify that the material described above has been tested and complies the terms of the contract under conditions, dass die Lieferung von Brechstrahlungsanlagen a) entspricht

Podnikový zámec výroby:

Sachverständigen des Hauptkoll:

PRODUCTION'S WORLD EXPLORE:

Goods returned not placed on file. This document is valid as an original. Please document let the Original & copy

ETAS
division of Vötsch & S.p.A.
QUALITY CONTROL

 Ministerstvo obrany Československé armády	3	18
	3	

12. Práskko výrobce (stamp of manufacturer)

Výrobce: Manufacturer/Hersteller Halasova 2804/1 Ostrava-Vitkovice		Vikovické slevárny, spol. s r.o. Report of material tests Abnahmeprüfzeugnis		Značka výrobce: Mark of the manufacturer Zeichen des Herstellers VS	
Zákazník: Customer/Besteller VITAS Division of VALVITALIA S.p.A.		Číslo: No./Nr. 34 / 05		Značka značka: Inspector stamp Stempel des Sachverständigen	
Objednávka: Order No./Bestellung 41276 O0965705028		Datum: Date/Datum 07.01.2005		Dod. podmínky: Delivery terms/Lieferbedingungen QCP 040330 Rev. 0	
Materiál: Material: A217 WC9		Číslo kusu: Piece No.: 10-11		Tepelné zpracování: Heat treatment: Normalizing	
Počet: Quantity: 2		Číslo závby: Charge No.: T541		Wärmebehandlung: Normalizing	
Výk: Bonnet G2-15P-112-A PS SR 12-14/1500		TEST BAR No. 038		Poznámka: Remark: ASME B16.34 ANNEX B ASTM E188 ASME B16.34 ANNEX C	
Chemická analýza - Chemical analysis - Chemische Analyse					
Tavba Melt No.: Charge No.:		Rm N/mm ²		Mechanické hodnoty - Mechanical properties - Mechanische Eigenschaften	
C %		A %		ISO-V 20°C (J)	
Si %		Z %		ISO-V 20°C (J)	
Mn %		A %		ISO-V 20°C (J)	
P %		Z %		ISO-V 20°C (J)	
S %		A %		ISO-V 20°C (J)	
Cr %		Z %		ISO-V 20°C (J)	
Ni %		A %		ISO-V 20°C (J)	
Mo %		Z %		ISO-V 20°C (J)	
Cu %		A %		ISO-V 20°C (J)	
V %		Z %		ISO-V 20°C (J)	
W %		Z %		ISO-V 20°C (J)	
Co %		Z %		ISO-V 20°C (J)	
max. 0,18		655		102	
min. 0,05		485		84,7	
0,11		424		199	
0,54		607			
0,36		20,3			
0,018		39,6			
0,018		86			
0,018		102			
0,018		84,7			
0,018		199			

Potvrzuje, že dodávka odpovídá podmínkám objednávky.
We hereby certify that the material described above has been tested and complies the terms of the contract.
Wir bestätigen, dass die Lieferung den Bestellungsbedingungen entspricht.

Podpisový znalec výrobce:
Sachverständiger des Herstellers:
Producer's works expert:

Tento dokument má platnost originálu. This document is valid as an original. Dieses Dokument ist als Original gültig.

Rm - Pevnost v tahu - Tensile strength / Zugfestigkeit
Rp0.2 - Mez kluzu - Yield point / Streckgrenze
A - Tážnost - Elongation / Bruchdehnung
Z - Zúžení - Reduction of area / Bruchreduktion

Vikovické
slevárny
Ostrava-Vitkovice
Česká republika
602 001
Tel. 59 63 14 111

Radičko výrobce (Stempel/Hersteller)

Witnessed
Reviewed
Signature
Date
20/1/05

VITAS
Division of VALVITALIA S.p.A.
QUALITY CONTROL

410 330



Nedestruktivní defektoskopie a zkušebnictví
Boleslavova 7, Ostrava 9, 709 00
tel., fax: 596 627 006

IT. 07

X-RAY Examination Record

Číslo protokolu/

No. of cert.: 9.

Výrobce odlitku/
Manufacturer:

Vítkovické slévárny s.r.o.

Počet listů/
No. of pages:

1 of 2

Název výrobku/DN/PN/typ:

Name of product/DN/PN/type:

Body PS SR 14"1500 Lb BW

Číslo modelu/
No. of pattern:

G1-150M-114-M-A

Počet kusů/
Quantity of pieces:

1

Objednávka č./
Order No.:

00965/05026

Číslo položky/Item No.:

T 538/3

Název součásti/
Name of part:

Body

Materiál/
Material:

WC9

Zákazník/
Customer:

VITAS divisione of VALVITALIA S.p.A./41276

Výrobní příkaz/
Production number:Rozsah zkoušky/
Range:ASME B 16.34, Annex B
critical point+BWProzařovaná tloušťka/
Radiographed thickness:

75-140 mm

Číslo postupu/
Procedure No.:

BV 005/16.09.99

Číslo návody/
Instruction No.:Měrka/
IQI:

ASTM C

Zářič/
Gamma source:

Co 60

Ohnisko/
Target:

3x1 mm

Aktivita/
Activity:

370 GBq

Expozice/
Exposure:

10-50 min

Zčernání filmu/
Film density:

2,8-3,8

Jakost radiogramu/
Required sensitivity:

WW12/75, W13/140

Film/
Film:

Agfa -Gevaert D7- ASTM Class I

Folie/
Folie:

Pb 0,027 mm

Předpis pro měření-norma/
Requirements for quality-standard:

ANSI B 16.34, Annex B, ASME Code sector V, Article 2

Hodnocení podle/
Valuation according to:

ASME B 16.34, Annex B, E 186

Výsledek zkoušky/Result:

Vyhovující - satisfactory

Náčrtek/Oudline, Sketch:

(see Enclosure No.1 - Dislocation of X-ray film)

Intertek Technical Inspections	Witnessed	☐	Q. C. no. 18
	Reviewed	☒	
	Signature	<i>[Signature]</i>	
	Date	22/4/05	

VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT

Datum zkoušky/
Date of test:

11.1.2005

Zkoušku provedl/
Test inspector:Level II/Z-S2-01806
Sebrala MarekPodpis/
Signature:Razítko, podpis/
Stamp, Signature:

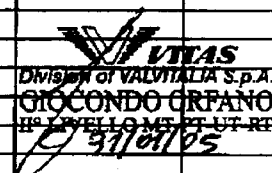
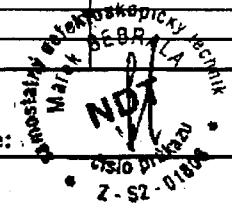
Ing. Satková Kateřina/II/301-05065



Protokol o zkoušce prozářením X-RAY Examination Record

Zákazník/ VITAS DIVISION of VALVITALIA S.p.A.
Customer:

Počet listů /
No. of pages: 2 of 2.

Číslo kusu/tavby No. of piece /cast:	Č.zkoušky/ No. of trial:	Měrka/ IQI:	Tloušťka/ Thickness:	Fokus/ F.F.D.:	Vyhodnoceno dle/Evaluation acc.		Vyhodnocení/ Evaluation:
					ASTM E 446	ASTM E 186	
T 538/3	1-2	ASTM C	140 mm	350 mm		0	ok
	2-3					0	ok
	3-4					0	ok
	4-5					0	ok
	5-1					0	ok
	6-7					0	ok
	7-8					0	ok
	8-9					0	ok
	9-10					0	ok
	10-6					0	ok
	11-12			330 mm		0	ok
	12-13					B1	ok
	13-14					0	ok
	15-16					0	ok
	16-17					0	ok
	17-18					0	ok
	19-20		75 mm	300 mm		0	ok
	20-21					B1	ok
	21-22					0	ok
	22-23					B1	ok
	23-24					B1	ok
	24-19					0	ok
0 05/04/05							
Intertek Witnessed ☐ Technical Reviewed ☒ Inspections Signature: <i>[Signature]</i> Date: 20/4/05							
 Division of VALVITALIA S.p.A. GIOCONDO ORFANO II° LIVELLO MET UT-RT 31/01/05							
Datum zkoušky/ Date of test: 11.1.2005	Zkoušku provedl/ Test inspector:	Level II/Z-S2-01806 Sebrala Marek			Podpis/ Signature:		
							
Razítko, podpis/ Stamp, Signature: Ing. Satková Kateřina/II/301-05065							



non-destructive testing



Boleslavova 7, Ostrava 9, 709 00

tel. a fax: 596 627 006

Rozmístění radiogramů

při kontrole prozářováním

Dislocation of X-ray film

X-RAY EXAMINATION

Odběratel/Customer:

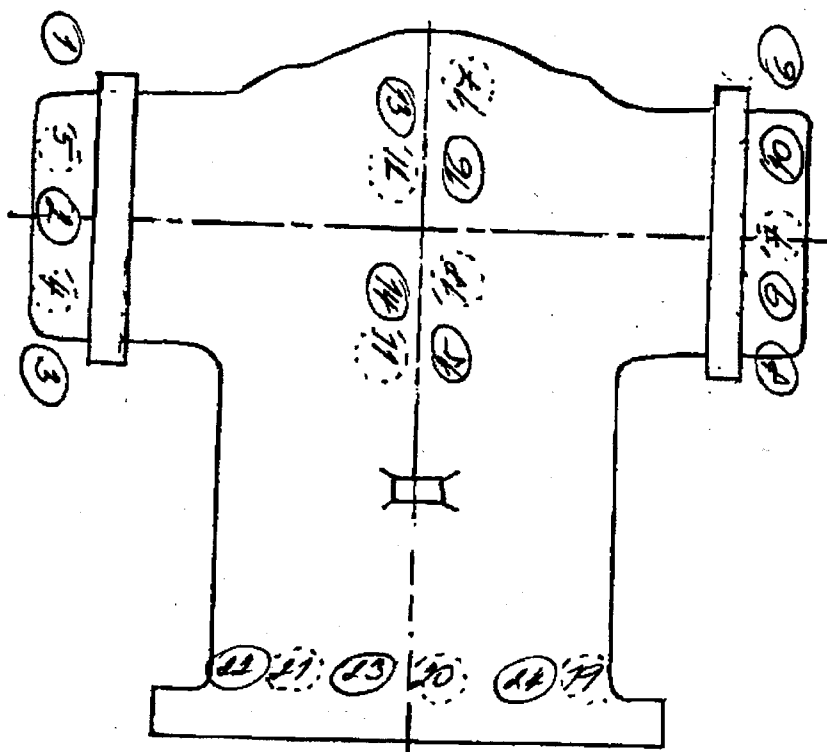
Vitkovické slévárny, s.r.o.
Ostrava

Objekt/Object:

Výrobek/Produkt:

Body 14"1500 Lb

T 538/3



Datum/Date:

11.1.2005

Kontrolor/Inspector:

Sebrala Marek/II/Z-S2-01806

Datum/Date:

Odběratel/Customer:



Nedestruktivní defektoskopie a zkušebnictví
Boleslavova 7, Ostrava 9, 709 00
tel./fax: 596 627 006

X-RAY Examination Record

Číslo protokolu/

No. of cert.: 5.

Výrobce odlitku/
Manufacturer:

Vítkovické slévárny s.r.o.

Počet listů/

No. of pages: 1 of 2

Název výrobku/DN/PN/typ:

Name of product/DN/PN/type:

Body PS SR 14"1500 Lb BW

Číslo modelu/

No. of pattern:

G1-150M-114-M-A

Počet kusů/

Quantity of pieces: 1

Objednávka č./

Order No.:

00965/05026

Číslo položky/Item No.:

T 538/4

Název součásti/

Name of part:

Body

Materiál/

Material:

WC9

Zákazník/

Customer:

VITAS divisione of VALVITALIA S.p.A./41276

Výrobní příkaz/

Production number:

Rozsah zkoušky/

Range:

ASME B 16.34, Annex B

critical point+BW

Prozařovaná tloušťka/

Radiographed thickness:

75-140 mm

Číslo postupu/

Procedure No.:

BV 005/16.09.99

Číslo návody/

Instruction No.:

Měrka/

IQI:

ASTM C

Zářie/

Gamma source:

Co 60

Ohnisko/

Target:

3x1 mm

Aktivita/

Activity:

370 GBq

Expozice/

Exposure:

10-50 min

Zčernání filmu/

Film density:

2,8-3,8

Jakost radiogramu/

Required sensitivity:

WW12/75, W13/140

Film/

Film:

Agfa -Gevaert D7- ASTM Class I

Folie/

Folie:

Pb 0,027 mm

Předpis pro měření-norma/

Requirements for quality-standard:

ANSI B 16.34, Annex B, ASME Code sector V, Article 2

Hodnocení podle/

Valuation according to:

ASME B 16.34, Annex B, E 186

Výsledek zkoušky/Result:

Vyhovující - satisfactory

Náčrtek/Oudline, Sketch:

(see Enclosure No.1 - Dislocation of X-ray film)

Intertek Technical Inspections	Witnessed	☐	Q. C. no.
	Reviewed	☒	
	Signature	<i>[Signature]</i>	
	Date	20/10/05	

VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
I° LEVELLO MT-PT-UT-RT
21/10/05



Datum zkoušky/

Date of test:

7.1.2005

Zkoušku provedl/

Test inspector:

Level II/Z-S2-01806

Sebrala Marek

Podpis/

Signature:

Razítko, podpis/

Stamp, Signature:

Ing. Satková Kateřina/II/301-05065



Nedestruktivní defektoskopie a zkušebnictví
Boleslavova 7, Ostrava 9, 709 00
tel., fax: 596 627 006

Protokol o zkoušce prozářením
X-RAY Examination Record

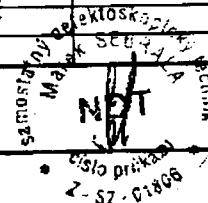
Číslo protokolu/
No. of cert.: 5.

Zákazník/
Customer: VITAS DIVISION of VALVITALIA S.p.A.

