



MAQUINADOS DE ACEROS FORJADOS

CALLE SIN NOMBRE ESQ. RIO HUAYAPANGO MZ. 2 LOTE 55 COLONIA EJIDO DEL SOCORRO

CUAUTITLAN IZCALLI EDO DE MEX, CP. 54740

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| | | | |
|------------------------|------------------------------|-----------------------------|------|
| CERTIFICADO DE CALIDAD | | CERTIFICADO No. 1450 | |
| | | FECHA: 26-Ene-10 | |
| CLIENTE | PLESA ANAHAC Y CIAS SA DE CV | No. DE ORDEN DE COMPRA | 7667 |
| | | REF | 2183 |

| | |
|---|--|
| ESPECIFICACIONES | PROCESO |
| A 105N - ASTM A 105N - 03/ ASME SA105N/NACE-MR-01-75/03 | FORGED/ROLLED 1150-1200 GRADES CELSIUS |

| | |
|--|--|
| NORMAS Y GRADOS | TRATAMIENTO TERMICO |
| ASME boiler and pressure Vessel SECC II, Code Part A, Edition 2004 | NORMALIZED 900 GRADES CELSIUS AND ALLOWED TO COOL IN STILL AIR |

| PARTIDA | CANTIDAD | DESCRIPCION DEL PRODUCTO | NORMAS APLICABLES | MEDIDA | COLADA |
|---------|----------|------------------------------|--------------------|--------|--------|
| 01 | 80 | FORJA BRIDA A.C.S.O. 150# RF | ASTM A-105-05 | 3" | 6331 |
| 02 | 50 | FORJA BRIDA A.C.S.O. 150# RF | ASME SA-105-05 | 4" | 7621 |
| | | | ASME B16.5 | | |
| | | | NACE MR-0175-03/05 | | |

PRUEBAS MECANICAS

| COLADA | RUPTURA (P.S.I.) | CEDENCIA (P.S.I.) | ELONGACION 2% | REDUCCION DE AREA % | DUREZA HB | CONTROL DE CALIDAD | | | | |
|--------|------------------|-------------------|---------------|---------------------|-----------|--------------------|--|--|--|--|
| 6331 | 82475 | 44622 | 31.1 | 59 | 84 | | | | | |
| 7621 | 85254 | 43564 | 26 | 39 | 85 | | | | | |
| | | | | | | | | | | |

% COMPOSICION QUIMICA

| COLADA | C | Mn | Si | P | S | Cr | Ni | Mo | Cu | SN | Al | Nb | V | Ti | Co | As | Sb | Hppri | Nppm | cEq | Cr+Mo | 1) |
|--------|------|------|------|-------|-------|-------|-------|-------|-------|----|----|----|--------|----|----|----|----|-------|------|-----|-------|------|
| 6331 | 0.31 | 0.81 | 0.21 | 0.006 | 0.016 | 0.063 | 0.074 | 0.020 | 0.190 | | | | 0.001 | | | | | | | | | 0.35 |
| 7621 | 0.30 | 0.85 | 0.22 | 0.004 | 0.019 | 0.080 | 0.099 | 0.022 | 0.208 | | | | 0.0009 | | | | | | | | | 0.41 |

NOTA 1) Cr+Ni+Mo+Cu

PNMG
ELABORO.

26 ENE 2010
ENTREGADO
APROBADO

CC-01 REV1.0