

Beralmar

**FACTORY WITH
SEMICONTINUOUS
DRYER AND
AIRTIGHT KILN**

**MESTRAL model dryer
PRESTHERMIC model kiln**

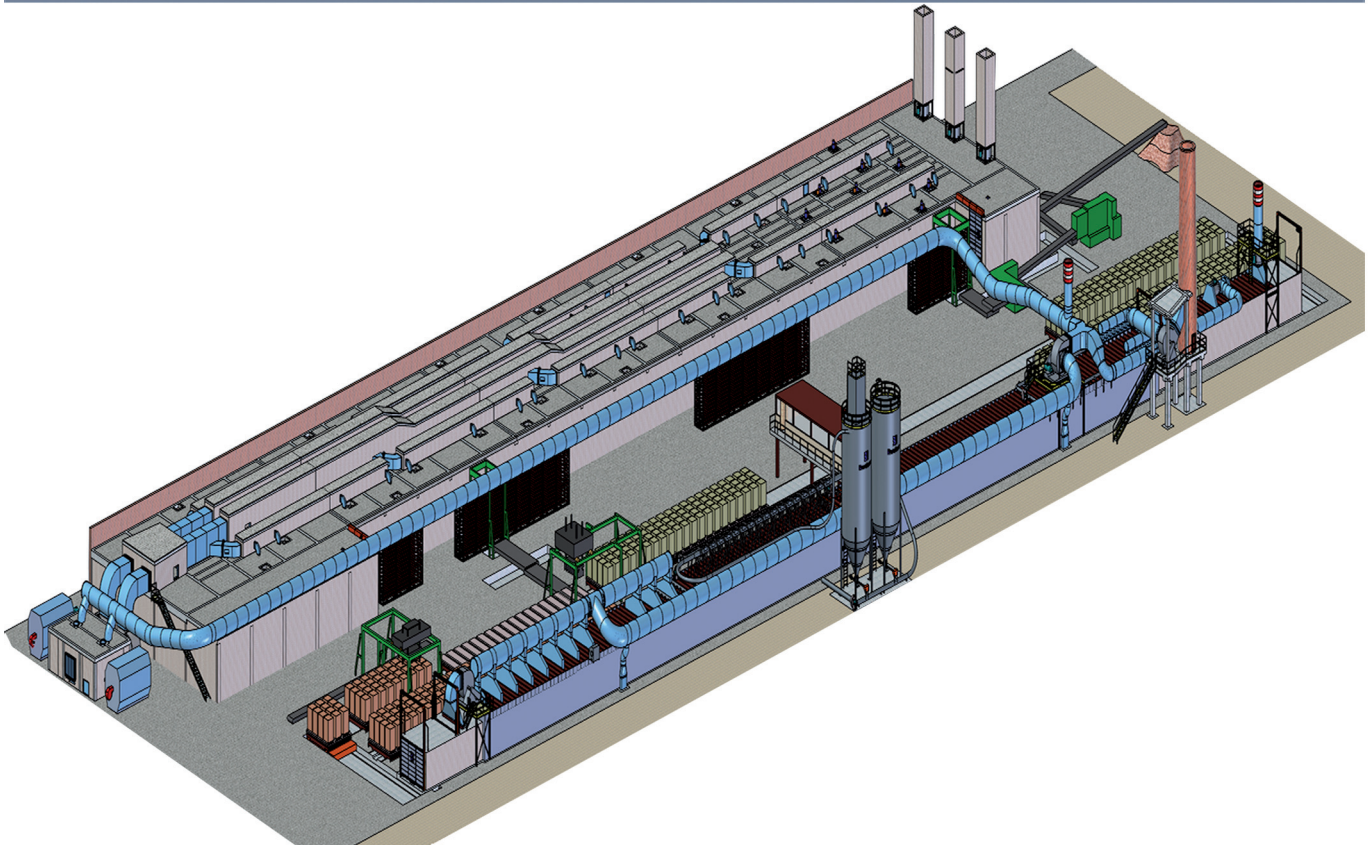
MAXIMUM VERSATILITY

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In an environment of constant change, versatility is at a premium. The universality of the MESTRAL semi-continuous dryer embodies versatility in every way:

Moderate consumption: the semicontinuous dryer with moderate consumption allowing the use of different fuels. BERAMAR's wide range of air generation technology makes it possible to choose the cheapest fuel (gas, fuel oil, coal, biomass, etc.) and bring down the energy bill.