Počet listů/
No. of pages: 2 of 2

Číslo kusu/tavby No. of piece /cast:	Č.zkoušky/ No. of trial:	Měrka/ IQI:	Tloušťka/ Thickness:	Fokus/ F.F.D.:	Vyhodnoceno dle/Evaluation acc.		Vyhodnocení/ Evaluation:
					ASTM E 446	ASTM E 186	
T 538/4	1-2	ASTM C	140 mm	350 mm		0	ok
	2-3					0	ok
	3-4					0	ok
	4-5					0	ok
	5-1					0	ok
	6-7					0	ok
	7-8					0	ok
	8-9					0	ok
	9-10					A1	ok
	10-6					0	ok
	11-12			330 mm		0	ok
	12-13					0	ok
	13-14					0	ok
	15-16					0	ok
	16-17					0	ok
	17-18					B1	ok
	19-20		75 mm	300 mm		A2	ok
	20-21					A2	ok
	21-22					A1	ok
	22-23					A1	ok
	23-24					B1	ok
	24-19					0	ok
OSTRAVA							
 VITAS Division of VALVITALIA S.p.A. GIOCONDO ORFANO II° LIVELLO MT-PT-UT-RT 21/1/05							
Datum zkoušky/ Date of test: 7.1.2005		Zkoušku provedl/ Test inspector: Sebrala Marek			Podpis/ Signature: [Signature]		
Razítko, podpis/ Stamp, Signature: Ing. Satková Kateřina/II/301-05065							

Witnessed	☐
Reviewed	☒
Signature	[Signature]
Date	21/1/05





Rozmístění radiogramů
při kontrole prozářováním
Dislocation of X-ray film
X-RAY EXAMINATION

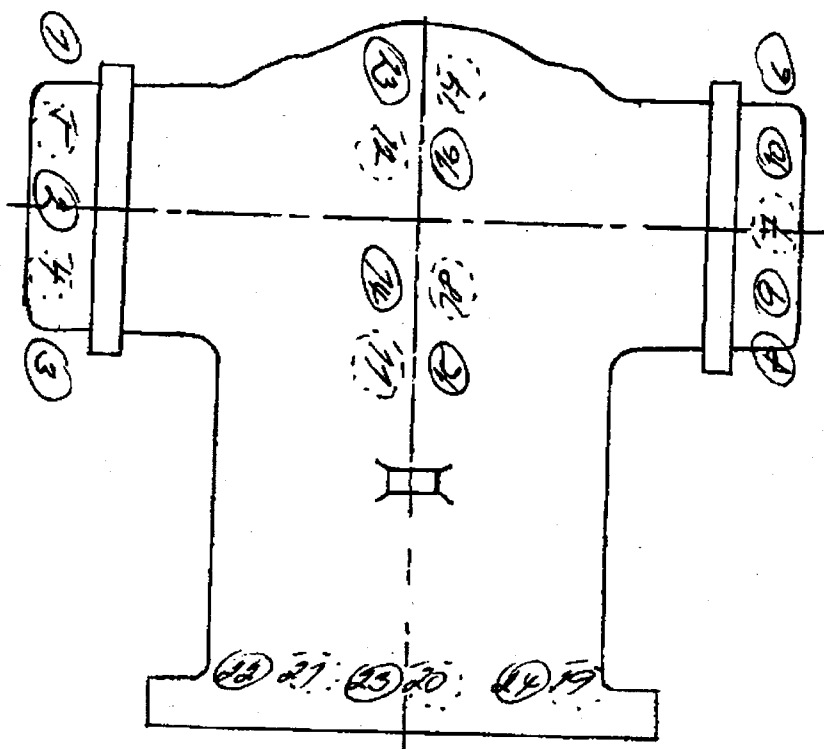
Odběratel/Customer:

Vítkovické slévárny, s.r.o.
Ostrava

Objekt/Object:

Výrobek/Produkt:

Body 14"1500 Lb
T 538/4



Datum/Date:

7.1.2005

Kontrolor/Inspector:

Sebrala Marek/II/Z-S2-01806

Datum/Date:

Odběratel/Customer:



Nedestruktivní defektoskopie a zkušebnictví
Boleslavova 7, Ostrava 9, 709 00
tel., fax: 596 627 006

X-RAY Examination Record

Číslo protokolu/

No. of cert.: 4.

Výrobce odlitku/
Manufacturer:

Vítkovické slévárny s.r.o.

Počet listů/

No. of pages: 1 of 2

Název výrobku/DN/PN/typ:

Name of product/DN/PN/type:

Bonnet PS SR 12"1500 Lb

Číslo modelu/
No. of pattern:

G2-15P-112-A

Počet kusů/

Quantity of pieces: 1

Objednávka č./
Order No.:

00965/05028

Číslo položky/Item No.:

T 541/11

Název součásti/
Name of part:

Bonnet

Materiál/

Material:

WC9

Zákazník/
Customer:

VITAS divisione of VALVITALIA S.p.A./41276

Výrobní příkaz/

Production number:

Rozsah zkoušky/
Range:ASME B 16.34, Annex B
critical point

Prozařovaná tloušťka/

Radiographed thickness:
65-80 mmČíslo postupu/
Procedure No.:

BV 005/16.09.99

Číslo návodky/
Instruction No.:

Měrka/

IQI:

ASTM C

Zářič/

Gamma source:

Co 60

Ohnisko/
Target:

3x1 mm

Aktivita/
Activity:

370 GBq

Expozice/

Exposure:

7-20 min

Zčernání filmu/
Film density:

2,8-3,8

Jakost radiogramu/

Required sensitivity: W12/65,80

Film/
Film:

Agfa -Gevaert D5- ASTM Class I

Folie/

Folie:

Pb 0,027 mm

Předpis pro měření-norma/

Requirements for quality-standard:

ANSI B 16.34, Annex B, ASME Code sector V, Article 2

Hodnocení podle/

Valuation according to:

ASME B 16.34, Annex B, E 186

Výsledek zkoušky/Result:

Vyhovující - satisfactory

Náčrtek/Oudline, Sketch:

(see Enclosure No.1 - Dislocation of X-ray film)

Intertek
Technical
InspectionsWitnessed ☐Reviewed ☒Signature: *[Signature]*

Date

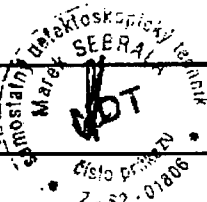
Q.C. no. 18

20/4/05

VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT

Datum zkoušky/
Date of test:

5.1.2005

Zkoušku provedl/
Test inspector:Level II/Z-S2-01806
Sebrala MarekPodpis/
Signature:

Razítko, podpis/

Stamp, Signature:

Ing. Satková Kateřina/II/301-05065



Nedestruktivní defektoskopie a zkušebnictví
Boleslavova 7, Ostrava 9, 709 00
tel./fax: 596 627 006

Protokol o zkoušce prozářením
X-RAY Examination Record

Číslo protokolu/
No. of cert.: 4.

Zákazník/
Customer: VITAS DIVISION of VALVITALIA S.p.A.

Počet listů/
No. of pages: 2 of 2

Číslo kusu/tavby No. of piece / cast:	Č.zkoušky/ No. of trial:	Měrka/ IQI:	Tloušťka/ Thickness:	Fokus/ F.F.D.:	Vyhodnoceno dle/Evaluation acc.		Vyhodnocení/ Evaluation:
					ASTM E 446	ASTM E 186	
T 541/11	1-2	ASTM C	80 mm	320 mm		0	ok
	2-3					A1,B2	ok
	3-4					A1,B1	ok
	4-1					B2	ok
	5		65 mm	320 mm		A1,B3	ok
	6					0	ok

05/24/05

Intéřek	Witnessed	Q.C. No. 18
Technical	Reviewed	☒
Inspections	Signature	<i>[Signature]</i>
	Date	20/4/05

VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
21/4/05

Datum zkoušky/
Date of test:
5.1.2005

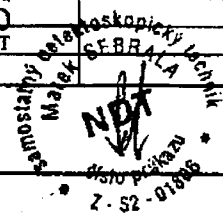
Zkoušku provedl/
Test inspector:

Level II/Z-S2-01806
Sebrala Marek

Podpis/
Signature:

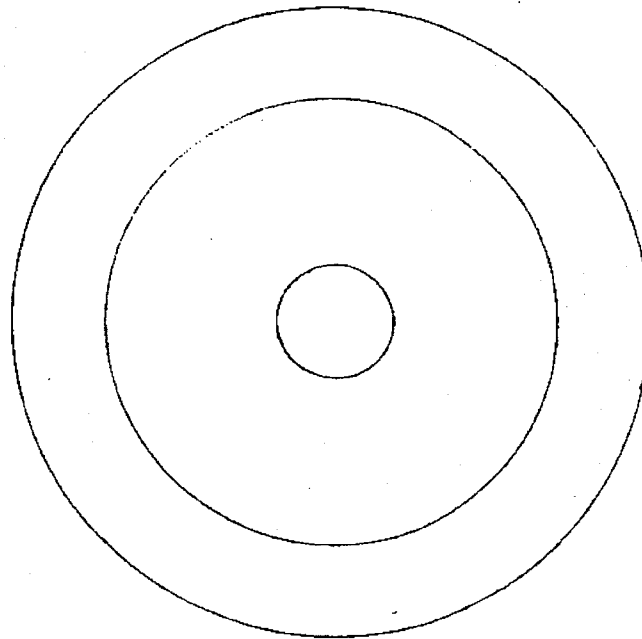
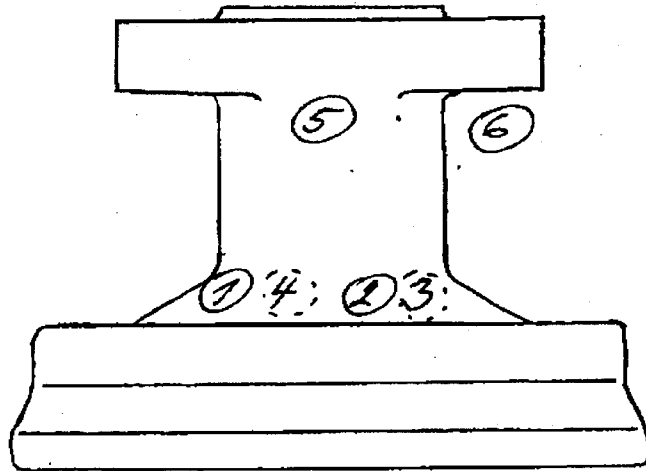
Razítko, podpis/

Stamp, Signature: Ing. Satková Kateřina/II/301-05065



non-destructive testing  CONTROLTEST spol. s r.o. Boleslavova 7, Ostrava 9,709 00 tel. a fax: 596 627 006	Rozmístění radiogramů při kontrole prozařováním Dislocation of X-ray film X-RAY EXAMINATION	Odběratel/Customer: Vítkovické slévárny, s.r.o. Ostrava
--	--	--

Objekt/Object: Výrobek/Produkt:	Bonnet 12"1500 Lb T 541/11
--	---------------------------------------



Datum/Date: 5.1.2005 Kontrolor/Inspector: Sebrala Marek/II/Z-S2-01806	Datum/Date: Odběratel/Customer:
---	---

40330



Nedestruktivní defektoskopie a zkušebnictví
Boleslavova 7, Ostrava 9, 709 00
tel./fax: 596 627 006

X-RAY Examination Record		Číslo protokolu/ No. of cert.: 3.	
Výrobce odlitku/ Manufacturer: Vítkovické slévárny s.r.o.		Počet listů/ No. of pages: 1 of 2	
Název výrobku/DN/PN/typ: Name of product/DN/PN/type: Bonnet PS SR 12"1500 Lb			
Číslo modelu/ No. of pattern: G2-15P-112-A		Počet kusů/ Quantity of pieces: 1	
Objednávka č./ Order No.: 00965/05028		Číslo položky/Item No.: T 541/10	
Název součásti/ Name of part: Bonnet		Materiál/ Material: WC9	
Zákazník/ Customer: VITAS divisi one of VALVITALIA S.p.A./41276		Výrobní příkaz/ Production number:	
Rozsah zkoušky/ Range: ASME B 16.34, Annex B critical point		Prozařovaná tloušťka/ Radiographed thickness: 65-80 mm	
Číslo postupu/ Procedure No.: BV 005/16.09.99		Číslo návody/ Instruction No.:	
Měrka/ IQI: ASTM C			
Září/ Gamma source: Co 60	Ohnisko/ Target: 3x1 mm	Aktivita/ Activity: 370 GBq	Expozice/ Exposure: 7-20 min
Zčernání filmu/ Film density: 2,8-3,8		Jakost radiogramu/ Required sensitivity: W12/65,80	
Film/ Film: Agfa -Gevaert D5- ASTM Class I		Folie/ Folie: Pb 0,027 mm	
Předpis pro měření-norma/ Requirements for quality-standard: ANSI B 16.34, Annex B, ASME Code sector V, Article 2			
Hodnocení podle/ Valuation according to: ASME B 16.34, Annex B, E 186			
Výsledek zkoušky/Result: Vyhovující - satisfactory			
Náčrtek/Oudline, Sketch: (see Enclosure No.1 - Dislocation of X-ray film)		Technical Inspections Witnessed ☐ Reviewed ☒ Signature <i>[Signature]</i> Date 20/6/05 Q.C. no. 18	
VITAS Division of VALVITALIA S.p.A. GIOCONDO ORFANO II° LIVELLO MT-PT-UT-RT 21.06.05			
Datum zkoušky/ Date of test: 5.1.2005	Zkoušku provedl/ Test inspector: Level II/2-52-01806 Sebrala Marek	Podpis/ Signature: <i>[Signature]</i>	
Razítko, podpis/ Stamp, Signature: Ing. Sátková Kateřina/II/301-05065			



Protokol o zkoušce prozářením X-RAY Examination Record

**Počet listů/
No. of pages:** 2 of 2

Q. C. no. 18

Imprish Witnessed ☐
Reviewed ☒
Technical Signature *[Signature]*
Inspections Date *2/1/85*

VITAS
Division of VALITALIA S.p.A.
GIOCONDO ORFANO
U° LEVEL IOMT PT. UT. RT
2/24/05

SEBRAL

**Podpis/
Signature:**

Stamp,Signature: Ing. Satková Kateřina/II/301-05065



non-destructive testing



Boleslavova 7, Ostrava 9,709 00

tel. a fax: 596 627 006

Rozmístění radiogramů

při kontrole prozářováním

Dislocation of X-ray film

X-RAY EXAMINATION

Odběratel/Customer:

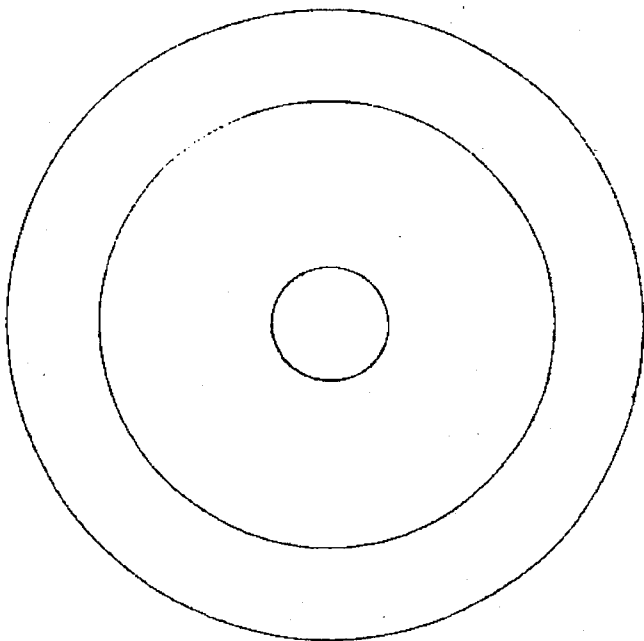
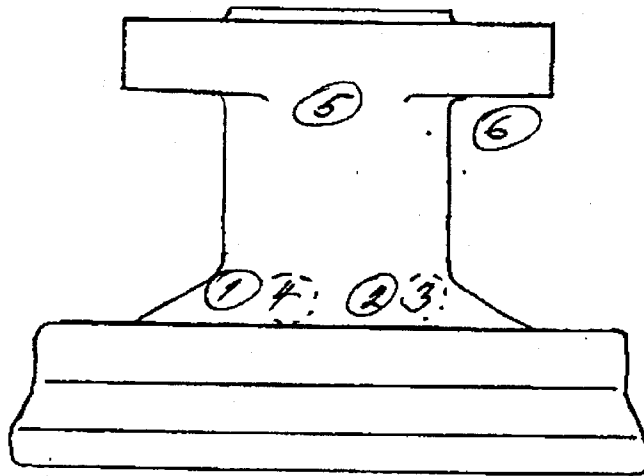
Vítkovické slévárny, s.r.o.
Ostrava

Objekt/Object:

Výrobek/Produkt:

Bonnet 12"1500 Lb

T 541/10



Datum/Date:

5.1.2005

Kontrolor/Inspector:

Sebrala Marek/II/Z-S2-01806

Datum/Date:

Odběratel/Customer:

13180 (ST)

Acciaierie Valbruna s.r.l.

