



**TERNIUM MEXICO, S.A. DE C.V.**  
 Av. Universidad No. 992, Colonia Cuauhtémoc, San Nicolás de los Garza, N.L.  
 C.P. 66450  
 R.F.C. TME-840710-TR4

**ESPECIFICACIONES TECNICAS DEL MATERIAL**

**DATOS GENERALES**

29/05/2010  
**720849**

No./ Document number  
 720849

720849

|                                                                                                                                  |                                          |                                                |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------------------------|
| <b>Código cliente/ Customer ID</b><br>1269                                                                                       | <b>Pedido No./ Sales order</b><br>130849 | <b>Orden de compra/ Purchase order</b><br>7968 |
| <b>Cliente/ Customer</b><br>PLESA CIA<br>AV. VALLE DE LAS ALAMEDAS # 66-O COL. SAN FRANCISCO CHILPAN<br>TULTITLAN<br>MX<br>54940 | <b>Remisión/ Delivery</b><br>720849      |                                                |
| <b>Medio de Transporte/ Means of transportation</b><br>Triple eje con susp. de a                                                 |                                          |                                                |

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

| 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 |
| 1406764AH                      | MR1021058   | N/A                    | 10055       | 22196 | 0.45 / 0.0177              | 48.11       | 1222 | 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 |
| 1406764AH                      | MR1021058   | N/A       |                | ROLLO FRIO TENSIONIVELADO | 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 Strength  
 4. HRBW: Rockwell B Indentador de WC  
 5. L/LL Límite Inferior / Lower Limit  
 6. LS/UL Límite Superior / Upper Limit

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>Observaciones / Comments</b><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>C.I. / ID #</b>                    |
| <b>Firma / Signature</b><br><br><small>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.<br/>   Propiedades Mecánicas bajo las normas ASTM E8, E18, E517, E646, EN-10002, según requerimiento y peso de capa bajo ASTM A90<br/>   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<br/>   Mechanical Properties as ASTM E8, E18, E517, E646, EN-10002, as required and coating weight with ASTM A90</small> | <br>Ing. Antonio Mani<br>Ternium Labs |



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| Calidad del Acero / Steel Quality |             |                           |
|-----------------------------------|-------------|---------------------------|
| No. Rollo/Coil id.                | Colada/Heat | Dureza HRBW/Hardness HRBW |
| 1406764AH                         | MR1021058   | 50                        |

| Calidad del Acero / Steel Quality (Análisis Químico/Chemical Analysis) |             |       |       |       |       |       |       |       |       |       |       |       |    |    |       |
|------------------------------------------------------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|----|-------|
| No. Rollo/Coil id.                                                     | Colada/Heat | C     | Mn    | P     | S     | Al    | Si    | Cu    | Ni    | Cr    | Mo    | V     | Cb | Ti | N     |
| 1406764AH                                                              | MR1021058   | 0.058 | 0.180 | 0.016 | 0.006 | 0.035 | 0.015 | 0.006 | 0.022 | 0.012 | 0.001 | 0.005 | 0  | 0  | 0.003 |

**Notas / Notes:**

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 4. HRBW: Rockwell B Indentador de WC

2. LE: Limite elástico / YP: Yield Point  
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**Observaciones / Comments**

N/A

**C.I. / ID #**

**Firma / Signature**

Ing. Antonio Mani  
 Ternium Labs

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 Propiedades Mecánicas bajo las normas ASTM E8, E18, E517, E646, EN-10002, según requerimiento y peso de capa bajo ASTM A90  
 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