



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER



CERTIFICATE Acc. To
EN 10204 – 3.1.B.

CERTIFICATE No.: 2807-01

REV.: 0

DATE: 30/06/2003

CLIENT: VALVES ENTREPRISE ORDER No.: P-200309 ITEM: 1 TAG No.: 10SPP046
SVR P.O.: 2807-06/03 ITEM: 1 QUANTITY: 1
FIGURE NO.: Z561Y600LB-16" DESCRIPTION: 16" - 600 Lbs. ENDS: FLANGE ()
Sch. Ø 406,4 x 21,44 GATE VALVE (GEAR OPERATED) BUTT WELD (X)
(1" Nozzle 100 mm. - OD 33,4 mm. X WT 6.35 mm)

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B	DIN 3230 - 3	MSS - SP 82	NACE MR 0175
OTHERS : ANSI/ASME B 16.34; B 16.25; B 16.10							

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER)100%HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	300	120	60	120
PRESSURE (Kg/cm ²)	158	115	115	4 - 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

SPECIALTY VALVES RESEARCH, S.A. certify that all valves described above are in compliance with purchase order and specification requirements. This test report represents the actual attributes of the valves furnished and the test results are in compliance with the applicable specification and purchase order requirements.

TEST REPORT EN 10204 – 3.1.B. / 2.2

BODY & BONNET	ASTM A 216 WCB		
WEDGE	ASTM A 216 WCB + STELLITE Overlay		
BODY RING	A 105 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
BOLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
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FOUNDRY MILL CERTIFICATE NUMBERS

BODY : A04340
BONNET: A04340

QUALITY CONTROL MANAGER: SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 30 JUN 2003 QA/QC Department	CUSTOMER'S INSPECTOR:
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SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

MATERIAL CERTIFICATES
CERTIFICADO DE INSPECCION s/
INSPECTION CERTIFICATE Acc. To
EN 10204 / 3.1.B.

Nº/Nr.: A04340

FECHA:
DATE: 27/04/2003

PAG.: DE
SHEET 1 OF 1

Cliente/Cient.:

VALVES ENTREPRISE
Las Mercedes No. 23 - 6º
Edificio Abra No.1
48930 LAS ARENAS -BIZKAIA-

Pedido Nº
Purchase Order: P-200309

Cantidad:
Quantity: 3

Anagrama del Fabricante / sello del Inspector:
Manufacturer's Logo / Inspector stamp:



TRATAMIENTO TERMICO
HEAT TREATMENT

Normalizado:



Normalized:

Normalizado+Revenido



Normalized+Tempered

Templado+Revenido:



Quenched+Tempered:

Solubilización:



Solution:

CONDICION
CONDITION T.T.

NORMALIZED 980 °C x 3 H

MODO DE FUSION:

INDUCTION MELTING

TYPE OF MELTING:

DENOMINACION DE LA PIEZA:
CASTING DENOMINATION:

Gate Body

16" - 600 Lbs

Heat No.:

F0401

Gate Bonnet

16" - 600 Lbs

Heat No.:

F0401

Gate Wedge

16" - 600 Lbs

Heat No.:

F0401

CALIDAD DE ACERO:
STEEL QUALITY:

ASTM A 216 WCB

CONDICIONES DE ENTREGA:
TERMS OF DELIVERY:

NÁLISIS QUÍMICO - CHEMICAL ANALYSIS

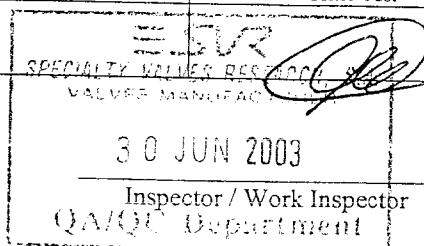
COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	V		Nº de Piezas Ner. Pieces	Peso kgs. Weight
Solicitado Requirements (max)	0.22	1.00	0.60	0.04	0.045	0.50	0.20	0.50	0.30	0.03			
F0401	0.21	0.81	0.51	0.028	0.028	0.1	0.005	0.041	0.18	0.004		3	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370

COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resiliencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	240	485 - 655	22	35	232	
F0401	Lo = 4D	10	310	525	27	41	152	
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gammagraphic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRITO AQUI HA SIDO ENSAYADO
Y CUMPLE CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.

we hereby certify that the material described above, has been
tested and complies to the material requirements of the purchase order.



 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure:	ASME B 16.34	Report No.:	10SPPO46
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Page: 1 / 2

Customer :	VALVES ENTREPRISE, S.L.	Contract:	P-200309
Description :	GATE BODY WELDING END	Extension of Test:	BW-ENDS
Drawing :	600LB 16"	Radiographed at:	Shop: ☒ Field: ☐
Material :	WCB (Heat Number: F0401)		

X Rays KV	Γ RAYS	Isotope :	IR 192	Curies:	/	Focal Spot Size:	3x3
Film Type, Brand and Size :	KODAK-MX,355x80			IQI:	II		
Screens Type and Thickness :	Pb,0.5~1mm			Material Thickness:	45mm		
Density :	1.8~2.8	Source Film Distance :	260mm	Exposure Time:	h 6 min 30s		

Evaluation standard for steel castings radiographic examination (See Back)		Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form		ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf.	Accepted
C1	1-2		E446/E186	/	/	/	/	/	/	I	OK
C2	2-3		E446/E186	/	/	/	/	/	/	I	OK
C3	3-4		E446/E186	/	/	/	/	/	/	I	OK
C4	4-5		E446/E186	/	/	/	/	/	/	I	OK
C5	5-1		E446/E186	/	/	/	/	/	/	I	OK
C6	6-7		E446/E186	/	/	/	/	/	/	I	OK
C7	7-8		E446/E186	/	/	/	/	/	/	I	OK
C8	8-9		E446/E186	/	/	/	/	/	/	I	OK
C9	9-10		E446/E186	/	/	/	/	/	/	I	OK
C10	10-6		E446/E186	/	/	/	/	/	/	I	OK
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Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.

We hereby certify that material described above, have been tested and complies to the material requirements of the purchase order. The results above indicated are exact transcription from the corresponding certificates, which are field in our factory, emitted by homologated suppliers.



SPECIALTY VALVES RESEARCH, S.A.
 VALVES MANUFACTURER

30 JUN 2003

 QA/QC Department



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

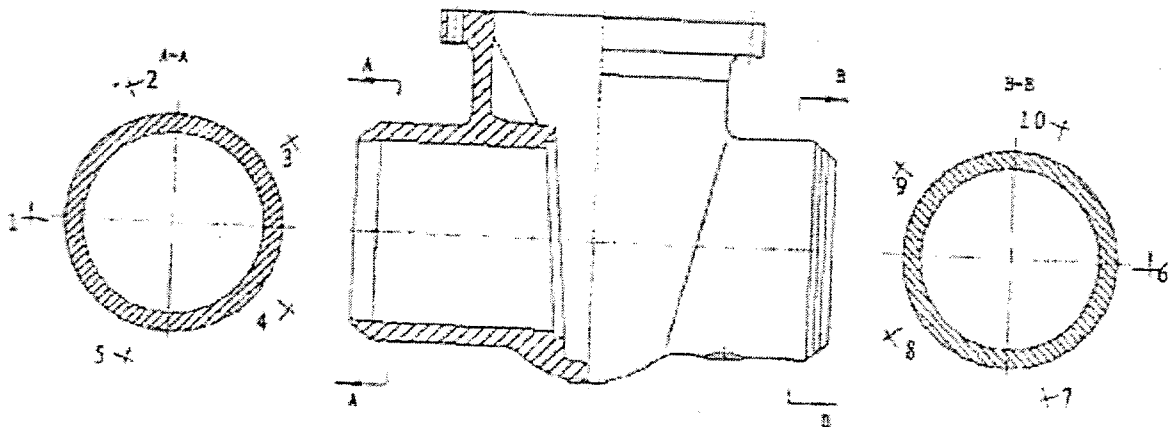
ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
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WEBB:	www.svrvalves.com
E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0401
Contract:	P-200309	Part No.	A04342
Drawing:	600LB 16"	Descriptions:	GATE BODY BW ENDS

Radiography No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C10	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	260	1.8-2.8	Pb
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****



 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER		CERTIFICATE Acc. To EN 10204 – 3.1.B.	CERTIFICATE No.: 2807-02
			REV.: 0
			DATE: 30/06/2003

CLIENT: VALVES ENTREPRISE	ORDER No.: P-200309	ITEM: 2	TAG No.: 10SPP047
SVR P.O.: 2807-06/03	ITEM: 2	QUANTITY: 1	
FIGURE NO.: Z561Y600LB-16"	DESCRIPTION: 16" - 600 Lbs.		ENDS: FLANGE ()
Sch. Ø 406,4 x 21,44	GATE VALVE (GEAR OPERATED)		BUTT WELD (X)
(1" Nozzle 100 mm. - OD 33,4 mm. X WT 6.35 mm)			

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B		DIN 3230 - 3		MSS - SP 82		NACE MR 0175	
OTHERS : ANSI/ASME B 16.34; B 16.25; B 16.10											

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER) 100% HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	300	120	60	120
PRESSURE (Kg/cm ²)	158	115	115	4 - 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

SPECIALTY VALVES RESEARCH, S.A. certify that all valves described above are in compliance with purchase order and specification requirements. This test report represents the actual attributes of the valves furnished and the test results are in compliance with the applicable specification and purchase order requirements.

TEST REPORT EN 10204 – 3.1.B. / 2.2

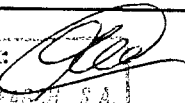
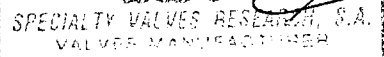
BODY & BONNET	ASTM A 216 WCB		
WEDGE	ASTM A 216 WCB + STELLITE Overlay		
BODY RING	A 105 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
BOLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
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FOUNDRY MILL CERTIFICATE NUMBERS

BODY: A04341
BONNET: A04341

QUALITY CONTROL MANAGER:   30 JUN 2003 QA/QC Department	CUSTOMER'S INSPECTOR: 
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 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	MATERIAL CERTIFICATES CERTIFICADO DE INSPECCION s/ INSPECTION CERTIFICATE Acc. To EN 10204 / 3.1.B.	N°/Nr.: A04341 FECHA: DATE: 27/04/2003 PAG.: DE SHEET 1 OF 1

Cliente/Client.: VALVES ENTREPRISE Las Mercedes No. 23 - 6° Edificio Abra No.1 48930 LAS ARENAS -BIZKAIA-	Pedido N° Purchase Order: P-200309 Cantidad: Quantity: 3	Anagrama del Fabricante / sello del Inspector: Manufacturer's Logo / Inspector stamp: 
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TRATAMIENTO TERMICO HEAT TREATMENT	Normalizado: ☒ Normalized:	Normalizado+Revenido ☐ Normalized+Tempered	Templado+Revenido: ☐ Quenched+Tempered:	Solubilización: ☐ Solution:
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. CONDICION CONDITION T.T.	NORMALIZED 980 °C x 3 H	MODO DE FUSION: INDUCTION MELTING TYPE OF MELTING:
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DENOMINACION DE LA PIEZA: CASTING DENOMINATION:	Gate Body	16" - 600 Lbs	Heat No.:	F0401
	Gate Bonnet	16" - 600 Lbs	Heat No.:	F0401
	Gate Wedge	16" - 600 Lbs	Heat No.:	F0401

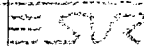
CALIDAD DE ACERO: STEEL QUALITY:	ASTM A 216 WCB	CONDICIONES DE ENTREGA: TERMS OF DELIVERY:	
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NÁLISIS QUÍMICO - CHEMICAL ANALYSIS											N° de Piezas Ner. Pieces	Peso kgs. Weight
COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	V		
Solicitado Requirements (max)	0.22	1.00	0.60	0.04	0.045	0.50	0.20	0.50	0.30	0.03		
F0401	0.21	0.81	0.51	0.028	0.028	0.1	0.005	0.041	0.18	0.004	3	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370								
COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resiliencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	240	485 - 655	22	35	232	
F0401	Lo = 4D	10	310	525	27	41	152	
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gammagraphic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRIPTO AQUI HA SIDO ENSAYADO
 Y CUMPLE CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.

I hereby certify that the material described above, has been
 tested and complies to the material requirements of the purchase order.