35100 Vicenza (Italia) - V.le della Scienza, 25



Telex 490090 VALVII - Telegrammi: Acciaierie Valbruna - Fax: (0444) 963838
 Telef.: (0444) 968211 (30 linee R.A.) - Casella postale 784 - C.C.I.A.A. 190889
 Canc. Tribunale di Vicenza n. 19944 - Cod. Fisc. e Partita IVA 01863340244

CERTIFICATO DI COLLAUDO (Test certificate)

N. 27380/95

Bolla di consegna n. 95/ 10129-V
delivery noteConferma n. 95 P 33040 Art. 29
confirmationTipo VCD4
qualityStato di fornitura LAM.C. NORM.RIN
delivery conditionProfilo in mm. TONDO 80.00
sizeCliente B.F.E. SPA DIVISIONE VALVOLE FUSE
purchaser VIA 18 MARZO 7
22036 ERBA COOrdine n. 1 DEL 10.1.95
purchaser orderPeso Kg. 238
weight

Analisi Richiesta	C	Si	Mn	Cr	Mo	P	S							
chemical requirem.	min	0.05		0.30	2.00	0.87								
	max	0.15	0.50	0.60	2.50	1.13	0.040	0.040						
Nr. Colata heat nr.	C	Si	Mn	Cr	Mo	P	S							
218141	0.10	0.48	0.47	2.12	0.91	0.018	0.005							

Specifiche applicabili: ASTM A182, 94C, F22

Trattamento Termico del Saggio	Normalizz. normaliz.	Ricottura annealing	Ricristallizz. annealing	Invecchiame. aging	Solubilizz. annealing	Tempra quenching	Mozzo medium	Rinvenimento tempering
sample heat treatment	°C							

Caratt. Meccaniche Richieste mechanical requirements		R N/mm²	R0.2 N/mm²	E %	RA %	KV	Lavoro assorbito Impact value Joule	KCU	Durezza hardness	
		min	515	310	20	30			HB	HRC
colata heat		max							156	
☒ prodotto as-shipped									207	
Provetta specimen Ø x mm	Lo mm	R N/mm²	R0.2 N/mm²	E %	RA %	KV	Joule	KCU	HB	HRC
12.5	50	606	470	30	75				196	

Note
remarksAcciaio prodotto al forno
elettrico ad arco.Resp. Controllo Qualità
Quality ControlIl Collaudatore
Inspector

Venezia, 11/09/95

	LIQUID PENETRANT TEST CERTIFICATE <i>Certificato di Controllo con Liquidi Penetranti</i>	MV501 rev.00 'LIQUID PENETRANT TEST CERTIFICATE'	
		Cert. No: <u>PT 08/105</u>	
		Sheet <u>1</u> of <u>1</u>	
		Date: <u>12/05/05</u>	

Client SIEKHAHM

Cliente

Vitas Job Number 40330

Commessa VITAS n°

Purchase Order No 90045640PPlant BOSSY GATE P.S. 14° 15' 00" B.W.

Impianto

Ordine n°

Material Materiale <u>API F-22</u>	Thickness [mm] Spessore [mm]	Manufacture Condition Stadio di Lavorazione <u>AS-WELDES</u>	Reference Specification Specificazione di Riferimento <u>PROC. BV002</u>	Acceptance Standard Standard di Accettazione <u>ASME VIII DIV. 1 APP.8</u>															
Surface Condition: Stato Superficiale:	☒ As Welded Come Saldato ☐ Ground Molato ☐ Brushed Spazzolato ☐ Machined Lavorato di Macchina ☐ As Rolled Come Laminato ☐ As Cast Come Fuso ☐ Other: Altro:																		
Q.ty	Description - Descrizione	Examined Part - Parte Controllata	Extension Estensione	Material - Materiale	Heat - Colata	SN - N° Serie													
<u>02</u>	<u>WELDING BY PASS</u>	<u>WELDING</u>	<u>100%</u>	<u>F-22</u>	<u>218141</u>	<u>/</u>													
<table border="1"> <tr> <td rowspan="5">PRODUCTS Prodotti</td> <td>Trade Mark Marca</td> <td> ☒ Water Washable Lavabile con Acqua ☐ Solvent Removable Lavabile con Solvente ☐ Post-Emulsifying Post-Emulsionabile Visible - l'isibile Fluorescent - Fluoresc. </td> <td rowspan="5">Sketch</td> </tr> <tr> <td>Cleaner Pulitore</td> <td><u>CGM SOLNET</u></td> </tr> <tr> <td>Penetrant Penetrante</td> <td><u>CGM RES W</u></td> </tr> <tr> <td>Remover Solvente</td> <td><u>/</u></td> </tr> <tr> <td>Developer Rivelatore</td> <td><u>CGM WHITE W</u></td> </tr> </table>							PRODUCTS Prodotti	Trade Mark Marca	☒ Water Washable Lavabile con Acqua ☐ Solvent Removable Lavabile con Solvente ☐ Post-Emulsifying Post-Emulsionabile Visible - l'isibile Fluorescent - Fluoresc.	Sketch	Cleaner Pulitore	<u>CGM SOLNET</u>	Penetrant Penetrante	<u>CGM RES W</u>	Remover Solvente	<u>/</u>	Developer Rivelatore	<u>CGM WHITE W</u>	
PRODUCTS Prodotti	Trade Mark Marca	☒ Water Washable Lavabile con Acqua ☐ Solvent Removable Lavabile con Solvente ☐ Post-Emulsifying Post-Emulsionabile Visible - l'isibile Fluorescent - Fluoresc.	Sketch																
	Cleaner Pulitore	<u>CGM SOLNET</u>																	
	Penetrant Penetrante	<u>CGM RES W</u>																	
	Remover Solvente	<u>/</u>																	
	Developer Rivelatore	<u>CGM WHITE W</u>																	
<table border="1"> <tr> <td rowspan="4">TESTING PROCEDURE Procedura di Controllo</td> <td>Pre-cleaning: Pulizia Iniziale</td> <td>Penetrant Application: Applicazione Penetrante</td> <td>Dwell Time: Tempo di Penetrazione</td> </tr> <tr> <td>Emulsifier Application: Applicazione Emulsificatore</td> <td>Emulsification Time: Tempo di Emulsione</td> <td>Penetrant Removal: Rimozione del Penetrante</td> </tr> <tr> <td>Drying: Asciugatura</td> <td>Developer Application: Applicazione Sviluppatore</td> <td>Developing Time: Tempo di Sviluppo</td> </tr> <tr> <td>Reading Time: Tempo di Lettura</td> <td>End Cleaning: Pulizia Finale</td> <td>Wood Light Intensity: Intensità Lampada di Wood</td> </tr> </table>							TESTING PROCEDURE Procedura di Controllo	Pre-cleaning: Pulizia Iniziale	Penetrant Application: Applicazione Penetrante	Dwell Time: Tempo di Penetrazione	Emulsifier Application: Applicazione Emulsificatore	Emulsification Time: Tempo di Emulsione	Penetrant Removal: Rimozione del Penetrante	Drying: Asciugatura	Developer Application: Applicazione Sviluppatore	Developing Time: Tempo di Sviluppo	Reading Time: Tempo di Lettura	End Cleaning: Pulizia Finale	Wood Light Intensity: Intensità Lampada di Wood
TESTING PROCEDURE Procedura di Controllo	Pre-cleaning: Pulizia Iniziale	Penetrant Application: Applicazione Penetrante	Dwell Time: Tempo di Penetrazione																
	Emulsifier Application: Applicazione Emulsificatore	Emulsification Time: Tempo di Emulsione	Penetrant Removal: Rimozione del Penetrante																
	Drying: Asciugatura	Developer Application: Applicazione Sviluppatore	Developing Time: Tempo di Sviluppo																
	Reading Time: Tempo di Lettura	End Cleaning: Pulizia Finale	Wood Light Intensity: Intensità Lampada di Wood																
<table border="1"> <tr> <td>RESULT Esito</td> <td colspan="6"> ☒ Conforming to Specification Conforme alla Specifica ☐ Not Conforming to Specification Non Conforme alla Specifica </td> </tr> </table>							RESULT Esito	☒ Conforming to Specification Conforme alla Specifica ☐ Not Conforming to Specification Non Conforme alla Specifica											
RESULT Esito	☒ Conforming to Specification Conforme alla Specifica ☐ Not Conforming to Specification Non Conforme alla Specifica																		

NOTES:

Note

EXAMINER: <u>W. LEV. PT</u> Esaminatore	Inspector: Ispettore	Client Cliente	
Division of VALITALIA S.p.A. <u>GIACCONDO ORFANO</u> II° LIVELLO MT-PT-UT-RT			
Date: Data: <u>12/05/05</u>	Date: Data:	Date: Data:	Date: Data:

Siekmann - Econosto
GmbH & Co KG
Freigrafenweg 2
D-44357 Dortmund

Certificate
DIN EN 10204 / 3.1B

Page 1 of 2



Client : Lurgi Öl, Gas, Chemie GmbH
Order No. : 4567581-000/1.69690 Zagros
Our Order No.: 8034495

Code : S 366G
Item : 00280
QTY : 1 PCS

Description :
16 " 150LB Gate Valve, WCB Body, API Trim
No.8, RF ends

Applicable Standard :

Basic Design: API 600
Face to Face Dimension: ASME/ANSI
B16.10
End Flange Dimension: ASME/ANSI
B16.5

Test according to API 598 / BS EN 12266

Rating	150LB	Pres.(MPa)	Time (S)	RSLT.
Hyd. Shell Test	3,2	300	OK	
Hyd.Seat/Backseat	2,3	180	OK	
Air seat Test	0,6	180	OK	
Other Inspection	View – Dim. – Oper.	OK		

Serial No.:	Body Heat No.	Bonnet Heat No.	Wedge/Disk Heat No.
C305-120-1	B1787	D2301	C4718

Remarks: _____

Datum, 15/02/2005
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

We hereby certify, that all tests were satisfactory and that the material described above complies with the order contract. This copy is true copy of the original certificate.

Description :
16 " 150LB Gate Valve, WCB Body, API Trim
No.8, RF ends

[illegible]



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 290-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
290	S363G	4		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

VITAS

YOUR PURCHASE ORDER NO.

15/09/04	22/09/04
----------	----------

URGENT PROJECT : ZAGROS 2

PHYSICAL TESTS

MATERIAL TESTED				TEST				COMPONENT HEAT CODE/MATERIAL HEAT NO./SUPPLIER	CHEMICAL ANALYSIS													
ITEM	QTY	PART N.	DESCRIPTION	HYDROSTATIC		PNEUM.	SEATS		SEATS	TENSILE Min. 2	YIELD Min. 2	ELONGATION (RED. OF AREA) %	IMPACT TEST			TEST TEMP. °C	HARDNESS		C.E.			
				SHELL	SEATS								1.00ME	2.00ME	3.00ME		HRC	HB				
8,00	4	751924	060R 112 IBB AZ/RE GATE VALVE 12" 600 LBS - BM THK 17.48mm - CASTINGS A216 WCB - F8 TRIM - STELLITE SEATS RINGS - F8 FLEX WEDGE - GASKET RJ SOFT IRON - PACKING GRAFOIL + BRAIDED GRAPHITE - BOLTING B7/2H - GEAR OPERATOR	155	115	7																
MARCATURA/TAG.: S363G - 00290 AASR216																						
-VISUAL EXAMINATION ACCORDING TO MSS SP 55 : SATISFACTORY.																						
-DIMENSIONAL EXAMINATION HAS BEEN CARRIED OUT WITH SATISFACTORY RESULT.																						
-ALL VALVES HAS BEEN MANUFACTURED ACCORDING TO RELEVANT VALVES SPECIFICATION.																						
-TRIM MATERIAL (DISC-SEAT-STEM) AND BOLTING ARE ACCORDING TO THE P.O. MATERIAL SPECIFICATION.																						
-ALL VALVES HAVE BEEN HYDROTESTED WITH SATISFACTORY RESULT.																						
-MAGNETIC PARTICLE INSPECTION HAS BEEN CARRIED OUT ON ALL ACCESSIBLE CASTING SURFACE ACCORDING TO CUSTOMER'S REQUIREMENTS.																						
-DYE PENETRANT INSPECTION HAS BEEN CARRIED OUT ON BUTT WELDING ENDS AFTER MACHINING WITH SATISFACTORY RESULTS.																						

ENTREPRENEUR

WE WANT YOUR SATISFACTION

ASPHALT PAVING

2007

CLIENT INSPECTION

2007

NSA/CSS DEPT.

3 (M)

und Gedächtnis 31.03.05

Polymers, to doskida edgovish podminishch obyektivny.
We hereby certify that the material described above has been tested and complies the terms of the contract.
Подтверждаю, что описанный выше материал испытан и соответствует условиям контракта.

Podnikový znanec výrobce:
Sachverständiger des Herstellers
Producer's works expert.

Tools document and related documents. This document is valid as an original. Class Document but also Original guilts.

[illegible]

KRÁLOVOPOLSKÁ SLÉVÁRNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No.

