

TECHNOLOGIES

COMPLETE PLANTS

Complete plants for producing ETP copper rod

YESTERDAY

The history of Properzi and copper began sometime during the 1950s when Mr. Ilario Properzi started experimenting with the application of the continuous casting and direct rolling technology, already successful for aluminium rod, for the production of copper rod.

The new system was certainly able to replace the current state-of-the-art based on the hot rolling of wirebars through the so-called Belgian Looping Mills; it was indeed a new technology. The Continuous Casting and Direct Rolling process solved the problems inherent to the old technology such as:

- Very large CapEx requirement
- Labor intensive and dangerous
- Tough and dangerous working conditions
- Weight of coils did not exceed 150 kg
- Low inconsistent quality

We want only to recall that the first two plants were sold by Ilario Properzi, one to an American company and one to a Russian company, during the very early 1960s thus opening the route to the modern era for the production of copper rod.

TODAY AND TOMORROW

These days almost 60% of the copper produced worldwide is in the shape of copper rod to serve the cable industry while the balance goes into ingots, billets and slabs.

The demand for Electrolytic Tough Pitch (ETP) copper rod is growing at a rate of 3.5-4.0% YOY and we can also say that the technical requirements for copper rod are becoming more and more severe year after year.

Anticipating such market needs, Continuous-Properzi designs, manufactures and services the most advanced plants, from furnaces to coiler and packaging for the production of ETP copper rod.



25 tph copper rod plant.

FROM SHAFT FURNACE TO COILER WITH COMPLETE KNOW-HOW AND ENGINEERING

While Continuous-Properzi is constantly improving equipment and machinery, our Excellency Team looks after the best and most complete training program for the operators so as to reach the lowest possible Operational Expenditure (OpEx), the best Overall Equipment Efficiency (OEE) and the widest repeatability of the rod quality.



... it is our design philosophy leaving space for future upgrade...

The table below shows the size of the standard plants available in Properzi's production program, however different plant sizes are always available upon request.

Joining our family provides many benefits and we would like to list the most important ones:

- **Specialized engineering for layouts, foundation drawings, etc., and for tailoring special technical solutions, if requested**
- **Tailor made machinery designed for life**
- **Lowest OpEx**
- **Highest OEE**
- **First class components (hydraulic, pneumatic, electrics, etc.) and user-friendly control system**
- **High rod quality and repeatability of the quality**
- **Flexible machinery**
- **Unparalleled technical assistance for training, commissioning and start-up and many other advantages that you will experience upon joining our large family of Properzi CCR users**

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

| Output rate | tph | Expected Range 240-300 dpy |
|-------------|------|-------------------------------|
| SMALL | 5.0 | 25,000 - 29,000 |
| | 7.0 | 34,000 - 40,000 |
| | 10.0 | 48,000 - 58,000 |
| MEDIUM | 12.0 | 61,000 - 72,000 |
| | 16.5 | 80,000 - 95,000 |
| | 20.0 | 98,000 - 115,000 |
| LARGE | 25.0 | 125,000 - 140,000 |
| | 30.0 | 150,000 - 170,000 |
| | 35.0 | 170,000 - 200,000 |