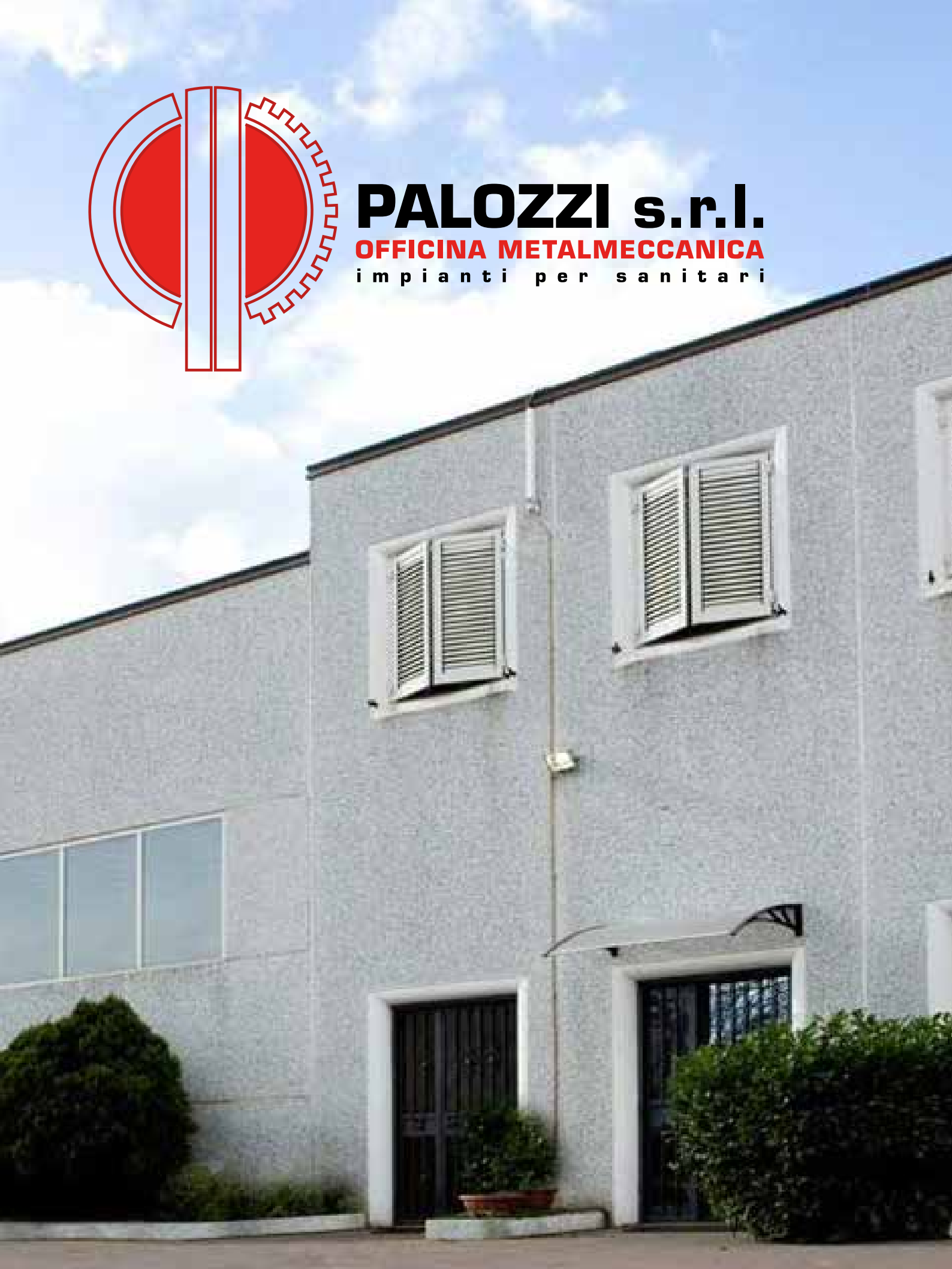
PALOZZI s.r.l.

OFFICINA METALMECCANICA

impianti per sanitari



Metalmeccanica Palozzi

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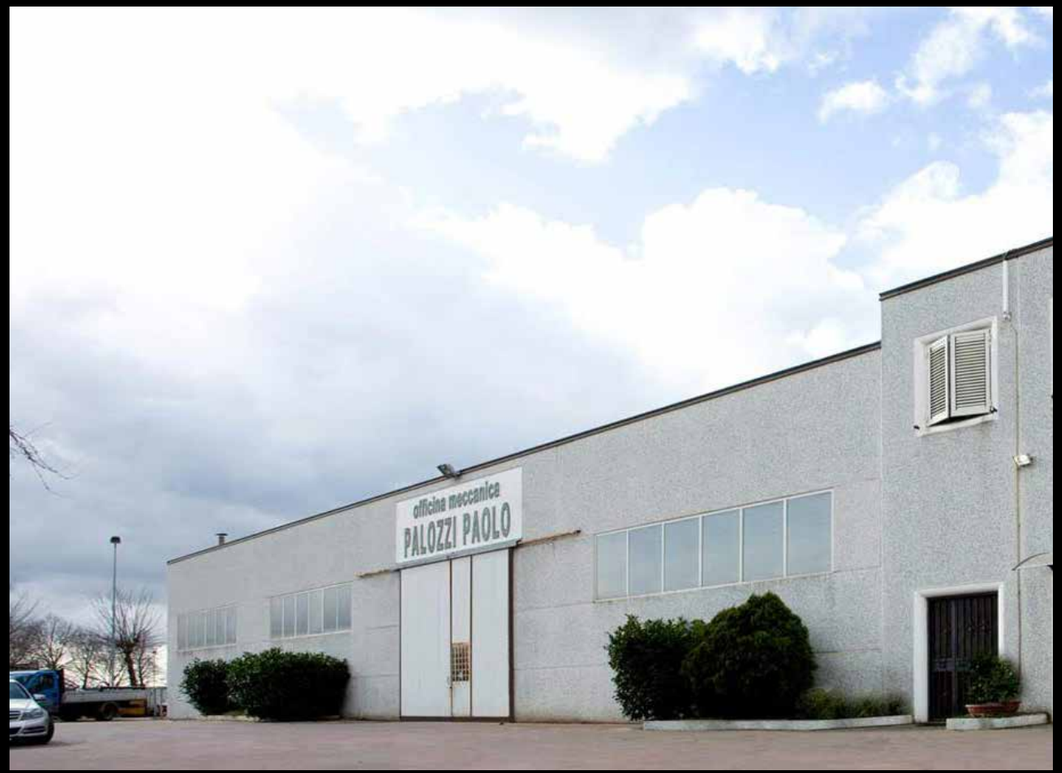


METALMECCANICA PALOZZI S.R.L. was established in 1979 covering an area of 4.500 mq, of which 1700 mq are occupied by our plant.
Our company has specialised in building artifacts of metal joinery, as well as Inox processing.
We make machinery and equipment for ceramic industry, pipes into metal sheeting and metal joinery functional for the installation of air-conditioning systems.
In this years, our company has increased its productivity offering a large selection of advanced machinery, in order to meet the requirements of this market.
Furthermore, our company is active in the industrial plant building market for sanitary-ware producers, both in Italy and abroad.
Metalmeccanica Palozzi, today, is a great entity in this field relying a large number of skilled workers.

MATELMECCANICA PALOZZI S.R.L. differs from all other companies for two reasons:
The whole team, thanks to its know-how and specialized skills, produces innovative and smart technologies by meeting the requirements of the clients;
Its competitiveness is given by the best value for money.

The entire production cycle takes place into the establishment of METALMECCANICA PALOZZI.
The assembly phase is implemented by skilled workers in the external worksites. The establishment is organized by two activity divisions:
Pipes and equipment production (first division);
Metal joinery production (second division).
The principal products of the holding are realized in the first activity division:
Tubes and pipes (diam. From 80 to 1.400 mm) Air-conditioning systems.
In the second division machinery and equipment for sanitary-ware producers are realized upon request and by own design.