09/12/05

Page

1 - 3

Customer	VITAS		Project No.	BODYGATE 12"600 BW							
Const & MFR			Item Name	040330 IT 08							
Project Name	BODYGATE 12"600 BW		Material Thickness	ASTM A 216 WCB .TH 50%							
Item No.	040330 IT 08		Dwg No.	Rev.							
Material Form	Weld	Casting	Other	I.Q.I	ASME, 35 ASTM						
X-Ray Equip	No.	Actual	kvp	mA	I.Q.I Placement Sensitivity						
Radioisotope	Ir 192		20 u		Film						
Focal size	2 x 1				Screen						
Exposure Time					Shim Thickness						
FFD / SFD					Development Condition						
Density	Single	Double	Procedure								
	18 ÷ 4	2 ÷ 4	ASME V ART-2								
EXP. TECHNIQUE	RWSV	DWSV	ANSI B16.34								
	DWDV	PANORAMIC									
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type	CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
ANSI B16.34 - ART. B				CA	CB	CC	CD				
Accepted severity level	2	1	3	2	3	3	3	NA	NA	NA	NA
Casting N.	Progressive N. Films										
SB 9150	1. 2										B2
HEAT/60415	2. 3										B1
	3. 4										0
	4. 1										A1
	5. 6										A1
	6. 7										B1
	7. 8										B1
	8. 5										0
Examined by	Level I			Date of Examination							
 GIOCONDO ORFANO II° LIVELLO MT-PT-UT-RT Level II			☐ Witnessed by ☐ Reviewed by								
Approved by											

KRAĽOVOPOLSKÁ

Křížikova 68, CZ-660 90 Brno, tel.: +420 5 712 1700

fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION

N D T

Report No

03/17/05

Page

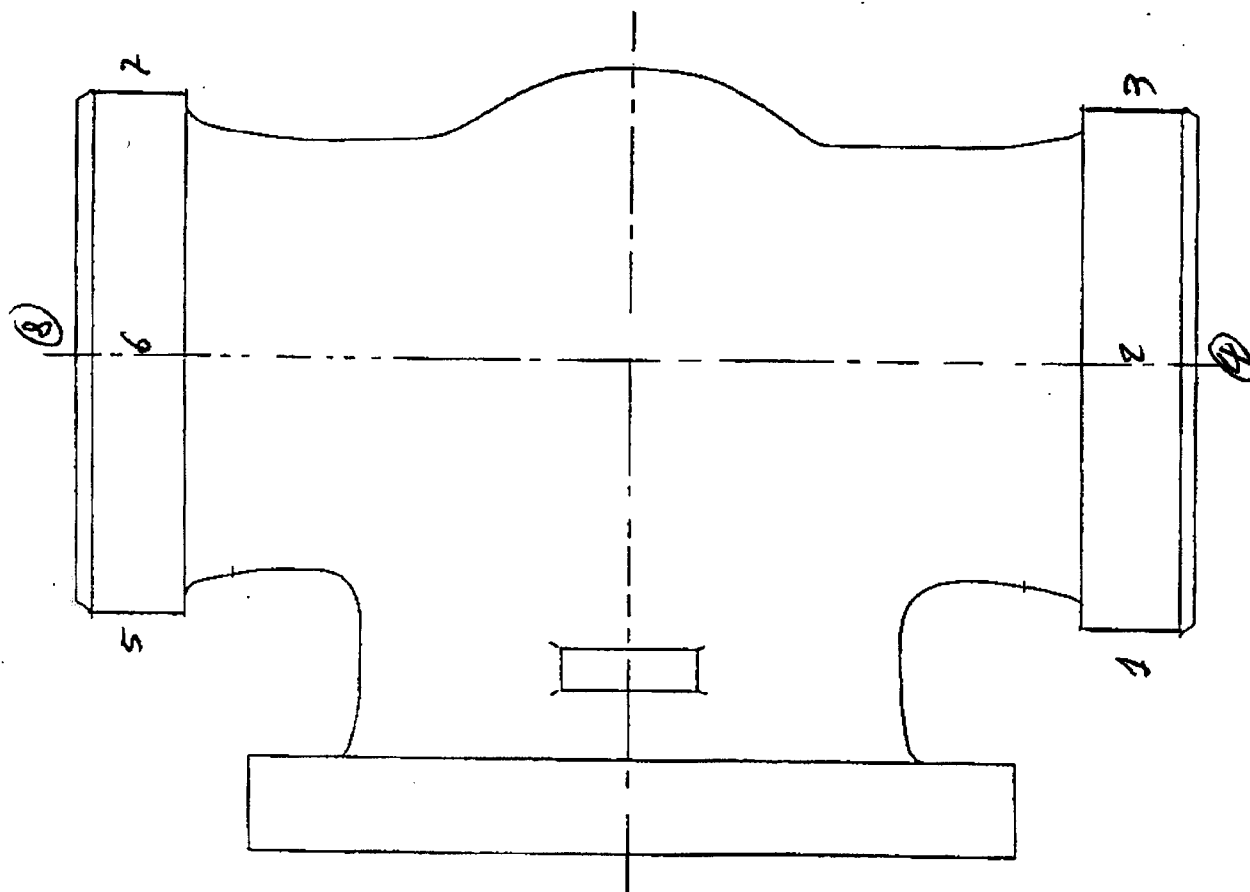
2 - 3

Casting N	Progressive N Films	BLOW HOLE	SLAG	SAND INCL	SHRINKAGE				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	REMARKS
					CA	CB	CC	CD						
		2	/	3	2	3	3	3	NA	NA	NA	NA		
SB-9151	1. 2	✓												A1
HEAT-62415	2. 3													O
	3. 4			✓										A1
	4. 1			✓										B1
	5. 6													O
	6. 7	✓												A1
	7. 8	✓												A1
	8. 5													O
SB-9152	1. 2			✓										B2
HEAT-62415	2. 3													O
	3. 4	✓												A1
	4. 1													O
	5. 6			✓										B2
	6. 7			✓										B2
	7. 8													O
	8. 5	✓												A1
SB-9153	1. 2													O
HEAT-62415	2. 3													O
	3. 4	✓												A1
	4. 1	✓												A1
	5. 6													O
	6. 7	✓												A1
	7. 8			✓										A1
	8. 5			✓										B2

VITAS
 DIVISIONE ITALVITALIA S.p.A.
 GIOCONDO ORFANO
 II° LIVELLO MT-PT-UT-RT
 20/01/05

BOSY SR 12'600BV

RT H. SB-9/50



VALTAS
 Divisione VALVITALIA S.p.A.
 GIOCONDO ORFANO
 II° LIVELLO MT-PT-UT-RT
 29/01/05

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 3	di di 3



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 300-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
300	S363G	8		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax: 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

IT 09

Výrobce: Vitkovické slévárny s.r.o.		Glas: 40001-547		Značka výrobce: VS	
Manufacturer/Hersteller: Ostrava - Vitkovice		No. Nr.		Mark of the manufacturer: Značka des Herstellers	
Zákazník: VITAS Division of VALVITALIA S.p.A.		Datum: 12.07.2004		Značka známe:	
Customer/Besteller: Customer/Besteller		Data/Datum		Inspector stamp: Stampel des Sachverständigen	
Objednávka: 041289		Dod. podmínky: OCP n° 40059			
Order No./Bestellung: 052852/108		Delivery terms/Lieferbedingungen			
Prostředí: Material:		Heat treatment: Wärmebehandlung:		Remarks: Bemerkung:	
Quantity: Material:					
Substance: Material:					
BODY		TEST BAR No 597		ASTM E 446	
GATE 18/600		TEST BAR No 599		NT According to ANSI	
		TEST BAR No 578		B16.34 annex C	
		TEST BAR No 587		VISUAL: ACC. MSS SP 65	
				DIMENSIONS: SATISFACTORY	

Chemical analysis - Chemical analysis - Chemische Analyse										
Turno	C	Si	P	S	Cr	Mn	Mo	Cu	V	W
148091	0,25	0,6	0,04	0,045	0,5	0,5	0,2	0,3	0,03	
148741	0,2	0,41	0,02	0,01	0,02	0,04	0,04	0,02	0	
148801	0,2	0,42	0,02	0,02	0,03	0,04	0,03	0,04	0	
148881	0,18	0,45	0,02	0,02	0,06	0,06	0,05	0,05	0	
	0,2	0,91	0,46	0,02	0,01	0,04	0,05	0,06	0,01	

Mechanical properties - Mechanical properties - Mechanische Eigenschaften									
Turno	Rm	A	Z	ISO-V	ISO-V	ISO-V	ISO-V	ISO-V	H8
148091	655	22	35	21	21	21	21	21	27
148741	485	31	51	37	40	42	40	40	164
148801	520	28	50	41	40	38	40	40	164
148881	500	30	48	42	143	40	75	183	
	510	28	49	41	41	39	40	160	

Pen-Pennet v tahu: Tensile strength/Zugfestigkeit
 Rp0.2 - Mez kuku-Yield point/Beugversen
 A - Tabuut-Elongation/Bruchdehnung
 Z - Zúbet-Reduction of area/Bruchvermindern

Provizorem, za dodávku odpovídá podnikatelů oběhovat.
 We hereby certify that the material described above has been tested and complies the terms of the contract.
 Wir bestätigen, dass die Lieferung des Beschäftigtenbedingungen entspricht.

Podpis/značka výrobce:

Sachverständiger des Herstellers:

Producer's works expert:

Teste dokument má platnost omezenou. This document is valid as an original. Dieses Dokument ist als Original gültig.

VALVITALIA S.p.A.
 Ostrava 800/VI
 02 794 82 Ostrava-Vitkovice
 041 + 429 688 824 fax
 E-mail: valvitalia@valvitalia.cz
 Web: www.valvitalia.cz

[illegible]

Výrobce: Manufacturer/Hersteller		Vilkovická slévárna s.r.o. Ostrava - Vítkovice		MATERIALOVÉ OSVEDČENÍ Report of material tests Abnahmeprüfzeugnis		Cislo: 40001-552 No. Nr.		Značka výrobce: Mark of the manufacturer Zeichen des Herstellers		VS	
Zákazník: Customer/Besteller		VITAS Division of VALVITALIA S.p.A.		dodávka: technická EN 10204 3.1.B		Datum: 12.07.2004 Date/Datum		Značka zmlouvy: Inspector stamp Stempel des Sachverständigen			
Objednávka: 041289 Order No./Bestellung		052852/108		Dod. podmínky: QCP n° 40089 Delivery terms/Lieferbedingungen							
Materiál: Part name: Bauwerkstoff		Předmět: Quantity: Stückzahl		Materiál: Material: Werkstoff		Mod. No.: Charge No.:		Pevn. No.: Sticht No.:		Poznámky: Bemerkungen	
BONNET GATE 16/600		6 6 6 6		A216 WCB		487011 488111 488711 489411				ASTM E 446 MT According to ANSI B16.34 annex C Visual: ACC. MSS SP 66 DIMENSIONS-DATIERFACTORY	
				TEST BAR No 604 TEST BAR No 601 TEST BAR No 605 TEST BAR No 588		Norm. 820°C - Temp. 820°C					

Chemical analysis - Chemische Analyse										Mechanical properties - Mechanische Eigenschaften										
Tab. Nr.	C	Si	P	S	Cr	Mn	Mo	Cu	V	W	Coq	Rm	ReL	Y	A	Z	ISO-V	ISO-V	ISO-V	HB
Charge No.:	%	%	%	%	%	%	%	%	%	%	%	N/mm ²	N/mm ²	%	%	%	(+20°)	(+20°)	(+20°)	
max	0.25	1.28	0.8	0.04	0.045	0.5	0.2	0.3	0.03			655								
min.																				
487011	0.19	0.9	0.49	0.02	0.01	0.03	0.05	0.03	0			250	485	22	35	21	21	21	27	
488111	0.2	0.82	0.41	0.02	0.02	0.05	0.03	0.06	0			315	525	30	49	38	38	41	39	161
488711	0.19	0.91	0.42	0.02	0.02	0.03	0.05	0.04	0			325	520	30	51	38	37	40	39	160
489411	0.18	0.92	0.47	0.02	0.02	0.03	0.06	0.05	0			320	510	30	48	40	38	39	39	167
												320	510	30	48	40	38	42	38	164

Prohlašujeme, že dodávka odpovídá podrobně předložené objednávce.
We hereby certify that the material described above has been tested and complies the terms of the contract.
Wir bestätigen, dass die Lieferung den Bestenfallsbedingungen entspricht.

Podpisový zmlouvy výrobce:
Sachverständiger des Herstellers:
Producer's works export:

Prohlašujeme, že dodávka odpovídá podrobně předložené objednávce.
We hereby certify that the material described above has been tested and complies the terms of the contract.
Wir bestätigen, dass die Lieferung den Bestenfallsbedingungen entspricht.

Podpisový zmlouvy výrobce:
Sachverständiger des Herstellers:
Producer's works export:

Prohlašujeme, že dodávka odpovídá podrobně předložené objednávce.
We hereby certify that the material described above has been tested and complies the terms of the contract.
Wir bestätigen, dass die Lieferung den Bestenfallsbedingungen entspricht.

Podpisový zmlouvy výrobce:
Sachverständiger des Herstellers:
Producer's works export:

[illegible]

KRÁLOVOPOLSKÁ SLEVÁRNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No. 03/15/05
Page 1 - 4

Customer	VITAS			Project No.	Body GATE 16"600 BW
Const & MFR				Item Name	040330 IT 09
Project Name	Body GATE 16"600 BW			Material Thickness	ASTM A 216 WCB-TH-55%
Item No.	040330 IT 09			Dwg. No.	Rev.
Material Form	Weld	Casting	Other	I.Q.I	ASME γ 40 ASTM
X-Ray Equip	No. 1	kvp N/A	mA	I.Q.I Placement Sensitivity	S.Side γ F.Side
Radioisotope	IR 192 20 u			Film	GEVAERI 37
Focal size	2 x 1			Screen	Pb
Exposure Time	-			Shim Thickness	0.10 mm
FFD / SFD	-			Development Condition	AUTOMATIC + 25°C
Density	Single 1.8 ÷ 4	Double 2 ÷ 4		Procedure	ANSI B16-34
EXP. TECHNIQUE	TWSV DWDV		DWSV PANORAMIC		ASMEV ART. 2

Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
				CA	CB	CC	CD							
ANSI B16-34 ANNEX B														
Accepted severity level	2	-	3	2	3	3	3	NA	NA	NA	NA			
Casting N.	Progressive N. Films													
5B-9118	1-2													PM
HEAT-148861	2-3													O
	3-4													O
	4-5													AI/AN
	5-6													PM
	6-7													B2
	7-8													O
	8-5													A1

Examined by

VITAS Level I
DIPLOMA OF VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
201103
Level II

Date of Examination

Approved by

☐ Witnessed by
☐ Reviewed by

KRALOVOPOLSKÁ

Křižíkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700

fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION

N D T

Report No.