Production flexibility: the semi-continuous dryer supports any ceramic format hollow and solid brick, thermoclay block, facebrick, vault ceiling slabs, tile, etc.



CLAY

Any suitable clay for the manufacture of structural ceramics is also suitable for drying in a semi-continuous dryer.



AUTOMATION AND MECHANISMS

MESTRAL semi-continuous dryers work with any format. BERALMAR offers cutting equipment for all formats: hollow brick, solid brick, thermoclay, tile, ceiling blocks, etc...



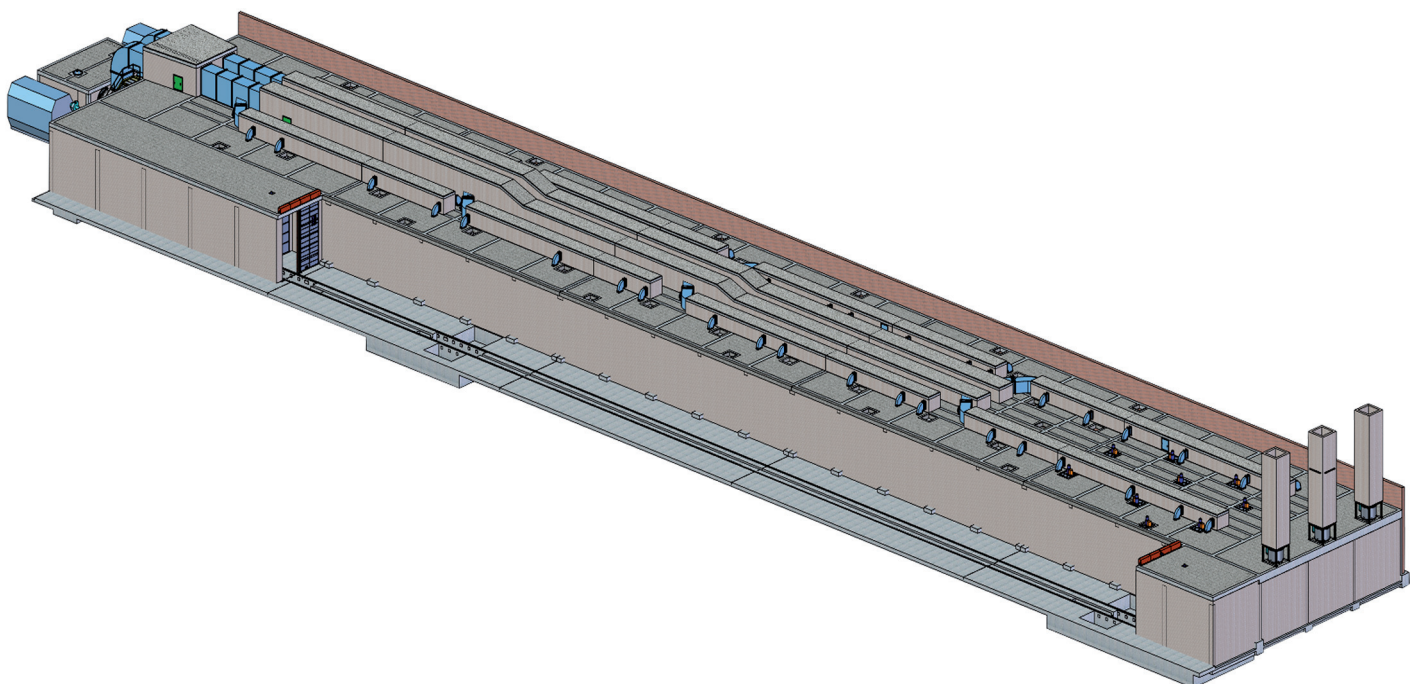
BERALMAR provides different solutions for loading shelf carts into the dryer ranging from lift loaders to a robotic application for loading and unloading the dryer.





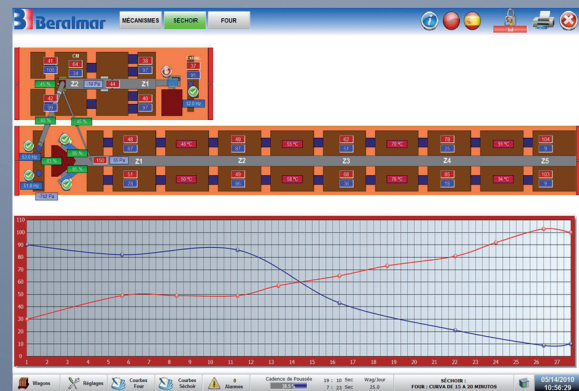
MESTRAL MODEL DRYER

- The MESTRAL semi-continuous dryer —comprising two or more kiln lanes for cars with shelves— is highly flexible both in terms of the formats it can handle and its drying cycles.



