Plating
Product range, technical data and delivery conditions

Tata Steel offers a wide variety of cold-rolled and electrolytically-plated cold-rolled strip products. These are available in a range of steel grades, coil weights and surface finish to suit your needs.

This general data sheet introduces our products. It provides an overview of product specifications and details of standard delivery conditions. Detailed information on each of our electroplated steel products can be found on separate data sheets.

Relationship with standards
Tata Steel’s cold-rolled and electrolytically-plated cold-rolled strip products comply with the following standards:

<table>
<thead>
<tr>
<th>Standard specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN 10139:</td>
<td>Standard specification for cold-rolled uncoated mild steel narrow strip for cold forming.</td>
</tr>
<tr>
<td>EN 10140:</td>
<td>Standard specification for cold-rolled narrow steel strip - tolerances on dimensions and shape.</td>
</tr>
<tr>
<td>ASTM A 109:</td>
<td>Standard specification for steel, strip, carbon (0.25 maximum per cent), cold-rolled</td>
</tr>
</tbody>
</table>

Other steel standards may be applicable - please consult us regarding compliance.

Steel grades

<table>
<thead>
<tr>
<th>Standard steel grades</th>
<th>High-strength steel grades (HSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>US</td>
</tr>
<tr>
<td>DC01</td>
<td>SAE 1006</td>
</tr>
<tr>
<td>DC03</td>
<td>SAE 1008</td>
</tr>
<tr>
<td>DC04</td>
<td>SAE 1010</td>
</tr>
<tr>
<td>DC05</td>
<td></td>
</tr>
<tr>
<td>DC06</td>
<td></td>
</tr>
</tbody>
</table>

Surface finishes

- HIBRITE® mirror finish (HB MF)
- HIBRITE® bright finish (HB BF)
- Cold-rolled strip (CRS) smooth to rough finish (KB MA)
- Natural (as plated)
- Planished (brushed)

Surface roughness (Ra)

<table>
<thead>
<tr>
<th>Finish Type</th>
<th>Ra (µm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KR 0 / Appliance Finish</td>
<td>≤ 0.10 (exceptionally smooth mirror finish)</td>
</tr>
<tr>
<td>KR 0.5</td>
<td>≤ 0.20 (very smooth bright finish)</td>
</tr>
<tr>
<td>KR 4 / #2 Finish</td>
<td>0.15 - 0.45 (smooth finish)</td>
</tr>
<tr>
<td>KR 7 / #1 Finish</td>
<td>0.6 - 1.8 (rough finish)</td>
</tr>
<tr>
<td>KR 8 / #1 Finish</td>
<td>1.0 - 2.5 (rough matt finish)</td>
</tr>
</tbody>
</table>

Our products

- HILUMIN®: electrolytically nickel-plated and diffusion-annealed for battery applications
- NICOR®: electrolytically-plated with dull nickel and diffusion-annealed
- HILAN®: electrolytically-plated with bright nickel
- NiZn-Cote®: electrolytically-plated with a nickel-zinc alloy
- NiZn-Cote® Plus: electrolytically-plated with a nickel-zinc alloy; with added polymer coating
- Copper-plated: electrolytically-plated with copper
- Brass-plated: electrolytically-plated with brass
- HIBRITE®: cold-rolled steel with a mirror finish or bright finish
- Cold-rolled steel: steel strip products supplied with a choice of surface appearance

Other product options

We can produce other electroplated steel strip products to meet your requirements. These include:

- Aluminium + nickel: electrolytically-plated with dull or bright nickel
- Stainless steel + nickel: electrolytically-plated with dull or bright nickel

Please consult us about other product options.
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Coil weight

<table>
<thead>
<tr>
<th>Strip thickness</th>
<th>max coil weight</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>mm / inch</td>
<td>EU / US</td>
<td></td>
</tr>
<tr>
<td>0,100 – 1,500 / 0.008” – 0.06”</td>
<td>10kg/mm coil width (10 KIM) / 700 PIW</td>
<td></td>
</tr>
</tbody>
</table>

Example:
A strip with a width of 500 mm can have a max weight of 5000 kg.

(Max 10 kg/mm coil width: 10 kg * 500 mm (strip-width) = 5000 kg max coil weight)

Coil edge finishes

- Natural edges (#2)
- Slit edges (#3)
- Sheets cut to length
- Straight wound coils
- Traverse wound coils (a spool)

Other packaging options are available – please consult us.

Surface protection

- Our products can be delivered with adhesive protective foils on the surface including among others: oil-resistant PVC foil, PE foil or a special PE foil used for laser-cutting purposes.
- In addition we apply oil according to your requirements.
- Other surface protection options are available – please consult us.

Packaging

<table>
<thead>
<tr>
<th>Skid</th>
<th>Type (2 &amp; 3 runners)</th>
<th>Dimensions mm / inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pallet (Eye to sky) Coil</td>
<td>2 - way</td>
<td>Minimum: 660 x 660 / 26” x 26”</td>
</tr>
<tr>
<td>Pallet (Eye to the side)</td>
<td>4 - way</td>
<td>Maximum: 1321 x 1321 / 52” x 52”</td>
</tr>
<tr>
<td>Coils</td>
<td></td>
<td>Parameters selected to protect coils from overhanging skids</td>
</tr>
<tr>
<td>Coils</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other packaging options are available – please consult us.

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