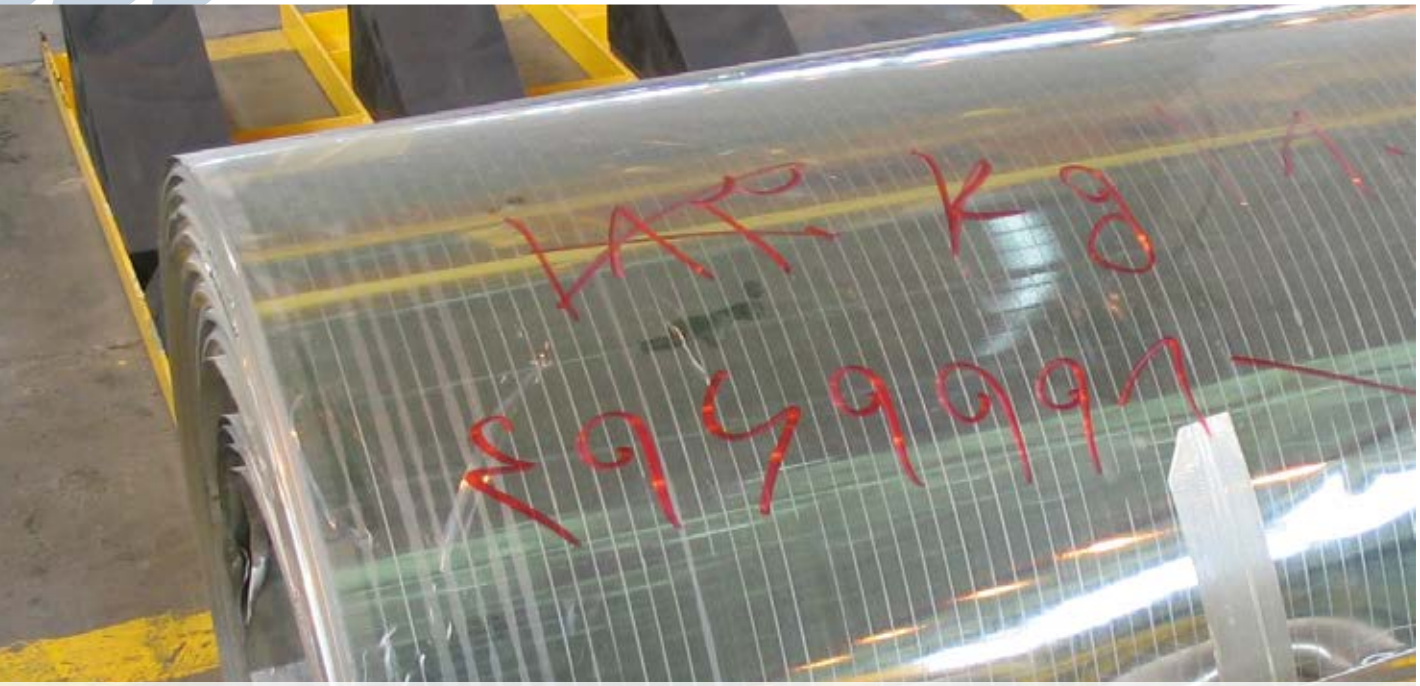
TPP 400
TINPLATE PRINTER

The **T**in**P**late **P**rinter **400** fulfils a typical requirement of **tin-coating lines**. It was specifically designed to print the code indicating the thickness of the coat, on either or both sides of unevenly coated strip. The marking unit is normally mounted at a point in which the strip runs up, with the rollers parallel to the surface of the strip. Opposite the marking unit, on the other side of the strip, a contrast roller must be provided.



Tinplate coil marked with lines

The **TPP 400** consists of a marking unit, which is composed of a frame housing two idle rollers coupled to each other, a soaking basin and an overflow basin. The first roller takes solution and transfer it to the second one. The second roller houses tapered rubber rings corresponding to the lines to be marked. This roller is in contact with the strip and is friction driven by it. As the roller rotates the rings rub against the strip and transfer the solution to its surface.
The code consist of continuous or broken straight lines. The lines run parallel to the edge of the strip, for the entire length of the strip. They are spaced at 12.5 mm (half inch) intervals or multiples thereof. The combination of lines is the code which identifies the type of coating on the strip. The lines are traced using a chemical solution which causes a characteristic discoloration or staining of the surface of the strip.
A separate solution pumping panel, equipped with preparation and supply tanks, supplies solution to one or two printers. The solution is prepared by putting measured amounts of the chemicals required into the preparation tank, and starting the preparation cycle.

The marking unit is equipped with an engaging/disengaging mechanism powered by a compressed air cylinder-piston, which places the unit in the marking position (in contact with the strip) or in the idle/maintenance position (away from the strip).

