



COMPANY PROFILE

Established in 1984 by Alfredo di Tonno, Later Meccanica, is a family owned and operated company located in Loreto Aprutino, Italy. Di Tonno boasts 50 years of experience in manufacturing machinery and equipment for the clay brick production industry. After a career as Production Manager in a leading kiln of Central Italy called Improta, he founded Later Meccanica and in 30 years turned it into one of the leading suppliers of refurbished brickmaking machinery in Italy. Today, the company has hundreds of customers around the world and is internationally recognized as a leader in this niche market.

Later Meccanica is specialized in the refurbishment, servicing and trading of world class manufacturing equipment for the preparation of clay and the production of bricks. Later Meccanica supplies exclusively Bongioanni and Morando products of Italian origin, recognized around the world as the international standard. Upon request, the machines can also be customized by our highly experienced team of professionals according to specific needs. In terms of production capacity, Later Meccanica focuses on the supply of machinery destined for plants with a production capacity up to 60 tons of clay per hour. We have available on site an extensive range of machines for sale. Our highly skilled and experienced workforce ensure a complete overhaul of all parts ensuring a thorough examination and repair to guarantee compliance with the most rigid industry norms and international standards.



Aside from ensuring a timely delivery of all purchases, Later Meccanica supplies professional after sale support to ensure the correct installment and operation of the equipment. In addition, spare parts and accessories are readily available to ensure a swift shipment in case of need. This translates into an efficient use of the machinery to ensure maximum output by customers. Without a doubt such sales support has brought Later Meccanica international recognition but most important of all a long-term relationship with its customers around the world. Over the last 30 years, Later Meccanica has manufactured and installed hundreds of machines around the world including in Iran, Iraq, Russia, Albania, Kosovo, Tunisia, United Arab Emirates, Morocco, Egypt, Libya, Algeria, Argentina, Venezuela, Pakistan, Peru, Poland, Romania.

REFURBISHED PRE-DWNED MACHINERY

Later Meccanica supplies around the world the most extensive range of Italian manufactured pre-owned brickmaking and quality reconditioned brick production equipment, offering the opportunity of purchasing high quality Morando and Bogiovanni brickmaking machinery at a vastly reduced rate versus the original retail price. These can offer attractive advantages over new ones:

1. SAME QUALITY AT A REDUCED COST

At Later Meccanica all motions are refurbishing into spec for new machine performance and longevity. All newly refurbished machines are fully tested to ensure the highest of standards are met.

2. FASTER TURNAROUND WHEN TIME IS THE ESSENCE

More often than not, refurbished machines can be up and running sooner than a new installation. Our Technical team works hard with you to meet deadlines.

3. MACHINE WARRANTY

Our standard refurbished machine warranty is 6 months conditional on correct usage.

Since its establishing in 1984, Later Meccanica, has worked hard to build a reputation that is second to none, for supplying a quality product at a fraction of the cost for new brickmaking machinery. Understanding the challenges facing the brick production industry and in today's competitive market place, our goal is to ensure that the machinery is running at optimum levels to minimize expensive downtime. Existing In-house facilities to fully clean and spray paint in-house permits us to make machines look new prior to installation.

ADDITIONAL CUSTOMER SERVICES

Later Meccanica is personally committed to providing leading customer service. This includes:

