

# A Strategic Choice to Secure Aluminium and Copper Rod Supply for Cable Manufacturers

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**New casting and rolling lines for producing optimum quality aluminium or copper rod.**

During the last few years, the worldwide economy has been forced to face new challenges that were not expected. The COVID-19 pandemic has only accelerated, or maybe it was the reason for, important changes and instability within the supply chain of several components that in turn led to other challenges.

In addition to the above, the increased geopolitical tensions in Europe and also in Asia are compelling many companies to interrupt long-standing commercial relationships with consolidated partners and suppliers in order to find new ones in areas where other similar companies are also searching.

In the case study of this article, the focus is on aluminium and copper rod that is a clear example of how this altered supply chain situation shows that the availability of aluminium or copper rod is not taken for granted, and could indeed become a strategic point for any possible future development. This becomes even more strategic when producing high-quality cables which require specific rod characteristics.

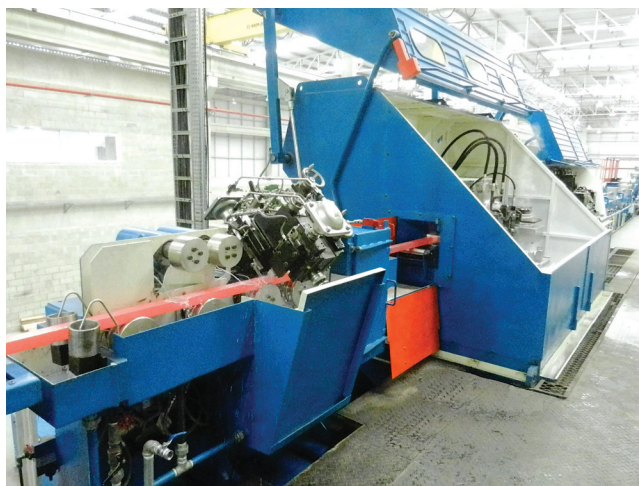
In fact, in order to produce high quality EC grade and in particular alloys rod as well as high quality copper rod, the requirements include a properly designed casting and rolling Line and Know-How. The rod market cannot be considered as a simple commodity with identical characteristics from one supplier to another, on the contrary they can change drastically causing several, often critical, problems during required downstream processes for cable manufacturing.

Based on the above considerations, we have noted that several cable manufacturers are reconsidering their strategic view on their supply chain and a solution could be to vertically integrate their manufacturing process to include production of aluminium and/or copper rod for their own internal consumption. This new scenario will shift the need from sourcing a product with specific peculiarities to sourcing true commodities (such as ingots/sows/T-bars for Al rod production, and cathodes for Cu rod production) with practically identical characteristics despite the supplier from which the commodities are procured.

The strategic idea to include internal rod production is also supported by economic advantages to reduce the costs associated with sourcing the rod, less logistic costs in transportation and elimination of the typical margin of a rod manufacturer.



**Example of CCR Aluminium Line for internal consumption by cable makers (above) and example of CCR Copper Line for internal consumption by cable makers (below).**



The rally in energy costs has also affected the prices of both aluminium and copper rod that, according to the opinions of some experts, has not been justified and higher than the real cost impact.

**Continuus-Properzi**, based on our unique position as the industry leader and unparalleled experience and knowledge of cable manufacturers' needs, has designed a family of Casting



Aluminium rod produced with Properzi technology (above), and copper rod produced with Properzi technology (below).



and Rolling Lines for production of high-quality aluminium or copper rod for the internal consumption by cable producers.

The complete Casting and Rolling Line, including the Furnace Set and fumes treatment system (if needed), and the ancillaries are designed and developed:

- To minimize the investment
- To reduce the installation costs
- To allow easy operation and maintenance in any environment, with a complete training and transfer of Know-How to our customer's team
- To guarantee the Properzi rod quality, the benchmark in the market

We have also specifically designed rod lines for smaller volumes than those typically requested by the traditional rod producers. Our efforts for these smaller Lines have been focused to avoid the drawbacks of certain copycats supplying machinery where the operator's safety is neglected, where maintenance and efficiency is a nightmare and where rod quality is low and not reliable.

In addition to the above, Continuus-Properzi can provide a wide range of Furnaces suitable to process and refine, if required, scrap generated during the downstream production process and also scrap sourced from the market, with huge cost savings for our customer and a real green impact on the environment.

### Conclusion

The latest changes and new challenges in the supply chain in the worldwide market, increased by the recent geopolitical tensions, are pushing some cable producers to evaluate the strategic decision to implement the production of aluminium rod (typically when their consumption is above 1000 tons per month) and/or Copper rod (typically when their consumption is above 2000 tons per month).

For the main advantages described in this article, Properzi has designed a family of Casting and Rolling Lines for production of high-quality aluminium or copper rod for the internal consumption by cable producers.

For any further details and to evaluate the economic feasibility of our smaller Lines please contact us at Continuus-Properzi or visit our website at: [www.properzi.com](http://www.properzi.com)

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### Company Profile:

**Continuus-Properzi** is an engineering company with specialized know-how in tailor-made machines to customer requirements. **Eng. Giulio Properzi**, Ilario's son, is the creative and engineering mind upon which the entire production of the company is based. The company has always been committed to offering its customers technical and technological solutions of absolute excellence in quality and innovation such as Microrolling®, Track & Belt caster and Vert-Ref Furnaces among others. Now we are driving our customers in Industry 4.0 and this has translated into having recently developed features for new plants and upgrading options for existing ones aimed at responding to the specific needs of managers who have operational responsibilities. This allows these managers to be updated in real time and to react in a timely and decisive manner in order to obtain the best possible results. [www.properzi.com](http://www.properzi.com)