02/15/05

Page

2 - 4

Casting N.	Progressive N. Films	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE				CRACK	HOT TEAR	INSERT	MOLT LINK	TREATMENT	REMARKS
					CA	CB	CC	CD						
		2	1	3	2	3	3	3	NA	NA	NA	NA		
SB-9235	1. 2													O
HEAT/148241	2-3													B2
	3-4													A1
	4-1													A1
	5-6													B1
	6-7													A1
	7-8													A1
	8-5													B1
SB-9236	1-2													A1
HEAT/148091	2-3													A1
	3-4													O
	4-1													O
	5-6													B1
	6-7													A1
	7-8													O
	8-5													B1
SB-9231	1-2													O
HEAT/149091	2-3													O
	3-4													B2
	4-1													A1B1
	5-6													B1
	6-7													O
	7-8													A2
	8-5													B1

VITAS
GIORGIO ORFANO
II° LIVELLO MT-PT-UT-RT
2010105

KRÁLOVOPOLSKÁ

Křižíkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700

fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION

N D T

Report No

09/15/05

Page

3 - 4

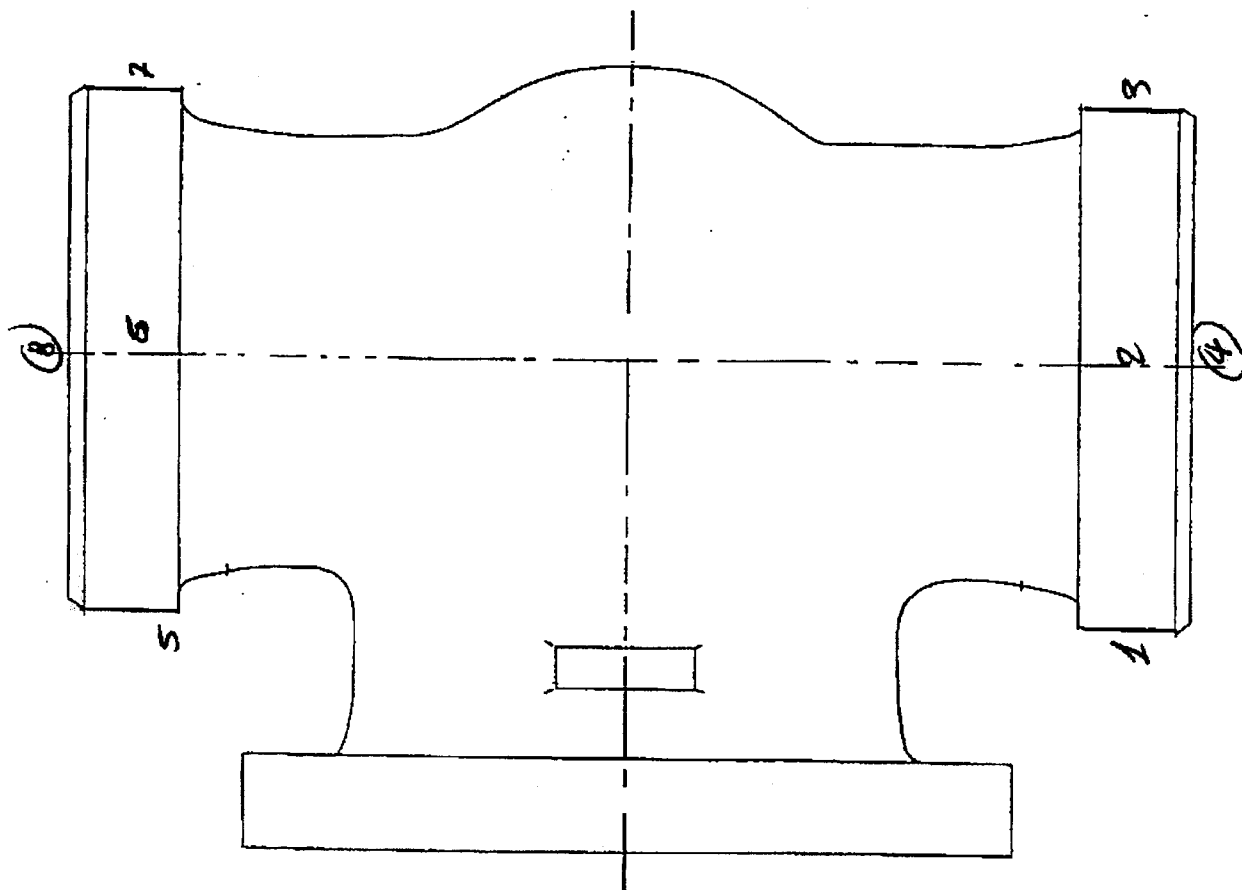
Casting N	Progressive N Films	BLOW HOLE	SLAG	SAND INCL	SHRINKAGE				CRACK	HOT TEAR	INSECT	MOTT LING	SURFACE DEFECT	GAS	TRENCH
					CA	CB	CC	CD							
		2	-	3	2	3	3	3	NA	NA	NA	NA			
SB-9238	1-2													O	
HEAT/148801	2-3	✓												A1	
	3-4			✓										A1	
	4-5			✓										A1	
	5-6			✓										B2	
	6-7			✓										A1	
	7-8													O	
	8-5													O	
SB-9239	1-2													O	
HEAT/148801	2-3													O	
	3-4			✓										A1	
	4-5			✓										B1	
	5-6	✓		✓										A1/B1	
	6-7	✓												A1	
	7-8													O	
	8-5			✓										B2	
SB-9240	1-2													O	
HEAT/148931	2-3					✓								CB2	
	3-4			✓										A1	
	4-5	✓												A1	
	5-6													O	
	6-7													B1	
	7-8													B1	
	8-5													B1	

Division of VALVITALIA S.p.A.
 GIOCONDO ORFANO
 II° LIVELLO MT-PT-UT-RT

24/11/05

BODY SR 16° 600

Rt H. 53-9118



VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
20/01/05

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 4	di di 4

KRÁLOVOPOLSKÁ SLÉVÁRNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No.

03/29/05

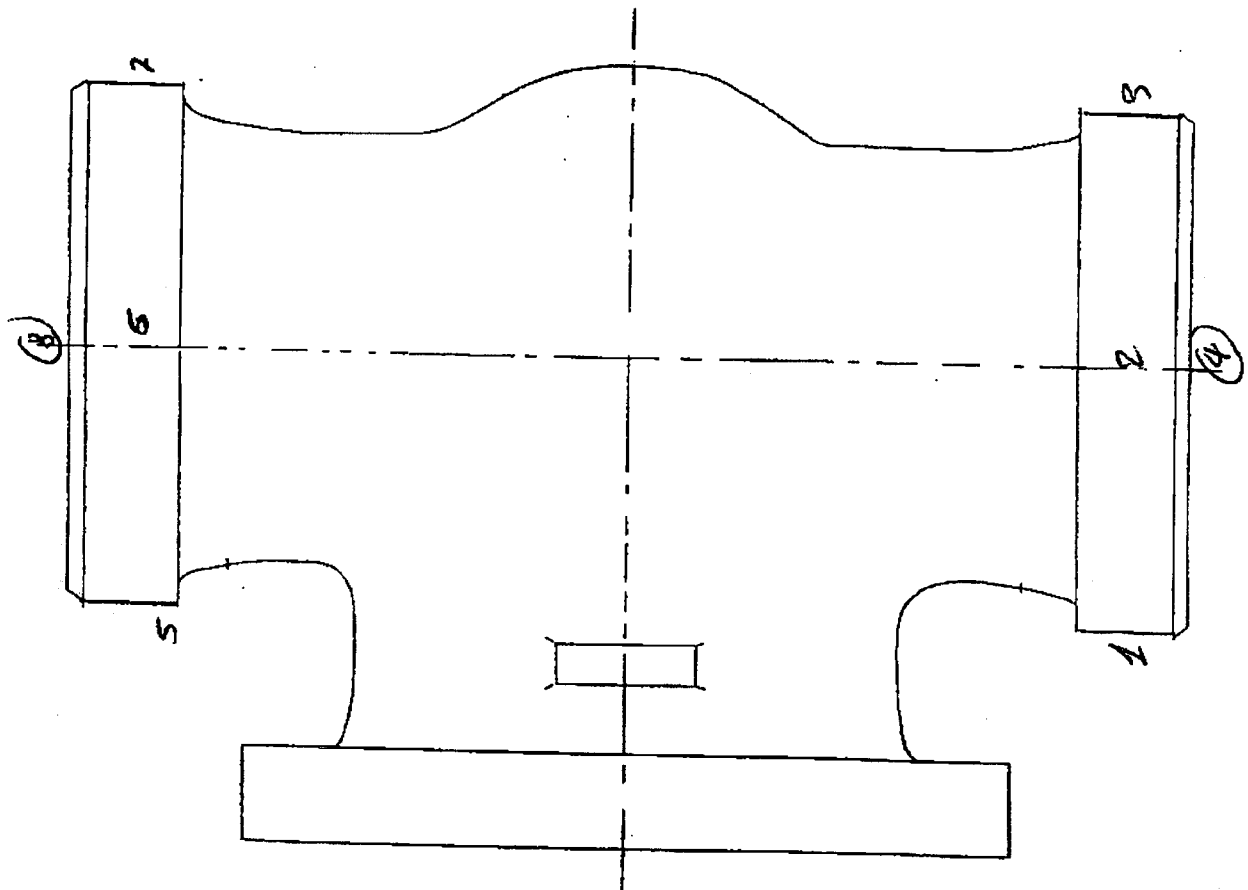
Page

1 - 2

Customer	VITAS		Project No.	BODY GATE 16"600 BW							
Const & MFR			Item Name	040330 IT 09							
Project Name	BODY GATE 16"600 BW		Material Thickness	ASTM A 216 WCB - TH 5522							
Item No.	040330 IT 09		Dwg. No.	Rev.							
Material Form	Weld	Casting	Other	I.Q.I	ASME 40 ASTM						
X-Ray Equip	No. / Actual	kVp N/A	mA	I.Q.I Placement Sensitivity	S.Side / F.Side						
Radioisotope	IR 192		19 u	Film	GEVAERT 17						
Focal size	2x1		Screen	Pb							
Exposure Time	✓		Shim Thickness	0.10 mm							
FFD / SFD	✓		Development Condition	AUTOMATIC + 25°C							
Density	Single	Double	Procedure	ANSI B16.34							
EXP. TECHNIQUE	RWSV DWDV	DWSV PANORAMIC	ASME V ART 2								
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type	CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
ANSI B16.34 ANNEX B				CA CB CC CD							
Accepted severity level	2	✓	3	2 3 3 3	HA	HA	HA	HA			
Casting N.	Progressive N. Films										
56-9047	1-2		✓								B2
ENT/ 450931	2-3		✓								B2
	3-4	✓	✓								A1/B1
	4-1										0
	5-6		✓	✓							C/N/A1
	6-7		✓								B1
	7-8										0
	8-5	✓	✓								A1/B1
Examined by	Level I		Date of Examination								
Approved by	Level II		 Division of VALITALIA S.p.A. GIOCONDO ORFANO II° LIVELLO MT-PT-UT-RT 29/05/05								
			☐ Witnessed by ☐ Reviewed by								

Body SR 16" 600

Rt H. SC-9047



VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
20/01/05

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag.	2 di 2



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 310-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
310	S421G	1		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:

Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

TEST CERTIFICATE

2

71-2003

PAGE

2 of

2

USEFUL

VALVITALITA S.p.A. - VITAS Division
 Stabilimento / Plant S.S. 11 Via Olmo, 31/33 • 36077 Altavilla Vicentina (VI) • Italy
 Tel. +39 0444 337 111 • fax +39 0444 349 359
 Ufficio Vendite / Sales Office: Via Tonale, 72 • 24081 Albano S. Alessandro (BG) • Italy
 Tel. +39 038 452 1278 • telefax. +39 035 452 1263
 e-mail: qualita@valitalia.com • www.valitalia.com

YOUNG BUSINESS OF CHINA AND

90755706
OUR JOB NO. REMARKS:

15/09/04

22/08/04

LURGI PROJECT : ZAGROS 2

WATERBURY

[illegible]

DOVE PENETRANT INSPECTION HAS BEEN CARRIED OUT ON HARD-FACED SEATS AND WEDGES ACCORDING TO CUSTOMER'S REQUIREMENTS.

~~EC~~ ~~DECLARATION OF CONFORMITY.~~

SUPPLIER: VITAS - DIVISION OF VALVITALIA SPA
VIA OLMO 31/33, ALIATELLA VICENTINA (VICENZA)

ACCORDING TO ANEX VII OF DIRECTIVE 97/23/CE, THE PRODUCTS DETAILED ABOVE, HEREBY DECLARE THAT THE PRODUCTS DETAILED ABOVE, ARE IN COMPLIANCE WITH THE DIRECTIVE 97/23/CE (C) ASSESSMENT MIDDLE H CATEGORY, TYPE TUD GROUP 1.

SIGNED: 

PRINT NAME	D. BALZAROTTI
TITLE	GENERAL MANAGER

了能个丁 康恩惠1911丁

TRBO AUTHORITY

DATE _____

CLIENT INSPECTOR

DATE _____

INSPECTOR DEPT.

DATE

DISCUSSION

NEW BATTER ACTIVELY

potraviny, za dodržení politických objektivit.

We hereby certify that the material described above has been tested and complies the terms of this contract.

✓
Wir bestätigen, dass die Lieferung den Beststellungsbedingungen entspricht.

Podpisový značek výrobce:
 Sachverständiger des Herstellers:
 Producer's works expert:

[Signature]

[Stamp: Z. H. S. A. Y. C. 1971]

KRALOVOPOLSKÁ SLEVARNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No. 03/18/05
Page 1 - 3

Customer	VITAS		Project No.	BODY GATE 8"900 BW								
Const & MFR			Item Name	040930 IT 10								
Project Name	BODY GATE 8"900 BW		Material Thickness	ASTM A-211-WLB-TH 40%								
Item No.	040930 IT 10		Dwg. No.	Rev.								
Material Form	Weld	Casting	Other	I.Q.I	ASME 30 ASTM							
X-Ray Equip	No. 1	kvp N/A	mA	I.Q.I Placement Sensitivity	S.Side F.Side Y							
Radioisotope	IR 192		20 u	Film	GEVAERT D7							
Focal size	2x1			Screen	Pb							
Exposure Time	-			Shim Thickness	0.10 %							
FFD / SFD	-			Development Condition	AUTOMATIC + 25°C							
Density	Single 1.8 ÷ 4	Double 2 ÷ 4		Procedure	ASME V ART. 2							
EXP. TECHNIQUE	TWSV DWDV		DWSV PANORAMIC		AHSI B46-32							
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type	CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note	
Accepted severity level	2	1	3	2	3	3	3	NA	NA	NA	NA	
Casting N.	Progressive N. Films											
5B-9154	1-2										B2	
HEAT 102.414	2-3										A1	
	3-4										A1	
	4-5										B2	
	5-6										B2	
	7-8										A1/B1	
	8-9										CAN	
	10-11										A1	
Examined by	Level I		Date of Examination									
Approved by		Level II		☐ Witnessed by ☐ Reviewed by								