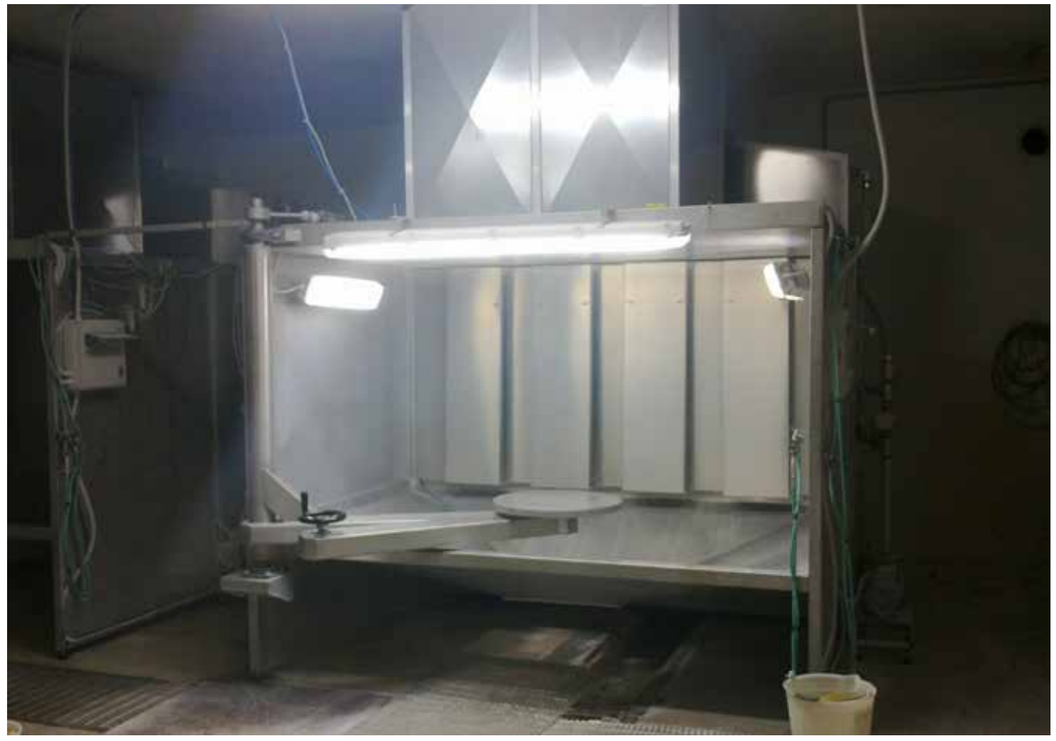
The decision-making group of METALMECCANICA PALOZZI S.R.L. has taken the decision to comply with the international regulation UNI EN ISO 9001:2008, in order to implement a quality policy capable of guaranteeing an effective organisational capacity of the team building and an high quality of the production.
METALMECCANICA PALOZZI, through this specific quality policy, aims to establish the following key principles:
Quality means organisational efficiency, the best achievements and empowerment for all team workers;

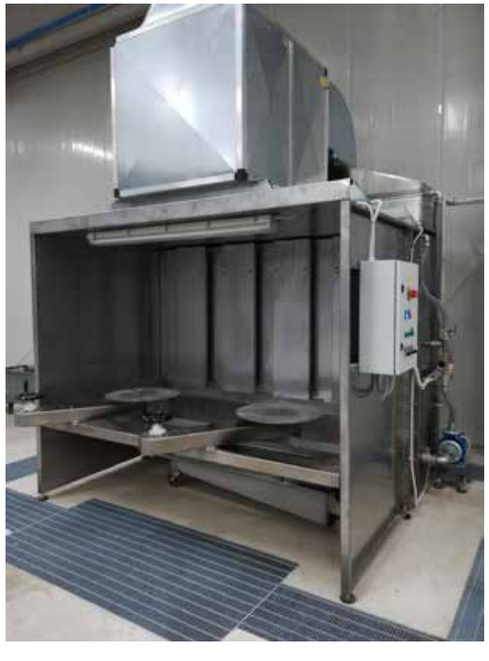
Continuous analysis of client requirements;
Facilitating access of services through management and diffusion of informations;
Reliability and responsibility of team workers;
Empowerment on quality policy;
Training and awareness of human resources to policy of quality production;
Monitoring and evaluation of services and activities through appropriate search tools;
Development and regular review of quality policy targets in order to improve own response to the market;
Enhancing the policy of quality production

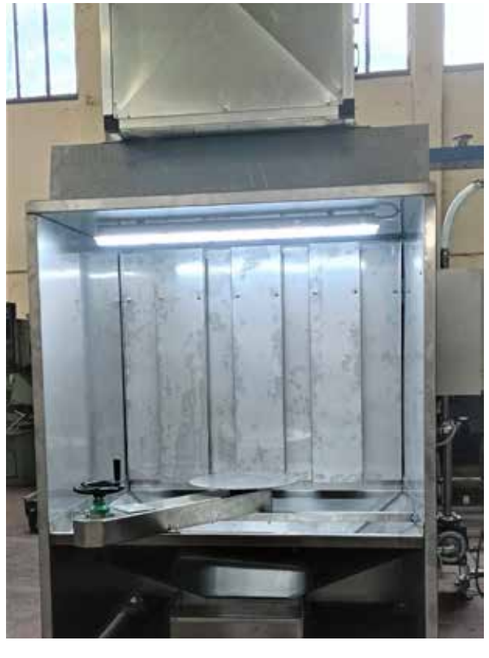
GLAZING SPRAY BOOTH

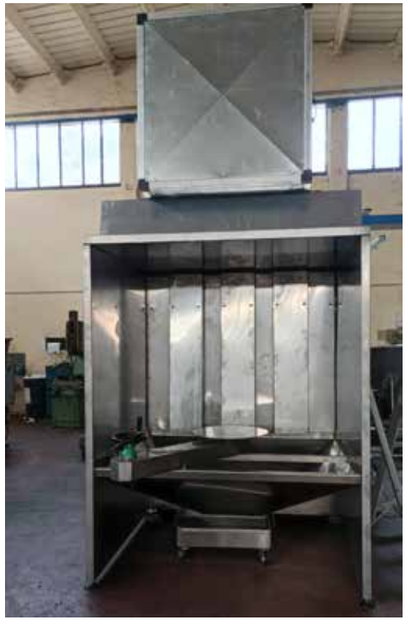
The glazing spray booth is used to glaze ceramic sanitary ware

The glazing booth can be, at the customer's request, with a single station or with a double station and is made entirely of stainless steel.
The work area is located on the front and it is equipped with a lathe that is moved manually by the operator using a a hand wheel .
During the glazing phase, the air, loaded with ceramic paint residues, is sucked in from the rear and passes through a system of waterfalls and veils of water; subsequently it flows through a series of drop eliminators in a plastic labyrinth and is sucked in by the fan to be then pushed out through the outflow chimney. The fan capable of guaranteeing the necessary flow rate and head characteristics is of the centrifugal type mounted on anti-vibration joints.
Soundproof fans are installed, in full compliance with the regulations on noise pollution.
The cleaning of the filters can be programmed automatically and carried out after the employees' working hours, optimizing time and productivity.









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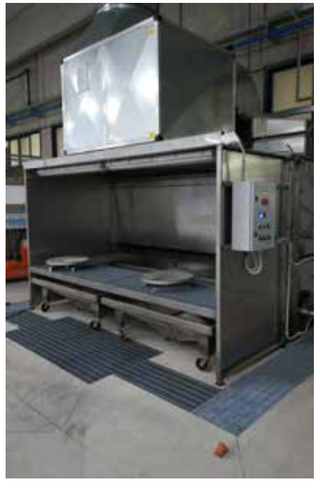
The finishing and testing booth is used for Ceramic Sanitary Ware Inspection

