

# THE FULL RANGE OF EQUIPMENT FOR DRAWING, STRANDING LRPC STRAND AND ACS (ALUMINIUM-CLAD STEEL) WIRE

## 20 Technology



Low Relaxation PC Strand Line outlet side

In 1999, two wire and rope machinery companies, RTM (Redaelli Tecna Meccanica), Italy and OTT, France, became the Wire Machinery Division (WMD) of Continuus-Properti.

Continuus-Properti WMD can satisfy any requested technical designs due to their deep roots in the world market. Here is a complete list of the equipment:

### DRY DRAWING LINES

#### VERTICAL AXIS SUPERLOGOS DRAWING LINE:

The latest evolution of the globally renowned Logos dry drawing line, with hundreds of units sold all over the world, is renewed according to the state-of-the-art technology in the sector.

For low, medium, high carbon or stainless steel wire rod with diameters ranging from 5.5 up to 18 mm available in the following capstan sizes: 560 – 670 – 760 – 900 – 1270 mm.

The drawing line with 670 mm capstans has been specifically studied to draw bimetallic ACS (Alumoclad) wire and is perfectly complementary to the Properti radial Pro-form cladding machine.

Our engineers recently focused their attention on the machine with the biggest size capstan (1270 mm), and specifically on the following issues:

- >> High speed narrow gap cooling system: the world-renowned narrow gap system (originally invented by OTT France) has been further improved.
- >> Direct air cooling system: newly designed air ducts allow lower pressure losses, resulting in higher machine performance
- >> High efficiency transmission system: the combination of high-efficiency gearboxes, belts and pulleys results in very low energy losses and minimum maintenance requirements

The following areas have also been subject to the redesign:

- >> Increased active and passive machine safety
- >> Facilitated equipment maintenance
- >> Facilitated line management and daily operation

All of this resulted in a very tough and robust drawing line capable of the highest working performance available on the market.

#### HORIZONTAL AXIS MEGALOGOS DRAWING LINE:

A design for the future: the horizontally mounted capstans make the machine a revolution in ergonomics, particularly important during the threading-up process.

Also for low, medium, high carbon or stainless steel wire rod with diameters ranging from 5.5 up to 18 mm available in the following capstan sizes: 560 – 670 – 760 – 900 – 1270 mm. The horizontal axis drawing line with 670 mm capstans has also been specifically studied to draw bimetallic ACS (Aluminium-Clad steel) wire and it too is perfectly complementary to the Properti Radial Pro-Form cladding machine.

#### A Design for the Future

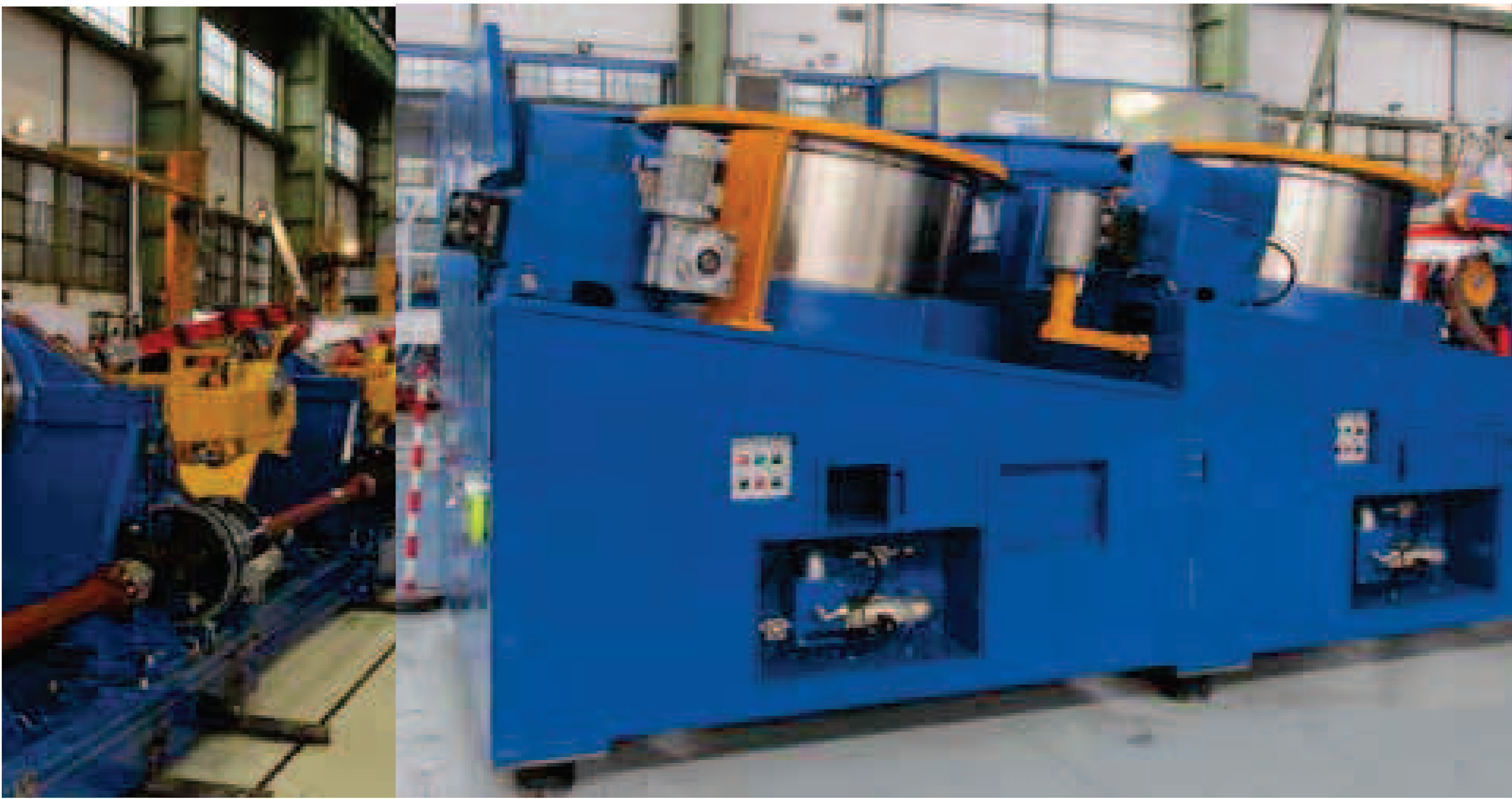
As stated above, the machine with horizontally mounted capstans is an ergonomic revolution, especially important during the threading-up process. The machine is easy and safe to use even while it is operating since the operators are no longer required to lean over the machine in order to improve their field of vision.

