



**SPECIALTY VALVES RESEARCH, S.A.**  
VALVES MANUFACTURER



# CERTIFICATE Acc. to EN 10204 – 3.1.B.

CERTIFICATE No.: 2805-01

REV.: 1

DATE: 08/08/2003

LURGI OEL GAS CHEMIE GmbH | LURGI CONTRACT No. 1.69666-01-GEM | LURGI OGC P.O.No.: 4553015-002 / 1.69666 / 136

PROJECT: MEGA METHANOL PLANT  
ZAGROS PETROCHEMICAL COMPANY  
SITE BANDAR ASSALUYEH, IRAN

HERE: MATERIAL No.: 1041318 ①  
ITEM: 00060 ①  
IDENT No.: S 655

KLAUS UNION P.O. No.: HH-01970+02

CLIENT: VALVES ENTREPRISE ORDER No.: P-200321 ITEM: 00060 TAG No.: S 655

SVR P.O.: 2805-06/03

ITEM: 00060

QUANTITY: 2

FIGURE NO.: 1.150RF

DESCRIPTION: 2" - 150 Lbs.  
GATE VALVE

ENDS: FLANGE (X)  
BUTT WELD ( )

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 16.5; B 16.10

| TYPE OF TEST                   | SHELL & PACKING 100% | SEAT (WATER)100%HP | BACKSEAT (WATER) 100% HP | SEAT (AIR) LP |
|--------------------------------|----------------------|--------------------|--------------------------|---------------|
| DURATION (Sec)                 | 60                   | 60                 | 60                       | 60            |
| PRESSURE (Kg/cm <sup>2</sup> ) | 33                   | 22                 | 22                       | 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 351 CF8C              |  |  |
| WEDGE         | ASTM A 351 CF8M              |  |  |
| BODY RING     | AISI 316                     |  |  |
| STEM          | AISI 316                     |  |  |
| PACKING       | GRAPHITE                     |  |  |
| GASKET        | INOXGRAPH                    |  |  |
| BOLTING       | A 193 B8 Cl. 2 / A 194 Gr. 8 |  |  |

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 : 24.701

BONNET: 24.701

QUALITY CONTROL MANAGER:

CUSTOMER'S INSPECTOR:

08/08/2003



Poligono Industrial de Saracho s/n.º Apt. 7  
01470 AMURRIO-ALAVA-SPAIN

CERTIFICADO DE RECEPCION SEGUN  
ABNAHMEPRÜFZEUGNIS NACH  
INSPECTION CERTIFICATE ACC.TO

EN-10204.3.1.B

DIN EN ISO-9001-200



Cliente:  
Customer: SPECIALTY VALVE RESEARCH, S.A.

Certificado N.º:  
Zeugnis:  
Certificate N.º: 24.701

Fecha:  
Datum: 31/07/03  
Date:

Producto:  
Prüfgegenstand: STAINLESS CAST STEEL  
Product:

Marca del fabricante:  
Herstellerzeichen:  
Brand of manufacturer:

Sello del inspector:  
Stempel des sachverständigen:  
Inspector stamp:

Proceso de elaboracion:  
Erschmelzungsart: INDUCTION FURNACE  
Elaboration Process:

Pedido N.º:  
Bestell nr:  
Order N.º: 2805-06/03

Normas de control y especificaciones:  
Prüfgrundlagen / Anforderungen: ASTM A-351 NACE MR-01-75:00  
Technical requirements / Demand:

N.º de fabricación:  
Werks nr:  
Works N.º SVR23024

Material:  
Werkstoff: CF8C  
Material:

Marcas en piezas:  
Kennzeichnung: HEAT No. - MATERIAL  
Material identification:

| N.º DE PIEZAS<br>Stückzahl<br>Quantity | DESIGNACION<br>Gegenstand<br>Designation | N.º COLADA<br>Schmelze<br>Heat n.º | N.º PROBETA<br>Probe nr.<br>Test n.º | PESO<br>Masse<br>Weight |
|----------------------------------------|------------------------------------------|------------------------------------|--------------------------------------|-------------------------|
| 2                                      | GATE BODY 02"-150 C-2569                 | T517                               | T517                                 | 30,00                   |
| 2                                      | GATE BONNET 02"-150 C-2570               | T517                               | T517                                 | 10,00                   |

