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OCI WORLD WIDE
 ORGANISMO DE CERTIFICACIÓN INTERNACIONAL
 Empresa Certificada Según:
NMX-CC-9001-IMNC-2008 / ISO 9001 : 2008



FLANGES & FITTINGS
VX
BRIDAS Y CONEXIONES

REPORTE DE PRUEBAS NUMERO:
TEST REPORT NUMBER:
 CERTIFICADO SERIE / CERTIFICATE SERIES:
MTR-TCI-AV-2339

CERTIFICADO DE INSPECCION / INSPECTION CERTIFICATE / EN 10204: 2004 - 3.1.

| | | | | | | | | | | | | | | | | | | | | | | |
|--|--|----------------------------|--|---|--|----------------------------|------------------------|---|-------------|-----------|-----------------------------|--------------------|---------------------------------------|---------------------|----------------------|----|----|-------|---|---------|---------|---------|
| NOMBRE DEL CLIENTE / CLIENT NAME: | | ORDEN DE COMPRA / P.O.NUM. | PED-ORP | REFERENCIA / REFERENCE | FECHA / DATE: | Codigo Formato: | | | | | | | | | | | | | | | | |
| PLESA ANAHUAC Y CIAS, S.A. DE C.V. | | 13525 | CPEH-0112 | | miércoles, 15 de agosto de 2012 | KHTCI-0812 | | | | | | | | | | | | | | | | |
| TIPO DE MATERIAL / MATERIAL TYPE: | | | | | | | | | | | | | | | | | | | | | | |
| CODIGOS y NORMAS APLICABLES / APPLICABLE CODES & NORMS | | | | | | | | | | | | | | | | | | | | | | |
| ASTM A 105/A105N-10, ASME A/SA105 / NACE-MR-01-75-03 / ISO 15156-03 | | | ASME Boiler & Pressure Vessel Code SECC II, Code Part A 2010 Addenda 2011 | | | | | | | | | | | | | | | | | | | |
| PROCESOS / PROCESS | | | | | | | | | | | | | | | | | | | | | | |
| FORGED / ROLLED 1150°C - 1200°C // VACUUM DEGASSING // DESGACIFICACION AL VACIO | | | TRATAMIENTOS TERMICOS / HEAT TREATMENTS | | | | | | | | | | | | | | | | | | | |
| | | | NORMALIZED 900°C AND ALLOWED TO COOL IN STILL AIR / NORMALIZADO 900°C Y ENFRIADO AL AIRE CALMADO | | | | | | | | | | | | | | | | | | | |
| DESCRIPCION DEL ARTICULO / DESIGNATION OF ARTICLE: | | | | | | | | | | | | | | | | | | | | | | |
| PW ITEM | CANTIDAD / QTY | INFORMACIÓN / INFORMATION | | | MATERIA PRIMA / BASE MATERIAL | | | | | | | | | | | | | | | | | |
| 1 | 15 | 8" | WNRF FLANGE 150# SCH 80 | ANSI B16.5/ASME B16.5-2003 | MILL HEAT SUPPLIER // HEAT: 27A6 | COLADA / HEAT CODE 27A6 | | | | | | | | | | | | | | | | |
| 2 | 2 | 3" | WNRF FLANGE 150# SCH 160 | ANSI B16.5/ASME B16.5-2003 | MILL HEAT SUPPLIER // HEAT: 36730 | 36730 | | | | | | | | | | | | | | | | |
| % COMPOSICION QUIMICA / % CHEMICAL COMPOSITION: | | | | | | | | | | | | | | | | | | | | | | |
| % | C | Mn | Si | P | S | Cr | Ni | Mo | Cu | SN | AL | Nb | V | Ti | Co | As | Sb | H ppm | N | CEQ | Cr+Mo | (1*) |
| REQUERIDO/ Required MAX PW ITEM COLADA/ HEAT CODE | ≤ 0.35 | 0.60 - 1.05 | 0.10 - 0.35 | ≤ 0.035 | ≤ 0.040 | ≤ 0.30 | ≤ 0.40 | ≤ 0.12 | ≤ 0.40 | | | | ≤ 0.08 | | | | | | | ≤ 0.470 | ≤ 0.320 | ≤ 1.000 |
