QUALITY HOT ROLLED STEEL SHEET - PICKLED & OILED

CleanStrip

CLEAN STEEL
CLEAN PROCESS
CLEAN ENVIRONMENT

CleanStrip
### CleanStrip Process

- **Machinery Supplier**: SMS Demag Ltd. (formerly Pro-Eco Ltd.) - Canada
- **Investment**: Approx. 1.0 billion baht
- **Capacity**: Maximum 1.0 million tonnes per annum

### Special facilities equipped in CleanStrip’s Pickling and Oiling Line

<table>
<thead>
<tr>
<th>Facility</th>
<th>Function</th>
<th>Value to customers</th>
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</thead>
<tbody>
<tr>
<td>Strip Stitcher</td>
<td>Connect strips to run in continuous mode</td>
<td>Better pickling quality throughout the strip length</td>
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<tr>
<td>Tension Leveller</td>
<td>Improve strip waviness</td>
<td>Completely flat strip outcome</td>
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<tr>
<td>Turbo Tunnel Pickling</td>
<td>Circulate acid to homogenize its concentration</td>
<td>Better pickling quality throughout the strip length</td>
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<tr>
<td>Stain Free Rinsing</td>
<td>Secure clean water in rinsing tank</td>
<td>Stain free product</td>
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<tr>
<td>Electrostatic Oiling</td>
<td>Secure homogenized oiling to strip surfaces</td>
<td>Better oiling film for longer rust preventing</td>
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<tr>
<td>Edge Trimmer</td>
<td>Trim-off strip edges (upon request)</td>
<td>Ready strip width for customer usage</td>
</tr>
<tr>
<td>Acid Regeneration Plant</td>
<td>Regenerate used acid to secure fresh acid to the line</td>
<td>Better pickling quality throughout the strip length</td>
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### CleanStrip Characteristics

- **Specification**: Available for all international standards
- **Specific coil weight**: Maximum 20 kg/mm width
- **Coil inside diameter**: 508 mm (20") or 610 mm (24") at customer option
- **Coil outside diameter**: Maximum 2,100 mm
- **Oil type**: Light and clear oil
- **Edge trimming**: Available on request
- **Skinpass surface**: Available on request
- **Dimension & tolerance**: As per reference specification
CleanStrip Size Available

Class #1: Tensile Strength 290-400 N/mm²

Class #2: Tensile Strength 400-500 N/mm²

Class #3: Tensile Strength 500-650 N/mm²

Packing

Type #1: Paper Packing
(mainly for domestic)

Type #2: Hard Plastic Packing

Type #3: Steel Packing
(for export)
CleanStrip Application

Automobile
Mechanical Tube
Electrical Appliance
Furniture
Structure

PRODUCT OF

Automobile
Electrical Appliance
Mechanical Tube
Furniture
Structure
Main Mission
To Maintain Environment

1999 - ISO 14001 Environmental Management System
2000 - Clean Technology Certificate
2001 - The Prime Minister's Industry Award 2001 for Environmental Management
        - The 2001 National Award in Safety, Occupational Health, and Workplace Environment
        - The Environmental Impact Assessment 2001 (EIA Awards)
2002 - TIS 18001
        - The 2002 National Award in Safety, Occupational Health, and Workplace Environment
2003 - The Prime Minister's Best Industry Award
        - The 2003 National Award in Safety, Occupational Health, and Workplace Environment
2004 - The 2004 National Award in Safety, Occupational Health, and Workplace Environment
2005 - The 2005 National Award in Safety, Occupational Health, and Workplace Environment
LEADER OF
QUALITY STEEL
PRODUCTS IN
SOUTHEAST ASIA

CleanStrip - Another Step of Success

Operating a modern stand-alone hot strip mill with a capacity of 4 million metric tonnes per year (MMTY), Sahaviriya Steel Industries Public Company Limited, or SSI, is the largest hot rolled steel sheet in coil producer in Thailand. To supply our products with excellent quality and full customer satisfaction, SSI is fully committed to develop our hot rolled sheet product to serve various markets continuously. 90% of our hot rolled coils produced annually are delivered to local customers in the form of finished products for use in automobiles, steel structures, steel pipe, home appliances and a variety of other products. A portion of that hot rolled steel sheet output is further processed into value-added products such as cold rolled steel sheets and galvanized steel sheets.

In response to increasing demand for high-grade specification products, SSI has invested in a Pickling and Oiling Line (P/O Line) with an investment of about Baht 1,000 million, located in the same area of our Hot Strip Mill in Bang Saphan steel complex. This CleanStrip, high-grade product, is recognized as a product with special clean surface quality, widely used in variety of applications such as automobile, electrical appliance, furniture, pipe, and mechanical tube.

With the state-of-the-art push-pull pickling technology, SSI can produce upto 1.0 million metric tonnes per annum of CleanStrip, with 1.20 to 6.50 mm in thickness and 650 to 1,650 mm in width to serve all international specifications. The entire manufacturing process is computer-controlled so as to make products that meet our customers’ demands. In addition, fully automated facilities improve precision and product quality.

Under ISO 14001 environmental management system, SSI is dedicated to environmental conservation ensuring a lasting harmony in the community where we operate. Environmental-friendly process and clean technology is selected as priority with the aim of zero-emission in mind. This is reason why an additional investment in Acid Regeneration Plant (ARP), which regenerate and recycle the acid in close-loop system with no discharge to the environment, had been decided. At the same time we strive to contribute to society and community through activities including environmental protection, working with environment-related organization and volunteer activities to support for the rehabilitation of mangrove forests.