



**TERNIUM MEXICO, S.A. DE C.V.**

**R.F.C. TME-840710-TR4**

Av. Universidad No. 992, Colonia Cuauhtémoc, San Nicolás de los Garza, N.L., Código Postal 66450

Teléfonos: +52(81)8329-8500

www.ternium.com

**CERTIFICADO DE CALIDAD /**  
**MILL TEST CERTIFICATE**  
(EN10204 3.1 – ISO 10474 3.1B)  
**Fecha de Emisión /Date of Issue**  
(DMA) 24/08/2012



0627566022

**No./ Document number**  
0627566022

**Código cliente/ Customer ID**

232500

**Pedido No./ Sales order**

0603440552

**Orden de compra/ Purchase order**

13608.

**Cliente/ Customer**

PLASA ANAHUAC Y CIAS. S.A. DE C.V.  
AV. VALLE DE LAS ALAMEDAS 66 SN. FCO.  
TULTITLAN, EDO. DE MEXICO  
99999

**Remisión/ Delivery**

0627566022

**Medio de Transporte/ Means of transportation**

Ferrocarril

**Descripción de mercaderías/ Goods description**

RFR, RFR

**Datos Generales / General Data**

| No. Rollo/Coil id. | Colada/Heat | Recubrimiento/ Coating | Peso/Weight |       | Espesor/ Thickness mm / in | Ancho/Width |         | Largo/Length |     | Capa/Thickness |      |
|--------------------|-------------|------------------------|-------------|-------|----------------------------|-------------|---------|--------------|-----|----------------|------|
|                    |             |                        | kg          | lb    |                            | in          | mm      | m            | ft  | oz/ft2         | g/m2 |
| 144931-010         | 15906       | N/A                    | 9230        | 20348 | 0.61 / 0.0239              | 48          | 1219.20 | 0            | N/A | N/A            | N/A  |
| 146018-000         | 15962       | N/A                    | 8830        | 19467 | 0.61 / 0.0239              | 48          | 1219.20 | 0            | N/A | N/A            | N/A  |

**Datos Generales / General Data**

| No. Rollo/Coil id. | Colada/Heat | TS/ST (1) | No. Parte/Part | Descripción/Description | Norma de Calidad/Quality Norm | Grado/Grade |
|--------------------|-------------|-----------|----------------|-------------------------|-------------------------------|-------------|
| 144931-010         | 15906       | N/A       |                | ROLLO FRIO RECOCIDO     | SAE1008                       | N/A         |
| 146018-000         | 15962       | N/A       |                | ROLLO FRIO RECOCIDO     | SAE1008                       | N/A         |

1. TS: Tratamiento superficial, Aceitado, Sellado / ST: Superficial treatment, Oiled, Stenciled,etc  
4. HRBW: Rockwell B Indentador de WC

2. LE: Límite elástico / YP: Yield Point - 0.2% offset productos recubiertos (coating products)  
5. LI/LL Límite Inferior / Lower Limit

3. RT: Resistencia a la tensión / TS: Tensile Strengh  
6. LS/UL Límite Superior / Upper Limit

**Observaciones / Comments**

N/A

**C.I. / ID #**

**Firma / Signature**

Ing. Antonio Mani  
Ternium Labs

Certificamos que el material aquí descrito ha sido inspeccionado y ensayado por personal autorizado independiente del área de manufactura con resultados satisfactorios en concordancia con la norma arriba descrita. Propiedades Mecánicas bajo las normas ASTM E8, E18, E517, E646, EN-10002, E23, JIS Z 2241, según requerimiento y peso de capa bajo ASTM A90 Análisis Químico bajo la norma ASTM E 415 / 1019  
We certify that the material described has been tested and inspected by authorized personal independent from the manufacturing department with satisfactory results in accordance with requirements of the above specification Mechanical Properties as ASTM E8, E18, E517, E646, EN-10002, E23, JIS Z 2241, as required and coating weight with ASTM A90 Chemical Analysis as ASTM E 415 / 1019



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| Calidad del Acero / Steel Quality (Análisis Químico de Colada/Chemical Composition Heat) |             |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| No. Rollo/Coil id.   | Colada/Heat | Al    | C     | Cb    | Cr    | Cu    | Mn    | Mo    | Ni    | P     | S     | Si    | Ti    | V     |
| 144931-010   | 15906       | 0.032 | 0.060 | 0.001 | 0.010 | 0.030 | 0.440 | 0.000 | 0.020 | 0.006 | 0.002 | 0.030 | 0.001 | 0.001 |

| Calidad del Acero / Steel Quality (Análisis Químico de Colada/Chemical Composition Heat) |             |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| No. Rollo/Coil id.   | Colada/Heat | Al    | C     | Cb    | Cr    | Cu    | Mn    | Mo    | Ni    | P     | S     | Si    | Ti    | V     |
| 146018-000   | 15962       | 0.031 | 0.050 | 0.000 | 0.010 | 0.040 | 0.280 | 0.000 | 0.020 | 0.008 | 0.007 | 0.020 | 0.000 | 0.000 |

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|  |  |
|--|--|
| <b>Observaciones / Comments</b><br>N/A   | <b>C.I. / ID #</b>   |
| Certificamos que el material aquí descrito ha sido inspeccionado y ensayado por personal autorizado independiente del área de manufactura con resultados satisfactorios en concordancia con la norma arriba descrita. Propiedades Mecánicas bajo las normas ASTM E8, E18, E517, E646, EN-10002, E23, JIS Z 2241, según requerimiento y peso de capa bajo ASTM A90 Análisis Químico bajo la norma ASTM E 415 / 1019<br>We certify that the material described has been tested and inspected by authorized personal independent from the manufacturing department with satisfactory results in accordance with requirements of the above specification Mechanical Properties as ASTM E8, E18, E517, E646, EN-10002, E23, JIS Z 2241, as required and coating weight with ASTM A90 Chemical Analysis as ASTM E 415 / 1019 | <b>Firma / Signature</b><br><br>Ing. Antonio Mani<br>Ternium Labs |