

**CERTIFICADO DE CALIDAD
INSPECTION CERTIFICATE**

(DIN EN 10204:2004E - ISO 10474 3.1.B)

Tabbas de Acero de México, S.A.
Carr. Mty-Laredo Km 24.2
Apartado Postal 43
(65550) C. de Flores, N.L. Méx.
(52) 81 8305 9600 tel
(52) 81 8305 9620 fax

Numero:
Number:
1 8717

Pagina/Page:
1 DE 1

Lista de Empaque:
Packing List:
3460 -

Pedido del Cliente No:
Customers Order No:
3460 -

Vendido a:
Sold to:
PLESA ANAHUAC Y CIA. S.A. DE C.V.

Fecha/Date:
11 de Septiembre de 2007

Dimensiones y tolerancias / Dimension and tolerances

ASME B 16.9 - 2003 and ASME B 16.28 - 1994

Especificaciones y Grados / Standard or Specification and Steel Grade

Seamless Fittings according to ASTM A 234"WPB-97, A234"WPB-05a, NACE MR 01.75-2003
Conform to ASME II Ed. 2001 ASME SA-234"WPB, Grade WPB.

Factura/Invoice:
Bocas / Ends
Biselado / Bevelled ends

| DESCRIPCION DE MATERIAL / MATERIAL DESCRIPTION | | PRUEBAS MECANICAS / MECHANICAL TEST | | | | | | PRUEBA DE IMPACTO 0°C / IMPACT TEST 0°C | | | | |
|--|------------------|-------------------------------------|----------------------------|------------------------------------|-------------------------------------|------------|--------------------|---|----------|----------|----------|-------------------------|
| ART. ITEM | COLADA HEAT CODE | CANTIDAD QUANTITY | DESCRIPCION / DESCRIPTION | ESF. CEDENCIA YIELD STRENGTH (Mpa) | ESF. RUPTURA TENSILE STRENGTH (Mpa) | ELONG. %2" | DUREZA HARDNESS HB | DIMENSIONES SAMPLE DIM mm | 1 Joules | 2 Joules | 3 Joules | PROMEDIO AVERAGE Joules |
| 1 | T34260 | 100 | CODO 6 X 90° R.I. CED-STD. | 319 | 486 | 40 | 90 | | | | | |
| 2 | T34691 | 100 | CODO 6 X 90° R.I. CED-STD. | 307 | 483 | 38 | 120 | | | | | |
| 3 | T34826 | 64 | TEE 8 CED-STD | 322 | 490 | 44 | 93 | | | | | |
| 4 | S20537 | 20 | CODO 5 X 45° CED-STD | 301 | 479 | 33 | 102 | | | | | |
| 5 | S37410 | 20 | CODO 5 X 90° R.I. CED-XS | 335 | 476 | 40 | 139 | | | | | |
| 6 | S22920 | 50 | CODO 5 X 90° R.I. CED-STD | 338 | 485 | 39 | 111 | | | | | |

ANALISIS QUIMICO / CHEMICAL ANALYSIS

| PROCESO PROCESS | COLADA HEAT CODE | COLADA/HEAT M.P./MOTHER PIPE | %C | %Mn | %P | %S | %Si | %Cr | %Cu | %Mo | %Ni | %V | %Nb |
|-----------------|------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| HF | T34260 | 34260 | 0.310 | 0.170 | 0.690 | 0.003 | 0.290 | 0.060 | 0.066 | 0.039 | 0.040 | 0.000 | 0.000 |
| HF | T34691 | 34691 | 0.310 | 0.170 | 0.680 | 0.002 | 0.280 | 0.050 | 0.081 | 0.025 | 0.040 | 0.000 | 0.000 |
| HF | T34826 | 34826 | 0.330 | 0.180 | 0.720 | 0.002 | 0.270 | 0.050 | 0.086 | 0.049 | 0.040 | 0.007 | 0.000 |
| HF | S20537 | 20537 | 0.336 | 0.190 | 0.790 | 0.002 | 0.290 | 0.040 | 0.035 | 0.010 | 0.021 | 0.001 | 0.001 |
| HF | S37410 | 37410 | 0.308 | 0.170 | 0.720 | 0.001 | 0.290 | 0.040 | 0.038 | 0.030 | 0.018 | 0.001 | 0.001 |
| HF | S22920 | 22920 | 0.309 | 0.180 | 0.700 | 0.002 | 0.270 | 0.030 | 0.029 | 0.010 | 0.036 | 0.001 | 0.001 |

Certificamos que los resultados de los Analisis Quimicos y Pruebas Mecanicas son verdaderos o una copia fiel de los certificados enviados por el Fabricante y/o el proveedor de Materia Prima (Tubería Sin Costura) conforme ASTM A106 Grado B con N°.

We certify that result of chemical analysis and mechanical test are true and correct copy of the test certificate issued by the manufacturer and/or supplier Raw material (Seamless Pipe) certs conform to ASTM A106 Grade B N°.

7038411 7033021 7036267 361142 257541 387154

Este material cumple con los requerimientos especificados en la orden
The material of this certificate heat number mentioned above is in compliance with the requirements specified in the order.

Notas:
Formado en caliente a 620°C-980°C, enfriado al aire; Formado en frío normalizado a 940°C max.
Tiempo de permanencia 10'.
Inspección Dimensional: Satisfactoria.
HF: FORMADO EN CALIENTE/HOT FORMED
CF: FORMADO EN FRIJO/COLD FORMED

Notas:
Hot formed fittings in a range from 620°C to 980°C, cooled in still air.
Cold formed normalized at 940°C max.
Holding time: 10'.
Visual dimensional check: Satisfactory
CF: FORMADO EN FRIJO/COLD FORMED

The Products described herein were produced in accordance with the above referenced specification and are identified with the "R" which is permanently marked on each fitting.

Jefe de Calidad:
Quality Manager:
ING. JOSE MARTINEZ MACIAS

CC-008