VITAS
Division of VALVITALIA S.p.A.
GIORGIO ORFANO
II° LIVELLO MI-PE-UT-RT
24/01/05

KRÁLOVOPOLSKÁ

Křižíkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723

REPORT OF RADIOGRAPHIC EXAMINATION

N D T

Report No

03/18/05

Page

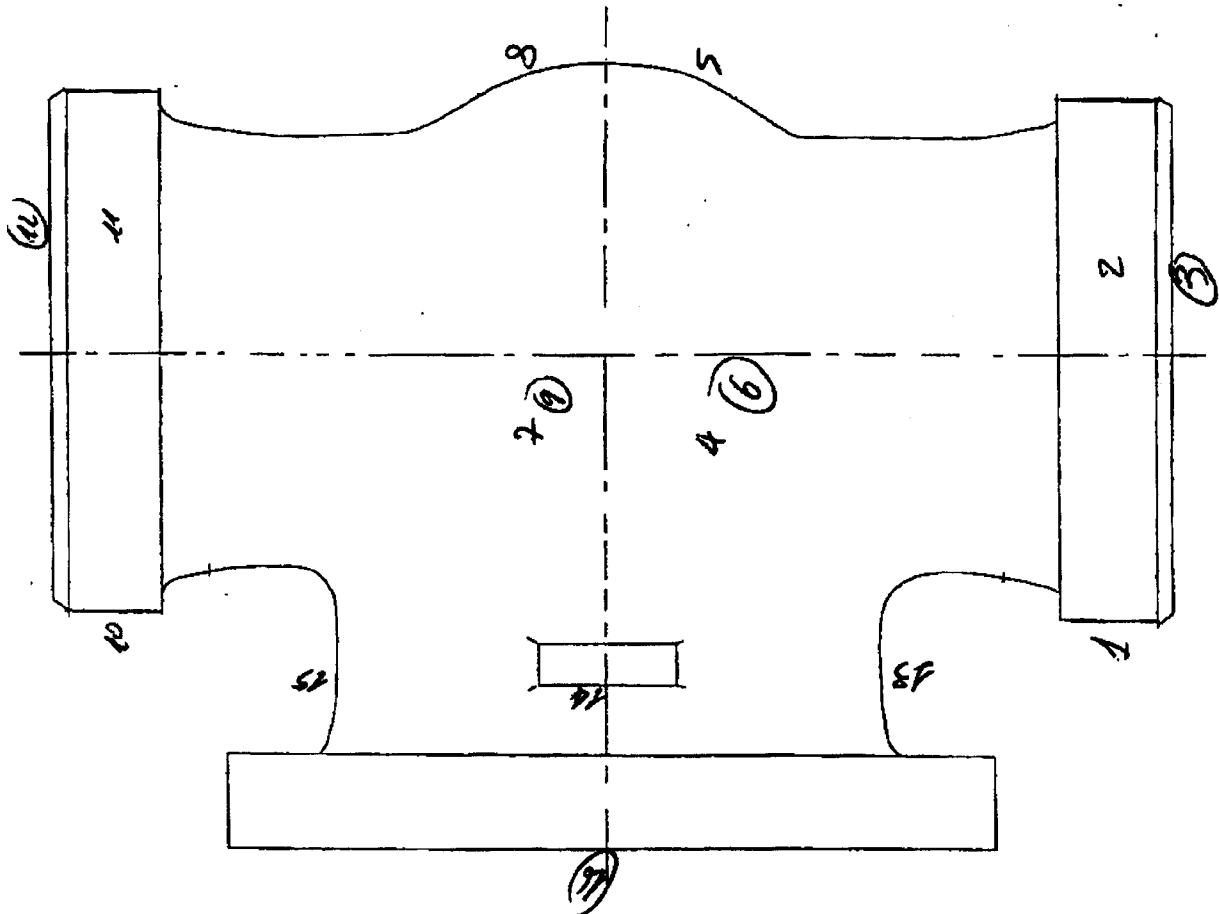
2 - 3

Casting N	Progressive N. Films	BLOW HOLE	SLAG	SAND INCL	SHRINKAGE				CHACK	HOT TEAR	INSERT	MOLT LING	DEFECT	REMARKS
					CA	CB	CC	CD						
		2	✓	3	2	3	3	3	NA	NA	NA	NA		
5B-9154	11 12	✓												A1
HEAT/00114	12 13			✓										B1
	13 14			✓										B1
	14 15	✓		✓										A1/B1
	15 16			✓										B2
	16 17	✓		✓										A1/B2

VITAS
Division of VALITALIA S.p.A.
GIOCONDO ORFANO
BREVETTO MT PT UT RT
29/01/05

Boby 32 8'800BV

RTH 58-9154



VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LI.ELLO MT-PT-UT-RT
20/11/05

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 3	di of 3

KRALOVOPOLSKÁ SLÉVÁRNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No

03/19/05

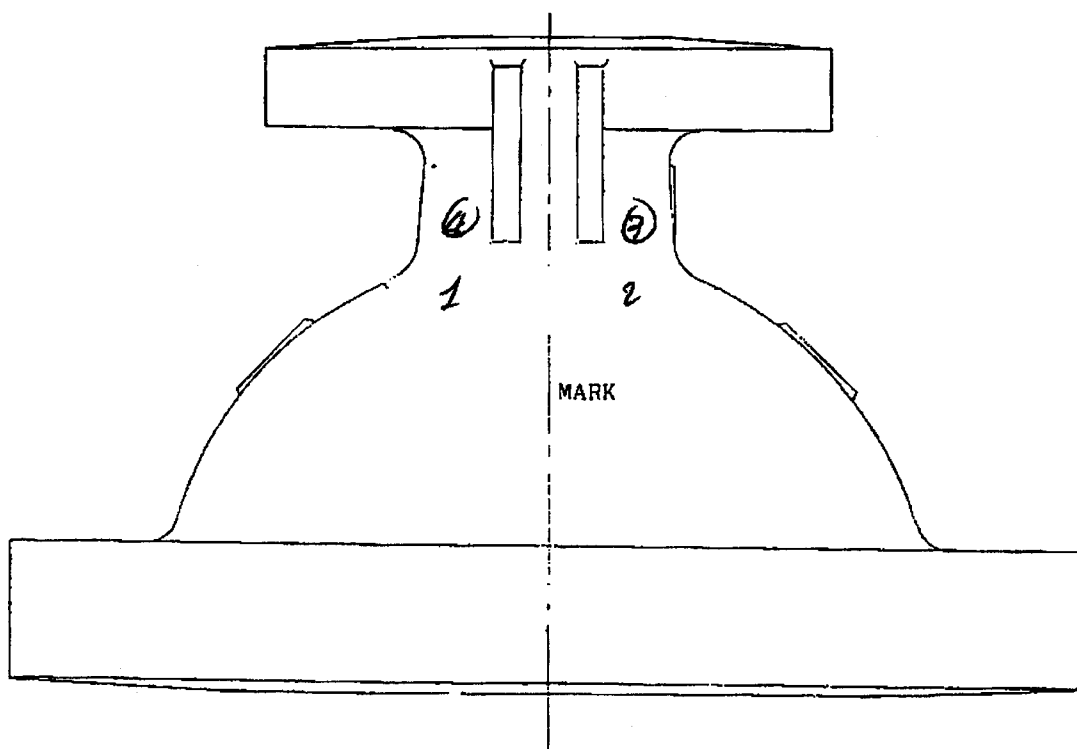
Page

1

Customer	VITAS			Project No.	BONNET GATE 8"900									
Const & MFR				Item Name	040330 IT 10									
Project Name	BONNET GATE 8"900			Material Thickness	ASTM A 217-WCB - TH 40"2									
Item No.	040330 IT 10			Dwg. No.	Rev.									
Material Form	Weld	Casting	Other	I.Q.I	ASME 130 ASTM									
X-Ray Equip	No.	Actual	kVp N/A	mA	I.Q.I Placement Sensitivity	S.Side F.Side 7								
Radioisotope	IR 192 20 u			Film	GEVAERT 37									
Focal size	2 x 1			Screen	PB									
Exposure Time	-			Shim Thickness	0.10"2									
FFD / SFD	/			Development Condition	AUTOMATIC + 25 ± C									
Density	Single	Double		Procedure	ASME V ART. 2									
	1.8 ÷ 4	2 ÷ 4												
EXP. TECHNIQUE	RWSV DWDV			DWSV PANORAMIC			ANSI B.16-34							
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
	CA	CB	CC	CD										
ANSI B.16-34 Annex B														
Accepted severity level	2	/	3	2	3	3	3	NA	NA	NA	NA			
Casting N.	Progressive N. Films													
50-9154/1	1-2													B2
HEAT/00119	2-3													B1
	3-4													0
	4-1													B2
Examined by	VITAS Level I Dipartimento VALITALIA S.p.A. GIORGIO ORFANO II° LIVELLO MT-PT-UT-RT 20/11/05				Date of Examination									
Approved by	Level II				☐ Witnessed by ☐ Reviewed by									

BONNET SR 8°900

RT N. SB-9154/1



VITALAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
20/04/05

Firma
Signature

Data
Date

UFFICIO CONTROLLO QUALITÀ

Quality Control Department

Rev.
Rev.

Sez.
Sec.

pag.
pag.

di
of

2

2



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 320-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
320	S421G	1		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG



QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:
Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

**TEST CERTIFICATE
(DECLARATION OF CONFORMITY)**

N. 5000215/ 3 PAGE 2 OF 2
CUSTOMER CODE 20350

STIERMANN ECONOSTO GMBH & CO. KG
FREIGRAFMENEG 2
44357 DORTMUND D

YOUR PURCHASE ORDER# NO.

	BALANCE ORDER
	FORTNITE ORDER

15/09/04	22/09/04
15/09/04	22/09/04

004957006

[illegible]

40330/1 | URGENT PROJECT : ZAGROS 2

MATERIAL TESTED

TEST		BAR	PHASIA	SEATO
☐	PSY	☒	MYOGRSTATO	SEATO
				SEATO

PART, N.	DESCRIPTION
1	...
2	...
3	...
4	...
5	...
6	...
7	...
8	...
9	...
10	...
11	...
12	...
13	...
14	...
15	...
16	...
17	...
18	...
19	...
20	...
21	...
22	...
23	...
24	...
25	...
26	...
27	...
28	...
29	...
30	...
31	...
32	...
33	...
34	...
35	...
36	...
37	...
38	...
39	...
40	...
41	...
42	...
43	...
44	...
45	...
46	...
47	...
48	...
49	...
50	...
51	...
52	...
53	...
54	...
55	...
56	...
57	...
58	...
59	...
60	...
61	...
62	...
63	...
64	...
65	...
66	...
67	

QTY	PART, N.	DESCRIPTION

POYD PENETRANT INSPECTION HAS BEEN CARRIED OUT ON HARD-FACTS OF SEATS AND WEDGES ACCORDING TO CUSTOMER'S REQUIREMENTS.

-EC DECLARATION OF CONFORMITY.

SUPPLIER: VITAS - DIVISION OF VALVITALIA SPA
VIA OLMO 31/33, ALTAVILLA VICENTINA (VICENZA)

ACCORDING TO ANNEX VII OF DIRECTIVE 97/23/OE,
 HEREBY DECLARE THAT THE PRODUCTS DETAILED ABOVE
 ARE IN COMPLIANCE WITH THE DIRECTIVE 97/23/OE (G)
 HAVE BEEN MANUFACTURED IN ACCORDANCE WITH CONFORMITY
 ASSESSMENT MIDDLE H, CATEGORY III, FLUID GROUP 1.

SIGNED :

-PRINT NAME : D.BALZAROTTI
-TITLE :GENERAL MANAGER

TEST RESULT

Need Authority

CLIENT INSPECTOR

DATE _____

INSPECTOR DEPT.

DATE _____

TRANSFORMING AND
SALES FACTORY

31 0305

17.11

Výrobce: VITKOVICKÉ SLÁVATNY s.r.o. Manufacturer/Hersteller: Ostrava - Vítkovice		Číslo: 40001-357/A No./Nr.: VS	
Zákazník: VITAS Division of VALVITALIA S.p.A. Customer/Besteller:		Značka výrobce: Mark of the manufacturer Zeichen des Herstellers	
Objednávka: 041288 Order No./Bestellung: 052852/108		Značka znalce: Inspector stamp Stempel des Sachverständigen	
Pročet: 12 Quantity: 12		Detail: QCP n° 40089 Delivery terms/Lieferbedingungen:	
Material: A217 WC6 Material:		Heat treatment: Wärmebehandlung:	
Spec. No.: 411192 Charge No.:		Remark: Bemerkung:	
Body: GATE 10/900		TEST BAR No 604 Norm. 920° - Temp 670°C	
Chemical analysis - Chemische Analyse		Mechanical properties - Mechanische Eigenschaften	
Termin: Charge No.:	C % Mn % P % S % Si % Ni % Cr % Mo % Cu % V % W % Ceq %	Rp0.2 N/mm ² Rm N/mm ² A % Z % ISO-V (20°) ISO-V (20°) ISO-V (20°) HB	HB
max. 0.2 min. 0.05	0.8 0.5 0.4 0.045 0.6 0.5 1.5 0.65 0.5 0.5 0.1 0.1	275 485 530 20 35 47	164
411192	0.13 0.57 0.34 0.02 0.01 1.25 0 0.54 0 0 0	530 27 47	164

Rm - Tensile strength / Zugfestigkeit

Rp0.2 - 0.2% proof stress / Streckgrenze

A - Tensile elongation / Bruchdehnung

Z - Reduction of area / Bruchminderung

Potvrzujeme, že dodávka odpovídá podrobnějším údajům.

We hereby certify that the material described above has been tested and complies the terms of the contract.

Wir bestätigen, dass die Lieferung den Bestellungsbedingungen entspricht.

Podpisový zruč výrobce:

Sachverständiger des Herstellers:

Producer's work expert:

VITAS

Division of VALVITALIA S.p.A.

QUALITY CONTROL

This document is valid as an original. This document is not original.

3

3

3

3

Razítka výrobce (Stamp)

Výrobce: Manufacturer/Hersteller		Výroviště slévárny s.r.o. Ostrava - Vítkovice		MATERIÁLOVÉ OSVĚDČENÍ Report of material tests Abnahmeprüfzeugnis		Číslo: 40001-358/A		Značka výrobce: Mark of the manufacturer/ Zeichen des Herstellers		VS	
Zákazník: Customer/Besteller		VITAS Division of VALVITALIA S.p.A		dle spec. techn. EN 10204 3.1.B		Datum: 03/12/2004		Značka analýzy: Inspector stamp			
Objedávka: Order No./Bestellung		041289		O52852/108		Dod. podmínky: CCP n° 40089		Inspektor státní Stamp of the Sachverständigen			
Název: Part name: Bestandteil		Počet: Quantity: Stückzahl		Materiál: Material: Werkstoff		Mark. No.: Charge No.:		Heat treatment: Wärmebehandlung		Remark: Bemerkungen	
BONNET GATE 10/900		12 12		A217 WC6		411192 411192		Norm. 920° - Temp 670°C		ASTM E 446 MT According to ANSI B18.34 annex C VERVAL: ACC. MSS SP 55 CERAM/CHS: SATISFACTORY	
TEST BAR No 604 TEST BAR No 604											
Mechanical properties - Mechanical properties - Mechanische Eigenschaften											
Tensile Mater. No.: Charge No.:		R _m / N/mm ²		A %		Z %		ISO-V (20°)		ISO-V (20°)	
max. 0,2		655		20		35					
min. 0,05		485		27		47					
411192		310		530		27				164	
411192		310		530		27				164	
Chemical analysis - Chemical analysis - Chemische Analyse											
C %		Si %		P %		S %		Cr %		Ni %	
0,2		0,8		0,4		0,045		1,5		0,5	
0,05		0,5		0,4		0,045		1		0,45	
0,13		0,34		0,02		0,01		1,25		0	
0,13		0,34		0,02		0,01		1,25		0	
Tensile strength / Zugfestigkeit R _m / 2 - Mez kuzu - Yield point / Streckgrenze A - Těžnost - Elongation / Bruchdehnung Z - Zúžení - Reduction of area / Bruchverring.ung											

Potvrzuje se, že dodávka odpovídá podmínkám objednávky.
We hereby certify that the material described above has been tested and complies the terms of the contract.
Wir bestätigen, dass die Lieferung den Bestandsbedingungen entspricht.