BERALMAR's philosophy for this type of dryer revolves around:

- Moving conical recirculation fans are installed at the feed-end of the dryer and fixed conical recirculation fans elsewhere in the unit. Having fan motors on the outside ensure easy maintenance and their longer life by avoiding high temperatures and humidities. BERALMAR's conical recirculation fans travel vertically, ensuring a temperature difference of less than 5 °C between high and low areas of the kiln cars.
- No dividing panels between kiln car lanes. With a reinforced concrete structure to support the roof. The fans can be placed along both sides of the kiln cars thus ensuring a more uniform, thorough drying.
- Total monitoring of the installation: the dryer has the same number of sections as hot air pumping points, managed by the MICROSEC automatic control system.



BERALMAR boasts a complete range of combustion equipment for all types of fuel for obtaining the necessary hot air. Given how expensive fuel oil and natural gas is in many countries, the use of solid fuels such as coal or biomass are an interesting alternative. The GBS heat exchangers generate smoke-free hot air from solid fuels. The use of biomass can translate into additional revenue from surplus CO₂ emission allowances generated.



PRESTHERMIC KILN

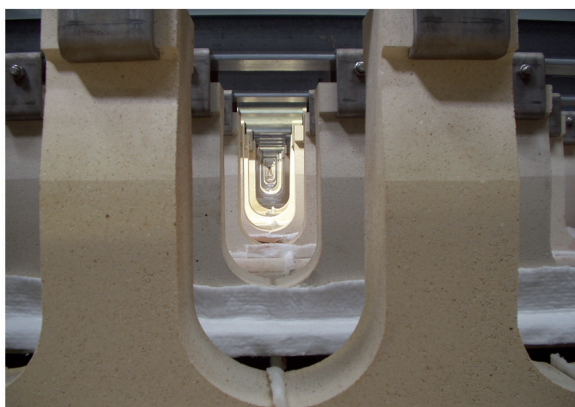
The PRESTHERMIC kiln offers significant energy savings thanks to the airtightness achieved through:

- Welded plate steel shell.
- Dry pressed refractory flat roof supported by the metallic shell.
- All kiln circuits are designed to work under high pressure including during almost the entire preheating area.

The kiln may be equipped with firing equipment with any type of fuel (natural gas, fuel oil, solid fuels, etc.). And all this is managed by the MICROBER automatic control.



Energy savings achieved thanks to the airtightness of the PRESTHERMIC kiln is between 7% and 10% greater than with conventional tunnel kilns.



MANUFACTURABLE PARTS

The great benefit of a production line with a semi-continuous dryer is its versatility. This type of factory can be configured for the production of any type of product format.

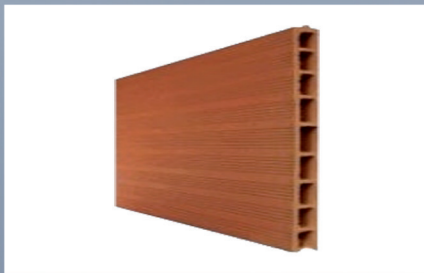
THERMO-CLAY



ALL TYPES OF HOLLOW BRICK



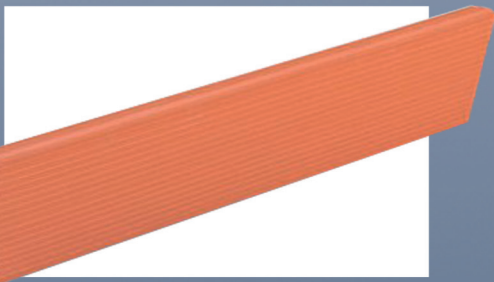
LARGE-SIZED HOLLOW BRICKS



ROOFING TILE



**PARTITION WALL BRICKS OR LONG
SLENDER SUB-ROOF BRICKS**



HOLLOW BRICK



FACING BRICK





Recent factory installations of the MESTRAL semi-continuous dryer and PRESTHERMIC airtight kiln.

2010 SALAMABRIQ - (Nador, Morocco)

Production: 500 tons/day

Hollow brick manufacturing

2012 TIMADANINE 2 - (Adrar, Algeria)

Production: 900 tons/day

Hollow brick manufacturing



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