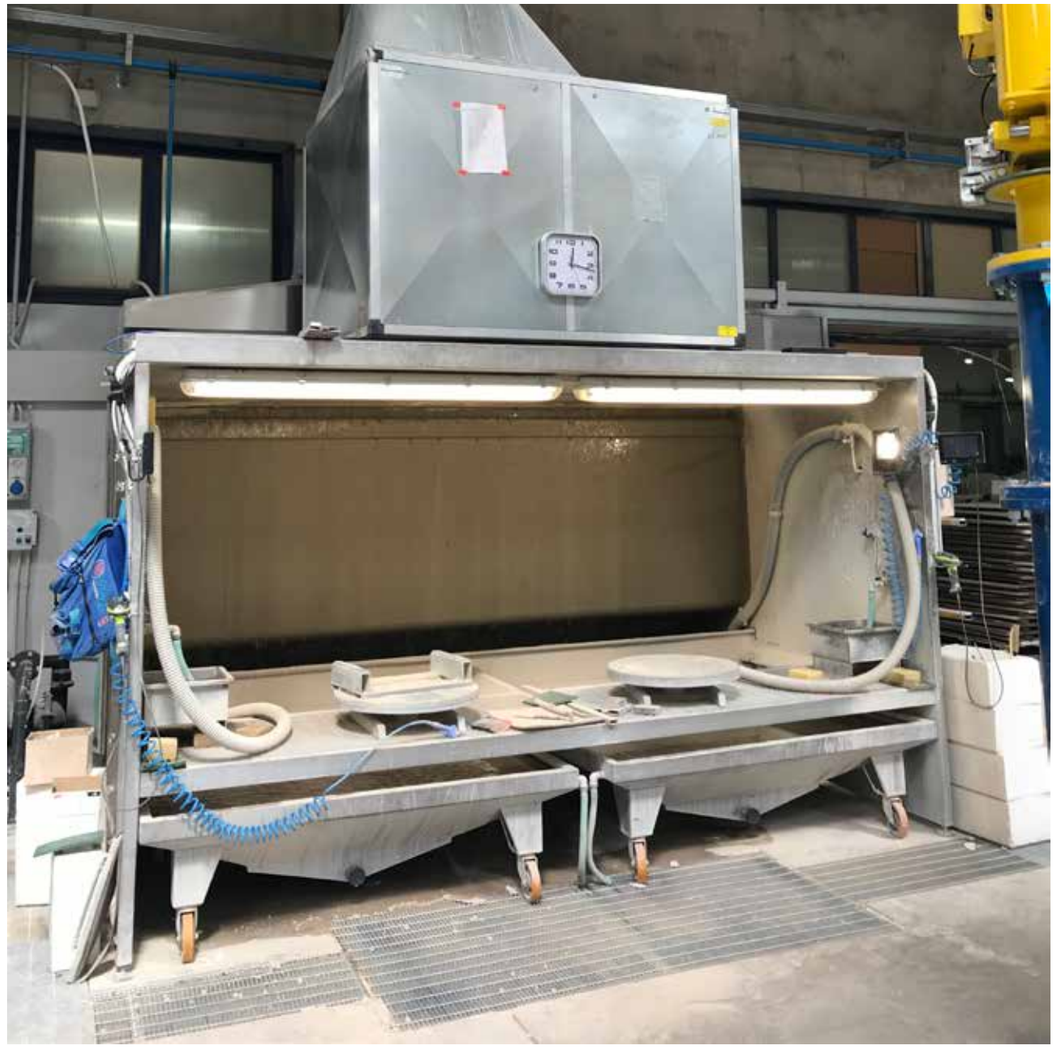
The finishing and testing cabin is made of stainless steel sheet at bent in order to give the machinery the necessary geometric characteristics and strength. The whole is robustly connected by means of welds with filler materials suitable for the materials to be connected. There are filter units with water curtain cascade, the inner part consists of labyrinth sheets and there is a barrel with a sprayer for dust abatement. Inside the hood there are stainless steel filters and automatic washing .

The extraction surface, that is the working area of the cabin is placed on the front and is equipped with a working lathe manually moved by the operator by means of a crank.

During the finishing phase, the air is filled with residual ceramic dust and is sucked in from the rear through a system of waterfalls and water veils, then flows through a series of plastic labyrinth droplet separators and is sucked by the fan to be then pushed outside through the exhaust chimney.



Inspection booth



There are two removable lathes , two trays for dust collection and grid on the ground.

The machine is complete with electrical panel.

At the request of the customer it can be realized at one or two stations

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THE MACHINERY IS MADE ENTIRELY OF STAINLESS STEEL and allows to dispose well, quickly and without waste the most inaccessible parts of the toilets such as the internal parts of the Brida and the siphon.

THE MAIN CHARACTERISTICS OF THE AUTOMATIC SIPHON GLAZING MACHINE ARE:

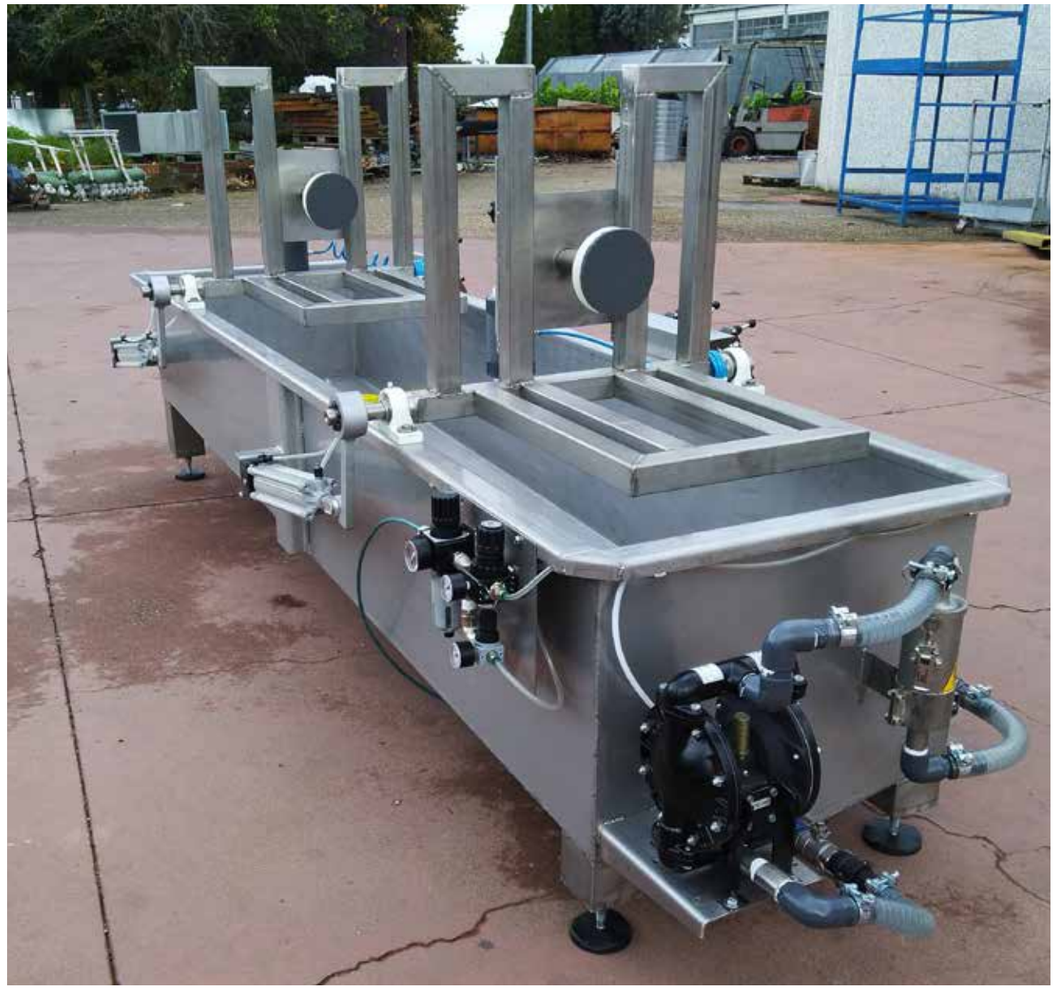
1) The complete Internal glazing of the siphons
2) Complete glazing of the under rim surface
3) Filling and emptying of enamel
4) Unit suitable to all wc models
5) control panel for 2 pneumatic units
6) Best quality materials used

Glazing cycle

- The piece is placed manually on the grazing area
- The water inlet and the drain holes of the pots are closed.
- The tank of the vase is filled with enamel.
- the glaze filling ends when the glaze has reached the level pre fixed by the operator, i.e. the under rim area.
- The piece is titled rorth and backwards to let the glaze to reach all the inner area of the si phon and for its following draining
- At the end of the enamel release, the piece is discharged manually.

The complete glazing cycle depends on the size of the workpiece and, in any case, is on average about 2 minutes.