#### ANALISIS QUIMICO / CHEMISCHE ANALYSE / CHEMICAL ANALYSIS

| N.º COLADA<br>Schmelze nr.<br>Heat n.º | % C   | % Mn  | % Si  | % S   | % P   | % Cr   | % Ni  | % Mo  | % Nb  | % Cu | % N | % V | % W | % Co | % Fe |
|----------------------------------------|-------|-------|-------|-------|-------|--------|-------|-------|-------|------|-----|-----|-----|------|------|
| T517                                   | 0,050 | 1,120 | 0,740 | 0,008 | 0,026 | 18,100 | 9,890 | 0,470 | 0,500 |      |     |     |     |      |      |

#### ENSAYOS MECANICOS / MECHANISCHE PRÜFUNGEN / MECHANICAL TEST

| TIPO DE ENSAYO<br>Prüfart<br>Test type |                                                               | TRACCION / ZUGFESTUGKEIT / TENSILE<br><br>ASTM A-370                         |                                                                           |                                                                   |                                                     |                                                          | RESILIENCIA / KERBSCHLAGZAHIGKEIT / IMPACT STRENGTH<br><br>ASTM A-370 |                                            |                                                             | DUREZA<br>HARTE<br>HARDNESS |
|----------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------|-----------------------------|
| OBETA<br>Probe nr.<br>Test n.º         | T.º DE ENSAYO<br>Prüftemperatur<br>Test Temperature<br><br>°C | LIMITE ELASTICO<br>Streck/dehngrenze<br>Yield strength<br><br>0,2 %<br>N/mm² | LIMITE ELASTICO<br>Streck/dehngrenze<br>Yield strength<br><br>1%<br>N/mm² | CARGA DE ROTURA<br>Zugfestigkeit<br>Tensile strength<br><br>N/mm² | ALARGAMIENTO<br>Bruchdehnung<br>Elongation<br><br>% | ESTRICCION<br>Bruchsehnung<br>Reduction of area<br><br>% | ENERGIA ABSORBIDA<br>Schlargarbeit<br>Energy of impact<br>J           | EXPANSION LATERAL<br>Breitung<br>Expansion | PORTE CRISTALINA<br>Krist. Bruchanteil<br>Cryst. Proportion | HB                          |
| T517                                   | 20                                                            | 238                                                                          |                                                                           | 533                                                               | 55,60                                               |                                                          | 140-145-171                                                           |                                            |                                                             | 158                         |

TRATAMIENTO TERMICO:  
Wärmebehandlung:  
Heat treatment: HEAT TO 1.080°C, QUENCH IN WATER

CORROSION INTERCRISTALINA:  
Interkristalline korrosion:  
Intergranular corrosion:

CONTROL VISUAL:  
Sichtprüfung:  
Visual inspection: SATISFACTORY ACCORDING TO MSS-SP-55.

PRUEBA DE PRESION:  
Druckprobe:  
Pressure test: 08 AUG 2003

Certificamos que el material arriba descrito ha sido inspeccionado y cumple con las especificaciones estipuladas en la orden de compra.

Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bie der Bestellannahme entspricht.

We certificate that the material has been inspectionated and keep with order specifications.

DIMENSIONAL CONTROL SATISFACTORY ACC. TO DRAWING CASTINOX S.A.

Werkstoffverständiger - Inspector  
Manager

|                                                                                                                                                   |                                                                                   |                                                        |                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------|
| <br><b>SPECIALTY VALVES RESEARCH, S.A.</b><br>VALVES MANUFACTURER |  | <b>CERTIFICATE Acc. To</b><br><b>EN 10204 – 3.1.B.</b> | CERTIF No.: SVR – 2917-6 |
|                                                                                                                                                   |                                                                                   |                                                        | REV.: 3                  |
|                                                                                                                                                   |                                                                                   |                                                        | DATE: 2/12/2003          |

|                                            |                                   |                         |                          |
|--------------------------------------------|-----------------------------------|-------------------------|--------------------------|
| CLIENT: <b>VALVES ENTREPRISE</b>           | ORDER No.: <b>P-200343</b>        | ITEM: <b>6</b>          | SERIAL No.: <b>S 655</b> |
| LURGI P.O.: <b>4558641-000/1.69666/136</b> | LURGI ITEM NO: <b>00070</b>       | QUANTITY: <b>2</b>      |                          |
| FIGURE NO.: <b>Z40H600LB-2"</b>            | DESCRIPTION: <b>2" - 600 Lbs.</b> | ENDS: <b>FLANGE (X)</b> |                          |
|                                            | <b>GATE VALVE</b>                 | <b>BUTT WELD ( )</b>    |                          |