| 1 27A6 | 0.180 | 0.820 | 0.22 | 0.014 | 0.002 | 0.13 | 0.1 | 0.040 | 0.240 | | | 0.007 | 0.001 | | | | | | | 0.374 | 0.170 | 0.511 |
| 2 36730 | 0.185 | 0.930 | 0.24 | 0.01 | 0.015 | 0.09 | 0.07 | 0.010 | 0.160 | | | 0.001 | 0.004 | | | | | | | 0.376 | 0.100 | 0.334 |
| PROPIEDADES MECANICAS / MECHANICAL PROPERTIES: | | | | | | | | | | | | | | | | | | | | | | |
| PRUEBAS DE TENSION / TENSILE TEST | | | | PRUEBAS DE IMPACTO / IMPACT TEST | | | | | | | | | | | | | | | | | | |
| No. PRUEBA / TEST No. | Dimension del Especimen / Specimen dimension | Dirección | Temperatura | RESISTENCIA Tensile/ Strength (Mpa) / Ksi UTS-Rm (Min) | LIMITE ELASTICO / Yield Point (Mpa) / Ksi YS - Rp0.2% (Min) | Elong.-A (%) (Min) | Red. of Area (%) (Min) | No. PRUEBA / Test No. | Temperatura | Dirección | Resiliencia KV Energy J | Promedio / Average | Expansión Lateral / Lateral expansion | Fractura / Fracture | DUREZA / Hardness HB | | | | | | | |
| REQUERIDO/ Required MAX PW ITEM COLADA/ HEAT CODE | | | | (485) / 70 | (250) / 36 | 22 | 30 | | | | | | | | 137 - 187 | | | | | | | |
| 1 27A6 | | LONG. | | 517 | 320 | 33 | 66.4 | | | | | | | | 150 | | | | | | | |
| 2 36730 | | LONG. | | 536 | 311 | 29 | 60 | | | | | | | | 163 | | | | | | | |
| NOTA / NOTE: 1)Cr+Ni+Mo+Cu+V / NO WELDING HAS BEEN PERFORMED // THIS PRODUCT IS FREE FROM MERCURY AND RADIOACTIVE // FOR EACH REDUCTION OF 0.01 % BELOW THE SPECIFIED CARBON MAXIMUM (0.35 %), AND INCREASE OF 0.06 % MANGANESE ABOVE THE SPECIFIED MAXIMUM (1.05 %) WILL BE PERMITTED UP TO A MAXIMUM OF 1.35 % | | | | | | | | | | | | | | | | | | | | | | |
| MARCADO / MARKING: | | VX VX FLANGES & FITTINGS ® | | | QA TCI / Inspectores autorizados / Authorized Works Inspector: | | | Ing. Jorge Ortiz / Ing. Andres Lira / Ing. Rafael Equir | | | Digitalizado / Digitalized: | | IOE-02339 | | | | | | | | | |

Certificamos que todos los resultados de pruebas e información de proceso y procedimientos asentados en el presente, son correctos y verdaderos, concordando con los Registros de soporte técnico, Aseguramiento de calidad y Sistema de Gestión de la Calidad. / We here by certify that all test results and process information contained here in, are true and correct in accordance with in all the records of technical support, QA management and the company quality management sistem. (EMPRESA CERTIFICADA SEGUN LA NORMA NMX-CC-9001-IMNC-2008/ ISO 9001:2008 para las actividades sigulentes: FABRICANTE DE BRIDAS Y CONEXIONES / certified company for the following activities: MANUFACTURING PROCESS OF FLANGES AND FITTINGS.)



CODIGO DE SEGURIDAD CERTIFICADO APROBADO POR:
 APPROVED CERTIFICATE BY:
APPROVED
 A234V351CQWEAA567