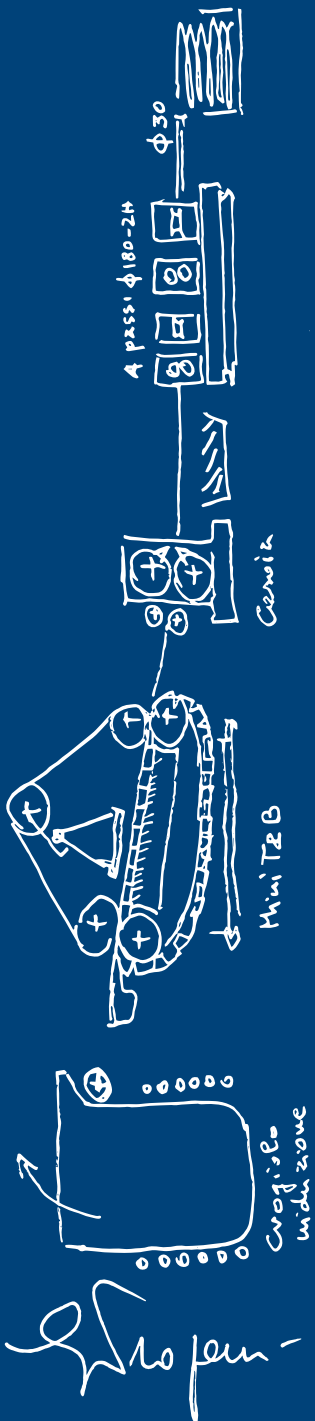
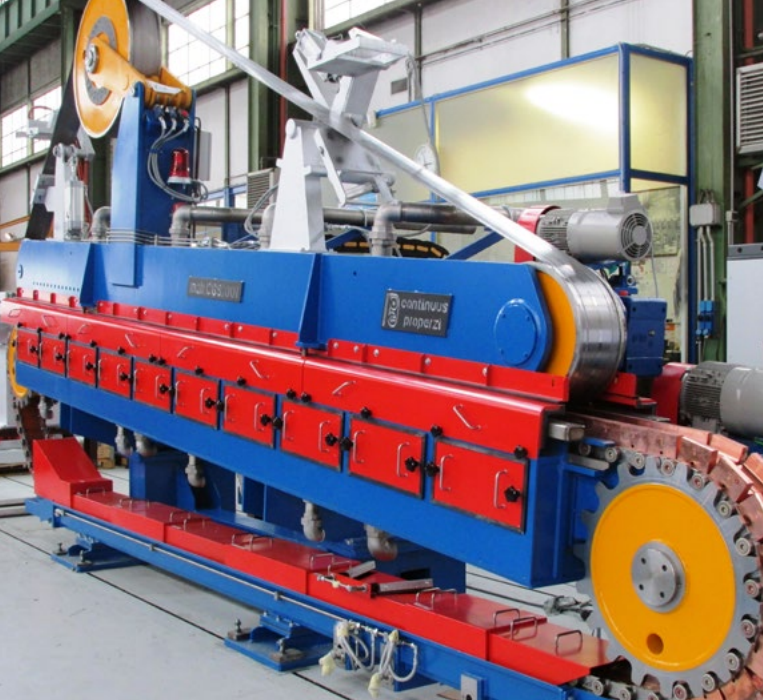


Primary and Secondary Ingots Lines for Aluminium Producers with the Properzi Track and Belt Process





Regardless of the starting material (molten aluminium or scrap), the usual re-melt forms standardized worldwide are ingots. Tee-bars and sows are less popular.

For many years ingots have been produced with the traditional mould chain and such ingots are referred to as "Open Top Ingots" in the market.

Although many improvements have been made over the years, several problems related to the general design concept remain unresolved. The recently patented Properzi Track & Belt Ingot Casting Machine Model 1 and Model 2 transform the molten metal into a continuous cast straight bar of trapezoidal shape with total repeatability. This cast bar is cut into ingots of precise length by a rotary shear. The ingots are then cooled in line to a temperature of 70-80°C in order to allow the palletization and strapping operations with plastic or steel straps.