DESIGN AND TEST ACCORDING TO:

|                                                    |                                     |         |                                     |                        |  |              |  |             |  |              |  |
|----------------------------------------------------|-------------------------------------|---------|-------------------------------------|------------------------|--|--------------|--|-------------|--|--------------|--|
| API 600                                            | <input checked="" type="checkbox"/> | API 598 | <input checked="" type="checkbox"/> | BS 6755 Part. 1 rate B |  | DIN 3230 – 3 |  | MSS - SP 82 |  | NACE MR 0175 |  |
| OTHERS : <b>ANSI/ASME B 16.34; B 16.5; B 16.10</b> |                                     |         |                                     |                        |  |              |  |             |  |              |  |

| TYPE OF TEST                  | SHELL & PACKING 100% | SEAT (WATER)100%HP | BACKSEAT (WATER) 100% HP | SEAT (AIR) LP |
|-------------------------------|----------------------|--------------------|--------------------------|---------------|
| DURATION (Sec)                | 60                   | 60                 | 60                       | 60            |
| RESSURE (Kg/cm <sup>2</sup> ) | 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

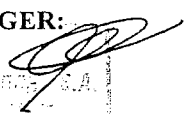
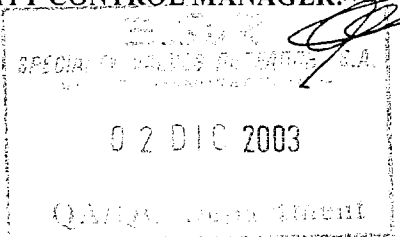
|               |                               |  |  |
|---------------|-------------------------------|--|--|
| BODY & BONNET | ASTM A 351 CF8C               |  |  |
| WEDGE         | ASTM A 351 CF8C + 316 Overlay |  |  |
| BODY RING     | A 182 F316                    |  |  |
| STEM          | A 182 F316                    |  |  |
| PACKING       | GRAPHITE                      |  |  |
| GASKET        | SPW 304 + Graphite            |  |  |
| BOLTING       | A 193 B8 / A 194 Gr. 8        |  |  |

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: <b>ACCEPTABLE</b> | VISUAL EXAMINATION: MSS SP 55 <b>ACCEPTABLE</b> | MARKING: MSS SP 25 <b>ACCEPTABLE</b> |
|--------------------------------------------|-------------------------------------------------|--------------------------------------|

### FOUNDRY MILL CERTIFICATE NUMBERS

|                                   |
|-----------------------------------|
| BODY : <b>YD-A0390, YD-A0391</b>  |
| BONNET: <b>YD-A0390, YD-A0391</b> |

|                                                                                                                                                                                                        |                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| QUALITY CONTROL MANAGER:<br><br> | 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.: YD-A0390

FECHA:  
DATE: 18/10/2003

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-200343

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.**

SOLUTION 1025 °C

**MODO DE FUSION:**

**INDUCTION MELTING**

**TYPE OF MELTING:**

**DENOMINACION DE LA PIEZA:**  
**CASTING DENOMINATION:**

Gate Body

2" - 600 Lbs

Heat No.:

5388

Gate Bonnet

2" - 600 Lbs

Heat No.:

5388

Gate Wedge

2" - 600 Lbs

Heat No.:

