# PETRO FLANGE, S.A. DE C.V.

**Vendido a:** FERRETERIA Y REP. INT., S.A. DE C.V.
**Direccion:**
**Pedido:** TEL

| | |
|---|---|
| **Folio:** | 3343 |
| **Cert. No.** | PF-WN-972-372 |
| **Date.** | 27/04/2009 |

## INSPECTION CERTIFICATE

| ITEM | PCS | DESCRIPTION | SPECIFICATIONS | HEAT No. | MECHANICAL COMPOSITION TENSILE Mpa | YIELD Mpa | ELONG % | R/Area % | HARDNES HB |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 18 | BLD 2" 150# R.F. | ASTM A-105-5<br>ASME SA-105-05<br>ASME B16.5-2003<br>NACE MR-0175-03/05 | 377 | 496 | 278 | 36 | 31 | 174 |

## CHEMICAL COMPOSITION

| ITEM | HEAT. No. | C | Mn | P | S | Si | Cu [A] | Ni [A] | Cr [AB] | Mo [AB] | V [A] | Nb | CE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 377 | 0.235 | 0.759 | 0.019 | 0.023 | 0.193 | 0.174 | 0.030 | 0.030 | 0.001 | 0.002 | - | 0.38 |

[A] The sum of cooper, nickel, chromium, molybdenum and vanadium shall not exceed 1.00 %
[B] The sum of chromium and molybdenum shall not exceed 0.32%

Ni+Cu)/15

NOTE: FORGED ROLLED 1150°C -1200°C
NORMALIZED 900°C AND ALLOWED TO COOL IN STILL AIR.

PETRO FLANGE S.A. DE C.V.
QUALITY ASSURANCE CONTROL DEPARTAMENT
ENTREGADO