 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER
30 JUN 2003
Inspector / Work Inspector
QA/QC Department

 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
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	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure:	ASME B 16.34	Report No.:	10SPP047
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Page: 1 / 2

Customer :	VALVES ENTREPRISE, S.L.	Contract:	P-200309
Description :	GATE BODY WELDING END	Extension of Test:	BW-ENDS
Drawing :	600LB 16"	Radiographed at:	Shop: ☒ Field: ☐
Material :	WCB (Heat Number: F0401)		

X Rays KV	Γ RAYS	Isotope :	IR 192	Curies:	/	Focal Spot Size:	3x3
Film Type, Brand and Size :	KODAK-MX,355x80			IQI:	II		
Screens Type and Thickness :	Pb,0.5~1mm			Material Thickness:	45mm		
Density :	1.8~2.8	Source Film Distance :	260mm	Exposure Time:	h 6 min 30s		

Evaluation standard for steel castings radiographic examination (See Back)	Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form	ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf.	Accepted
C1	1-2		E446/E186	/	/	CA2	/	/	/	II	OK
C2	2-3		E446/E186	/	/	/	/	/	/	I	OK
C3	3-4		E446/E186	/	/	/	/	/	/	I	OK
C4	4-5		E446/E186	/	/	/	/	/	/	I	OK
C5	5-1		E446/E186	/	/	/	/	/	/	I	OK
C6	6-7		E446/E186	/	/	CA2	/	/	/	II	OK
C7	7-8		E446/E186	/	/	/	/	/	/	I	OK
C8	8-9		E446/E186	/	/	/	/	/	/	I	OK
C9	9-10		E446/E186	/	/	/	/	/	/	I	OK
C10	10-6		E446/E186	/	/	CA2	/	/	/	II	OK
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Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.

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 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 30 JUN 2003 QA/QC Department
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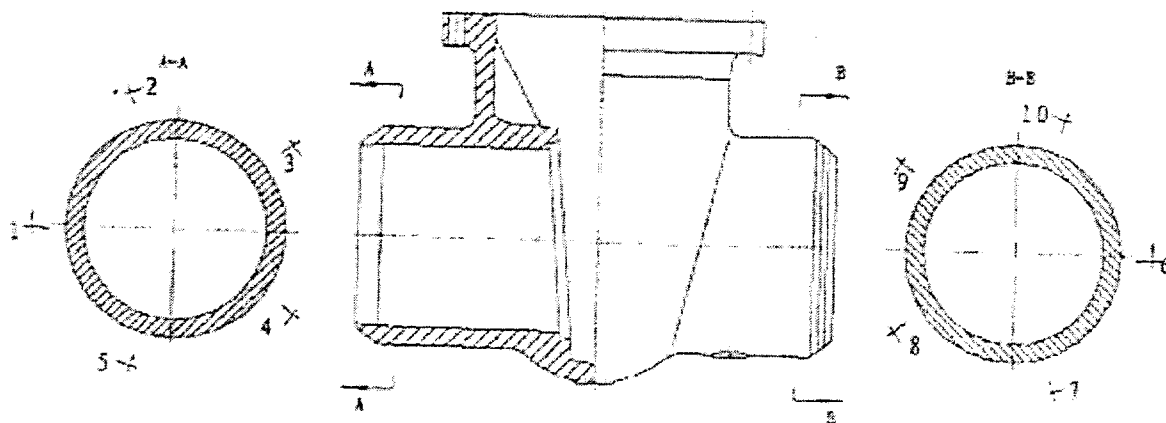
 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0401
Contract	P-200309	Part No.	A04342
Drawing:	600LB 16"	Descriptions:	GATE BODY BW ENDS

Radiography No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C10	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	260	1.8-2.8	Pb
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****





SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER



CERTIFICATE Acc. To EN 10204 – 3.1.B.

CERTIFICATE No.: 2807-03

REV.: 0

DATE: 30/06/2003

CLIENT: VALVES ENTREPRISE ORDER No.: P-200309 ITEM: 3 TAG No.: 10SPPO48
SVR P.O.: 2807-06/03 ITEM: 3 QUANTITY: 1
FIGURE NO.: Z561Y600LB-16" DESCRIPTION: 16" - 600 Lbs. ENDS: FLANGE ()
Sch. Ø 406,4 x 21,44 GATE VALVE (GEAR OPERATED) BUTT WELD (X)
(1" Nozzle 100 mm. - OD 33,4 mm. X WT 6,35 mm)

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B	DIN 3230 - 3	MSS - SP 82	NACE MR 0175
OTHERS : ANSI/ASME B 16.34; B 16.25; B 16.10							

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER) 100% HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	300	120	60	120
PRESSURE (Kg/cm ²)	158	115	115	4 - 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

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TEST REPORT EN 10204 – 3.1.B. / 2.2

BODY & BONNET	ASTM A 216 WCB		
WEDGE	ASTM A 216 WCB + STELLITE Overlay		
BODY RING	A 105 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
BOLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
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FOUNDRY MILL CERTIFICATE NUMBERS

BODY : A04342
BONNET: A04342

QUALITY CONTROL MANAGER: SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 30 JUN 2003 QA/QC Department	CUSTOMER'S INSPECTOR:
---	---------------------------



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

MATERIAL CERTIFICATES
CERTIFICADO DE INSPECCION s/
INSPECTION CERTIFICATE Acc. To
EN 10204 / 3.1.B.

Nº/Nr.: A04342

FECHA:
DATE: 27/04/2003

PAG.: DE
SHEET 1 OF 1

Cliente/Cient.:

VALVES ENTREPRISE
Las Mercedes No. 23 - 6º
Edificio Abra No.1
48930 LAS ARENAS -BIZKAIA-

Pedido Nº
Purchase Order: P-200309

Cantidad:
Quantity: 3

Anagrama del Fabricante / sello del Inspector:
Manufacturer's Logo / Inspector stamp:



TRATAMIENTO TERMICO
HEAT TREATMENT

Normalizado:



Normalized:

Normalizado+Revenido



Normalized+Tempered

Templado+Revenido:



Quenched+Tempered:

Solubilización:



Solution:

CONDICION
CONDITION T.T.

NORMALIZED 980 °C x 3 H

MODO DE FUSION:

INDUCTION MELTING

TYPE OF MELTING:

DENOMINACION DE LA PIEZA:
CASTING DENOMINATION:

Gate Body

16" - 600 Lbs

Heat No.:

F0401

Gate Bonnet

16" - 600 Lbs

Heat No.:

F0401

Gate Wedge

16" - 600 Lbs

Heat No.:

F0401

CALIDAD DE ACERO:
STEEL QUALITY:

ASTM A 216 WCB

CONDICIONES DE ENTREGA:
TERMS OF DELIVERY:

NÁLISIS QUÍMICO - CHEMICAL ANALYSIS

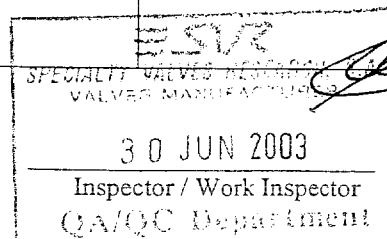
COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	V		Nº de Piezas Ner. Pieces	Peso kgs. Weight
Solicitado Requirements (max)	0.22	1.00	0.60	0.04	0.045	0.50	0.20	0.50	0.30	0.03			
F0401	0.21	0.81	0.51	0.028	0.028	0.1	0.005	0.041	0.18	0.004		3	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370

COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resilencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	240	485 - 655	22	35	232	
F0401	Lo = 4D	10	310	525	27	41	152	
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gammagraphic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRIPTO AQUI HA SIDO ENSAYADO
" CUMPLE CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.

reby certify that the material described above, has been
tested and complies to the material requirements of the purchase order.



 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure:	ASME B 16.34	Report No.:	IOSPP048
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Page: 1 / 2

Customer :	VALVES ENTREPRISE, S.L.	Contract:	P-200309
Description :	GATE BODY WELDING END	Extension of Test:	BW-ENDS
Drawing :	600LB 16"	Radiographed at:	Shop: ☒ Field: ☐
Material :	WCB (Heat Number: F0401)		

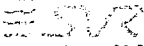
X Rays KV	Γ RAYS	Isotope :	IR 192	Curies:	/	Focal Spot Size:	3x3
Film Type, Brand and Size :	KODAK-MX,355x80			IQI:	II		
Screens Type and Thickness :	Pb,0.5~1mm			Material Thickness:	45mm		
Density :	1.8~2.8	Source Film Distance :	260mm	Exposure Time:	h 6 min 30s		

Evaluation standard for steel castings radiographic examination (See Back)	Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form	ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf	Accepted
C1	1-2		E446/E186	/	/	/	/	/	/	I	OK
C2	2-3		E446/E186	/	/	/	/	/	/	I	OK
C3	3-4		E446/E186	/	/	/	/	/	/	I	OK
C4	4-5		E446/E186	/	/	/	/	/	/	I	OK
C5	5-1		E446/E186	/	/	/	/	/	/	I	OK
C6	6-7		E446/E186	/	/	/	/	/	/	I	OK
C7	7-8		E446/E186	A1	/	/	/	/	/	I	OK
C8	8-9		E446/E186	/	/	/	/	/	/	I	OK
C9	9-10		E446/E186	/	/	/	/	/	/	I	OK
C10	10-6		E446/E186	/	/	/	/	/	/	I	OK
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
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*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.

We hereby certify that material described above, have been tested and complies to the material requirements of the purchase order. The results above indicated are exact transcription from the corresponding certificates, which are field in our factory, emitted by homologated suppliers.



 SPECIALTY VALVES RESEARCH, S.A.
 VALVES MANUFACTURER

 30 JUN 2003

 QA/QC Department



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

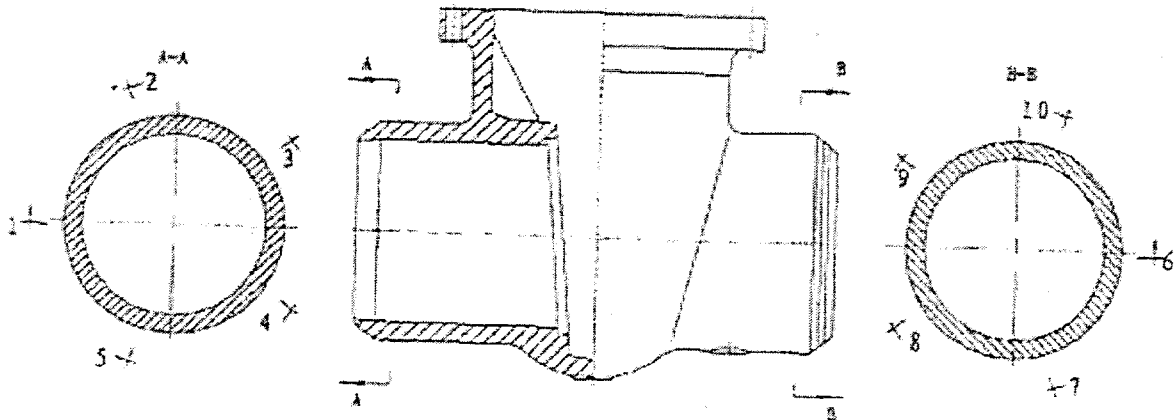
ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
PHONE:	+ (34) 94. 455. 51. 51
FAX:	+ (34) 94. 455. 51. 50
WEBB:	www.svrvalves.com
E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0401
Contract:	P-200309	Part No.	A04342
Drawing:	600LB 16"	Descriptions:	GATE BODY BW ENDS

Radiography No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C10	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	260	1.8-2.8	Pb
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****



 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER		CERTIFICATE Acc. To EN 10204 – 3.1.B.	CERTIFICATE No.: 2807-04
			REV.: 0
			DATE: 30/06/2003

CLIENT: VALVES ENTREPRISE	ORDER No.: P-200309	ITEM: 4	TAG No.: 10SPP049
SVR P.O.: 2807-06/03	ITEM: 4	QUANTITY: 1	
FIGURE NO.: Z561Y600LB-16"	DESCRIPTION: 16" - 600 Lbs.		ENDS: FLANGE ()
Sch. Ø 406,4 x 21,44	GATE VALVE (GEAR OPERATED)		BUTT WELD (X)
(1" Nozzle 100 mm. - OD 33,4 mm. X WT 6.35 mm)			

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B		DIN 3230 - 3		MSS - SP 82		NACE MR 0175	
OTHERS : ANSI/ASME B 16.34; B 16.25; B 16.10											

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER)100%HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	300	120	60	120
PRESSURE (Kg/cm ²)	158	115	115	4 - 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

SPECIALTY VALVES RESEARCH, S.A. certify that all valves described above are in compliance with purchase order and specification requirements. This test report represents the actual attributes of the valves furnished and the test results are in compliance with the applicable specification and purchase order requirements.