5388

**CALIDAD DE ACERO:**  
**STEEL QUALITY:**

ASTM A 351 CF8C

**CONDICIONES DE ENTREGA:**  
**TERMS OF DELIVERY:**

NACE MR 01-75:00

**NÁLISIS QUÍMICO - CHEMICAL ANALYSIS**

| COLADA<br>HEAT No.               | C     | Mn   | Si   | P     | S     | Cr            | Mo    | Ni           | Cu | V | Nº de Piezas<br>Ner. Pieces | Peso kgs.<br>Weight |
|----------------------------------|-------|------|------|-------|-------|---------------|-------|--------------|----|---|-----------------------------|---------------------|
| Solicitado<br>Requirements (max) | 0.08  | 1.50 | 2.00 | 0.04  | 0.04  | 18.0-<br>21.0 | 0.50  | 9.0-<br>12.0 |    |   |                             |                     |
| 5388                             | 0.056 | 1.25 | 0.86 | 0.022 | 0.019 | 18.3          | 0.016 | 9.22         |    |   | 3                           |                     |

**PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370**

| COLADA<br>HEAT No.         | Probeta<br>Test Sample | Diametro<br>(mm)<br>Diameter Ø | L. Elástico<br>Yield Point<br>N/mm² | Resistencia<br>Tensile Str.<br>N/mm² | Alargamiento<br>Elongation<br>% | Estricción<br>Red. of Area<br>% | Dureza<br>Hardness<br>HB | Resiliencia<br>Impact Test<br>(ISO Prob)<br>J; T °C |
|----------------------------|------------------------|--------------------------------|-------------------------------------|--------------------------------------|---------------------------------|---------------------------------|--------------------------|-----------------------------------------------------|
| Solicitado<br>Requirements | Lo = 4D                | 12.5                           | 205                                 | 485                                  | 30                              |                                 | 232                      |                                                     |
| 5388                       | Lo = 4D                | 12.5                           | 254                                 | 490                                  | 38                              |                                 | 157                      |                                                     |

|                                                                |                                    |                                                  |                                    |                                           |
|----------------------------------------------------------------|------------------------------------|--------------------------------------------------|------------------------------------|-------------------------------------------|
| Insp. Visual y C. Dimensional<br>Visual Insp. And Dimens check | Ensayo Magnaflux<br>Magnaflux test | Insp. Por Gammagrafia<br>Gammagraphic Inspection | Ensayo de Presión<br>Pressure Test | Insp. Por Ultrasonidos<br>Ultrasonic Test |
| S/ MSS-SP-55                                                   | Satisfactory                       |                                                  | OK                                 |                                           |

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



**SPECIALTY VALVES RESEARCH, S.A.**  
VALVES MANUFACTURER

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

Nº/Nr.: YD-A0391

FECHA:  
DATE: 18/10/2003

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-200343

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.**

SOLUTION 1025 °C

**MODO DE FUSION:**  
**INDUCTION MELTING**  
**TYPE OF MELTING:**

**DENOMINACION DE LA PIEZA:**  
**CASTING DENOMINATION:**

|             |              |           |      |
|-------------|--------------|-----------|------|
| Gate Body   | 2" - 600 Lbs | Heat No.: | 5388 |
| Gate Bonnet | 2" - 600 Lbs | Heat No.: | 5388 |
| Gate Wedge  | 2" - 600 Lbs | Heat No.: | 5388 |

**CALIDAD DE ACERO:**  
**STEEL QUALITY:**

ASTM A 351 CF8C

**CONDICIONES DE ENTREGA:**  
**TERMS OF DELIVERY:**

NACE MR 01-75:00

**NÁLISIS QUÍMICO - CHEMICAL ANALYSIS**

| COLADA<br>HEAT No.               | C     | Mn   | Si   | P     | S     | Cr            | Mo    | Ni           | Cu | V |  | Nº de Piezas<br>Ner. Pieces | Peso kgs.<br>Weight |
|----------------------------------|-------|------|------|-------|-------|---------------|-------|--------------|----|---|--|-----------------------------|---------------------|
| Solicitado<br>Requirements (max) | 0.08  | 1.50 | 2.00 | 0.04  | 0.04  | 18.0-<br>21.0 | 0.50  | 9.0-<br>12.0 |    |   |  |                             |                     |
| 5388                             | 0.056 | 1.25 | 0.86 | 0.022 | 0.019 | 18.3          | 0.016 | 9.22         |    |   |  | 3                           |                     |

**PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370**

| COLADA<br>HEAT No.         | Probeta<br>Test Sample | Diametro<br>(mm)<br>Diameter Ø | L. Elástico<br>Yield Point<br>N/mm² | Resistencia<br>Tensile Str.<br>N/mm² | Alargamiento<br>Elongation<br>% | Estricción<br>Red. of Area<br>% | Dureza<br>Hardness<br>HB | Resiliencia<br>Impact Test<br>(ISO Prob)<br>J; T °C |
|----------------------------|------------------------|--------------------------------|-------------------------------------|--------------------------------------|---------------------------------|---------------------------------|--------------------------|-----------------------------------------------------|
| Solicitado<br>Requirements | Lo = 4D                | 12.5                           | 205                                 | 485                                  | 30                              |                                 | 232                      |                                                     |
| 5388                       | Lo = 4D                | 12.5                           | 254                                 | 490                                  | 38                              |                                 | 157                      |                                                     |

|                                                                |                                    |                                                  |                                    |                                           |
|----------------------------------------------------------------|------------------------------------|--------------------------------------------------|------------------------------------|-------------------------------------------|
| Insp. Visual y C. Dimensional<br>Visual Insp. And Dimens check | Ensayo Magnaflux<br>Magnaflux test | Insp. Por Gammagrafia<br>Gammagraphic Inspection | Ensayo de Presión<br>Pressure Test | Insp. Por Ultrasonidos<br>Ultrasonic Test |
| S/ MSS-SP-55                                                   | Satisfactory                       |                                                  | OK                                 |                                           |

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

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

Inspector / Work Inspector

|                                                                                                                                                    |                                                                                   |                                                        |                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------|
| <br><b>SPECIALTY VALVES RESEARCH, S.A.</b><br>VALVES MANUFACTURER |  | <b>CERTIFICATE Acc. To</b><br><b>EN 10204 – 3.1.B.</b> | CERTIF No.: SVR – 2917-7 |
|                                                                                                                                                    |                                                                                   |                                                        | REV.: 3                  |
|                                                                                                                                                    |                                                                                   |                                                        | DATE: 2/12/2003          |

|                                            |                                    |                         |                            |
|--------------------------------------------|------------------------------------|-------------------------|----------------------------|
| CLIENT: <b>VALVES ENTREPRISE</b>           | ORDER No.: <b>P-200343</b>         | ITEM: <b>7</b>          | SERIAL No.: <b>S 657 G</b> |
| LURGI P.O.: <b>4558641-000/1.69666/136</b> | LURGI ITEM NO: <b>00090</b>        | QUANTITY: <b>1</b>      |                            |
| FIGURE NO.: <b>Z40H900LB-12"</b>           | DESCRIPTION: <b>12" - 900 Lbs.</b> | ENDS: <b>FLANGE ( )</b> | <b>BUTT WELD (X)</b>       |
|                                            |                                    | <b>GATE VALVE</b>       |                            |

DESIGN AND TEST ACCORDING TO:

|                                             |                                     |         |                                     |                        |  |              |  |             |  |              |  |
|---------------------------------------------|-------------------------------------|---------|-------------------------------------|------------------------|--|--------------|--|-------------|--|--------------|--|
| API 600                                     | <input checked="" type="checkbox"/> | API 598 | <input checked="" type="checkbox"/> | BS 6755 Part. 1 rate B |  | DIN 3230 – 3 |  | MSS - SP 82 |  | NACE MR 0175 |  |
| OTHERS : ANSI/ASME B 16.34; B 16.5; 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           |
| RESSURE (Kg/cm <sup>2</sup> ) | 238                  | 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

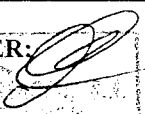
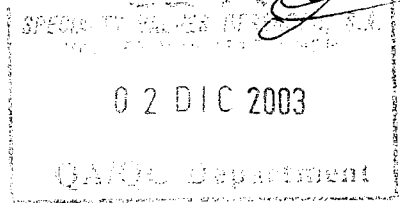
|               |                               |  |  |
|---------------|-------------------------------|--|--|
| BODY & BONNET | ASTM A 351 CF8C               |  |  |
| WEDGE         | ASTM A 351 CF8C + 316 Overlay |  |  |
| BODY RING     | A 182 F316                    |  |  |
| STEM          | A 182 F316                    |  |  |
| PACKING       | GRAPHITE                      |  |  |
| GASKET        | SPW 304 + Graphite            |  |  |
| BOLTING       | A 193 B8 / A 194 Gr. 8        |  |  |

