

EA-105217



VILLACERO

MILL TEST REPORT

PRODUCT: 2" C80 ASTM A-53-A / NMX B-177

FINISHING: TUBO BARNIZADO CON EXTREMO LISO

CUSTOMER: PLESA ANAHUAC Y CIAS.
S.A. DE C.V.

SHIPPING DATE: 15/01/18

INVOICE: FT-36933

PURCHASE ORDER: 1200290515

TRANSPORT/ TRANSPORTE:

LOGISTICA DE TRANSPORTES PJH

MANUFACTURER/ PLANTA : LAMINA Y PLACA COMERCIAL S.A DE C.V.
DIEGO DIAZ DE BERLANGA, NO. 1002 SUR
SAN NICOLAS DE LOS GARZA, NUEVO LEON, MEXICOI HEREBY CERTIFY THAT THE PRODUCT ACCOMPLISHED WITH THE SPECIFICATION TO THE INVOICE AND/ OR REMISSION
(DATABASE OF SYSTEM).ESTE PRODUCTO FUE FABRICADO BAJO LA NORMA QUE SE DESCRIBE HACIENDO CUMPLIR LOS REQUERIMIENTOS DE LA
ESPECIFICACION (BASE DE DATOS DEL SISTEMA).

PROCESS: HFW

| MANUFACTURING INFORMATION/ INFORMACION DE MANUFACTURA | | | | | | | DIMENSIONS (DIMENSIONES) | | |
|---|-------|------|------------|-------|---------------------|----------------|--------------------------------|----------------------|-------------------|
| DATE | SHIFT | OPER | ORDER OP # | GRADE | MANUFACT PROCESS | HEAT TREATMENT | OUTSIDE DIAMETER MM (IN) | Thickness MM (IN) | LENGT MTS (FT) |
| 10/10/17 | 1 | COM | 253 | A | E | N/A | 2.375" | 0.218" | 6.40 |

| ONLINE TESTS (PRUEBAS DE CAMPO) | | | | | | | | | |
|---------------------------------|----------------------------------|-----------------------|-------------|-------------------------------|-----------------------|--------------|--------------------|----------------------|--|
| HEAT NUMBER (COLADA) | HYDROSTATIC TEST BAR (PSI) | DELIVERY CONDITION | TIME (Sec.) | NON-DESTRUCTIVE TEST (PND) | METALLOGRAPHY TEST | BENDING TEST | FLATTENING TEST | VISUAL INSPECTION | |
| 176449 | 2514 | AS ROLLED | 5 | OK | N/A | N/A | OK | OK | |

| CHEMICAL ANALYSYS (ANALISIS QUIMICOS)/ MECHANICAL PROPERTIES (PROPIEDADES MECANICAS) | | | | | | | | | |
|--|--------|--------|--------|--------|-----------------------|-----------------|---------|-------------------|---------------------------|
| HEAT NUMBER (COLADA) | %C | %Mn | %P | %S | %Si | %Cr | %Mo | %Ni | %Cu |
| 176449 | 0.1900 | 0.8800 | 0.0160 | 0.0080 | 0.0110 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | %Nb | %Sn | %Ti | %V | YIELD ST MPA (PSI) | UT MPA (PSI) | % ELONG | HARDNESS (HRb) | CARBON EQUIVALENT % |
| 0.0010 | 0.0000 | 0.0020 | 0.0020 | | 56974 | 72600 | 46.000 | 78 | N/A |

| CHARPY TEST (PRUEBA CHARPY) | | | | | |
|-----------------------------|--------------------------------|-----|-----|---------|------------------------|
| HEAT IDENT NUM | ABSORBED ENERGY MTS-KG (FT-LB) | | | AVERAGE | TEMPERATURE TEST °C |
| | 1 | 2 | 3 | | |
| 176449 | N/A | N/A | N/A | N/A | N/A |

NOTE: THE SUM OF THE NIOBIUM, VANADIUM AND TITANIUM CONCENTRATIONS SHALL BE \leq 0.15%
 NOTA: LA SUMA DE LA CONCENTRACION DE NIOBIO, VANADIO Y TITANIO DEBE SER \leq 0.15%

I HAVE PERSONAL KNOWLEDGE AS TO ACCURACY OF THE ABOVE INFORMATION, AND HAVE AUTHORITY TO SIGN ON BEHALF OF
THE COMPANY.

TENGO EL CONOCIMIENTO Y AUTORIZACION EN NOMBRE DE LA COMPAÑÍA PARA AVALAR ESTA INFORMACIÓN.

SINCERELY


 Ing. Erick Maximino Dávila García

QUALITY ASSURANCE MANAGER