TEST REPORT EN 10204 – 3.1.B. / 2.2

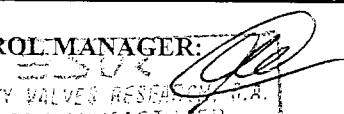
BODY & BONNET	ASTM A 216 WCB		
WEDGE	ASTM A 216 WCB + STELLITE Overlay		
BODY RING	A 105 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
BOLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
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FOUNDRY MILL CERTIFICATE NUMBERS

BODY: A04343
BONNET: A04343

QUALITY CONTROL MANAGER:  SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 30 JUN 2003 QA/QC Department	CUSTOMER'S INSPECTOR: 
--	---



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

MATERIAL CERTIFICATES
CERTIFICADO DE INSPECCION s/
INSPECTION CERTIFICATE Acc. To
EN 10204 / 3.1.B.

Nº/Nr.: A04343

FECHA:
DATE: 27/04/2003

PAG.: DE
SHEET 1 OF 1

Cliente/Cient.:

VALVES ENTREPRISE
Las Mercedes No. 23 - 6º
Edificio Abra No.1
48930 LAS ARENAS -BIZKAIA-

Pedido Nº
Purchase Order: P-200309

Cantidad:
Quantity: 3

Anagrama del Fabricante / sello del Inspector:
Manufacturer's Logo / Inspector stamp:



TRATAMIENTO TERMICO
HEAT TREATMENT

Normalizado:



Normalized:

Normalizado+Revenido



Normalized+Tempered

Templado+Revenido:



Quenched+Tempered:

Solubilización:



Solution:

CONDICION
CONDITION T.T.

NORMALIZED 980 °C x 3 H

MODO DE FUSION:

INDUCTION MELTING

TYPE OF MELTING:

DENOMINACION DE LA PIEZA:
CASTING DENOMINATION:

Gate Body	16" - 600 Lbs	Heat No.:	F0401
Gate Bonnet	16" - 600 Lbs	Heat No.:	F0401
Gate Wedge	16" - 600 Lbs	Heat No.:	F0401

CALIDAD DE ACERO:
STEEL QUALITY:

ASTM A 216 WCB

CONDICIONES DE ENTREGA:
TERMS OF DELIVERY:

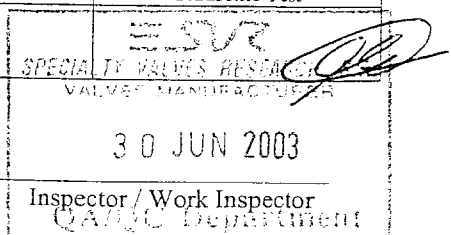
NÁLISIS QUÍMICO - CHEMICAL ANALYSIS

COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	V		Nº de Piezas Ner. Pieces	Peso kgs. Weight
Solicitado Requirements (max)	0.22	1.00	0.60	0.04	0.045	0.50	0.20	0.50	0.30	0.03			
F0401	0.21	0.81	0.51	0.028	0.028	0.1	0.005	0.041	0.18	0.004		3	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370

COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resiliencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	240	485 - 655	22	35	232	
F0401	Lo = 4D	10	310	525	27	41	152	
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gamma-graphic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRIPTO AQUI HA SIDO ENSAYADO
SAMPLE CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.
We hereby certify that the material described above, has been
tested and complies to the material requirements of the purchase order.



 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure:	ASME B 16.34	Report No.:	10SPPO49
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Page: 1 / 2

Customer : VALVES ENTREPRISE, S.L.	Contract: P-200309
Description : GATE BODY WELDING END	Extension of Test: BW-ENDS
Drawing : 600LB 16"	Radiographed at: Shop: ☒ Field: ☐
Material : WCB (Heat Number: F0401)	

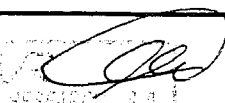
X Rays KV	F RAYS	Isotope: IR 192	Curies: /	Focal Spot Size: 3x3
Film Type, Brand and Size : KODAK-MX,355x80			IQI: II	
Screens Type and Thickness : Pb,0.5~1mm			Material Thickness: 45mm	
Density : 1.8~2.8		Source Film Distance : 260mm		Exposure Time: h 6 min 30s

Evaluation standard for steel castings radiographic examination (See Back)		Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form		ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf.	Accepted
C1	1-2		E446/E186	/	/	/	/	/	/	I	OK
C2	2-3		E446/E186	/	/	/	/	/	/	I	OK
C3	3-4		E446/E186	/	/	/	/	/	/	I	OK
C4	4-5		E446/E186	/	/	/	/	/	/	I	OK
C5	5-1		E446/E186	A2	/	/	/	/	/	II	OK
C6	6-7		E446/E186	/	/	/	/	/	/	I	OK
C7	7-8		E446/E186	/	/	/	/	/	/	I	OK
C8	8-9		E446/E186	/	/	/	/	/	/	I	OK
C9	9-10		E446/E186	/	/	/	/	/	/	I	OK
C10	10-6		E446/E186	/	/	CA2	/	/	/	II	OK
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*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.

We hereby certify that material described above, have been tested and complies to the material requirements of the purchase order. The results above indicated are exact transcription from the corresponding certificates, which are field in our factory, emitted by homologated suppliers.

 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 30 JUN 2003 QA/QC Department
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SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

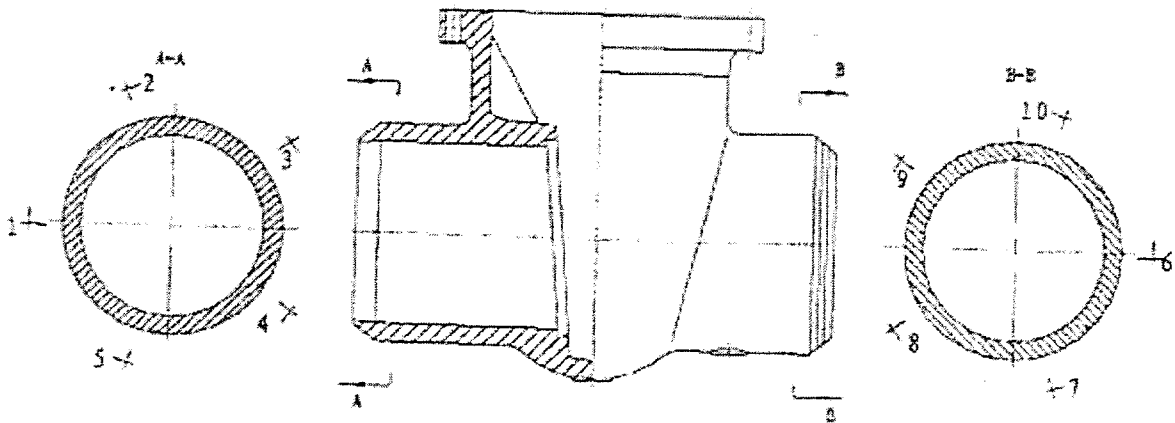
ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
PHONE:	+ (34) 94. 455. 51. 51
FAX:	+ (34) 94. 455. 51. 50
WEBB:	www.svrvalves.com
E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0401
Contract:	P-200309	Part No.	A04342
Drawing:	600LB 16"	Descriptions:	GATE BODY BW ENDS

Radiografy No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C10	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	260	1.8-2.8	Pb
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****



 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER		CERTIFICATE Acc. To EN 10204 – 3.1.B.	CERTIFICATE No.: 2807-05
			REV.: 0 DATE: 30/06/2003

CLIENT: VALVES ENTREPRISE	ORDER No.: P-200309	ITEM: 5	TAG No.: 10SPP051
SVR P.O.: 2807-06/03	ITEM: 5	QUANTITY: 1	
FIGURE NO.: Z561Y900LB-16"	DESCRIPTION: 16" - 900 Lbs.		ENDS: FLANGE ()
Sch. Ø 406,4 x 21,44	GATE VALVE (GEAR OPERATED)		BUTT WELD (X)
-LOCKING SYSTEM- (1" Nozzle 100 mm. - OD 33,4 mm. X WT 6.35 mm)			

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B	DIN 3230 – 3	MSS - SP 82	NACE MR 0175
OTHERS : ANSI/ASME B 16.34; B 16.25; B 16.10							

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER)100%HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	300	120	60	120
PRESSURE (Kg/cm ²)	274	172	172	4 – 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

SPECIALTY VALVES RESEARCH, S.A. certify that all valves described above are in compliance with purchase order and specification requirements. This test report represents the actual attributes of the valves furnished and the test results are in compliance with the applicable specification and purchase order requirements.

TEST REPORT EN 10204 – 3.1.B. / 2.2

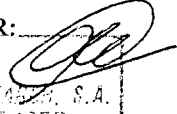
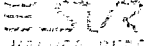
BODY & BONNET	ASTM A 217 WC6		
WEDGE	ASTM A 217 WC6 + STELLITE Overlay		
BODY RING	AISI 410 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
BOLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
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FOUNDRY MILL CERTIFICATE NUMBERS

BODY : A04344
BONNET: A04344

QUALITY CONTROL MANAGER:   SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 30 JUN 2003 QA/QC Department	CUSTOMER'S INSPECTOR: 
---	---



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

MATERIAL CERTIFICATES
CERTIFICADO DE INSPECCION s/
INSPECTION CERTIFICATE Acc. To
EN 10204 / 3.1.B.

Nº/Nr.: A04344

FECHA:
DATE: 27/04/2003

PAG.: DE
SHEET 1 OF 1

Cliente/Cliet.:

VALVES ENTREPRISE
Las Mercedes No. 23 - 6º
Edificio Abra No.1
48930 LAS ARENAS -BIZKAIA-

Pedido Nº
Purchase Order: P-200309

Cantidad:
Quantity: 3

Anagrama del Fabricante / sello del Inspector:
Manufacturer's Logo / Inspector stamp:



TRATAMIENTO TERMICO
HEAT TREATMENT

Normalizado:



Normalized:

Normalizado+Revenido



Normalized+Tempered

Templado+Revenido:



Quenched+Tempered:

Solubilización:



Solution:

CONDICION
CONDITION T.T.

NORMALIZED 980 °C x 3 h + TEMPERED 630 °C

MODO DE FUSION:

INDUCTION MELTING

TYPE OF MELTING:

DENOMINACION DE LA PIEZA:
CASTING DENOMINATION:

Gate Body

16" - 900 Lbs

Heat No.:

F0401-6

Gate Bonnet

16" - 900 Lbs

Heat No.:

F0401-6

Gate Wedge

16" - 900 Lbs

Heat No.:

F0401-6

CALIDAD DE ACERO:
STEEL QUALITY:

ASTM A 217 WC6

CONDICIONES DE ENTREGA:
TERMS OF DELIVERY:

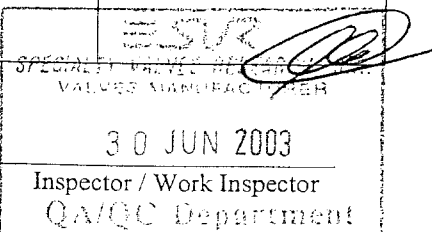
NÁLISIS QUÍMICO - CHEMICAL ANALYSIS

COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	W		Nº de Piezas Ner. Pieces	Peso kgs. Weight
Solicitado Requirements (max)	0.05- 0.20	0.05- 0.80	0.60	0.040	0.045	1.00- 1.50	0.45- 0.65	0.50	0.50	0.10			
F0401-6	0.19	0.63	0.37	0.021	0.027	1.2	0.56	0.02	0.03	0.01		3	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370

COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resiliencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	275	485 - 655	20	35		
F0401-6	Lo = 4D	10	320	550	27	41		
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gammaographic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRITO AQUI HA SIDO ENSAYADO
COMPLE CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.
We hereby certify that the material described above, has been
tested and complies to the material requirements of the purchase order.





SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
PHONE:	+ (34) 94. 455. 51. 51
FAX:	+ (34) 94. 455. 51. 50
WEBB:	www.svrvalves.com
E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure:	ASME B 16.34	Report No.:	10SPPO51
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Page: 1 / 2

Customer :	VALVES ENTREPRISE, S.L.	Contract:	P-200309
Description :	GATE BODY WELDING END	Extension of Test:	CRITICAL AREAS
Drawing :	900LB 16"	Radiographed at:	Shop: ☒ Field: ☐
Material :	WCB (Heat Number: F0401-6)		

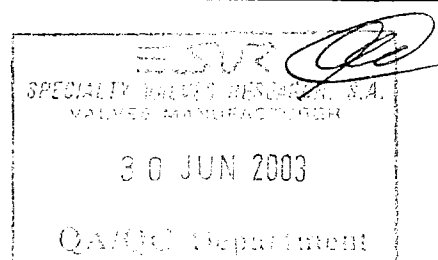
X Rays KV	Γ RAYS	Isotope :	IR 192	Curies:	/	Focal Spot Size:	3x3
Film Type, Brand and Size :	KODAK-MX,355x80					IQI:	II
Screens Type and Thickness :	Pb,0.5~1mm					Material Thickness:	55mm/60mm
Density :	1.6~2.2	Source Film Distance :	160 mm/180 mm	Exposure Time:	3 h 3 min		

Evaluation standard for steel castings radiographic examination (See Back)	Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form	ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf.	Accepted
C1	1-2		E446/E186	/	B2	/	/	/	/	II	OK
C2	2-3		E446/E186	/	/	/	/	/	/	I	OK
C3	3-4		E446/E186	/	/	/	/	/	/	I	OK
C4	4-5		E446/E186	/	/	/	/	/	/	I	OK
C5	5-1		E446/E186	/	B2	/	/	/	/	II	OK
C6	6-7		E446/E186	/	/	/	/	/	/	I	OK
C7	7-8		E446/E186	/	/	/	/	/	/	I	OK
C8	8-9		E446/E186	/	/	/	/	/	/	I	OK
C9	9-10		E446/E186	/	/	/	/	/	/	I	OK
C10	10-6		E446/E186	/	/	/	/	/	/	I	OK
C11	11-12		E446/E186	/	/	CA2	/	/	/	II	OK
C12	12-13		E446/E186	/	/	/	/	/	/	I	OK
C13	13-14		E446/E186	A1	B2	/	/	/	/	II	OK
C14	14-15		E446/E186	A2	/	/	/	/	/	II	OK
C15	15-16		E446/E186	A1	/	/	/	/	/	I	OK
C16	16-17		E446/E186	/	/	/	/	/	/	I	OK
C17	17-11		E446/E186	/	/	/	/	/	/	I	OK
C18	C18		E446/E186	/	/	/	/	/	/	I	OK
C19	C19		E446/E186	/	/	/	/	/	/	I	OK
C20	C20		E446/E186	/	/	CA2	/	/	/	II	OK
C21	C21		E446/E186	/	/	/	/	/	/	I	OK
C22	C22		E446/E186	/	/	CA2	/	/	/	II	OK
C23	C23		E446/E186	/	/	CA2	/	/	/	II	OK

Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.

We hereby certify that material described above, have been tested and complies to the material requirements of the purchase order. The results above indicated are exact transcription from the corresponding certificates, which are field in our factory, emitted by homologated suppliers.



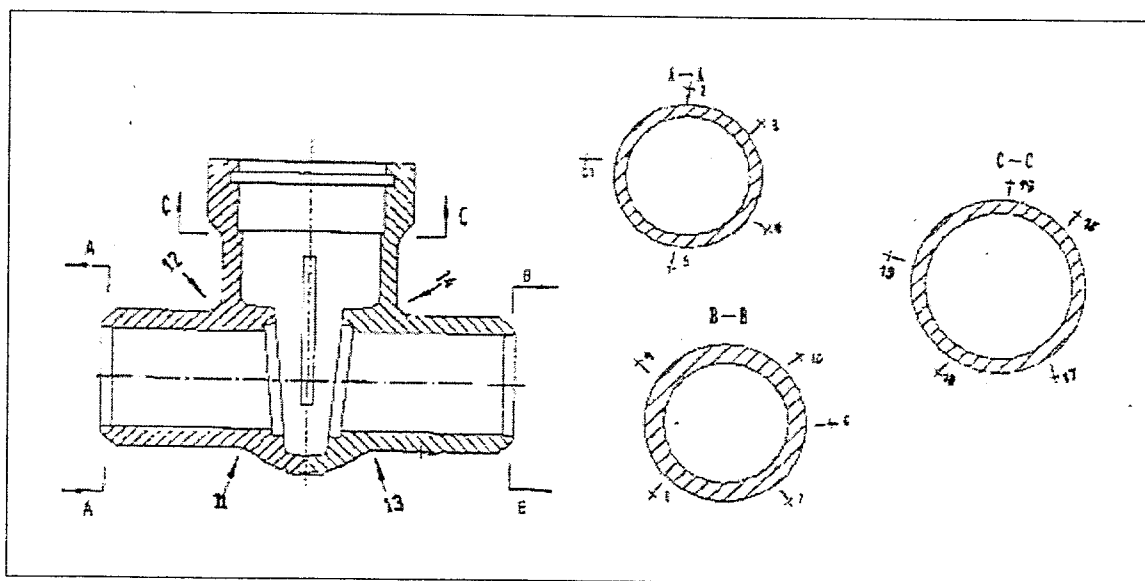
 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0401-6
Contract	P-200309	Part No.	A04346
Drawing:	900LB 16"	Descriptions:	GATE BODY CRITICAL AREAS

Radiografy No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C10	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	160	1.6-2.2	Pb
C11 - C17	KODAK-MX, 355x81	0.5 - 1 mm	Ir192	II	160	1.6-2.2	Pb
C18 - C23	KODAK-MX, 355x82	0.5 - 1 mm	Ir192	II	160	1.6-2.2	Pb





SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER



CERTIFICATE Acc. To EN 10204 – 3.1.B.

CERTIFICATE No.: 2807-06

REV.: 0

DATE: 30/06/2003

CLIENT: VALVES ENTREPRISE ORDER No.: P-200309 ITEM: 6 TAG No.: 10SPP052
SVR P.O.: 2807-06/03 ITEM: 6 QUANTITY: 1
FIGURE NO.: Z561Y900LB-16" DESCRIPTION: 16" - 900 Lbs. ENDS: FLANGE ()
Sch. Ø 406,4 x 21,44 GATE VALVE (GEAR OPERATED)
-LOCKING SYSTEM- BUTT WELD (X)
(1" Nozzle 100 mm. - OD 33,4 mm. X WT 6.35 mm)

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B	DIN 3230 - 3	MSS - SP 82	NACE MR 0175
OTHERS: ANSI/ASME B 16.34; B 16.25; B 16.10							

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER) 100% HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	300	120	60	120
PRESSURE (Kg/cm ²)	274	172	172	4 - 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

SPECIALTY VALVES RESEARCH, S.A. certify that all valves described above are in compliance with purchase order and specification requirements. This test report represents the actual attributes of the valves furnished and the test results are in compliance with the applicable specification and purchase order requirements.

TEST REPORT EN 10204 – 3.1.B. / 2.2

BODY & BONNET	ASTM A 217 WC6		
WEDGE	ASTM A 217 WC6 + STELLITE Overlay		
BODY RING	AISI 410 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
OLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
-------------------------------------	--	-------------------------------

FOUNDRY MILL CERTIFICATE NUMBERS

BODY: A04345
BONNET: A04345

QUALITY CONTROL MANAGER: SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 30 JUN 2003 QA/QC Department	CUSTOMER'S INSPECTOR:
---	---------------------------



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

MATERIAL CERTIFICATES
CERTIFICADO DE INSPECCION s/
INSPECTION CERTIFICATE Acc. To
EN 10204 / 3.1.B.

Nº/Nr.: A04345

FECHA:
DATE: 27/04/2003

PAG.: DE
SHEET 1 OF 1

Cliente/Cliet.:

VALVES ENTREPRISE
Las Mercedes No. 23 - 6º
Edificio Abra No.1
48930 LAS ARENAS -BIZKAIA-

Pedido Nº
Purchase Order: P-200309

Cantidad:
Quantity: 3

Anagrama del Fabricante / sello del Inspector:
Manufacturer's Logo / Inspector stamp:



TRATAMIENTO TERMICO
HEAT TREATMENT

Normalizado:



Normalized:

Normalizado+Revenido



Normalized+Tempered

Templado+Revenido:



Quenched+Tempered:

Solubilización:



Solution:

L.T. CONDICION
CONDITION T.T.

NORMALIZED 980 °C x 3 h+ TEMPERED 630 °C

MODO DE FUSION:

INDUCTION MELTING

TYPE OF MELTING:

DENOMINACION DE LA PIEZA:
CASTING DENOMINATION:

Gate Body

16" - 900 Lbs

Heat No.:

F0401-6

Gate Bonnet

16" - 900 Lbs

Heat No.:

F0401-6

Gate Wedge

16" - 900 Lbs

Heat No.:

F0401-6

CALIDAD DE ACERO:
STEEL QUALITY:

ASTM A 217 WC6

CONDICIONES DE ENTREGA:
TERMS OF DELIVERY:

NÁLISIS QUÍMICO - CHEMICAL ANALYSIS

COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	W		Nº de Piezas Ner. Pieces	Peso kgs. Weight
Solicitado Requirements (max)	0.05- 0.20	0.05- 0.80	0.60	0.040	0.045	1.00- 1.50	0.45- 0.65	0.50	0.50	0.10			
F0401-6	0.19	0.63	0.37	0.021	0.027	1.20	0.56	0.02	0.03	0.01		3	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370

COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resiliencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	275	485 - 655	20	35		
F0401-6	Lo = 4D	10	320	550	27	41		
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gammagraphic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRIPTO AQUI HA SIDO ENSAYADO
CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.

we hereby certify that the material described above, has been
tested and complies to the material requirements of the purchase order.

SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

Inspector / Work Inspector

QA/QC Department

 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure: ASME B 16.34 **Report No.:** 10SP052

Page: 1 / 2

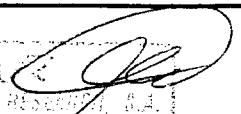
Customer : VALVES ENTREPRISE, S.L.	Contract: P-200309
Description : GATE BODY WELDING END	Extension of Test: CRITICAL AREAS
Drawing : 900LB 16"	Radiographed at: Shop: ☒ Field: ☐
Material : WCB (Heat Number: F0401-6)	

X Rays KV 1 RAYS	Isotope : IR 192	Curies: /	Focal Spot Size: 3x3
Film Type, Brand and Size : KODAK-MX,355x80	IQI: II		
Screens Type and Thickness : Pb,0.5~1mm	Material Thickness: 55mm/60mm		
Density : 1.6~2.2	Source Film Distance : 160 mm/180 mm	Exposure Time: 3 h 3 min	

Evaluation standard for steel castings radiographic examination (See Back)	Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form	ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf.	Accepted
C1	1-2		E446/E186	/	/	/	/	/	/	I	OK
C2	2-3		E446/E186	/	/	/	/	/	/	I	OK
C3	3-4		E446/E186	/	B1	/	/	/	/	I	OK
C4	4-5		E446/E186	/	/	/	/	/	/	I	OK
C5	5-1		E446/E186	/	/	/	/	/	/	I	OK
C6	6-7		E446/E186	/	/	/	/	/	/	I	OK
C7	7-8		E446/E186	/	/	/	/	/	/	I	OK
C8	8-9		E446/E186	/	/	/	/	/	/	I	OK
C9	9-10		E446/E186	A2	/	/	/	/	/	II	OK
C10	10-6		E446/E186	/	/	/	/	/	/	I	OK
C11	11-12		E446/E186	/	/	/	/	/	/	I	OK
C12	12-13		E446/E186	/	/	/	/	/	/	I	OK
C13	13-14		E446/E186	/	/	/	/	/	/	I	OK
C14	14-15		E446/E186	/	/	/	/	/	/	I	OK
C15	15-16		E446/E186	A2	/	/	/	/	/	II	OK
C16	16-17		E446/E186	/	/	CA2	/	/	/	II	OK
C17	17-11		E446/E186	/	/	/	/	/	/	I	OK
C18	C18		E446/E186	/	/	/	/	/	/	I	OK
C19	C19		E446/E186	/	/	CA2	/	/	/	II	OK
C20	C20		E446/E186	/	/	CA2	/	/	/	II	OK
C21	C21		E446/E186	/	/	CA2	/	/	/	II	OK
C22	C22		E446/E186	/	/	/	/	/	/	I	OK
C23	C23		E446/E186	/	/	CA2	/	/	/	II	OK

Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.
 We hereby certify that material described above, have been tested and complies to the material requirements of the purchase order. The results above indicated are exact transcription from the corresponding certificates, which are field in our factory, emitted by homologated suppliers.