INDUSTRY 4.0 COMPLIANT

imts Marking & Tracking

Marking and reading systems for metallurgical products

BAR

BEAM

BEAM BLANK

BILLET

BLOOM

BUNDLE

COIL

INGOT

PIPE

PLATE

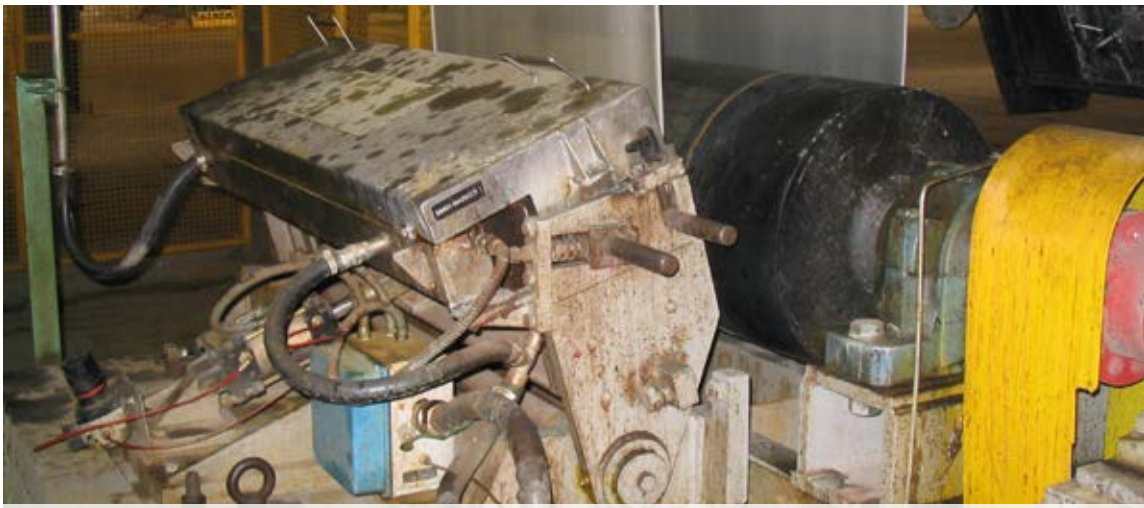
SHEETS

SLAB

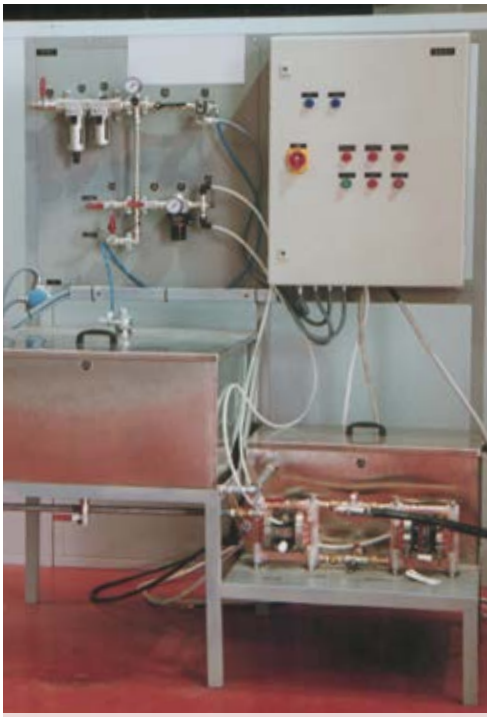
TINPLATE

TUBE

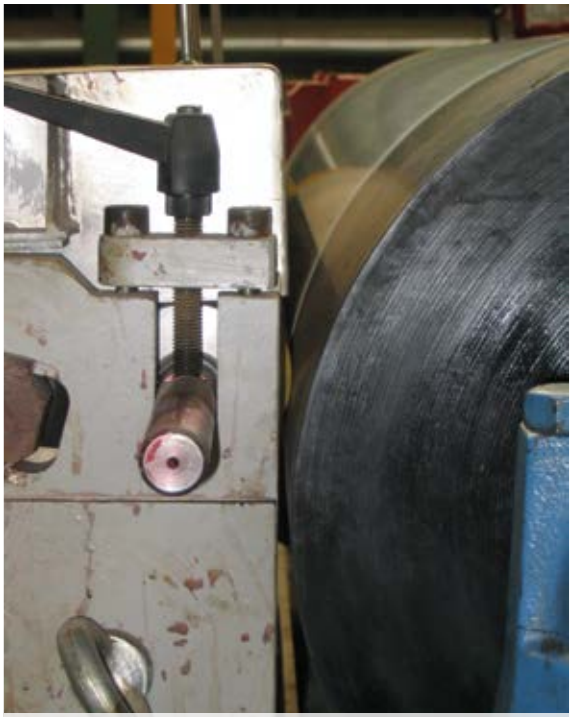
WIRE ROD



Printer after many years of operation



Solution pumping panel



Fast locking system for roll

The **TPP 400** is a relatively simple machine, comprising few moving parts. Being friction-driven, it requires no motorization and no synchronization with the process line. That makes the printer very economic to buy, to operate and to maintain. Since the marking roll has only the rubber rings required for the code being printed, the consumption of rings is lowered significantly.
Printing roll is mounted by fast locking system to allow its easy and fast substitution. Spare printing rolls, with different codes, can be prepared off-line and mounted as soon as a different code is required.

Typical specifications:

- Strip width: 550 – 1050 mm
- Strip thickness: 0,15 – 0,5 mm (0,55 off gauge)
- Max strip speed: 280 m/min
- Max strip acceleration/deceleration: 0,33 m/s^2
- Strip direction at marking point: Vertical up
- Marking ring capacity: Up to 83 rings
- Spacing of marking rings (centre line to centre line) 12,5 mm or multiple thereof
- Width of marking edge of the marking rings approx. 0,7 mm

Contact us to know more about special versions.

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