



**INDUSTRIAL AUTOMATION**

# ROBOTIC DE-BANDING

**The Tebulo de-strapping system is designed for a safe removal of straps on coils, plate, profile, tube stacks, or other packages. The de-strapping robot in an industrial environment prevents unsafe labour conditions in several ways.**

Operator injury due to flying straps after cutting and also severe coil damage due to bursting of the strap at the down coiler, by means of the in-feed table, are eliminated. The de-bander is based on a strap detection system and a hydraulic tool to cut off the strap; the de-banding head is mounted on a robot for optimal flexibility. The additional winding unit is used to wind the removed straps into small scrap packages. The unit is rigidly designed to operate in heavy industrial areas.

The robot, in combination with a strap detection and removal system provides a reliable, fully automatic de-strapping system and could be placed at the entrance of a pickling line, cold strip & tandem mills, and galvanizing lines to name a few. The orientation of the coil (eye in line or perpendicular to transport direction) does not influence the de-strapping process.

## **FEATURES:**

- Strap scanning detection system
- Hydraulic cutting head
- Flexible operation by using an industrial robot
- Fully programmable
- Overall performance > 99.8%
- Overlapping strap detection
- Easy installation and integration into existing or new product lines
- Low maintenance costs

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## Standard Specifications

Single strap removal	Approx. 35 sec.
Dual strap removal	Approx. 60 sec.
Coil diameter	Up to 2,700 mm (106 inches)
Coil width	Up do 2,200 mm (87 inches)
Total equipment weight	2,700 kg (5952 lbs)
Control	Robot control PLC
Communication	Ethernet/Profibus DP
Communication protocol	Any standard
Overall height	2,250 mm (89 inches)
Overall length	3,200 mm (126 inches)
Overall depth	2,700 mm (106 inches)
Power consumption	13 kW
Supply voltage	Any standard Voltage



## Additional Options:

- Additional grinder unit to upgrade the cut performance from 98% to 99.8%
- Coil position with:
  - Eye in line with transport direction
  - Perpendicular to the transport direction
- For 19-50mm (3/4 - 2 inch) strap width
- Visualization in the operator pulpit
- Tail-end detection system
- Barcode scanner
- Eye strap removal
- Other PLC make and types are possible