 SPECIALTY VALVES RESEARCH, S.A.
 VALVES MANUFACTURER
 30 JUN 2003
 QA/QC Department



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

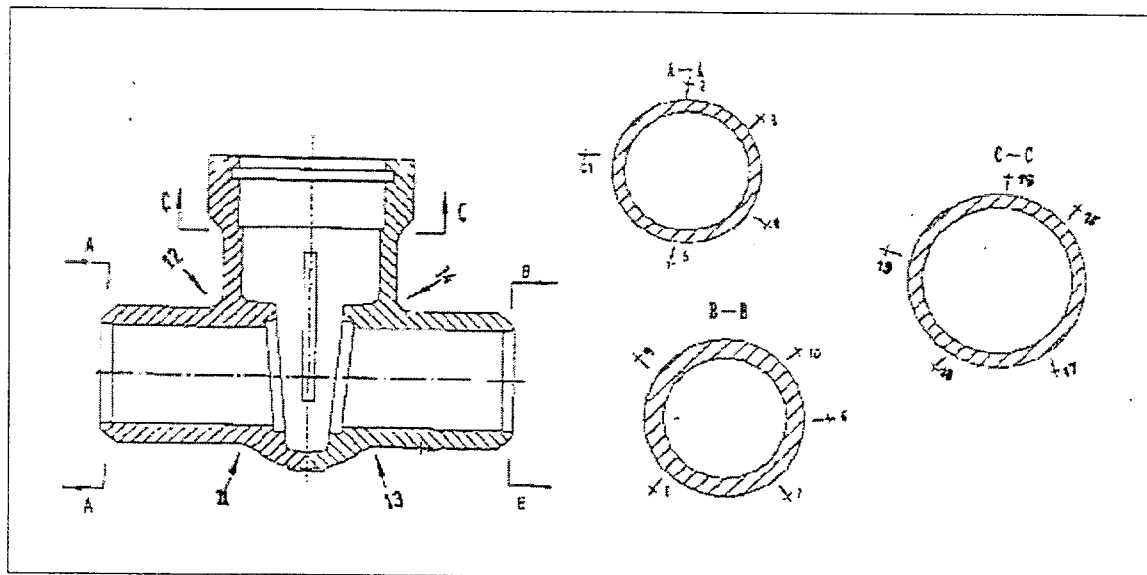
ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
PHONE:	+ (34) 94. 455. 51. 51
FAX:	+ (34) 94. 455. 51. 50
WEBB:	www.svrvalves.com
E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0401-6
Contract	P-200309	Part No.	A04346
Drawing:	900LB 16"	Descriptions:	GATE BODY CRITICAL AREAS

Radiography No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C10	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	160	1.6-2.2	Pb
C11 - C17	KODAK-MX, 355x81	0.5 - 1 mm	Ir192	II	160	1.6-2.2	Pb
C18 - C23	KODAK-MX, 355x82	0.5 - 1 mm	Ir192	II	160	1.6-2.2	Pb





SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER



CERTIFICATE Acc. To EN 10204 – 3.1.B.

CERTIFICATE No.: 2807-07

REV.: 0

DATE: 30/06/2003

CLIENT: VALVES ENTREPRISE ORDER No.: P-200309 ITEM: 7 TAG No.: 10SPP057
SVR P.O.: 2807-06/03 ITEM: 7 QUANTITY: 1
FIGURE NO.: Z561Y900LB-12" DESCRIPTION: 12" - 900 Lbs. ENDS: FLANGE ()
Sch. Ø 323,9 x 17,48 GATE VALVE (GEAR OPERATED) BUTT WELD (X)
-LOCKING SYSTEM-

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B	DIN 3230 – 3	MSS - SP 82	NACE MR 0175
OTHERS: ANSI/ASME B 16.34; B 16.25; B 16.10							

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER)100%HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	120	120	60	120
PRESSURE (Kg/cm ²)	274	172	172	4 – 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

SPECIALTY VALVES RESEARCH, S.A. certify that all valves described above are in compliance with purchase order and specification requirements. This test report represents the actual attributes of the valves furnished and the test results are in compliance with the applicable specification and purchase order requirements.

TEST REPORT EN 10204 – 3.1.B. / 2.2

BODY & BONNET	ASTM A 217 WC6		
WEDGE	ASTM A 217 WC6 + STELLITE Overlay		
BODY RING	AISI 410 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
BOLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
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FOUNDRY MILL CERTIFICATE NUMBERS

BODY: A04346
BONNET: A04346

QUALITY CONTROL MANAGER: 30 JUN 2003	CUSTOMER'S INSPECTOR:
---	-------------------------------



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

MATERIAL CERTIFICATES
CERTIFICADO DE INSPECCION s/
INSPECTION CERTIFICATE Acc. To
EN 10204 / 3.1.B.

Nº/Nr.: A04346

FECHA:
DATE: 27/04/2003

PAG.: DE
SHEET 1 OF 1

Cliente/Cient.:

VALVES ENTREPRISE
Las Mercedes No. 23 - 6º
Edificio Abra No.1
48930 LAS ARENAS -BIZKAIA-

Pedido Nº
Purchase Order: P-200309

Cantidad:
Quantity: 3

Anagrama del Fabricante / sello del Inspector:
Manufacturer's Logo / Inspector stamp:



TRATAMIENTO TERMICO
HEAT TREATMENT

Normalizado:



Normalized:

Normalizado+Revenido



Normalized+Tempered

Templado+Revenido:



Quenched+Tempered:

Solubilización:



Solution:

CONDICION
CONDITION T.T.

NORMALIZED 980 °C x 3 h + TEMPERED 630 °C

MODO DE FUSION:

INDUCTION MELTING

TYPE OF MELTING:

DENOMINACION DE LA PIEZA:
CASTING DENOMINATION:

Gate Body	12" - 900 Lbs	Heat No.:	F0419
Gate Bonnet	12" - 900 Lbs	Heat No.:	F0419
Gate Wedge	12" - 900 Lbs	Heat No.:	1918

CALIDAD DE ACERO:
STEEL QUALITY:

ASTM A 217 WC6

CONDICIONES DE ENTREGA:
TERMS OF DELIVERY:

ANÁLISIS QUÍMICO - CHEMICAL ANALYSIS

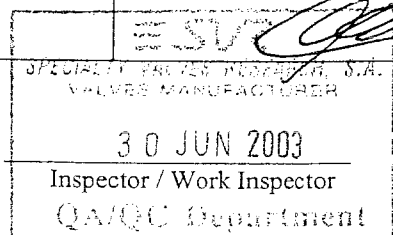
COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	W		Nº de Piezas Ner. Pieces	Peso kgs. Weight
Solicitado Requirements (max)	0.05- 0.20	0.05- 0.80	0.60	0.040	0.045	1.00- 1.50	0.45- 0.65	0.50	0.50	0.10			
F0419	0.17	0.58	0.37	0.020	0.021	1.32	0.54	0.02	0.02	0.01		2	
1918	0.15	0.65	0.38	0.021	0.026	1.25	0.56	0.02	0.02	0.01		1	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370

COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resiliencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	275	485 - 655	20	35		
F0419	Lo = 4D	10	335	560	25	39		
1918	Lo = 4D	10	325	530	28	40		
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gammagraphic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRIPTO AQUI HA SIDO ENSAYADO
CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.

Whereby certify that the material described above, has been
tested and complies to the material requirements of the purchase order.



 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure:	ASME B 16.34	Report No.:	10SPPO57
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Page: 1 / 2

Customer : VALVES ENTREPRISE, S.L.	Contract: P-200309
Description : GATE BODY WELDING END	Extension of Test: CRITICAL AREAS
Drawing : 900LB 12"	Radiographed at: Shop: ☒ Field: ☐
Material : WCB (Heat Number: F0419)	Field: ☐

X Rays KV : 1 RAYS	Isotope : IR 192	Curies: /	Focal Spot Size: 3x3
Film Type, Brand and Size : KODAK-MX,355x80	IQI: II		
Screens Type and Thickness : Pb,0.5~1mm	Material Thickness: 70mm/80mm		
Density : 1.6~2.4	Source Film Distance : 160 mm/180 mm	Exposure Time: 12min	

Evaluation standard for steel castings radiographic examination (See Back)	Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form	ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf.	Accepted
C1	1-2		II	/	B2	CA2	/	/	/	II	OK
C2	2-3		II	/	/	/	/	/	/	I	OK
C3	3-4		II	/	/	/	/	/	/	I	OK
C4	4-5		II	/	/	/	/	/	/	I	OK
C5	5-1		II	/	B2	/	/	/	/	II	OK
C6	6-7		II	/	/	CA2	/	/	/	II	OK
C7	7-8		II	/	/	/	/	/	/	I	OK
C8	8-9		II	/	/	/	/	/	/	I	OK
C9	9-10		II	/	/	/	/	/	/	I	OK
C10	10-6		II	/	/	CB2	/	/	/	II	OK
C11	C11		II	/	/	/	/	/	/	I	OK
C12	C12		II	A1	/	/	/	/	/	I	OK
C13	C13		II	/	B2	/	/	/	/	II	OK
C14	C14		II	/	/	/	/	/	/	I	OK
C15	15-16		II	/	/	/	/	/	/	I	OK
C16	16-17		II	/	/	/	/	/	/	I	OK
C17	17-18		II	/	/	CA2	/	/	/	II	OK
C18	18-19		II	/	/	/	/	/	/	I	OK
C19	19-15		II	/	/	/	/	/	/	I	OK

Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.

We hereby certify that material described above, have been tested and complies to the material requirements of the purchase order. The results above indicated are exact transcription from the corresponding certificates, which are filed in our factory, emitted by homologated suppliers.

 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 30 JUN 2003 QA/QC Department
--



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

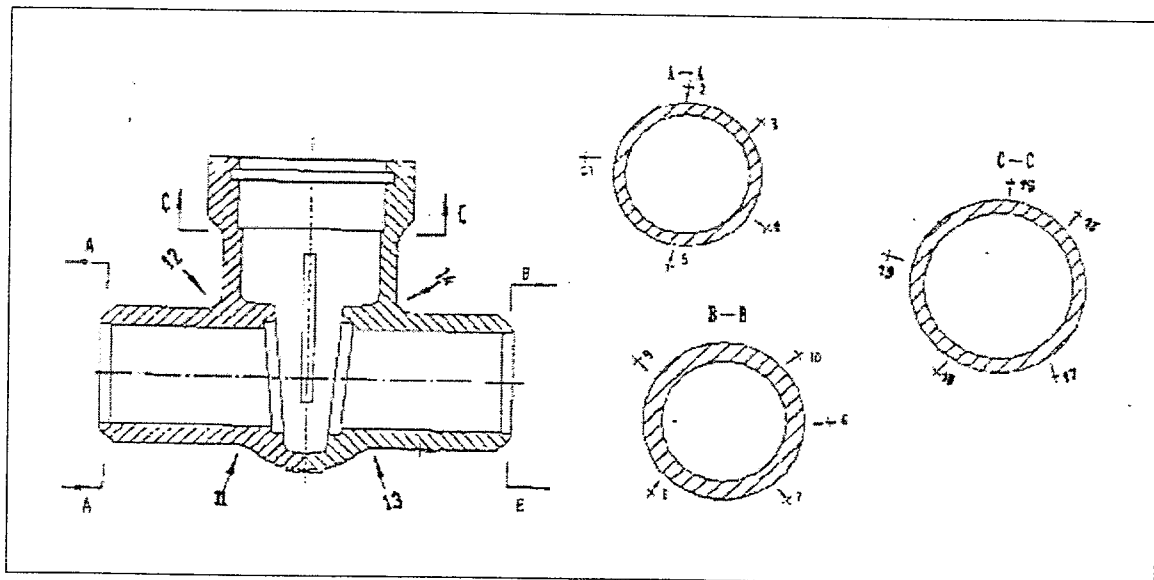
ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
PHONE:	+ (34) 94. 455. 51. 51
FAX:	+ (34) 94. 455. 51. 50
WEBB:	www.svrvalves.com
E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0419
Contract:	P-200309	Part No.	A04346
Drawing:	900LB 12"	Descriptions:	GATE BODY BW ENDS

Radiography No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C10	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	160	1.6-2.4	Pb
C11 - C15	KODAK-MX, 355x81	0.5 - 1 mm	Ir193	II	160	1.6-2.5	Pb
C16 - C19	KODAK-MX, 355x82	0.5 - 1 mm	Ir194	II	160	1.6-2.6	Pb





SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER



CERTIFICATE Acc. To EN 10204 – 3.1.B.