1. The new geometry of the machine drastically improves the maintenance of any of its components, including die holder/soapbox and sensor arm. The backside of the machine features access doors to the motors, gearboxes, and air and water piping.
2. Capstans can be disassembled for maintenance acting on a single expansion ring.

The drawn wire is collected on the downstream spooler without any wire twist.

#### Outstanding Mechanical Quality

1. Each capstan is equipped with a water cooling system that utilizes high performance, internal high-speed sprayers in addition to external air cooling directed at the apron ring.
2. The cooling system design is unique in that the internal surface of each capstan is protected against corrosion, mineral build-up and clogging problems.
3. The gearbox positioned behind each capstan, and the horizontal positioning of each motor, allows the connection between gearbox and motor to be made through a mechanical joint.
4. The ecological safeguards, which include a powerful exhaust system, protect the operator's working environment from soap dust pollution.



**Superlogos 1270 Drawing Line Blocks**



**Tubular Strander**

The MegaLogos line gives competitive advantages when producing PC products as well as large diameter spring wire from steel rod and other steel alloys.

**DRAWING LINE ACCESSORY MACHINES:**

- >> Pay-offs:  
for low, medium, high carbon or stainless steel wire rod with diameters ranging from 5.5 up to 18 mm
  - Self-rotating arm horizontal pay-off
  - Motorized rotating arm horizontal pay-off
  - Vertical pay-off
  
- >> Spoolers:  
for low, medium, high carbon or stainless steel drawn wire with diameters ranging from 5.5 up to 18 mm
  - Single spoolers up to B1600
  - Double automatic spooler up to B1250
  
- >> Coilers:  
for low, medium, high carbon or stainless steel drawn wire with diameters ranging from 5.5 up to 18 mm
  - Static coilers
  - Dynamic coilers

**LOW RELAXATION PRESTRESSED CONCRETE (LRPC) WIRE LINE**

This line allows production of Low Relaxation Prestressed Concrete (LRPC) Wire, also in galvanized or indented form, according to any international standard.

Available in the following configurations to best satisfy the required product mix of the customers:

- >> Single pulling unit – Single capstan
- >> Single pulling unit – Double capstan
- >> Double pulling unit – Double capstan

**LOW RELAXATION PRESTRESSED CONCRETE (LRPC) STRAND LINE – SKIP STRANDER**

This produces Low Relaxation Prestressed Concrete (LRPC) Strand also of the compacted, galvanized or indented type, according to any international standard.

- >> Bow strander capable to strand 6+1 or 3 wires strand
- >> PC strand (6+1) diameters from 0.25" up to 0.70"
- >> Spool size: Din 900 / DIN 1000 / DIN 1120 / DIN 1250
- >> Induction furnace available sizes: 350 kW – 450 kW – 650 kW - 800 kW
- >> The LRPC Skip strander SK 1120 has been redesigned to perform 1000 rpm (max. linear speed = 150 m/min)
- >> The LRPC Skip strander SK 1250 is equipped with an electrical wire tension control system

All of the above machinery has been subject to improvements and redesign aimed at:

- >> Maximizing the productivity of the line by increasing the rotation speed of the skip strander
- >> Reducing the required maintenance by redesigning critical parts including, but not limited to, Skip Strander bearings and bows, pulling units and layer winder mandrel
- >> Facilitating maintenance by allowing easier access to maintenance points
- >> Improving the product quality by providing better control of process parameters

**TUBULAR STRANDING LINES**

To produce any type of steel strand and rope up to 36 wires both bare and galvanized.

Also in this sector is quite evident the efforts of Properzi for continuous innovation.

Properzi is available to supply such plants on EPC (Engineering, Procurement, Construction) basis so that the Buyer is only minimally involved with the installation of the plant.

*By G.M.*



**Low Relaxation PC Strand**