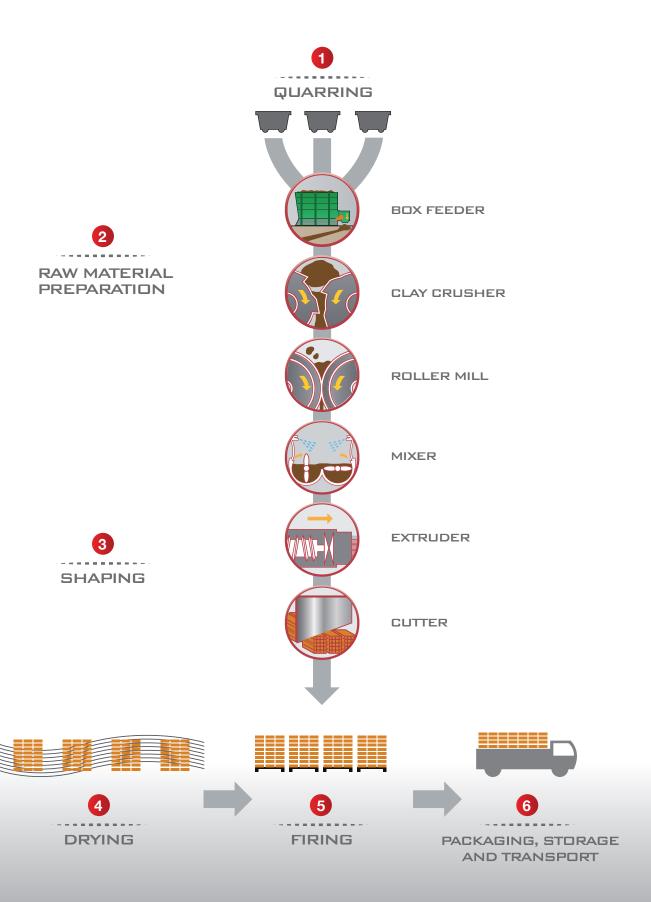
- 1. Scheduled maintenance and reconditioning during planned factory shutdown or urgent shipment of spare parts.
- 2. Consultancy service responsive to available raw material and desired daily production goals at site.
- 3. Emergency repair service and post sales support

ADVANTAGES OF ITALIAN TECHNOLOGY

Italian Brickmaking machinery enjoys strong appeal and customer loyalty for the following reasons:

- 1. High Equipment Reliability (Sturdy Structure and Reliable Mechanical Components)
- 2. High-Efficiency Machines and Simplicity of Use
- 3. Easy-to-manage Intuitive Electronic Components
- 4. Machines of Rugged Design thoroughly tested for robust operation in severe conditions, including high vibrations and mechanical impact leading to greater durability and wear resistance.
- 5. Reduced Maintenance Costs, Unscheduled Downtime and Production Losses
- 6. Resulting High Process and Product Quality in terms of Strength, Durability and Color Retention.

THE BRICK MANUFACTURING PROCESS



REFURBISHED PRE-OWNED MACHINERY

The Brick manufacturing process appears quite simple but in fact hides many pitfalls. After extraction from the Quarries, the clay raw material is crushed into powder to attain the required grain size. Before processing, the moisture content is verified and water is added to obtain the right consistency for forming. After blending it is fed into a vacuum chamber which extracts the air. Then the mixture is extruded into long columns, the length and width of the finished brick. At the end, the raw brick column is wire-cut into individual bricks. Then, the brick travels on rail cars to the dryer. The brick is now ready to be fired in a kilns at extreme temperatures.

In a brick manufacturing production plant, the costs incurred for a pre-processing section represents less than 30% of the total cost. However, greater investments in this strategic phase result insignificant when compared to the benefits obtained in terms of quality. The machinery supplied by Later Meccanica puts focus on the preparation process of the clay with the purpose of improving the quality of the finished product in terms of the clay's workability and simplifying the subsequent processes of shaping, drying and firing. Waste reduction, workability of the raw material and energy savings increase the overall economic performance by making the solutions appear initially more costly, but in fact providing higher economic returns.



The following extensive range of refurbished machines and equipment is available through Later Meccanica in order to satisfy the different production needs.

1. AUTOMATIC BOX FEEDERS

The purpose of the Box Feeders is to receive the clay coming from the pit and to feed it in a constant and suitable manner to the preparation machines.

2. RUBBER BELT AND SLAT CONVEYORS

Suitable for the transport of raw material at different inclinations for high production requirements and for a long working life.

3. CLAY CRUSHERS

These machines are used to break and shred into small pieces lumps of hard clay arriving from the pit either in pure state or containing heterogeneous materials (small stones and similar) in order to facilitate the later clay processing.

4. PAN MILLS

These machines are important during clay preparation because whenever clay with differing proprieties are mixed together these mills guarantee efficient homogenization by adequate grinding, watering and mixing.

5. ROLLER MILLS

These machines perform an efficient comminuting of agglomerated clays, even in the case of extreme hardness, while at the same time removing a limited quantity of rocks present in the clay.

6. GRINDING MACHINES

These machines permit to automatically grind the roller shells in position on the spot, without dismantling them.