CERTIFICATE No.: 2807-08

REV.: 0

DATE: 04/07/2003

CLIENT: VALVES ENTREPRISE ORDER No.: P-200309 ITEM: 8 TAG No.: 10SPP079
SVR P.O.: 2807-06/03 ITEM: 8 QUANTITY: 1
FIGURE NO.: Z561Y600LB-16" DESCRIPTION: 16" - 600 Lbs. ENDS: FLANGE ()
Sch. Ø 406,4 x 21,44 GATE VALVE (GEAR OPERATED) BUTT WELD (X)
(1" Nozzle 100 mm. - OD 33,4 mm. X WT 6.35 mm)

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B	DIN 3230 -- 3	MSS - SP 82	NACE MR 0175
OTHERS : ANSI/ASME B 16.34; B 16.25; B 16.10							

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER)100%HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	300	120	60	120
PRESSURE (Kg/cm ²)	158	115	115	4 - 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

SPECIALTY VALVES RESEARCH, S.A. certify that all valves described above are in compliance with purchase order and specification requirements. This test report represents the actual attributes of the valves furnished and the test results are in compliance with the applicable specification and purchase order requirements.

TEST REPORT EN 10204 – 3.1.B. / 2.2

BODY & BONNET	ASTM A 216 WCB		
WEDGE	ASTM A 216 WCB + STELLITE Overlay		
BODY RING	A 105 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
BOLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
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FOUNDRIY MILL CERTIFICATE NUMBERS

BODY : A05322
BONNET: A05322

QUALITY CONTROL MANAGER: SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 04 JUL 2003 Quality Department	CUSTOMER'S INSPECTOR:
---	---------------------------



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

MATERIAL CERTIFICATES
CERTIFICADO DE INSPECCION s/
INSPECTION CERTIFICATE Acc. To
EN 10204 / 3.1.B.

Nº/Nr.: A05322

FECHA:
DATE: 27/05/2003

PAG.: DE
SHEET 1 OF 1

Cliente/Cient.:

VALVES ENTREPRISE
Las Mercedes No. 23 - 6º
Edificio Abra No.1
48930 LAS ARENAS -BIZKAIA-

Pedido Nº
Purchase Order: P-200309

Cantidad:
Quantity: 3

Anagrama del Fabricante / sello del Inspector:
Manufacturer's Logo / Inspector stamp:



TRATAMIENTO TERMICO
HEAT TREATMENT

Normalizado:



Normalized:

Normalizado+Revenido



Normalized+Tempered

Templado+Revenido:



Quenched+Tempered:

Solubilización:



Solution:

CONDICION
CONDITION T.T.

NORMALIZED 980 °C x 3 H

MODO DE FUSION:

INDUCTION MELTING

TYPE OF MELTING:

DENOMINACION DE LA PIEZA:
CASTING DENOMINATION:

Gate Body	16" - 600 Lbs	Heat No.:	F0513
Gate Bonnet	16" - 600 Lbs	Heat No.:	F0512
Gate Wedge	16" - 600 Lbs	Heat No.:	F0512

CALIDAD DE ACERO:
STEEL QUALITY:

ASTM A 216 WCB

CONDICIONES DE ENTREGA:
TERMS OF DELIVERY:

ANÁLISIS QUÍMICO - CHEMICAL ANALYSIS

COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	V	Nº de Piezas Ner. Pieces	Peso kgs. Weight
Solicitado Requirements (max)	0.22	1.00	0.60	0.04	0.045	0.50	0.20	0.50	0.30	0.03		
F0513	0.21	0.84	0.5	0.028	0.020	0.164	0.012	0.042	0.066	0.006	1	
F0512	0.21	0.75	0.45	0.028	0.02	0.25	0.011	0.135	0.29	0.006	2	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370

COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resiliencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	250	485 - 655	22	35	232	
F0513	Lo = 4D	10	305	510	32	48	154	
F0512	Lo = 4D	10	295	505	35	47	152	
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gammagraphic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRIPTO AQUI HA SIDO ENSAYADO
Y CUMPLE CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.

we hereby certify that the material described above, has been
tested and complies to the material requirements of the purchase order.

SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

04 JUL 2003

Inspector / Work Inspector

QA/QC Department

 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure:	ASME B 16.34	Report No.:	10SPPO79
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Page: 1 / 2

Customer: VALVES ENTREPRISE, S.L.	Contract: P-200309 REV 1
Description: GATE BODY WELDING END	Extension of Test: BW-ENDS
Drawing: 600LB 16"	Radiographed at: Shop: =
Material: WCB (Heat Number: F0513)	Field: =√

X Rays KV: 7 RAYS	Isotope: IR 192	Curies: /	Focal Spot Size: 3x3
Film Type, Brand and Size: KODAK-MX,355x80	IQI: II		
Screens Type and Thickness: Pb,0.5~1mm	Material Thickness: 65 mm		
Density: 1.0~3.5	Source Film Distance: 450 mm	Exposure Time: h 4 min 30s	

Evaluation standard for steel castings radiographic examination (See Back)	Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form	ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf.	Accepted
C1	1-2		E446/E186	/	/	/	/	/	/	I	OK
C2	2-3		E446/E186	/	/	/	/	/	/	I	OK
C3	3-4		E446/E186	/	/	/	/	/	/	I	OK
C4	4-5		E446/E186	/	/	/	/	/	/	I	OK
C5	5-1		E446/E186	/	/	/	/	/	/	I	OK
C6	6-1		E446/E186	/	/	/	/	/	/	I	OK
C7	7-8		E446/E186	/	/	/	/	/	/	I	OK
C8	8-9		E446/E186	/	/	/	/	/	/	I	OK
C9	9-10		E446/E186	/	/	/	/	/	/	I	OK
C10	10-11		E446/E186	/	/	/	/	/	/	I	OK
C11	11-12		E446/E186	A2	/	/	/	/	/	II	OK
C12	12-7		E446/E186	/	/	/	/	/	/	I	OK
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
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*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.

We hereby certify that material described above, have been tested and complies to the material requirements of the purchase order. The results above indicated are exact transcription from the corresponding certificates, which are field in our factory, emitted by homologated suppliers.



SPECIALTY VALVES RESEARCH, S.A.
 VALVES MANUFACTURER

04 JUL 2003

 QA/QC Department

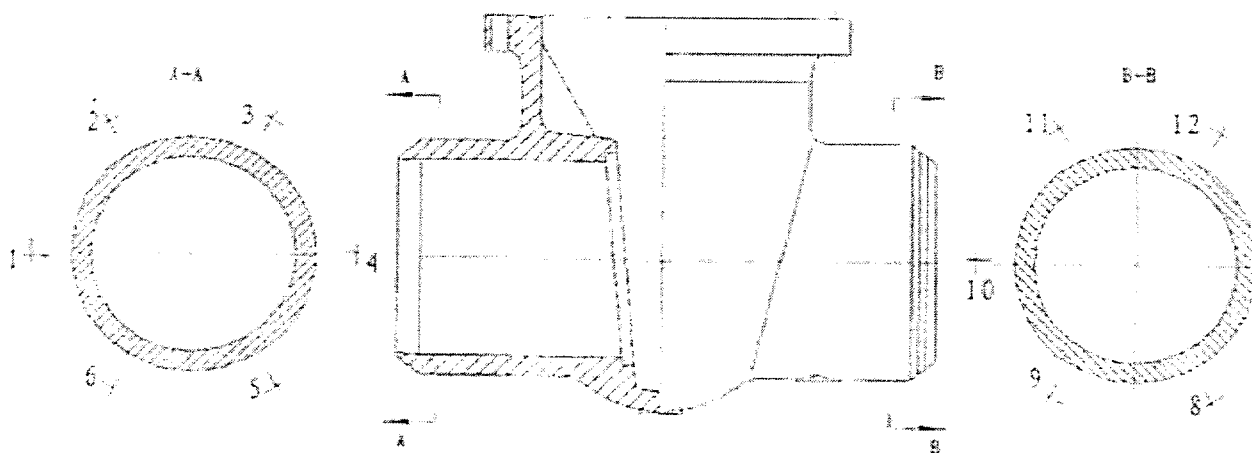
 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0513
Contract	P-200309 REV 1	Part No.	A05322
Drawing:	600LB 16"	Descriptions:	GATE BODY BW ENDS

Radiography No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C12	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	450	1.6-2.6	Pb
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****



 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER		CERTIFICATE Acc. To EN 10204 – 3.1.B.	CERTIFICATE No.: 2807-09
			REV.: 0
			DATE: 04/07/2003

CLIENT: VALVES ENTREPRISE	ORDER No.: P-200309	ITEM: 9	TAG No.: 10SPPO80
SVR P.O.: 2807-06/03	ITEM: 9	QUANTITY: 1	
FIGURE NO.: Z561Y600LB-16"	DESCRIPTION: 16" - 600 Lbs.		ENDS: FLANGE ()
Sch. Ø 406,4 x 21,44	GATE VALVE (GEAR OPERATED)		BUTT WELD (X)
(1" Nozzle 100 mm. - OD 33,4 mm. X WT 6.35 mm)			

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B		DIN 3230 - 3		MSS - SP 82		NACE MR 0175	
OTHERS: ANSI/ASME B 16.34; B 16.25; B 16.10											

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER) 100% HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	300	120	60	120
PRESSURE (Kg/cm ²)	158	115	115	4 - 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

SPECIALTY VALVES RESEARCH, S.A. certify that all valves described above are in compliance with purchase order and specification requirements. This test report represents the actual attributes of the valves furnished and the test results are in compliance with the applicable specification and purchase order requirements.

TEST REPORT EN 10204 – 3.1.B. / 2.2

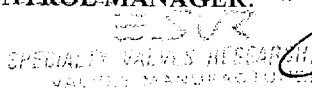
BODY & BONNET	ASTM A 216 WCB		
WEDGE	ASTM A 216 WCB + STELLITE Overlay		
BODY RING	A 105 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
BOLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
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FOUNDRY MILL CERTIFICATE NUMBERS

BODY: A05323
BONNET: A05323

QUALITY CONTROL MANAGER:   SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 04 JUL 2003 QA/QC Department	CUSTOMER'S INSPECTOR: 
---	---



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

MATERIAL CERTIFICATES
CERTIFICADO DE INSPECCION s/
INSPECTION CERTIFICATE Acc. To
EN 10204 / 3.1.B.

Nº/Nr.: A05323

FECHA:
DATE: 27/05/2003

PAG.: DE
SHEET 1 OF 1

Cliente/Cient.:

VALVES ENTREPRISE
Las Mercedes No. 23 - 6º
Edificio Abra No.1
48930 LAS ARENAS -BIZKAIA-

Pedido Nº
Purchase Order: **P-200309**

Cantidad:
Quantity: **3**

Anagrama del Fabricante / sello del Inspector:
Manufacturer's Logo / Inspector stamp:



TRATAMIENTO TERMICO
HEAT TREATMENT

Normalizado:



Normalized:

Normalizado+Revenido



Normalized+Tempered

Templado+Revenido:



Quenched+Tempered:

Solubilización:



Solution:

CONDICION
CONDITION T.T.

