



MILL TEST REPORT

PRODUCT: 1 1/2" 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: 26/10/20

INVOICE: FT-45267

PURCHASE ORDER: 1200364329

TRANSPORT/ TRANSPORTE:

AUTOTRANSPORTES PABLO DANIEL



MANUFACTURER/ PLANTA : LAMINA Y PLACA COMERCIAL S.A DE C.V.
 RAW MATERIAL MAKER/FABRICANTE MATERIA PRIMA: AHMSA MÉXICO
 DIEGO DIAZ DE BERLANGA, NO. 1002 SUR
 SAN NICOLAS DE LOS GARZA, NUEVO LEON, MEXICO

26 OCT. 2020

THIS CERTIFICATE IS ISSUED ACCORDING TO EN 10204 3.1

I HEREBY CERTIFY THAT THE PRODUCT ACCOMPLISHED WITH THE SPECIFICATION TO THE INVOICE AND/ OR REMISSION (DATABASE OF SYSTEM)

ESTE CERTIFICADO ES EMITIDO SEGÚN EN 10204 3.1

ESTE PRODUCTO FUE FABRICADO BAJO LA NORMA QUE SE DESCRIBE HACIENDO CUMPLIR LOS REQUERIMIENTOS DE LA NOMBRÉ Y FIRMA DE CALIDAD ESPECIFICACION (BASE DE DATOS DEL SISTEMA).

1 ATADOS 61 PIEZAS
 Irune Tagle

PROCESS : HFW

| MANUFACTURING INFORMATION/ INFORMACION DE MANUFACTURA | | | | | DIMENSIONS (DIMENSIONES) | | |
|---|----------------|-------|----------------------|----------------|--------------------------|-------------------|-----------------|
| DATE | ORDER (No. OP) | GRADE | MANUFACTUR E PROCESS | HEAT TREATMENT | OUTSIDE DIAMETER MM (IN) | THICKNESS MM (IN) | LENGTH MTS (FT) |
| 12/10/20 | O-205 | A | E | N/A | 1.900" | 0.200" | 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 |
| 492285 | 1814 | AS ROLLED | 5 | EDDY CURRENT | FREE MARTENSITE | N/A | OK | OK |

| CHEMICAL ANALYSIS (ANALISIS QUIMICOS)/ MECHANICAL PROPERTIES (PROPIEDADES MECANICAS) | | | | | | | | | |
|--|--------|--------|--------|--------|--------------------|----------------------|---------|----------------|---------------------|
| HEAT NUMBER (COLADA) | %C | %Mn | %P | %S | %Si | %Cr | %Mo | %Ni | %Cu |
| 492285 | 0.0660 | 0.6630 | 0.0190 | 0.0040 | 0.1130 | 0.0180 | 0.0030 | 0.0190 | 0.0180 |
| %Nb | %B | %Ti | %V | | YIELD ST MPA (PSI) | TENSILE ST MPA (PSI) | % ELONG | HARDNESS (HRb) | CARBON EQUIVALENT % |
| 0.0100 | 0.0000 | 0.0020 | 0.0010 | | 48400 | 66400 | 30.000 | 76 | N/A |

| CHARPY TEST (PRUEBA CHARPY) | | | | | |
|-----------------------------|--------------------------------|-----|-----|---------|---------------------|
| HEAT IDENT NUM | ABSORBED ENERGY MTS-KG (FT-LB) | | | AVERAGE | TEMPERATURE TEST °C |
| | 1 | 2 | 3 | | |
| 492285 | N/A | N/A | N/A | N/A | N/A |

NOTE: THE SUM OF THE NIOBIUM, VANADIUM AND TITANIUM CONCENTRATIONS SHALL BE ≤ 0.15%

NOTA: LA SUMA DE LA CONCENTRACION DE NIOBIO, VANADIO Y TITANIO DEBE SER ≤ 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