Automatic siphon glazing machine



AUTOMATIC SYSTEM

The automatic siphon glazing unit complete all the enameling cycle automatically .
The only manual part is the positioning of the ceramic piece by the operator and then, at the end of the enamelling process , the piece is discharged manually.

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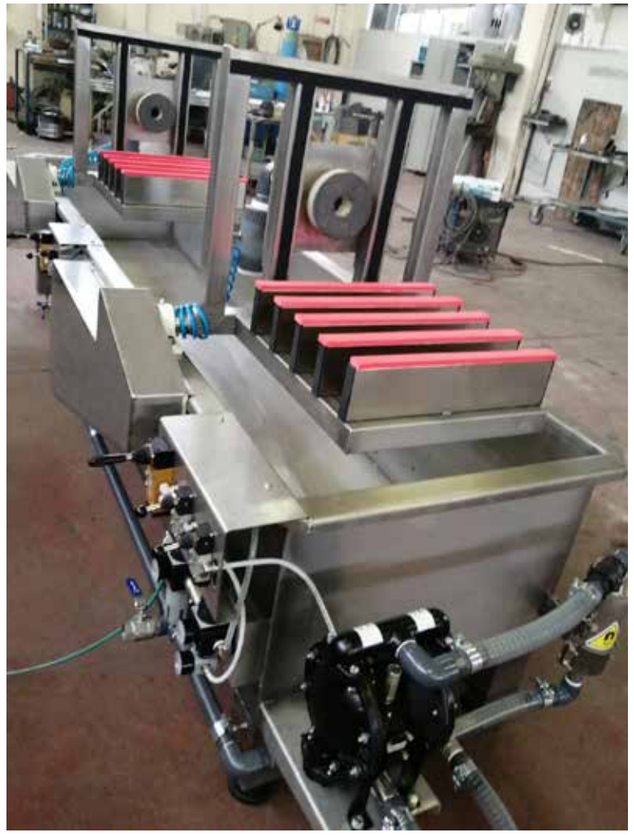
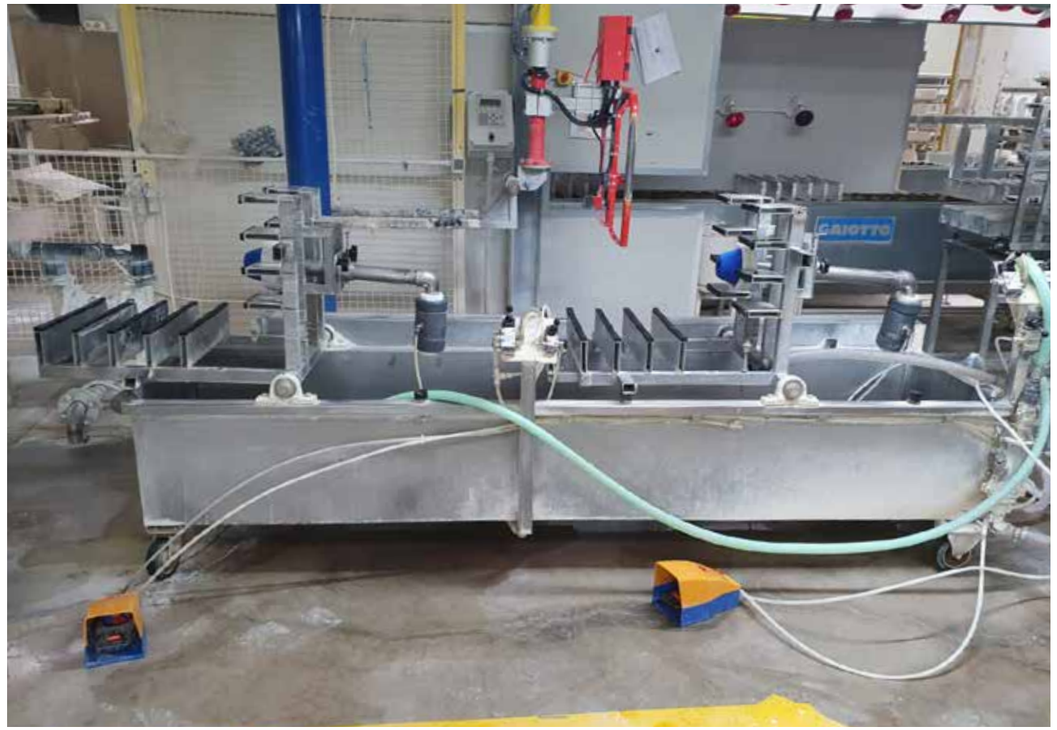
Glazing cycle

- The piece is placed manually on the grazing area
- The water inlet and the drain holes of the pots are closed.
- The tank of the vase is filled with enamel.
- the glaze filling ends when the glaze has reached the level pre fixed by the operator, i.e. the under rim area.
- The piece is titled rorth and backwards to let the glaze to reach all the inner area of the si phon and for its following draining
- At the end of the enamel release, the piece is discharged manually.

The complete glazing cycle depends on the size of the workpiece and, in any case, is on average about 2 minutes.



Semi-atomatic siphon glazing machine



THE MACHINERY IS MADE ENTIRELY OF STAINLESS STEEL and allows to dispose well, quickly and without waste the most inaccessible parts of the toilets such as the internal parts of the Brida and the siphon.

THE MAIN CHARACTERISTICS OF SEMI- AUTOMATIC SIPHON GLAZING MACHINE ARE:

1) The complete Internal glazing of the siphons
2) Complete glazing of the under rim surface
3) Filling and emptying of enamel
4) Unit suitable to all wc models
5) control panel for 2 pneumatic units
6) Best quality materials used

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Weightlifters

Mechanized handling of loads reduces the incidence of accidents at work, facilitates the integration of women in sanitaryware factories.

This machine Helps to manage High loads in low pressure sanitaryware casting.
The system can be adopted to all low pressure casting machines from any manufacturer.

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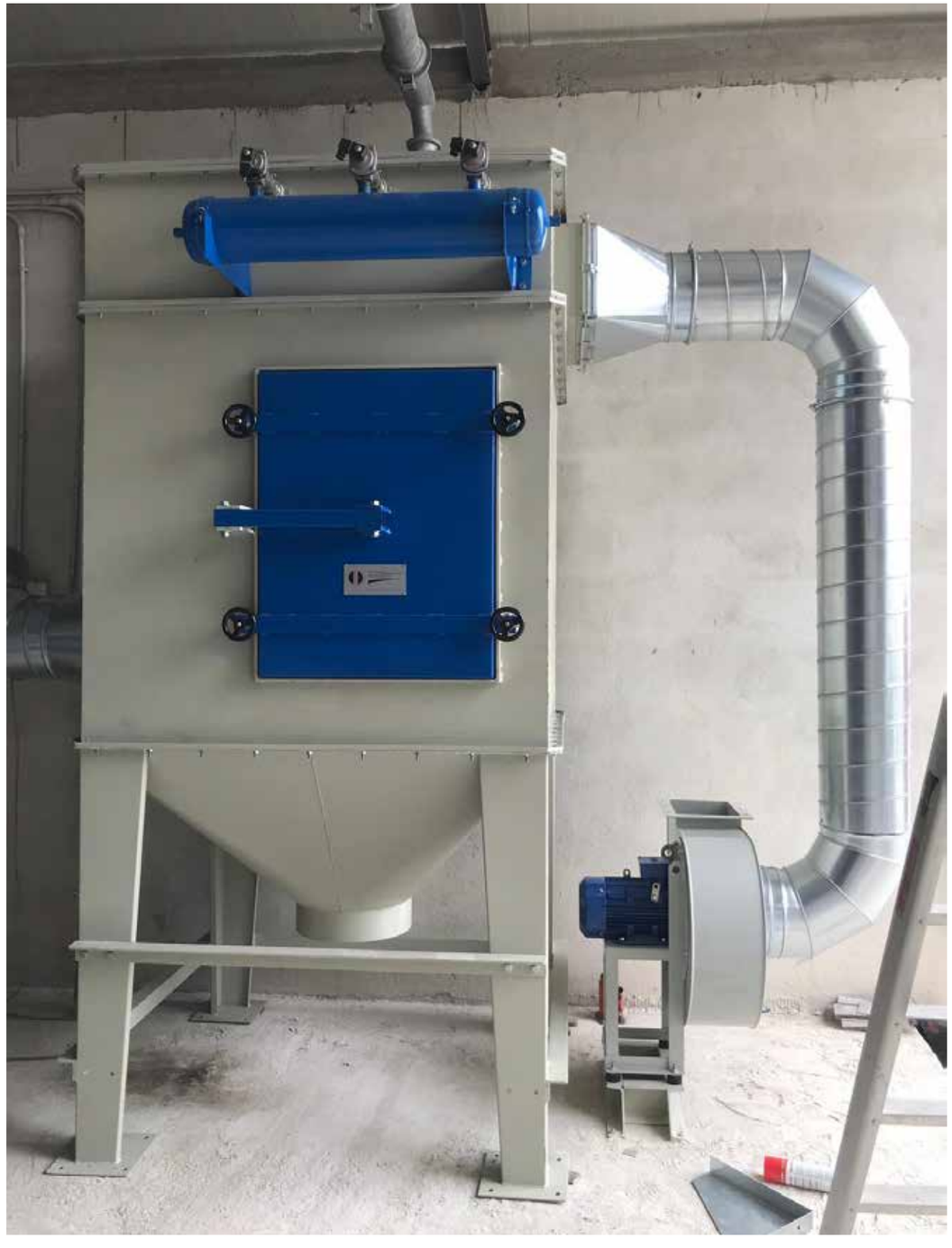
Dust extractor