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: <b>ACCEPTABLE</b> | VISUAL EXAMINATION: MSS SP 55 <b>ACCEPTABLE</b> | MARKING: MSS SP 25 <b>ACCEPTABLE</b> |
|--------------------------------------------|-------------------------------------------------|--------------------------------------|

### FOUNDRY MILL CERTIFICATE NUMBERS

|                         |
|-------------------------|
| BODY : <b>YD-A0392</b>  |
| BONNET: <b>YD-A0392</b> |

|                                                                                                                                                                                                     |                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| QUALITY CONTROL MANAGER: <br> | 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.: YD-A0392

FECHA:  
DATE: 18/10/2003

PAG.: DE  
SHEET 1 OF 1

Cliente/Cient.:

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

Pedido Nº  
Purchase Order: P-200343

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.**

SOLUTION 1025 °C

**MODO DE FUSION:**  
**INDUCTION MELTING**  
**TYPE OF MELTING:**

**DENOMINACION DE LA PIEZA:**  
**CASTING DENOMINATION:**

|             |               |           |       |
|-------------|---------------|-----------|-------|
| Gate Body   | 12" – 900 Lbs | Heat No.: | 90913 |
| Gate Bonnet | 12" – 900 Lbs | Heat No.: | 90913 |
| Gate Wedge  | 12" – 900 Lbs | Heat No.: | 90913 |

**CALIDAD DE ACERO:**  
**STEEL QUALITY:**

ASTM A 351 CF8C

**CONDICIONES DE ENTREGA:**  
**TERMS OF DELIVERY:**

NACE MR 01-75:00

**NÁLISIS QUÍMICO – CHEMICAL ANALYSIS**

| COLADA<br>HEAT No.               | C    | Mn   | Si   | P     | S    | Cr            | Mo    | Ni           | Cu | V | Nº de Piezas<br>Ner. Pieces | Peso kgs.<br>Weight |
|----------------------------------|------|------|------|-------|------|---------------|-------|--------------|----|---|-----------------------------|---------------------|
| Solicitado<br>Requirements (max) | 0.08 | 1.50 | 2.00 | 0.04  | 0.04 | 18.0-<br>21.0 | 0.50  | 9.0-<br>12.0 |    |   |                             |                     |
| 90913                            | 0.05 | 1.01 | 1.08 | 0.012 | 0.01 | 18.01         | 0.014 | 10.52        |    |   | 3                           |                     |

**PROPIEDADES MECANICAS / MECHANICAL PROPERTIES Acc. To ASTM A 370**

| COLADA<br>HEAT No.                                             | Probeta<br>Test Sample | Diametro<br>(mm)<br>Diameter Ø     | L. Elástico<br>Yield Point<br>N/mm² | Resistencia<br>Tensile Str.<br>N/mm²             | Alargamiento<br>Elongation<br>% | Estricción<br>Red. of Area<br>%    | Dureza<br>Hardness<br>HB | Resiliencia<br>Impact Test<br>(ISO Prob)<br>J; T °C |
|----------------------------------------------------------------|------------------------|------------------------------------|-------------------------------------|--------------------------------------------------|---------------------------------|------------------------------------|--------------------------|-----------------------------------------------------|
| Solicitado<br>Requirements                                     | Lo = 4D                | 12.5                               | 205                                 | 485                                              | 30                              |                                    | 232                      |                                                     |
| 90913                                                          | Lo = 4D                | 12.5                               | 245                                 | 515                                              | 35                              |                                    | 155                      |                                                     |
| Insp. Visual y C. Dimensional<br>Visual Insp. And Dimens check |                        | Ensayo Magnaflux<br>Magnaflux test |                                     | Insp. Por Gammagrafia<br>Gammagraphic Inspection |                                 | Ensayo de Presión<br>Pressure Test |                          | Insp. Por Ultrasonidos<br>Ultrasonic Test           |
| S/ MSS-SP-55                                                   |                        | Satisfactory                       |                                     |                                                  |                                 | OK                                 |                          |                                                     |

CERTIFICAMOS QUE EL MATERIAL DESCRIPTO AQUI HA SIDO ENSAYADO  
IMPLE 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