

# Continuus-Properzi: Developing Technologies in the Present to Cater to Future Challenges

Continuus-Properzi's long-term growth strategy is to always remain the benchmark in the aluminium and copper rod sector, trying to anticipate the future trends of the market in advance, to study and develop technological solutions in the present that will help industry to face future challenges. With 75+ years of experience and 500+ commissionings in 80+ countries, the company has designed and patented new technological solutions to reduce the energy consumption during the casting, rolling, and coiling of aluminium and copper rod, ingot lines and in their furnaces, shares Eng. Alberto Ghisetti, Sales Director, Continuus-Properzi S.p.A. during an interaction with Wire & Cable India.



Eng. Alberto Ghisetti, Sales Director, Continuus-Properzi S.p.A.

Wire & Cable India: What are the key innovations and emerging trends shaping the wire and cable industry? Alberto Ghisetti: The wire and cable market has seen significant expansion in recent years with a compound annual growth rate around 6%. This growth is largely driven by advancements in the automotive sector, a surge in telecommunications, the development of power transmission networks, rising demand for consumer electronics, and the overall growth of the manufacturing industry. These trends are shaping the wire and cable industry today, but more growth is expected. The growing need for electrical power for data centers that store vast amounts of information and exponential numbers of interactions required by the new computer processors for IoT, Industry 4.0, 5.0 revolution, and artificial intelligence will be important factors that boost growth in wire and cable markets. According to information collected on the internet, by 2030 almost 12% of the total power demand in the USA will be consumed exclusively by data centers.

WCI: Please highlight the latest advancements and technology developments that you have

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### introduced in your machines to cater to these evolving needs.

AG: Continuus-Properzi has always provided its customers with new advanced technological solutions developed during the 75+ years of experience and 500+ commissionings completed in 80+ countries worldwide. Particularly, during the last few years we have designed and patented new technological solutions to reduce the energy consumption of our furnaces, both in aluminium (with the Properzi Vert-Melt Furnace) and copper (with the Properzi Vert-Ref, with the charging system from the roof of our reverberatory refining furnace, and for the continuous refining process). We have also dedicated particular attention to the reduction of electrical consumption during the casting, rolling, and coiling of our aluminium and copper rod and ingot lines, using inverters and instruments that, implemented with our IULIUS 4.0 software (our Industry 4.0 program), are capable of reducing power consumption to the lowest level in this field of the market.

The substantial investments we have dedicated to the acquisition of 4.0 machine tools, allow us to build certain parts of our systems here in Italy, guaranteeing the "made in Italy" quality that distinguishes our lines and the end product obtained with Properzi lines.

WCI: How do you help your customers achieve better efficiencies in their production processes? Maybe, by reducing the energy consumption; enhancing quality or reducing the waste in the production process.

AG: We are assisting our customers in reducing energy consumption and process production waste, while increasing the quality to the highest level of the market. At any rate, we are consistently working to help our customers anticipate the trends and market requirements/challenges. For example, in the 1980's Continuus-

Properzi began to develop and improve the refining process of copper scrap with concepts of circular economy and recycling - which are the challenges and trends of modern day. Due to this far-sighted vision of our president Mr. Giulio Properzi, our customers are today able to face and succeed new challenges with processes and technologies that were developed and optimized decades ago. Furthermore, we guarantee a technical consultancy that is available in two solutions, via e-mail, or on site, designed precisely to meet our customers' needs, depending on the importance of the intervention.



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## WCI: Do you have any R&D team catering to evolving needs? Elaborate more about your R&D efforts.

AG: Absolutely yes, we have a team dedicated to Research & Development consisting of engineers and specialized personnel who dedicate their time to all types of tests. Over the years, our R&D department has developed new technologies and processes to satisfy the needs of our customers. A vivid example is our revolutionary SAM (Self Annealing Machinery), which we consider to be environmentally friendly machinery as it guarantees energy saving in rod-breakdown operations up to 50%, in the range of 80 kWh/t,

with no copper dust creation during the process. Furthermore, our R&D has dedicated some time to several tests performed to support university professors in their scientific articles.

# WCI: What is your current product portfolio catering to the wire & cable sector? Are there any expansion plans in the pipeline?

AG: Continuus-Properzi pioneered the process of continuously casting and rolling nonferrous rod in the 1940s and today is the global leader for nonferrous wire rod production equipment offering complete lines including furnaces, casting equipment, rolling equipment and double spoolers. The Properzi organization provides unparalleled technology for the production of aluminium and copper wire rod around the world. The copper rod can be produced from either cathodes or 100% low quality copper scrap to yield top quality copper rod. The product offering also includes our "Pro-Form" continuous rotary extrusion machinery for a wide range of applications in copper and aluminium, our Vert-Melt furnace for aluminium, and our Self-Annealing Microrolling® (SAM) machine that processes 8mm copper rod down to 1.8mm -2mm soft wire without an annealer, thereby providing significant energy savings.

The availability of efficient aftersale service, which includes on-site technical assistance, remote technical consultancy and the supply of spare parts, is engrained in the corporate culture. During the last years we have expanded our portfolio offering to our customers to include fume treatment systems for our furnaces and other applications.

#### WCI: Could you provide insights into your market presence and key clientele globally & in India?

**AG:** Continuus-Properzi is the most well-recognized reference in both the aluminium and copper rod fields, as

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well as zinc wire and lead strip. During its 75+ years of activity, Continuus-Properzi has supplied complete plants to all main players worldwide. The list of names is long and to mention all of them would risk forgetting to mention one of them. Looking into the Indian market, we have supplied our equipment to Adani, Balco, Hindalco, Nalco, Sterlite and Vedanta, only to mention the biggest. Naturally, the entire Properzi team will continue to work hard, in order to increase our

presence in our Indian plants.

### WCI: What are your company's long-term growth strategies and future plans?

AG: Continuus-Properzi long-term growth strategy is to always remain the benchmark in the aluminium and copper rod sector, trying always to anticipate the future trends of the market in order to study and develop technological solutions today that will help our customers to face future

challenges. Furthermore in the recent years we are offering to our customers a wider range of services and supplies compared to the past years, being today capable to provide complete aluminium and copper rod (or ingot) lines on EPC basis, supporting our customers from the first commercial negotiations, through the construction of the factories, to then arrive at the installation of our CCR (Continuous Casting & Rolling) lines, in short, providing a real turnkey service.