Blast chiller for dust extraction
THE DUST EXTRACTOR IS MADE UP OF STAINLESS STEEL.

The machine is complete with a COMPRESSED AIR TANK with solenoid valves for filter cleaning.
There is a dust extraction fan, a fan chimney and a fan base.
The filter consists of a metal box separated into two sections, one of the access of the dusty air, the other of the exhaust of clean air.
Both the inlet of the air to be purified, and the outlet of the purified air are placed at the top.
The filter inlet chimney has a section of 500 mm x 300 mm.
Between the inlet and outlet sections there are specific cartridges for the abatement of the part containing quartz.
Their cleaning is guaranteed by a compressed air blowing system by means of an electric sequencer mounted on the panel.
The purifier air enters the filter, coming from inside the plant, through two vents placed in position exactly mirror each other.

Once inside the filtering box the air, after a first abrupt change of direction , in which there is the detachment of the fluid current of the coarser fraction , passes through the pleats of the cartridges on which it deposits the remaining portion of particulate matter , once released of its polluting load , the air flows through a fan and from this by means of suitable flushing chimneys at 1 m above the roof and flows into the atmosphere.
As it has been conceived, the system has a wide autonomy, it is self-cleaning and necessary only to wash the filters with water every year and replace them with a predictable average frequency of three years.

It should be noted that the system must be equipped with a permit for the discharge of fumes into the atmosphere and that this authorization is prior to the installation of the system.
all’installazione dell’impianto.



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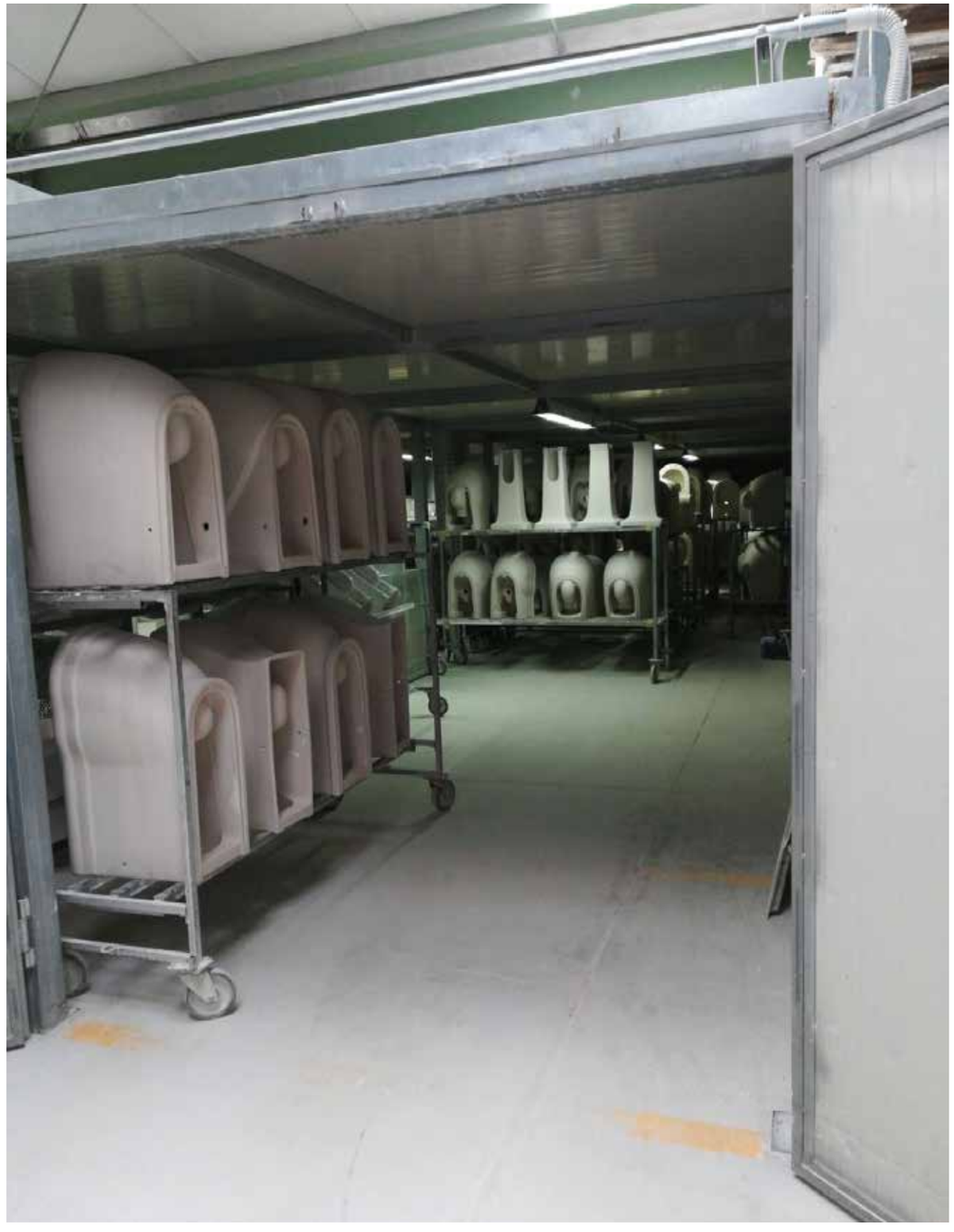
The sanitary ware dryer is designed for drying plaster molds of all types and sizes The dryer consists of:

- A metal support structure made with metal profiles of various shapes with removable coupling (main joints for bolting);
- An external thermal insulating paneling made with smooth 40 mm panels for the walls and with 40 mm corrugated thermal insulating roof panels for the roof;
- A system of external ducts for the introduction of air, for its recirculation and for its expulsion;
- A high induction internal air distribution system with 22 individually adjustable units;
- An indirect exchange heat exchanger equipped with a modulating burner and gas train.
- A ventilation system consisting of two double inlet fans and an incubated axial fan with belt transmission;
- A system of 10 pneumatically operated valves complete with actuators with position signaling;
- A group of control solenoid valves with monostable operation and mechanical actuator for manual override with light connector;
- Operation and control electrical panel

Dryer system



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The inlet and suction pipes are equipped with section and shape calibration dampers suitable for uniform air distribution.
The movement of the air is guaranteed by two ventilation groups, one dedicated to the circulation of the heated air and the recirculation of the internal air and another to the extraction of humidity.

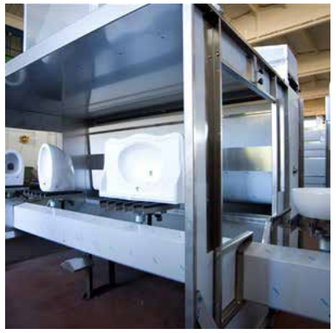
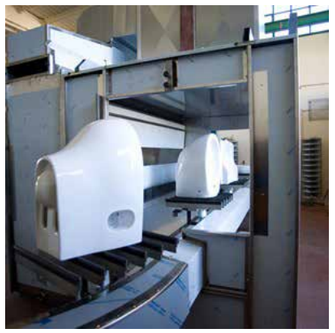
The supervision system receives information from a group of temperature and humidity probes, through dedicated adjustment and display tools.
It generates alternating heating cycles with expulsion of air and air recirculation of varying duration by piloting the cylinders that make up the system according to a freely programmable logic.

