METALS
CARBON STEEL PICKLING LINES
FROM HOT ROLLED COILS TO VALUE ADDED PRODUCTS
CONTINUOUS PICKLING LINES

As a pioneer in the design and manufacture of polypropylene pickling tanks, ANDRITZ redefined shallow-tank and turbulent pickling. Many years of experience worldwide in revamping, processing, and full turnkey supply of continuous pickling lines – also as a part of pickling line and tandem cold mills (PLTCM) – form the basis of our customers’ satisfaction, which is our top priority. The optimized pickling process with individual circulation and heating system ensures minimized consumption of utilities, while the result is always a scale-free strip surface.

Our continuous pickling lines (CPL) are designed for strip gauges from 0.8 mm to 6.5 mm and strip widths of up to 2,100 mm in different steel grades. Our lines for carbon steel serve capacities of over 2,000,000 t/year and pickling speeds of up to 400 meters/minute.

PUSH PICKLING LINES

Push pickling lines were developed and introduced to the industry by ANDRITZ Ruthner in 1965. Since then, ANDRITZ Metals has built more push pickling lines worldwide than any other supplier.

The advantage of the push pickling line (PPL) is its high flexibility combined with high productivity at low investment costs. Cost-intensive equipment, like welding machines, loopers, and bridle rolls, is not required. The shallow pickling tank design ensures high turbulence and reduced pickling time.

ANDRITZ Metals push-pickling lines are capable of processing strip thicknesses from 0.8 mm to 16 mm and strip widths of up to 2,100 mm, with different steel grades and dimensions, coil by coil, and in direct succession. We have supplied lines for carbon steel with a maximum capacity of up to 1,200,000 t/year. The optimized pickling process, with individual circulation and heating system, ensures minimized consumption of utilities, while delivering a fully pickled and defect-free strip surface.

With the installation of a new push pickling line for stainless steel, ANDRITZ Metals has broken new ground. Its main features include four shot blasting machines, two brush scrub machines, and polypropylene pickling tanks. Many years of experience in design, manufacture, and commissioning demonstrate our expertise in supplying customized turnkey solutions.

DECADES OF EXPERIENCE

The concepts and technology from decades of experience, and the specific needs in the different application fields drive us to new ideas and specialized solutions. Together as partners we want to condition, treat, and shape the material to its best.
## References

### STEEL PRODUCER, CHINA

**Continuous pickling line**

<table>
<thead>
<tr>
<th>Plant facts</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>1,200,000 t/year</td>
</tr>
<tr>
<td>Strip thickness</td>
<td>0.6–6.0 mm</td>
</tr>
<tr>
<td>Strip width</td>
<td>900–1,600 mm</td>
</tr>
<tr>
<td>Entry section speed</td>
<td>700 m/min, max.</td>
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<tr>
<td>Process section speed</td>
<td>400 m/min, max.</td>
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<tr>
<td>Exit section speed</td>
<td>650 m/min, max.</td>
</tr>
<tr>
<td>Steel grades</td>
<td>SPHC, SPHD, SPHE, HSLA, DP</td>
</tr>
<tr>
<td>Scope of supply</td>
<td>Skin pass mill, tension leveler, turret-type side trimmer, general planning, commissioning, and start-up</td>
</tr>
</tbody>
</table>

### STEEL PRODUCER, NORTH AMERICA

**Push pickling line**

<table>
<thead>
<tr>
<th>Plant facts</th>
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</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>1,200,000 t/year</td>
</tr>
<tr>
<td>Strip thickness</td>
<td>1.5–9.5 mm</td>
</tr>
<tr>
<td>Strip width</td>
<td>900–1,650 mm</td>
</tr>
<tr>
<td>Operation speed</td>
<td>200 m/min, max.</td>
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<tr>
<td>Steel grades</td>
<td>Low-carbon steel, electrical steel, HSLA, AHSS</td>
</tr>
<tr>
<td>Scope of supply</td>
<td>Mechanical, process, electrical and automation equipment, multi-roll leveler, skin pass mill, turret-type side trimmer, general planning</td>
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### CUSTOMER BENEFITS
- Mechanical, process, electrical, and automation equipment—all services provided from a single source
- High-turbulence Venturi pickling
- Compact rinse based on intensive research
- Modular arrangement
- Improved development and design provide long equipment life
- Vast know-how and continuous further developments make ANDRITZ the leading supplier of HCl pickling technology.
ANDRITZ - YOUR PARTNER

We appreciate to walk down the supply chain with you to value added products. Continuous, push or multi-purpose pickling lines - we have the right technology for your needs.

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