Podnikový znalec výrobce:
Sachverständiger des Herstellers:
Producer's works expert:

QUALITY CONTROL

VITKOVICE
Ostrava 76041
CZ 700 02 Ostrava-Vitkovice
tel.: + 420 595 954 809
fax: + 420 595 954 809
Razítka výrobce (Stamp of the manufacturer)

This document is valid as an original. Diese Dokument ist als Original gültig.

KRALOVOPOLSKÁ SLÉVÁRNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No. 09/20/05
Page 1 - 3

Customer	VITAS		Project No.	BODY GATE 10"900 BW	
Const & MFR			Item Name	040330 IT 11	
Project Name	BODY GATE 10"900 BW		Material Thickness	ASTM A-272 WCB-TH-452	
Item No.	040330 IT 11		Dwg. No.	Rev.	
Material Form	Weld	Casting	Other	I.Q.I	ASME 230 ASTM
X-Ray Equip	No. 1	kvp	mA	I.Q.I Placement Sensitivity	S.Side F.Side
Radioisotope	IR 192		20 u	Film	GEVAERT 37
Focal size	2x1		Screen	Pb	
Exposure Time	-		Shim Thickness	0.10 2	
FFD / SFD	-		Development Condition	AUTOMATIC + 25°C	
Density	Single	Double	Procedure	ASME V ART. 2	
	1.8 ÷ 4	2 ÷ 4			
EXP. TECHNIQUE	RWSV DWDV		DWSV PANORAMIC	ANSI B16.34	

Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
				CA	CB	CC	CD							
ANSI B16.34 ANNEX B														
Accepted severity level	2	1	3	2	3	3	3	HA	HA	HA	HA			
Casting N.	Progressive N. Films													
SB 9155	1-2												AI	
HEAT/01492	2-3												CB	
	3-1												AI	
	4-5												CB	
	5-6												AI	
	7-8												AI	
	8-9												AI	
	10-11												AI	

Examined by

Level I

Date of Examination

VITAS
Division of VALITALIA S.p.A.
GIACOMO ORFANO
B° LIVELLO MT-PT-UT-RT
Level II

Approved by

☐ Witnessed by
☐ Reviewed by



REPORT OF RADIOGRAPHIC EXAMINATION

NDT

Report No.

03/22/05

Page

2 - 3

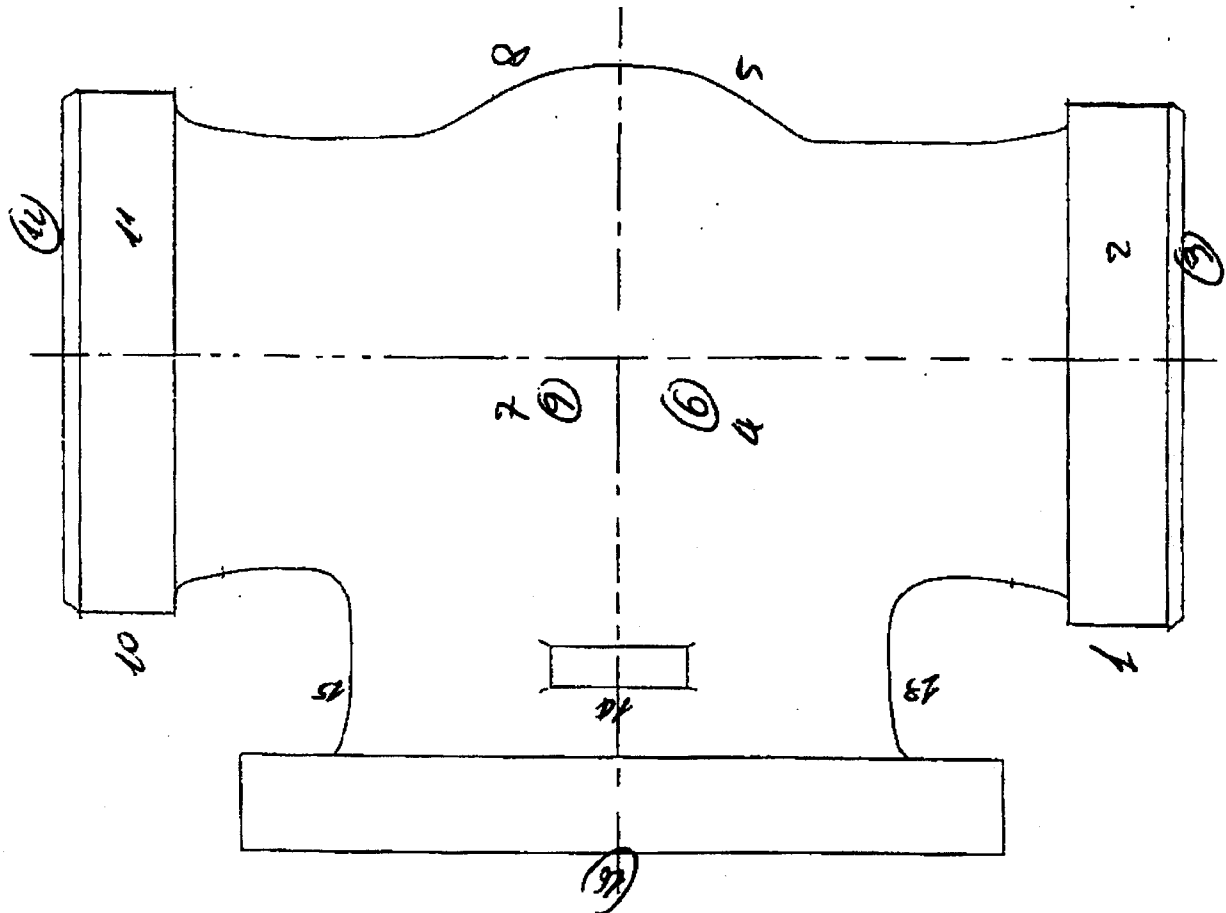
Casting N.	Progressive N. Films	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Remarks
					CA	CB	CC	CD							
		2	1	3	2	3	3	3	NA	NA	NA	NA			
SB-9155	11-12			✓										B2	
HEM/211192	12-13			✓										A1	
	13-14	✓		✓										A1/B2	
	14-15			✓										A1	
	15-16			✓										A1	
	16-13			✓										A1	



DIVISION OF VALVITALIA S.p.A.
 GIOCONDO ORFANO
 II° LIVELLO MT-PT-UT-RT
 2014/05

UTLAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
P° LIVELLO MT-PT-UT-RT
204465

Body SR 10'200 BW
Rt H. SB. 9/55



VTAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
26/01/55

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 9	di di 3

KRALOVOPOLSKÁ SLEVARNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No. 03/24/05

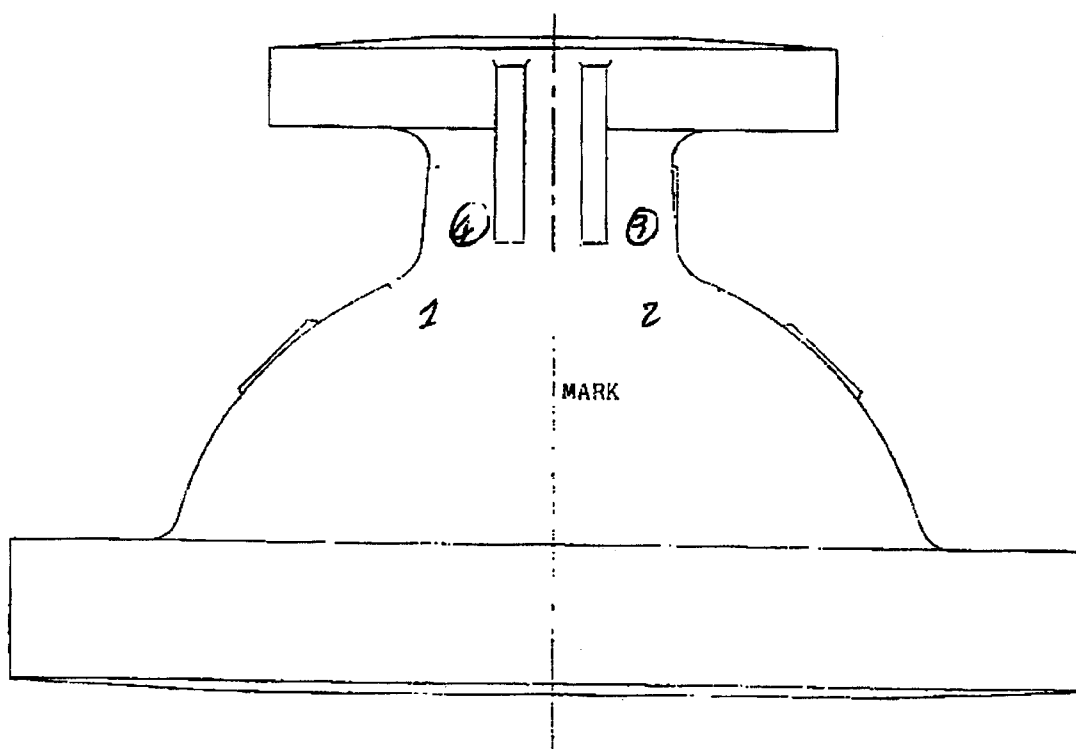
Page 1 - 2

Customer	VITAS		Project No.	BONNET GATE 10°400							
Const & MFR			Item Name	040930 IT 11							
Project Name	BONNET GATE 10°400		Material Thickness	15TH A 241 WCC-TH 452							
Item No.	040930 IT 11		Dwg. No.	Rev							
Material Form	Weld	Casting	Other	I.Q.I	ASME 30 ASTM						
X-Ray Equip	No. 1	kvp N/A	mA	I.Q.I Placement Sensitivity	S.Side F.Side						
Radioisotope	IR-192		20 u	Film	BEUMER 37						
Focal size	2 x 1			Screen	Pb						
Exposure Time	-			Shim Thickness	0.10 1/2						
FFD / SFD	-			Development Condition	AUTOMATIC + 25°C						
Density	Single 1.8 ÷ 4	Double 2 ÷ 4		Procedure	ASME V ART 2						
EXP. TECHNIQUE	TWSV DWDV		DWSV PANORAMIC	ANSI B16-34							
Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL.	SHRINKAGE type	CRACK	HOT TEAR	INSERT	MOLT LING	SURFACE DEFECT	Grade	Note
ANSI B16-34 ART 2 B				CA CB CC CD							
Accepted severity level	2	1	3	2	3	3	3	N/A	N/A	N/A	N/A
Casting N.	Progressive N. Films										
58-9155/1	1.2										B2
HEAT/011192	2.3										CB1
	3.4										CB1
	4.1										PA
Examined by	Level I		Date of Examination								
Approved by	Level II		☐ Witnessed by ☐ Reviewed by								

VITAS
DIVISION OF VALVITALIA S.p.A.
GIOCONDO ORFANO
112 LIVELLO MT-PT-UT-RT
24/06/07

BONNET SR 10°900

RT H. 5B-9155/1



VITALAS
 Division of ALVITALIA S.p.A.
 GIOCONDO ORFANO
 II° LIVELLO MT-PT-UT-RT
 29/1/05

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 2	di of 2



Material & Test Certificates Valves

Client : Lurgi Oel und Gas Chemie GmbH
Lurgi-Order-No. : 4567581
Siekmann-Order-No.: 8034495

CERTIFICATE-NO.: 330-1

Lurgi-Item-No.	Lurgi-I.D.	Quantity	Page	Remarks
330	S421G	1		

Date 17.03.05
Siekmann Econosto GmbH & Co. KG


QM Meinold Oestreich

If you need any Spare Parts or
technical support please contact:
Siekmann Econosto GmbH & Co. KG
P.O. Box 150440, D-44344 Dortmund
Freigrafenweg 2, D-44357 Dortmund
Germany

Tel.: 0049 - 231 937 50
Fax : 0049 - 231 937 5188
E-mail: info@siekmann-econosto.de
Web: www.siekmann-econosto.de

TEST CERTIFICATE (DECLARATION OF CONFORMITY)



VALITALIA S.p.A. - VITAS Division
Stabilimento / Plant 8.B. 11 Via Orio. 31/33 - 38077 Alleva Vescovana (VI) - Italy
Tel. +39 0444 337 111 - Fax +39 0444 349 359
Ufficio Vendita / Sales Office: Via Trieste 72 - 24061 Albano S. Alessandro (BG) - Italy
Tel. +39 035 4521278 - Telefax: +39 035 4521283
e-mail: qualita@valitalia.com - www.valitalia.com

YOUR PURCHASE ORDER NO.

90045640P

OUR JOB NO.

REMARKS

40330/1 LURGI PROJECT : ZAGROS 2

DATE

15/09/04

22/09/04

☒ PARTIAL ORDER

☐ BALANCE ORDER

☒ API 598

☐ BS 6756

☒ EN 10204 J19

☐

SIEMANN ECONOSTO GMBH & CO. KG
FREIGRAFFENEG 2
44367 DORTMUND D

N. 5000216/3

PAGE

1 OF 2

CODE

20350

MATERIAL TESTED			TEST			CHEMICAL ANALYSIS												
ITEM	QTY	PART. N.	DESCRIPTION	HYDROSTATIC	SEAL	SEATS	SEATS	SEATS	SEATS	SEATS	SEATS	SEATS	SEATS	SEATS	SEATS	SEATS	SEATS	SEATS
12,0	1	751937	090R 114, 188 AZ/RE GATE VALVE 14" 900 LBS - BW THK 19,05mm - CASTINGS A217 WCB - F6 TRIM - STELLITE SEATS RINGS & WEDGE - FLEX WEDGE - GASKET RJ A182 F5 - PACKING GRAPHITE + BRAIDED GRAPHITE - BOLTING B16/GR4 - GEAR OPERATOR	235	175	7												
MARCATURA/TAG.: S4216 - 00330 AASR21K																		
-VISUAL EXAMINATION ACCORDING TO MSS SP 55 : SATISFACTORY.																		
-DIMENSIONAL EXAMINATION HAS BEEN CARRIED OUT WITH SATISFACTORY RESULT.																		
-ALL VALVES HAS BEEN MANUFACTURED ACCORDING TO RELEVANT VALVES SPECIFICATION.																		
-TRIM MATERIAL (DISC-SEAT-STEM) AND BOLTING ARE ACCORDING TO THE P.O. MATERIAL SPECIFICATION.																		
-ALL VALVES HAVE BEEN HYDROTESTED WITH SATISFACTORY RESULT.																		
-MAGNETIC PARTICLE INSPECTION HAS BEEN CARRIED OUT ON ALL ACCESSIBLE CASTING SURFACE ACCORDING TO CUSTOMER'S REQUIREMENTS.																		
-DYE PENETRANT INSPECTION HAS BEEN CARRIED OUT ON BUTT WELDING ENDS AFTER MACHINING WITH SATISFACTORY RESULTS.																		