By programming a maximum humidity threshold during the heating / expulsion phase, the exhausted air, still hot, but no longer excessively humid, being clean air, can be reintroduced into the room for its heating or for uses that can be served by it. .
All service circuits work in low voltage (24 Vac).

The electrical panel allows separate operation of the various dryers and mounts a digital temperature and humidity recorder (one probe for each cell) and an industrial computer for easy operation control and simple setting of the various quantities involved (operating temperatures, humidity limits, cycle times and flow reversal times, external or internal extraction, room heating, etc.).

Dryer system

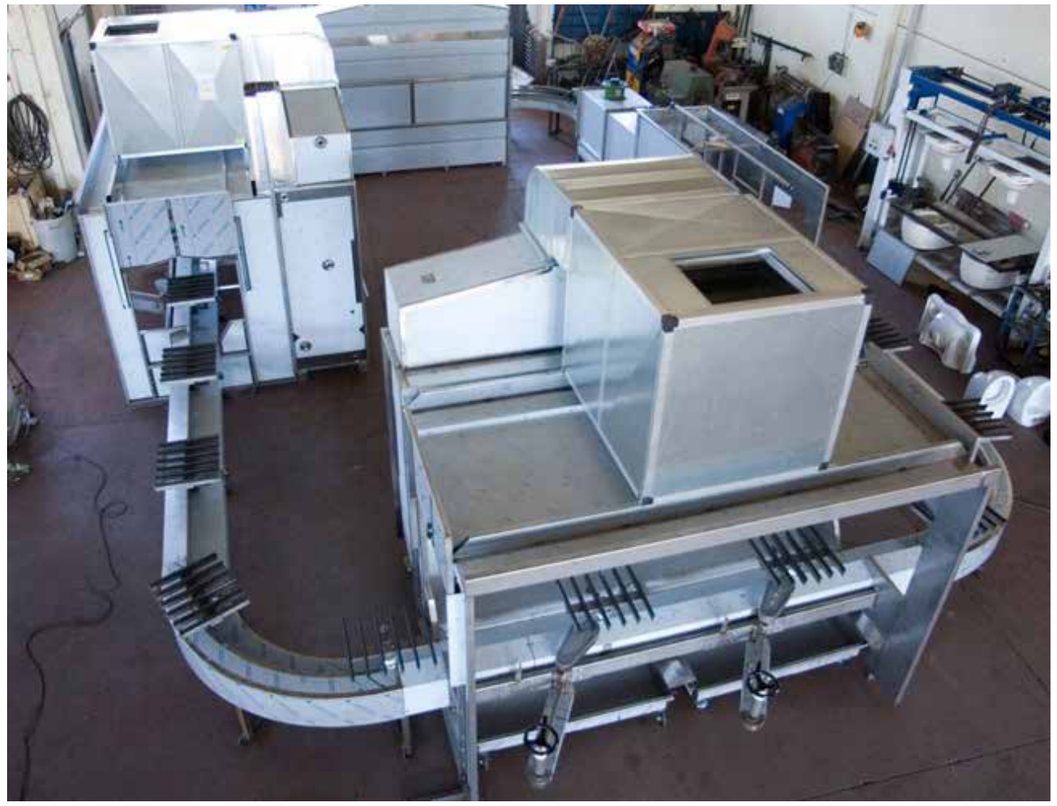
Obviously it also contains all the protections and the power and service commands necessary to implement what has been programmed and the relative non-functioning alarms.

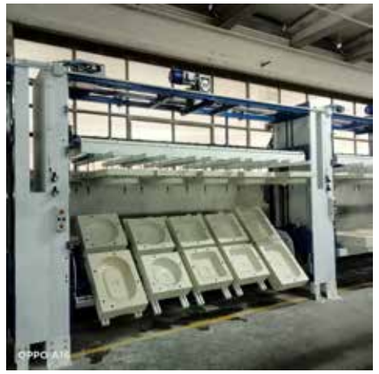
Carousel of control and enameling made by automatic line for various phases of galzin. The Inspection and glazing carousel is made of:

34 metres of track on which run the trolleys supporting the frames handling the pieces;
The tracks are hold by stands and both tracks and stands are galvanized;
48 trolleys which are linked together to have the overhead contact line;
24 trolleys which have the stands to support the frames holding the piece;
24 trolleys have free run to make the rotation of the overhead contact line free;
48 trolleys are galvanized and completed with bearings and of what is necessary for the complete functioning of the overhead contact line;
24 rack supports in stainless steel applied on 24 trolleys holding the pieces.
On each rack a mechanical rotation stop by gravity is placed to avoid their rotation during the overhead contact linerun.
The rack step is mm 1400.
The stop and go system for the rack rotation is installed inside the 3 glazing booths.
One caterpillar specifically dimensioned and made by the kinematic chain motor// joint fluo-dynamic gearbox.
One set of stainless steel plates crankcase to protect the structure made of the stands and tracks.
Two glazing booths (width mm 3000) with 2 rotation systems for the turnstile with manual belt.
One fettling booth (width mm 3000).
One washing booth with rack to clean 2 turnstile.
One blowing piece booth.

Glazing and testing carousel



The booths are completed by a powder sucking system with fans. The productivity is from 2 up to 300 pieces in 8 hours, depending on the piece dimension. The plant is completed with feeding pumps, water recycling and electrical plant.



Versatile casting machine

The machine consists of a metal structure that supports a mobile platform on which the lower half-mould is anchored, and an upper platform on which the upper half-mould is anchored and which has the function of keeping the mould closed.
The mould is kept closed between the two frames by means of pneumatic pistons, formed by a pneumatic gripping system, during the casting phase.
The center of rotation is fixed
The frames have the characteristic of being able to rotate in any position (flat, vertical or inclined depending on the operation to be performed).
They are also equipped with micrometric adjustments to accommodate molds of all sizes.
All sanitary ware composed of two or three parts (if the third part can be removed manually) such as: hanging pots and bidets (made with moulds in three parts), washbasins of all kinds, washbasins and other special pieces
The demolding of the pieces takes place through a special trolley on wheels supplied with the machine itself that is mechanically lifted
The machine is suitable for small productions and productions that require frequent mold changes.
The demolding of the pieces takes place above trolleys that can also have the function of piece storage.

Low pressure casting benches , for all kinds of sanitary ware
Each casting machine can accommodate up to 6 moulds , upon customer request.

Casting machine PESP02

It is a machine specially designed for the production of large parts.

The machine called PESP02, is in fact suitable for casting large ceramic products.
The module consists of a metal structure that supports a mobile platform on which the lower half-mould is anchored, and an upper platform on which the upper half-mould is anchored and which has the function of keeping the mould closed.
The mould is kept closed between the two frames by means of lever closures holes center.
The frames have the characteristic of being able to rotate in any position (flat, vertical or inclined depending on the operation to be performed).
They are also equipped with micrometric adjustments to accommodate molds of all sizes.
You can pour all sanitary ware composed of two or three parts (if the third part is removable manually) such as: hanging pots and bidets (made with molds in three parts), washbasins of all kinds, sinks, shower trays, cassettes, columns or other special pieces.
The demolding of the pieces takes place through a special trolley on wheels supplied with the machine itself at an additional cost.

The machine is suitable for small productions and productions that require frequent mold changes.

