



**TERNIUM MEXICO, S.A. DE C.V.**  
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**CERTIFICADO DE CALIDAD /**  
**MILL TEST CERTIFICATE**

**Fecha de Emisión /Date of Issue**  
 (DMA) 29/03/2011

**No./ Document number**  
 841167



841167

**Código cliente/ Customer ID**  
 1269

**Pedido No./ Sales order**  
 150703

**Orden de compra/ Purchase order**  
 9714

**Cliente/ Customer**  
 PLESA CIA  
 AV. VALLE DE LAS ALAMEDAS # 66-O COL. SAN FRANCISCO CHILPAN  
 TULTITLAN  
 MX  
 54940

**Remisión/ Delivery**  
 841167

**Medio de Transporte/ Means of transportation**  
 Triple eje con susp. de a

**Descripción de mercaderías/ Goods description**  
 ROLLO FRIO RECOCIDO

| 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 |
| 1507501AF                      | MR1110479   | N/A                   | 9452        | 20865 | 2.69 / 0.1059             | 48.19       | 1224 | N/A          | 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 |
| 1507501AF                      | MR1110479   | N/A       |                | ROLLO FRIO RECOCIDO     | SAE J403                      | 1008        |

1. TS: Tratamiento superficial, Aceitado, Sellado / ST: Superficial treatment, Oiled, Stenciled,etc  
 2. LE: Límite elástico / YP: Yield Point  
 3. RT: Resistencia a la tensión / TS: Tensile Strenght  
 4. HRBW: Rockwell B Indentador de WC  
 5. LI/LL Límite Inferior / Lower Limit  
 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, según requerimiento y peso de capa bajo ASTM A90 Análisis Químico bajo la norma ASTM E 415 / 1019  
 We here certify that the material described in here 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, as required and coating weight with ASTM A90 Chemical Analysis as ASTM E 415 / 1019



841167

**Calidad del Acero / Steel Quality (Análisis Químico/Chemical Analysis)**

| No. Rollo/Coil id. | Colada/Heat | C     | Mn    | Si    | P     | S     | Al    | Cu    | Cr    | Ni    | Mo    | Sn    | N     | Cb | V     | Ca    | Ti    | Sb |
|--------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|-------|-------|-------|----|
| 1507501AF          | MR1110479   | 0.082 | 0.320 | 0.018 | 0.012 | 0.002 | 0.032 | 0.013 | 0.017 | 0.024 | 0.002 | 0.001 | 0.005 | 0  | 0.002 | 0.004 | 0.001 | 0  |

**Notas / Notes:**

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**Observaciones / Comments**

N/A

**C.I. / ID #**

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