FOLLOWING TEST RESULT	THIRD AUTHORITY	DATE	CLIENT INSPECTOR	DATE	INSPECTOR DEPT.	DATE
HYDROSTATIC AND PNEUMATIC TESTS SATISFACTORY		/ /		/ /		31/03/05



VALVITALIA S.p.A. - VITAS Division
 Stabilimento / Plant: S. 11 Via Ombra 31/233 - 36077 Altavilla Vicentina (VI) - Italy
 Tel. +39 0444 337 111 - Fax +39 0444 349 359
 Ufficio Vendite / Sales Office: Via Trieste 72 - 24061 Albano S. Alessandro (BG) - Italy
 Tel. +39 035 4521278 - Telefax: +39 035 4521283
 e-mail: qualita@valitalia.com - www.valitalia.com

YOUR PURCHASE ORDER NO.

90045640P

OUR JOB NO.

REMARKS

15/09/04

22/09/04

LURGI PROJECT : ZAGROS. 2

MATERIAL TESTED

QTY PART N DESCRIPTION

-DYE PENETRANT INSPECTION HAS BEEN CARRIED OUT ON HARD-FACINGS (STELLITE) OF SEATS AND WEDGES ACCORDING TO CUSTOMER'S REQUIREMENTS.

-EC DECLARATION OF CONFORMITY.

-SUPPLIER: VITAS - DIVISION OF VALVITALIA SPA
 VIA OLMO 31/33, ALTAVILLA VICENTINA (VICENZA)

-ACCORDING TO ANNEX VII OF DIRECTIVE 97/23/CE,
 HEREBY DECLARE THAT THE PRODUCTS DETAILED ABOVE
 ARE IN COMPLIANCE WITH THE DIRECTIVE 97/23/CE (CERT. N.01 202 I/Q-03-0710) AND
 HAVE BEEN MANUFACTURED IN ACCORDANCE WITH CONFORMITY
 ASSESSMENT MODULE H, CATEGORY III, FLUID GROUP 1.

-SIGNED:

-PRINT NAME: D. BALZAROTTI

-TITLE: GENERAL MANAGER

TEST CERTIFICATE (DECLARATION OF CONFORMITY)

N. 5000216/ 3

PAGE

2 OF

CODE

20350

STIERMANN ECONOSTO GMBH & CO. KG
 FREIGRAFEWEG 2
 44357 DORTMUND D

DATE

☒ PARTIAL ORDER

☐ BALANCE ORDER

API 598

6N 16204.3 f.6

BS 6759

CHEMICAL ANALYSIS

MECHANICAL PROPERTIES

IMPACT TEST

TEST TEMP: °C

CE

YIELD STRESS

ELONGATION

RED OF AREA

LOOSE

IMPACT

TEST

TEMP

°C

HARDNESS

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

HR

CLIENT INSPECTOR

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

31.03.05

Pratuzjeme, iz določena eksperimentalna področja objektivnosti.
 We hereby certify that the material described above has been tested and complies the terms of the contract.
 we herewith declare that I inform the Bundesnachrichtendienst correctly.

VITAS
Division of VITA/USA S.A.
QUALITY CONTROL

6

Različko výrobce (Stamp of manufacturer)

[illegible]

KRALOVOPOLSKÁ SLÉVÁRNA, s. r. o., Křižíkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION

NDT

Report No.

03/14/05

Page

1 - 3

Customer	VITAS			Project No	BODY GATE 14"900		
Const & MFR				Item Name	RR 040330-IT 12		
Project Name	BODY GATE 14"900 AW			Material Thickness	ASTM A-211 WCB - TH55 %		
Item No.	RR 040330 - IT 12			Dwg. No.	Rev.		
Material Form	Weld	Casting	Other	I.Q.I	ASME, AS		
X-Ray Equip	No.	Actual	kvp N/A	mA	I.Q.I Placement Sensitivity		
Radioisotope	IR 192			Film	GEVAERT D7		
Focal size	2x1			Screen	Pb		
Exposure Time	-			Shim Thickness	0.10 %		
FFD / SFD	-			Development Condition	AUTOMATIC + 25°C		
Density	Single	Double		Procedure	ASME V ART 2		
	1.8 : 4	2 : 4					
EXP. TECHNIQUE	TWSV DWDV			DWSV PANORAMIC	ANSI B16.34		

Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
				CA	CB	CC	CD							
ANSI B46.34 ANNEX B														
Accepted severity level	2	1	3	2	3	3	3	NA	NA	NA	NA			
Casting N.	Progressive N. Films													
58.9111	1.2													B2
HEAT/112102	2.3													A1
	3.4													A1
	4.1													A1/B2
	5.6													CB2
	6.1													B2
	7.8													A1
	9.10													B2

Examined by

Level I

Date of Examination

Approved by

VITAS
Division of VALITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
7/14/05

Witnessed by

Reviewed by

KRÁLOVOPOLSKÁ

Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700

fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION

NDT

Report No

03/14/05

Page

2 - 3

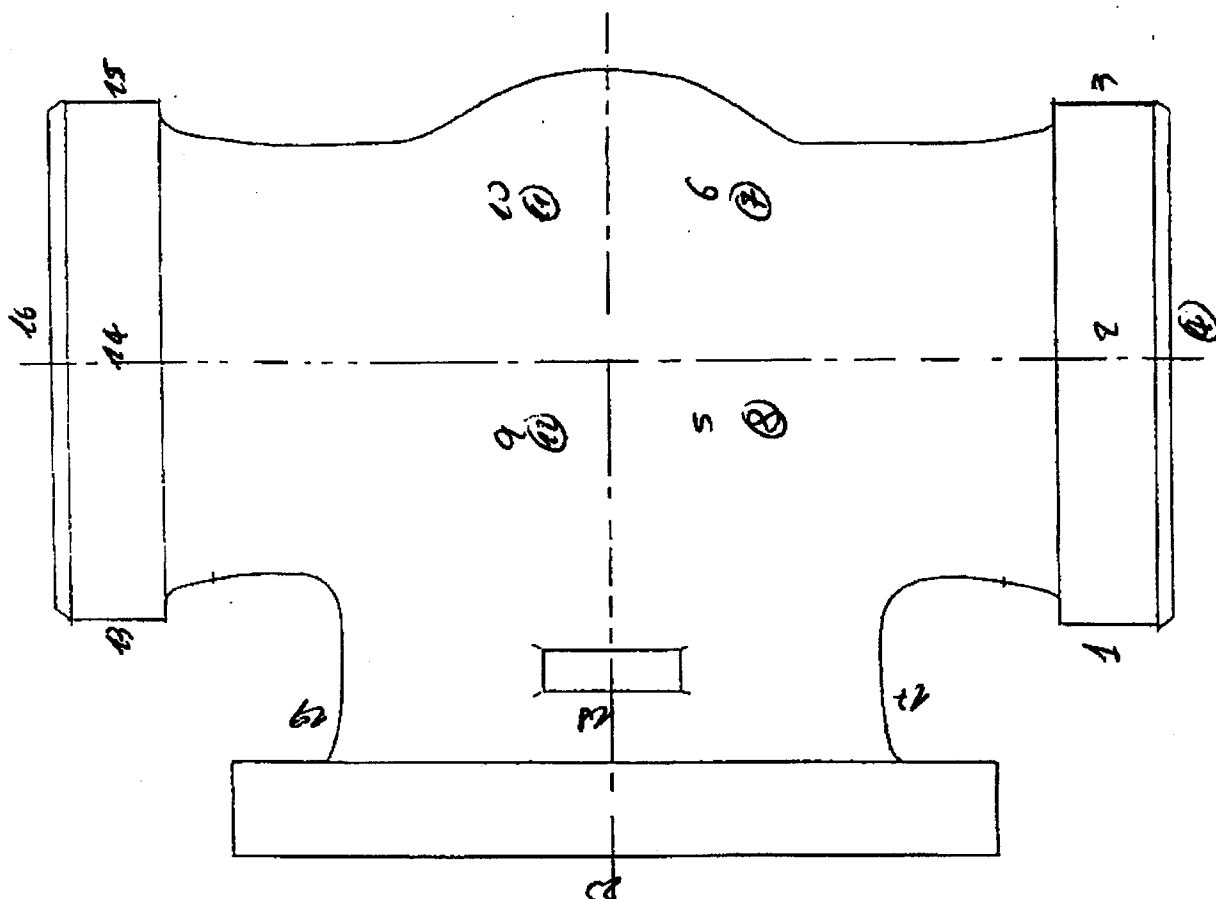
Casting N.	Progressive N Films	BLOW HOLE	SLAG	SAND INCI	SHRINKAGE				CRACK	HOT TEAR	PERFECT	NOT LUNG	LEAK EFFECT	TANK	TANKING
					CA	CB	CC	CD							
		2	/	3	2	3	3	3	NA	NA	NA	NA			
SB-9117	10-11					✓									CB2
HEAT/412102	11-12			✓											B2
	13-14			✓											B2
	14-15			✓											B2
	15-16	✓		✓											A1B1
	16-17			✓											B1
	17-18	✓			✓										CA1/A1
	18-19			✓											B2
	19-20			✓											B1
	20-17	✓		✓											A1B1

VITAS
 DIVISION OF VALUTALIA S.p.A.
 GIOCONDO ORFANO
 IP-LEVELLO ME-PL-UT-RT

30/01/05

Boby se 10'900 Bu

Rt H. SB-9117



VITAS
Division of VALVITALIA S.p.A.
GIACOMO ORFANO
II° LIVELLO MT-FT-UT-RT
20/01/05

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 3	di di 3

KRALOVOPOLSKÁ SLEVARNA, s. r. o., Křížkova 68, CZ-660 90 Brno, tel.: +420 5 712 1700
fax: +420 5 712 1723



REPORT OF RADIOGRAPHIC EXAMINATION NDT

Report No. 03/16/05
Page 1 - 2

Customer	VITAS		Project No.	BONNET GATE 14'900	
Const & MFR			Item Name	PR. 040930 IT 12	
Project Name	BONNET GATE 14'900		Material Thickness	ASTM A 211 WCB TH 55%	
Item No.	PR. 040930 IT 0912		Dwg. No.	Rev.	
Material Form	Weld	Casting ↓	Other	I.Q.I.	ASME 3.4 ASTM
X-Ray Equip	No. 1 Actual :	kvp N/A	mA	I.Q.I Placement-Sensitivity	S.Side ✓ F.Side
Radioisotope	IR 192 20 Ci		Film	GEVAERI 57	
Focal size	2 x 1		Screen	P0	
Exposure Time	/		Shim Thickness	0.10 mm	
FFD / SFD	/		Development Condition	AUTOMATIC + 25°C	
Density	Single 1.8 ÷ 4	Double 2 ÷ 4	Procedure	ASME V ART 2	
EXP. TECHNIQUE	TWSV DWDV		DWSV PANORAMIC	ANSI B46.34	

Discontinuity type and category	BLOW HOLE	SLAG	SAND INCL	SHRINKAGE type				CRACK	HOT TEAR	INSERT	MOTT LING	SURFACE DEFECT	Grade	Note
				CA	CB	CC	CD							
ANSI B46.34 - ANNEX B														
Accepted severity level	2	✓	3	2	3	3	3	NA	NA	NA	NA			
Casting N.	Progressive N. Films													
SB-9117/1	1.2		✓											B2
HEAT/43101	2.3		✓											B2
	3.4	✓												A1
	4.1		✓											A1

Examined by

VITAS
Division of VALUTALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
20/11/05

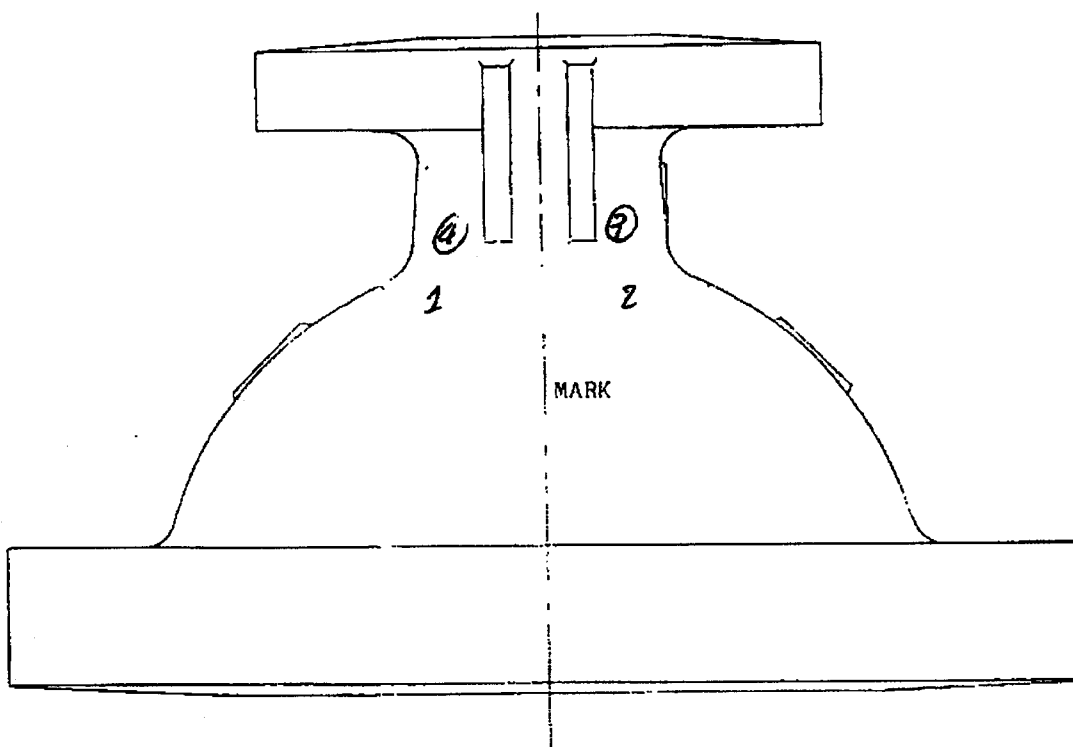
Date of Examination

Approved by

Level II

☐ Witnessed by☐ Reviewed by

BONNET SR 14"900
RT H SB 9114/1



VITAS
Division of VALVITALIA S.p.A.
GIOCONDO ORFANO
II° LIVELLO MT-PT-UT-RT
22/06/05

Firma Signature	UFFICIO CONTROLLO QUALITÀ Quality Control Department	Rev. Rev.	Sez. Sec.
Data Date		pag. pag. 2	di di 2