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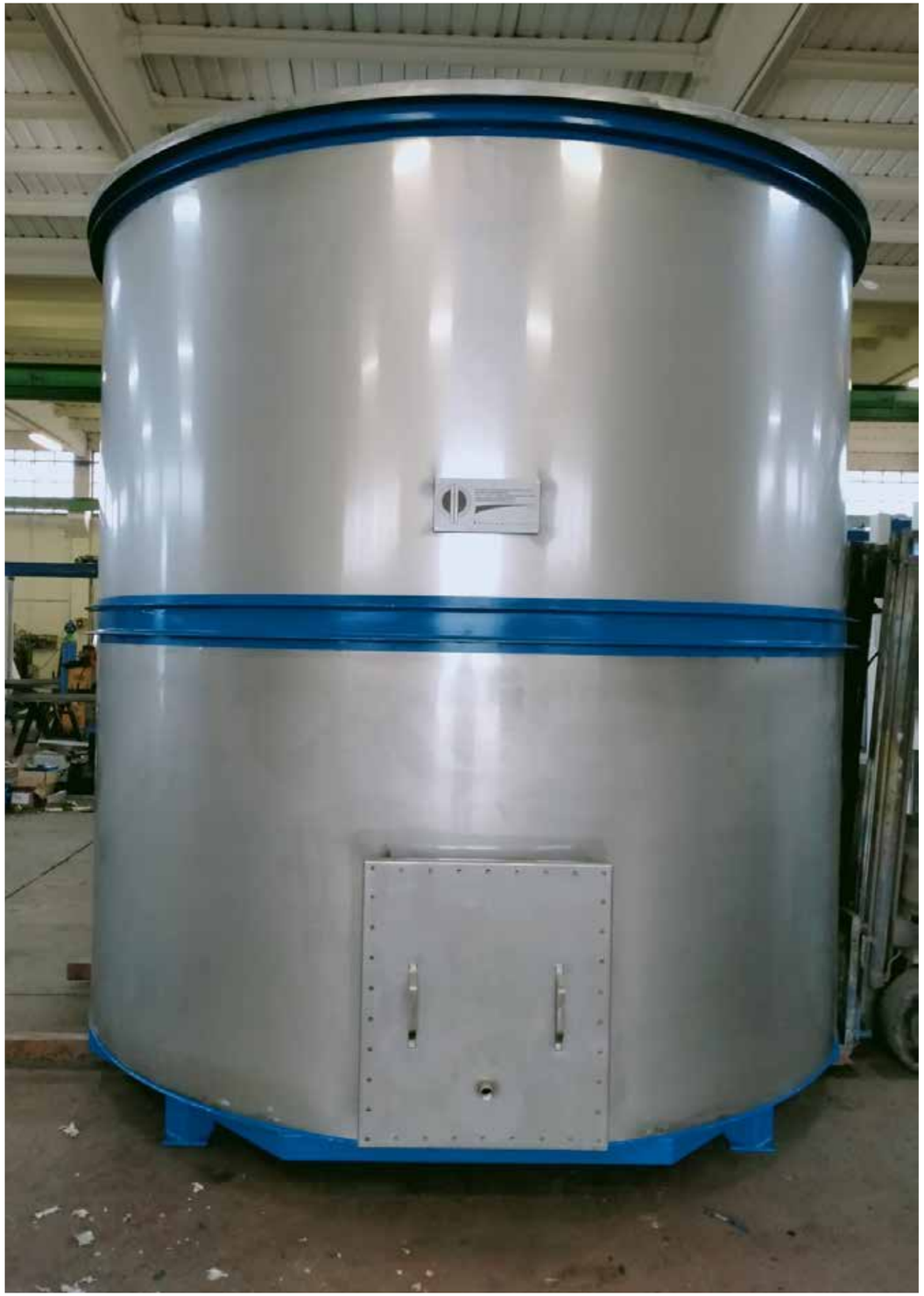
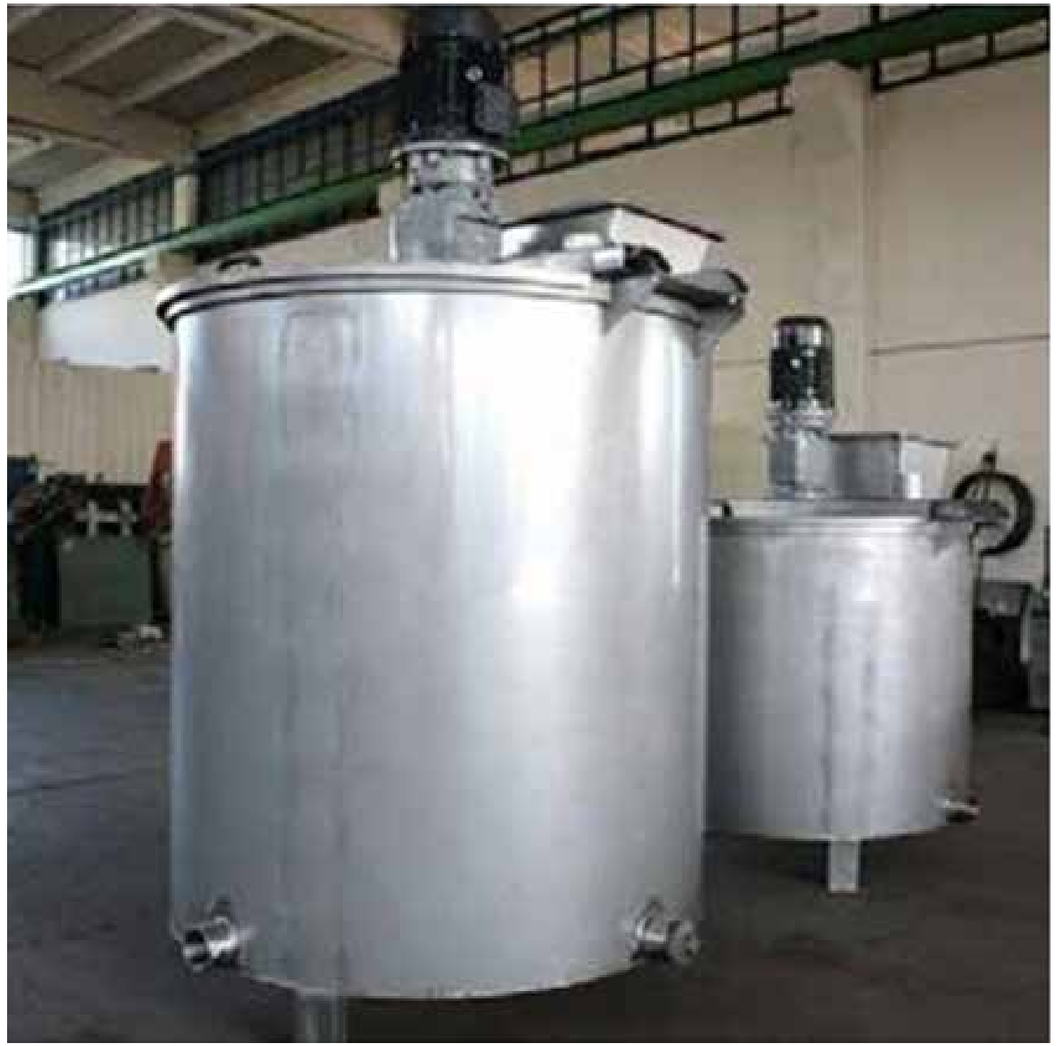
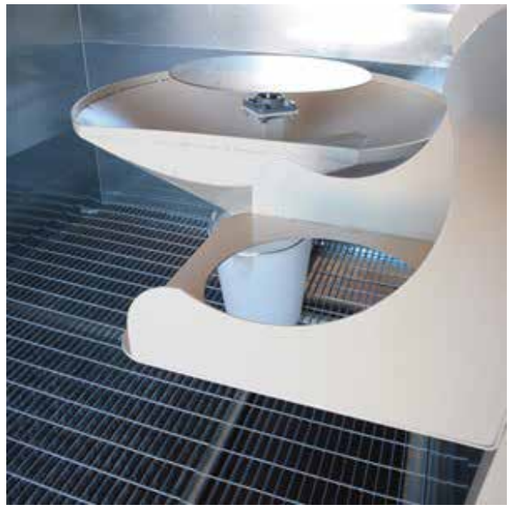
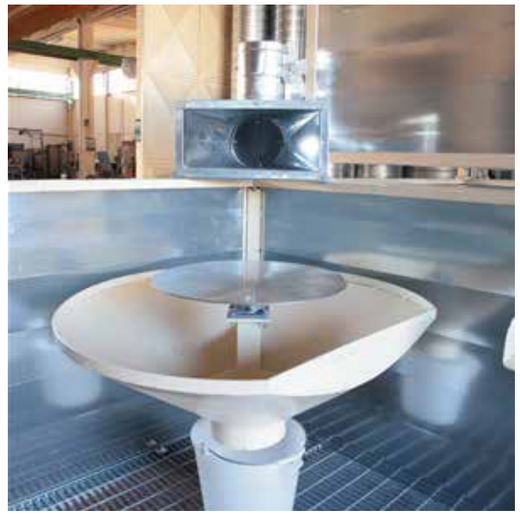