NORMALIZED 980 °C x 3 H

MODO DE FUSION:

INDUCTION MELTING
TYPE OF MELTING:

DENOMINACION DE LA PIEZA:
CASTING DENOMINATION:

Gate Body

16" - 600 Lbs

Heat No.:

F0512

Gate Bonnet

16" - 600 Lbs

Heat No.:

F0512

Gate Wedge

16" - 600 Lbs

Heat No.:

F0512

CALIDAD DE ACERO:
STEEL QUALITY:

ASTM A 216 WCB

CONDICIONES DE ENTREGA:
TERMS OF DELIVERY:

NÁLISIS QUÍMICO - CHEMICAL ANALYSIS

COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	V		Nº de Piezas Ner. Pieces	Peso kgs. Weight
Solicitado Requirements (max)	0.22	1.00	0.60	0.04	0.045	0.50	0.20	0.50	0.30	0.03			
F0512	0.21	0.75	0.45	0.028	0.02	0.25	0.011	0.135	0.29	0.006		3	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370

COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resiliencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	250	485 - 655	22	35	232	
F0512	Lo = 4D	10	295	505	35	47	152	
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gamma-graphic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRIPTO AQUI HA SIDO ENSAYADO
Y CUMPLE CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.

we hereby certify that the material described above, has been
tested and complies to the material requirements of the purchase order.

SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

04 JUL 2003

Inspector / Work Inspector

 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure:	ASME B 16.34	Report No.:	10SPPO80
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Page: 1 / 2

Customer : VALVES ENTREPRISE, S.L.	Contract: P-200309 REV 1
Description : GATE BODY WELDING END	Extension of Test: BW-ENDS
Drawing : 600LB 16"	Radiographed at: Shop: ☐
Material : WCB (Heat Number: F0512)	Field: ☒

X Rays KV	F RAYS	Isotope : IR 192	Curies: /	Focal Spot Size: 3x3
Film Type, Brand and Size :		KODAK-MX,355x80		
Screens Type and Thickness :		Pb,0.5~1mm		
Density : 1.0~3.5		Source Film Distance : 450 mm	Exposure Time: h 4 min 30s	Material Thickness: 65 mm

Evaluation standard for steel castings radiographic examination (See Back)	Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form	ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf.	Accepted
C1	1-2		E446/E186	/	/	/	/	/	/	I	OK
C2	2-3		E446/E186	/	/	/	/	/	/	I	OK
C3	3-4		E446/E186	/	/	/	/	/	/	I	OK
C4	4-5		E446/E186	/	/	/	/	/	/	I	OK
C5	5-1		E446/E186	/	/	/	/	/	/	I	OK
C6	6-1		E446/E186	/	B2	/	/	/	/	II	OK
C7	7-8		E446/E186	/	B2	/	/	/	/	II	OK
C8	8-9		E446/E186	/	/	/	/	/	/	I	OK
C9	9-10		E446/E186	/	/	/	/	/	/	I	OK
C10	10-11		E446/E186	/	/	/	/	/	/	I	OK
C11	11-12		E446/E186	/	B2	/	/	/	/	II	OK
C12	12-7		E446/E186	A2	/	/	/	/	/	II	OK
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
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*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.

We hereby certify that material described above, have been tested and complies to the material requirements of the purchase order. The results above indicated are exact transcription from the corresponding certificates, which are field in our factory, emitted by homologated suppliers.



SPECIALTY VALVES RESEARCH, S.A.
 VALVES MANUFACTURER

04 JUL 2003

 Q.A./C. Department

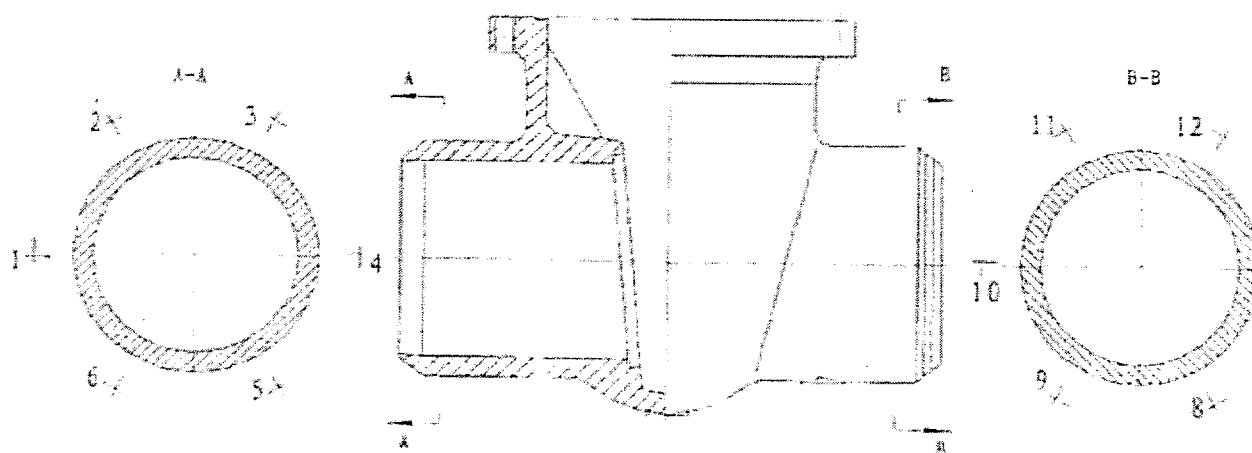
 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0512
Contract	P-200309 REV 1	Part No.	A05323
Drawing:	600LB 16"	Descriptions:	GATE BODY BW ENDS

Radiografy No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C12	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	450	1.6-2.6	Pb
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****



 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER		CERTIFICATE Acc. To EN 10204 – 3.1.B.	CERTIFICATE No.: 2807-10
			REV.: 0
			DATE: 04/07/2003

CLIENT: VALVES ENTREPRISE	ORDER No.: P-200309	ITEM: 10	TAG No.: 10SPP082
SVR P.O.: 2807-06/03	ITEM: 10	QUANTITY: 1	
FIGURE NO.: Z561Y600LB-16"	DESCRIPTION: 16" - 600 Lbs.		ENDS: FLANGE ()
Sch. Ø 406,4 x 21,44	GATE VALVE (GEAR OPERATED)		BUTT WELD (X)
(1" Nozzle 100 mm. - OD 33,4 mm. X WT 6.35 mm)			

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B		DIN 3230 - 3		MSS - SP 82		NACE MR 0175	
OTHERS: ANSI/ASME B 16.34; B 16.25; B 16.10											

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER)100%HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	300	120	60	120
PRESSURE (Kg/cm ²)	158	115	115	4 - 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

SPECIALTY VALVES RESEARCH, S.A. certify that all valves described above are in compliance with purchase order and specification requirements. This test report represents the actual attributes of the valves furnished and the test results are in compliance with the applicable specification and purchase order requirements.

TEST REPORT EN 10204 – 3.1.B. / 2.2

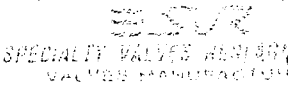
BODY & BONNET	ASTM A 216 WCB		
WEDGE	ASTM A 216 WCB + STELLITE Overlay		
BODY RING	A 105 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
BOLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
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FOUNDRY MILL CERTIFICATE NUMBERS

BODY: A05324
BONNET: A05324

QUALITY CONTROL MANAGER:   SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 04 JUL 2003 QA/QC Department	CUSTOMER'S INSPECTOR: 
---	---



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

MATERIAL CERTIFICATES
CERTIFICADO DE INSPECCION s/
INSPECTION CERTIFICATE Acc. To
EN 10204 / 3.1.B.

Nº/Nr.: A05324

FECHA:
DATE: 27/05/2003

PAG.: DE
SHEET 1 OF 1

Cliente/Cient.:

VALVES ENTREPRISE
Las Mercedes No. 23 - 6º
Edificio Abra No.1
48930 LAS ARENAS -BIZKAIA-

Pedido Nº
Purchase Order: P-200309

Cantidad:
Quantity: 3

Anagrama del Fabricante / sello del Inspector:
Manufacturer's Logo / Inspector stamp:



TRATAMIENTO TERMICO
HEAT TREATMENT

Normalizado:



Normalized:

Normalizado+Revenido



Normalized+Tempered

Templado+Revenido:



Quenched+Tempered:

Solubilización:



Solution:

CONDICION
CONDITION T.T.

NORMALIZED 980 °C x 3 H

MODO DE FUSION:

INDUCTION MELTING

TYPE OF MELTING:

DENOMINACION DE LA PIEZA:
CASTING DENOMINATION:

Gate Body

16" - 600 Lbs

Heat No.:

F0513

Gate Bonnet

16" - 600 Lbs

Heat No.:

F0512

Gate Wedge

16" - 600 Lbs

Heat No.:

F0512

CALIDAD DE ACERO:
STEEL QUALITY:

ASTM A 216 WCB

CONDICIONES DE ENTREGA:
TERMS OF DELIVERY:

NÁLISIS QUÍMICO - CHEMICAL ANALYSIS

COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	V	Nº de Piezas Ner. Pieces	Peso kgs. Weight
Solicitado Requirements (max)	0.22	1.00	0.60	0.04	0.045	0.50	0.20	0.50	0.30	0.03		
F0513	0.21	0.84	0.5	0.028	0.020	0.164	0.012	0.042	0.066	0.006	1	
F0512	0.21	0.75	0.45	0.028	0.02	0.25	0.011	0.135	0.29	0.006	2	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370

COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resiliencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	250	485 - 655	22	35	232	
F0513	Lo = 4D	10	305	510	32	48	154	
F0512	Lo = 4D	10	295	505	35	47	152	
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gamma graphic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRIPTO AQUI HA SIDO ENSAYADO
Y CUMPLE CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.

reby certify that the material described above, has been
tested and complies to the material requirements of the purchase order.

SPECIALTY VALVES RESEARCH
VALVES MANUFACTURER

Inspector / Work Inspector

QA/QC Department

 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure:	ASME B 16.34	Report No.:	10SPPO82
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Page: 1 / 2

Customer : VALVES ENTREPRISE, S.L.	Contract: P-200309 REV 1
Description : GATE BODY WELDING END	Extension of Test: BW-ENDS
Drawing : 600LB 16"	Radiographed at: Shop: -
Material : WCB (Heat Number: F0513)	Field: -f

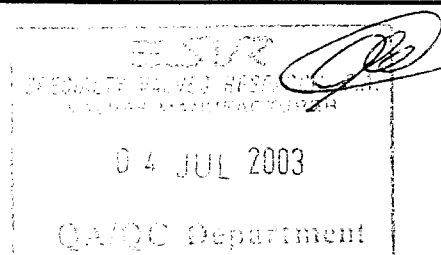
X Rays KV	7 RAYS	Isotope : IR 192	Curies: /	Focal Spot Size: 3x3
Film Type, Brand and Size :	KODAK-MX,355x80			IQI: II
Screens Type and Thickness :	Pb,0.5~1mm			Material Thickness: 65 mm
Density : 1.0~3.5	Source Film Distance :	450 mm	Exposure Time:	h 4 min 30s

Evaluation standard for steel castings radiographic examination (See Back)	Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form	ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf.	Accepted
C1	1-2		E446/E186	/	/	/	/	/	/	I	OK
C2	2-3		E446/E186	/	/	/	/	/	/	I	OK
C3	3-4		E446/E186	/	/	/	/	/	/	I	OK
C4	4-5		E446/E186	/	/	/	/	/	/	I	OK
C5	5-1		E446/E186	/	/	/	/	/	/	I	OK
C6	6-1		E446/E186	/	/	/	/	/	/	I	OK
C7	7-8		E446/E186	/	/	CA2	/	/	/	II	OK
C8	8-9		E446/E186	/	/	CA2	/	/	/	II	OK
C9	9-10		E446/E186	/	/	/	/	/	/	I	OK
C10	10-11		E446/E186	/	/	/	/	/	/	I	OK
C11	11-12		E446/E186	/	/	/	/	/	/	I	OK
C12	12-7		E446/E186	/	/	/	/	/	/	I	OK
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
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*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.

We hereby certify that material described above, have been tested and complies to the material requirements of the purchase order. The results above indicated are exact transcription from the corresponding certificates, which are field in our factory, emitted by homologated suppliers.