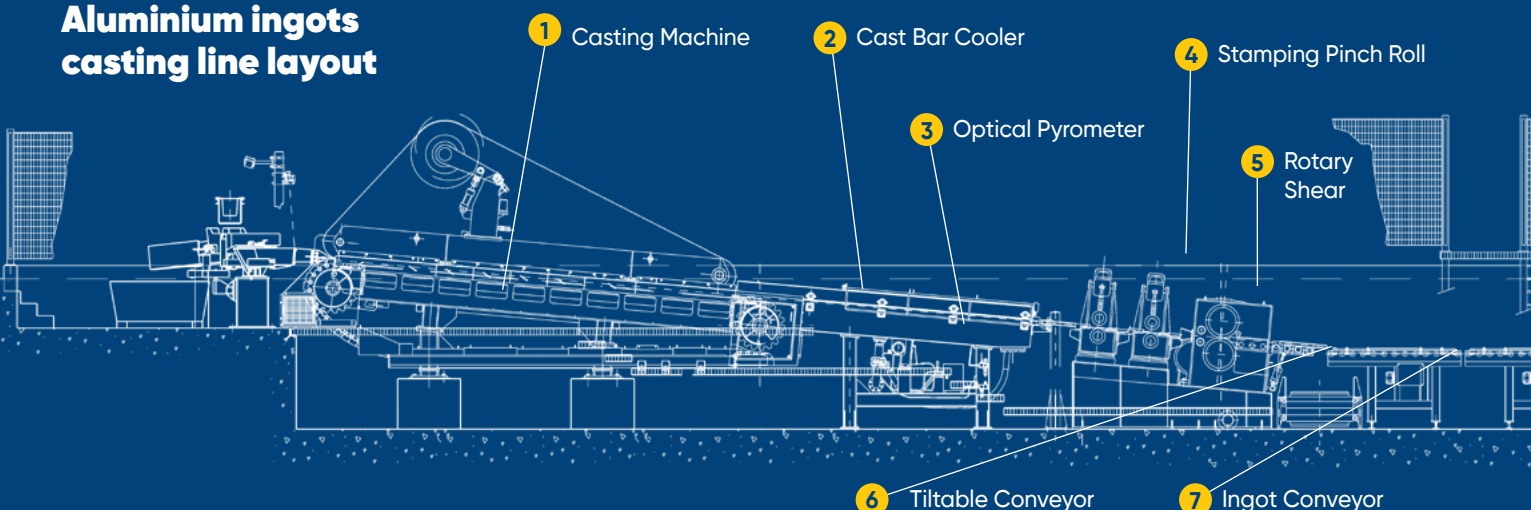
OPEN TOP INGOTS

PROPERZI INGOTS

OPEN TOP INGOT DRAWBACKS

- Heavy weight (E.C. Al) for high production rate
- Inconsistent geometric
- Instability of the ingot bundles
- Loss of metal due to skimming
- High rate of rejection due to off-size
- Critical de-moulding operations
- Dangerous cracks and voids within the ingot
- Necessity of using at least three straps to secure each bundle; the use of five straps is also quite common

Aluminium ingots casting line layout



PROPERZI INGOT



Thanks to the advantages listed above, the Properzi system boasts one of the lowest Operational Expenditures (OpEx) available in the market to produce ingots either for primary smelters or for scrap reclamation.

The Track & Belt process is gaining wide acceptance in many countries from Italy to Mexico, from Poland to Russia and China. We have also enjoyed record repeat orders from Raffmetal (Italy) with five (5) machines ordered, four (4) of which are in production!

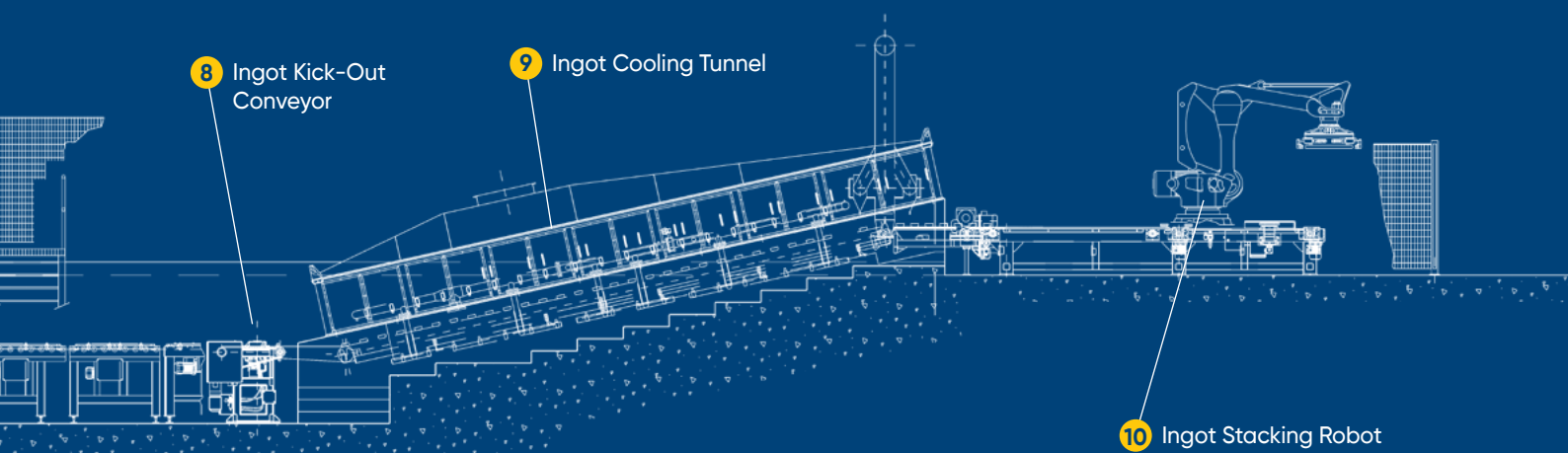
The Properzi T&B Ingot Casting Lines can work either in continuous operation reaching an Overall Equipment Efficiency (OEE) exceeding 90% or on a batch basis, as requested by most refineries of aluminium scrap. Ingots can be of 8.5, 10.0 or 15.0 kg always having a maximum length of 720 mm but it is also possible to produce ingots with a length of 600 mm with different relative weights.

Different plant configurations can provide ingot production rates ranging from 10 tph or higher for secondary alloys up to 28 tph for pure aluminium.

Lines to produce ingots of special size and weight tailored to customer needs are available upon request. Properzi is also willing 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.

ADVANTAGES OF PROPERZI INGOTS:

- 100% repeatable shape, dimensions and weight
- Consistent dimensions and shape of ingot bundles with high stability
- 25% less space required for storage
- The cast bar is solidified with zero cracks and no dangerous voids
- Skimming is not required
- Traceability data mechanically imprinted
- Zero de-molding problems
- Minimum number of straps needed



A Family Passion!



And much more...