7. DOUBLE SHAFT MIXERS

These machines are used for an efficient mixing and wetting of the clay. Some Mixers will also include a filter to process raw materials containing impurities

8. DE-AIRING EXTRUDERS

These de-airing auger machines combine sturdiness, easy access to all parts, easy disassembling of the augers, high degree de-airing mixers.

9. DIE PLATES

An extensive Range of Die Plates meeting individual customer specifications are available. Our plates are built in order to permit regulating of external brakes and fast dismantling.

10. AUTOMATIC BRICK CUTTERS

These machines are used to cut the extruded clay column into bricks of precise sizes through adjustable column cutters and multi-wire cutters. These machine are designed for easy operation and capable to work continuously for long hours with minimum maintenance.



ADVANTAGES OF BRICK IN CONSTRUCTION

Brick retains heat, with-stands corrosion, and resists fire. Because each unit is small and aesthetically pleasing, brick is an ideal material for structures in confined spaces, as well as for curved designs. Moreover, with minimal upkeep, brick buildings generally last a long time. Brick has been used as a building material for at least 5,000 years. Although bricks can cost more than some other commonly used materials, there are numerous advantages:

1. SUSTAINABILITY:

Bricks are 100% recyclable

2. GOOD THERMAL INSULATION:

Studies indicate that brick homes have lower Energy Consumption (lower heating and cooling costs) thanks to the insulating qualities of bricks.

3. EXCELLENT ACOUSTIC INSULATION:

Brick walls have an excellent sound proofing quality.

4. UNPARALLELED BEAUTY:

When traveling through residential areas nothing can compare to the aesthetic beauty of a home that is made of brick or has at least an all brick front.

5. FIRE RESISTANCE:

Masonry is very heat resistant and thus provides an excellent fire protection. Maximum Fire Ratings permit Lower Insurance Costs to the homeowner.

6. LONG RESISTING WITH ZERO MAINTENANCE COSTS:

There is virtually no cost to maintain the exterior of an all brick home. The colour and texture of clay bricks is permanent and not even the most severe weather conditions will change them.

7. FLEXIBLE IN APPLICATION:

Bricks come in every Shape, Size, Color, Texture.

8. GREATER RESALE VALUE:

Brick's beauty and practicality adds value to homes (on average about 6%)

THE HISTORY OF BRICKMAKING

The first brick was probably made in the Middle East, between the Tigris and Euphrates rivers in what is now Iraq. Lacking the stone their contemporaries in other regions used for permanent structures, early builders here relied on the abundant natural materials to make their sun-baked bricks. These, however, were of limited use because they lacked durability and could not be used outdoors; exposure to the elements caused them to disintegrate. The Babylonians, who later dominated Mesopotamia, were the first to fire bricks, from which many of their tower-temples were constructed.

From the Middle East the art of brickmaking spread west to what is now Egypt and east to Persia and India. Although the Greeks, having a plentiful supply of stone, did not use much brick, evidence of brick kilns and structures remains throughout the Roman Empire. However, with the decline and fall of Rome, brickmaking in Europe soon diminished. It did not resume until the 1200s, when the Dutch made bricks apparently exported to England. In the Americas, people began to use brick during the sixteenth century. It was the Dutch, however, who were considered expert craftsmen.

Prior to the mid-1800s, people made bricks in small batches, relying on relatively inefficient firing methods. One of the most widely used was an open clamp, in which bricks were placed on a fire beneath a layer of dirt and used bricks. As the fire died down over the course of several weeks, the bricks fired. Such methods gradually became obsolete after 1865, when the Hoffmann kiln was invented in Germany. Better suited to the manufacture of large numbers of bricks, this kiln contained a series of compartments through which stacked bricks were transferred for pre-heating, burning, and cooling.

Brickmaking improvements have continued into the twentieth century. Improvements include rendering brick shape absolutely uniform, lessening weight, and speeding up the firing process. For example, modern bricks are seldom solid. Some are pressed into shape, which leaves a frog, or depression, on their top surface. Others are extruded with holes that will later expedite the firing process by exposing a larger amount of surface area to heat. Both techniques lessen weight without reducing strength.

www.latermeccanica.it



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