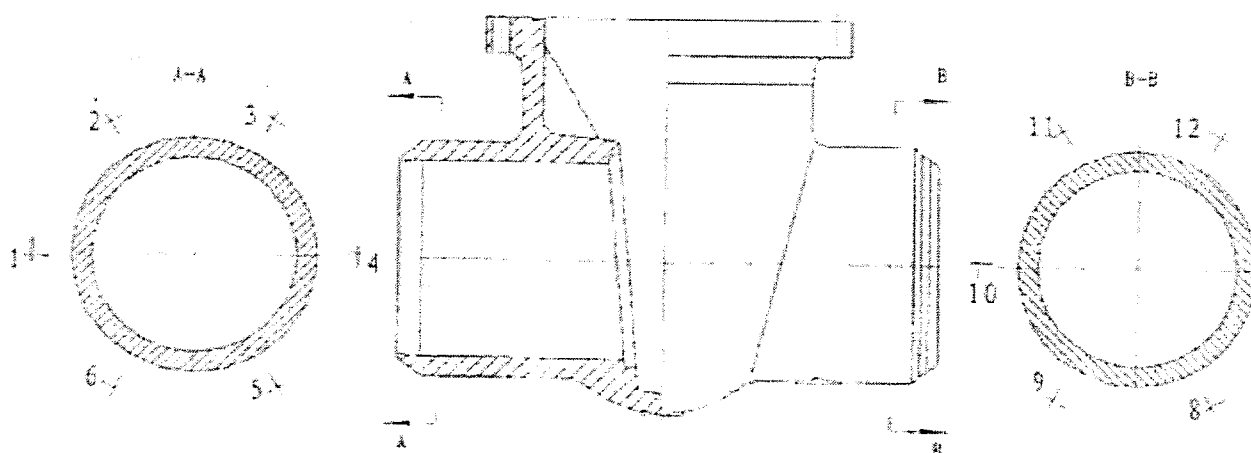
 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER	ADDRESS:	ARETXALDE, 150 48196 LEZAMA -BIZKAIA- (SPAIN)
	PHONE:	+ (34) 94. 455. 51. 51
	FAX:	+ (34) 94. 455. 51. 50
	WEBB:	www.svrvalves.com
	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0513
Contract	P-200309 REV 1	Part No.	A05324
Drawing:	600LB 16"	Descriptions:	GATE BODY BW ENDS

Radiography No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C12	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	450	1.6-2.6	Pb
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****



 SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER		CERTIFICATE Acc. To EN 10204 – 3.1.B.	CERTIFICATE No.: 2807-11
			REV.: 0
			DATE: 04/07/2003

CLIENT: VALVES ENTREPRISE	ORDER No.: P-200309	ITEM: 11	TAG No.: 10SPP084
SVR P.O.: 2807-06/03	ITEM: 11	QUANTITY: 1	
FIGURE NO.: Z561Y600LB-16"	DESCRIPTION: 16" - 600 Lbs.		ENDS: FLANGE ()
Sch. Ø 406,4 x 21,44	GATE VALVE (GEAR OPERATED)		BUTT WELD (X)
(1" Nozzle 100 mm. - OD 33,4 mm. X WT 6.35 mm)			

DESIGN AND TEST ACCORDING TO:

API 600	X	API 598	X	BS 6755 Part. 1 rate B		DIN 3230 - 3		MSS - SP 82		NACE MR 0175	
OTHERS: ANSI/ASME B 16.34; B 16.25; B 16.10											

TYPE OF TEST	SHELL & PACKING 100%	SEAT (WATER) 100% HP	BACKSEAT (WATER) 100% HP	SEAT (AIR) LP
DURATION (Sec)	300	120	60	120
PRESSURE (Kg/cm ²)	158	115	115	4 - 7
RESULT	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE	ACCEPTABLE

SPECIALTY VALVES RESEARCH, S.A. certify that all valves described above are in compliance with purchase order and specification requirements. This test report represents the actual attributes of the valves furnished and the test results are in compliance with the applicable specification and purchase order requirements.

TEST REPORT EN 10204 – 3.1.B. / 2.2

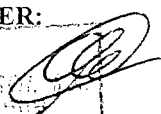
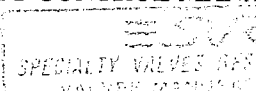
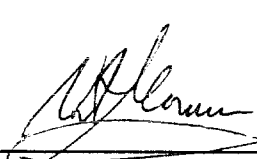
BODY & BONNET	ASTM A 216 WCB		
WEDGE	ASTM A 216 WCB + STELLITE Overlay		
BODY RING	A 105 + STELLITE Overlay		
STEM	AISI 410 (F6)		
PACKING	GRAPHITE		
GASKET	SPW 304 + GRAPHOIL		
BOLTING	A 193 B7 / A 194 Gr. 2H		

SPECIALTY VALVES RESEARCH, S.A. certifies that the above items are in full compliance with the listed material specifications and all purchase order requirements.

DIMENSIONAL EXAMINATION: ACCEPTABLE	VISUAL EXAMINATION: MSS SP 55 ACCEPTABLE	MARKING: MSS SP 25 ACCEPTABLE
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FOUNDRY MILL CERTIFICATE NUMBERS

BODY: A05325
BONNET: A05325

QUALITY CONTROL MANAGER:   SPECIALTY VALVES RESEARCH, S.A. VALVES MANUFACTURER 04 JUL 2003 Q.A./Q.C. Department	CUSTOMER'S INSPECTOR: 
---	---



SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

MATERIAL CERTIFICATES
CERTIFICADO DE INSPECCION s/
INSPECTION CERTIFICATE Acc. To
EN 10204 / 3.1.B.

Nº/Nr.: A05325

FECHA:
DATE: 27/05/2003

PAG.: DE
SHEET 1 OF 1

Cliente/Cient.:

VALVES ENTREPRISE
Las Mercedes No. 23 - 6º
Edificio Abra No.1
48930 LAS ARENAS -BIZKAIA-

Pedido Nº
Purchase Order: P-200309

Cantidad:
Quantity: 3

Anagrama del Fabricante / sello del Inspector:
Manufacturer's Logo / Inspector stamp:



TRATAMIENTO TERMICO
HEAT TREATMENT

Normalizado:



Normalized:

Normalizado+Revenido



Normalized+Tempered

Templado+Revenido:



Quenched+Tempered:

Solubilización:



Solution:

CONDICION
CONDITION T.T.

NORMALIZED 980 °C x 3 H

MODO DE FUSION:

INDUCTION MELTING

TYPE OF MELTING:

DENOMINACION DE LA PIEZA:
CASTING DENOMINATION:

Gate Body

16" - 600 Lbs

Heat No.:

F0512

Gate Bonnet

16" - 600 Lbs

Heat No.:

F0512

Gate Wedge

16" - 600 Lbs

Heat No.:

F0512

CALIDAD DE ACERO:
STEEL QUALITY:

ASTM A 216 WCB

CONDICIONES DE ENTREGA:
TERMS OF DELIVERY:

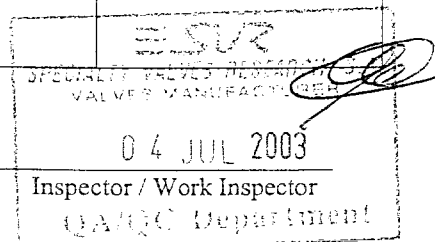
ANÁLISIS QUÍMICO - CHEMICAL ANALYSIS

COLADA HEAT No.	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	V		Nº de Piezas Ner. Pieces	Peso kgs. Weight
Solicitado Requirements (max)	0.22	1.00	0.60	0.04	0.045	0.50	0.20	0.50	0.30	0.03			
F0512	0.21	0.75	0.45	0.028	0.02	0.25	0.011	0.135	0.29	0.006		3	

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370

COLADA HEAT No.	Probeta Test Sample	Diametro (mm) Diameter Ø	L. Elástico Yield Point N/mm²	Resistencia Tensile Str. N/mm²	Alargamiento Elongation %	Estricción Red. of Area %	Dureza Hardness HB	Resiliencia Impact Test (ISO Prob) J; T °C
Solicitado Requirements	Lo = 4D	12.5	250	485 - 655	22	35	232	
F0512	Lo = 4D	10	295	505	35	47	152	
Insp. Visual y C. Dimensional Visual Insp. And Dimens check		Ensayo Magnaflux Magnaflux test		Insp. Por Gammagrafia Gammagraphic Inspection		Ensayo de Presión Pressure Test		Insp. Por Ultrasonidos Ultrasonic Test
S/ MSS-SP-55		Satisfactory						

CERTIFICAMOS QUE EL MATERIAL DESCRIPTO AQUI HA SIDO ENSAYADO
Y CUMPLE CON LOS REQUISITOS SOLICITADOS POR EL CLIENTE.
We hereby certify that the material described above, has been
tested and complies to the material requirements of the purchase order.



04 JUL 2003

Inspector / Work Inspector

QA/QC Department

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	E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC EXAMINATION REPORT FOR CASTINGS

Procedure: ASME B 16.34	Report No.: 10SPP084	
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Page: 1 / 2

Customer : VALVES ENTREPRISE, S.L.	Contract: P-200309 REV 1
Description : GATE BODY WELDING END	Extension of Test: BW-ENDS
Drawing : 600LB 16"	Radiographed at: Shop: =
Material : WCB (Heat Number: F0512)	Field: =√

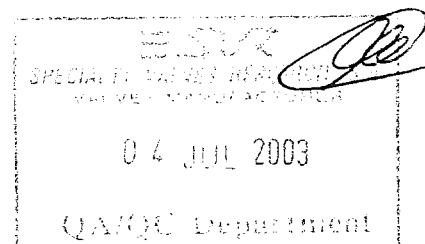
X Rays KV : 7 RAYS	Isotope : IR 192	Curies: /	Focal Spot Size: 3x3
Film Type, Brand and Size : KODAK-MX,355x80	IQI: II		
Screens Type and Thickness : Pb,0.5~1mm	Material Thickness: 65 mm		
Density : 1.0~3.5	Source Film Distance : 450 mm	Exposure Time: h 4 min 30s	

Evaluation standard for steel castings radiographic examination (See Back)	Acceptance Standard
Sketch of geometric arrangement of radiographs and location markers in attached form	ASME B 16.34

Identification	Interval	Viewing	Evaluation	Observed Defects							
				Porosity	Sand	Shrinkage	Cracks	Hot Tears	Others	Superf.	Accepted
C1	1-2		E446/E186	/	/	/	/	/	/	I	OK
C2	2-3		E446/E186	/	/	/	/	/	/	I	OK
C3	3-4		E446/E186	/	/	/	/	/	/	I	OK
C4	4-5		E446/E186	/	/	/	/	/	/	I	OK
C5	5-1		E446/E186	/	B2	/	/	/	/	II	OK
C6	6-1		E446/E186	/	/	/	/	/	/	I	OK
C7	7-8		E446/E186	/	/	/	/	/	/	I	OK
C8	8-9		E446/E186	/	/	/	/	/	/	I	OK
C9	9-10		E446/E186	/	B2	/	/	/	/	II	OK
C10	10-11		E446/E186	/	/	/	/	/	/	I	OK
C11	11-12		E446/E186	/	/	/	/	/	/	I	OK
C12	12-7		E446/E186	/	/	/	/	/	/	I	OK
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
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Certificamos que el material descrito aquí ha sido ensayado y cumple con los requisitos solicitados por el cliente. Los resultados arriba indicados son fiel reflejo de los certificados correspondientes, que abran en nuestro poder, emitidos por los suministradores homologados.

We hereby certify that material described above, have been tested and complies to the material requirements of the purchase order. The results above indicated are exact transcription from the corresponding certificates, which are field in our factory, emitted by homologated suppliers.





SPECIALTY VALVES RESEARCH, S.A.
VALVES MANUFACTURER

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E-mail:	webmaster@svrvalves.com

RADIOGRAPHIC MAP

Page: 2 / 2

Procedure:	ASME B 16.34		
Customer:	VALVES ENTREPRISE, S.L.	Heat:	F0512
Contract	P-200309 REV 1	Part No.	A05325
Drawing:	600LB 16"	Descriptions:	GATE BODY BW ENDS

Radiografy No.	Type and Size of Film	Thickness	Source	I.Q.I.	Focus-Film Distance	Density	Back Shielding
C1 - C12	KODAK-MX, 355x80	0.5 - 1 mm	Ir192	II	450	1.6-2.6	Pb
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****
*****	*****	*****	*****	*****	*****	*****	*****