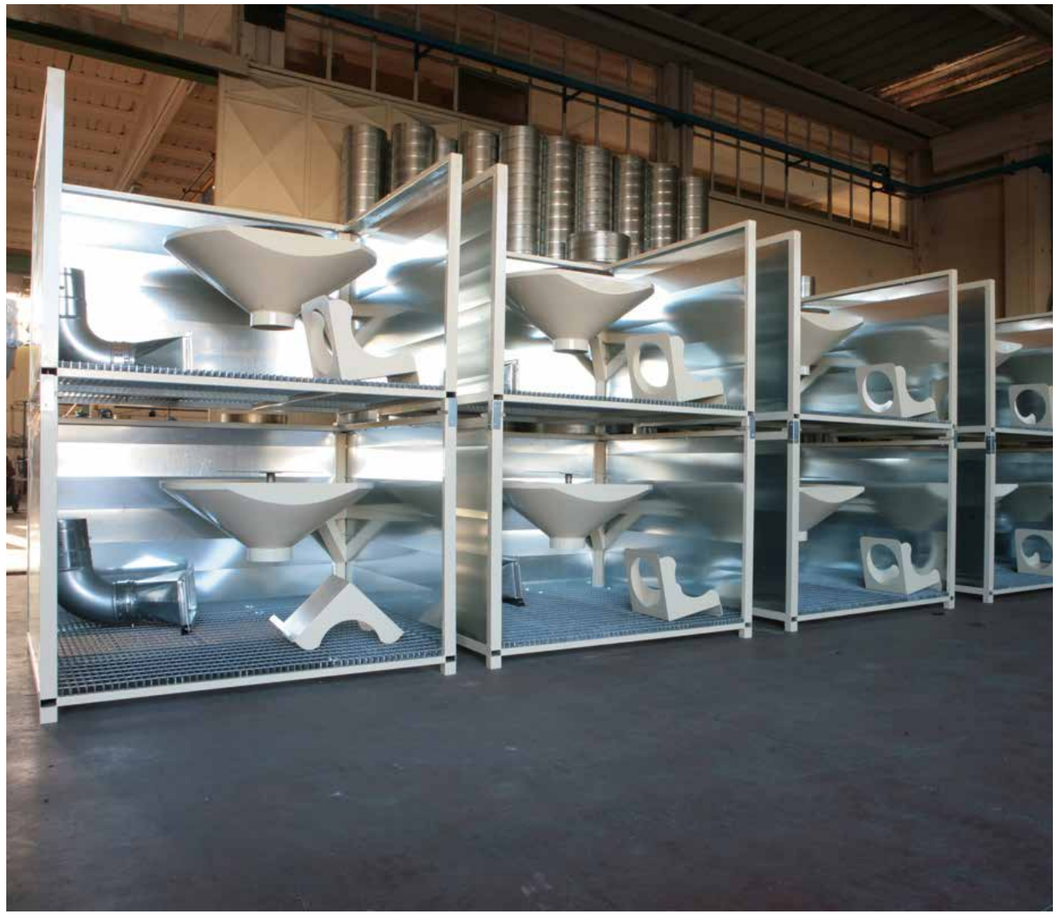
Stainless steel melter



Melters are used in the ceramic industry to dissolve clays in water to mix barbs or enamels with other components and to avoid sedimentation of heavier components in suspension.
They operate with a three-blade propeller fixed to the lower end of the crankshaft that holds the fluid in agitation; the motion is also helped by the inclination of the bottom of the tank. The tanks are made of stainless steel AISI 304 of our supply. The propeller shafts are supplied according to the use in stainless steel and so the propellers. The melters are high speed 350 revolutions per minute
Hopper for dust extraction and material loading.







Finishing booth

Cabin for manual sanitary finishing raw, equipped with hood and blast chiller for fine dust.

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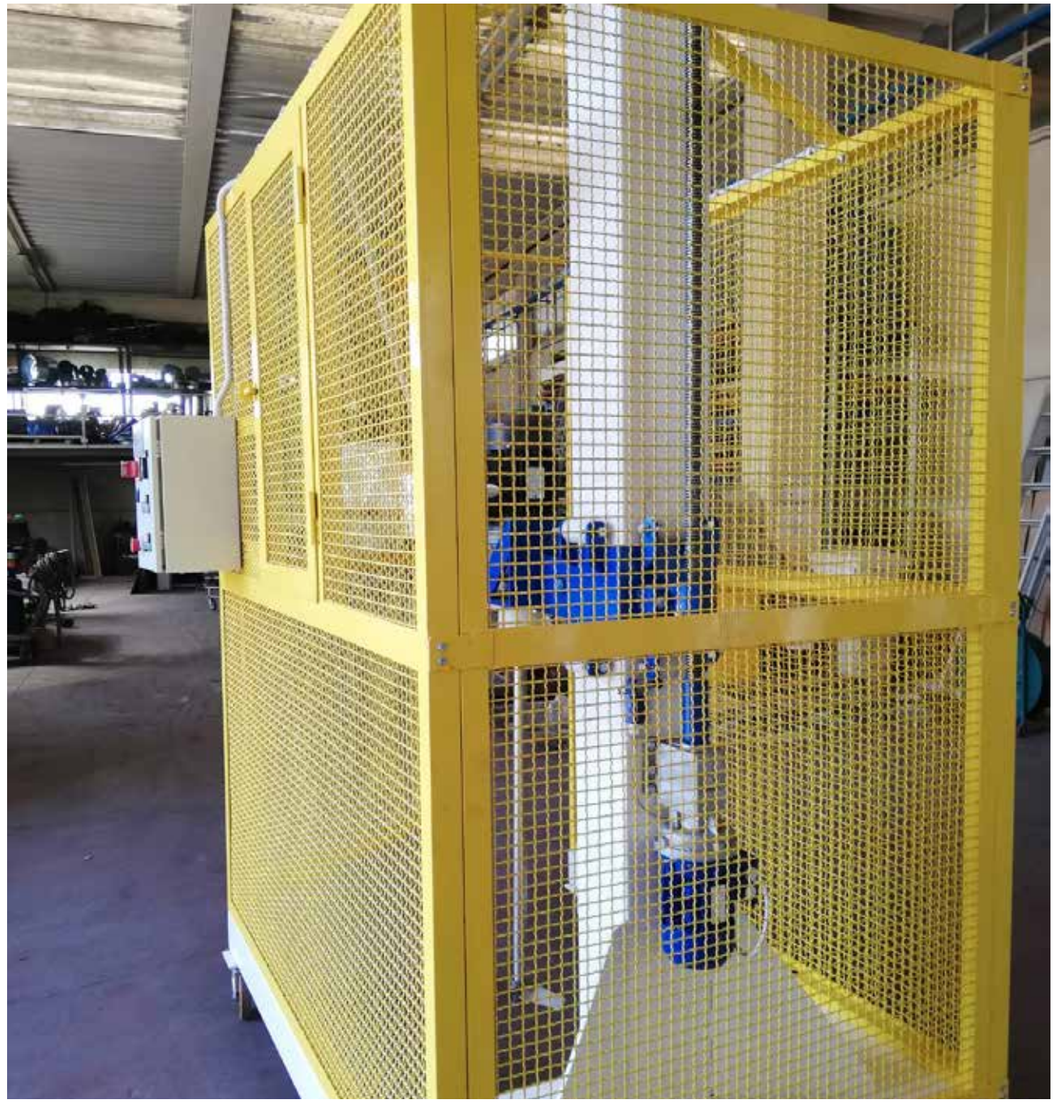
Wheeled stirrer



The wheeled stirrer is used for dissolving ceramic raw materials for the preparation of mixtures, glue solutions and mixing glazes
The agitator is mounted on a column on which it slides through a worm screw and is equipped with protective sides.
The structure is built-in tubular with mesh panels and openable door with safety system.

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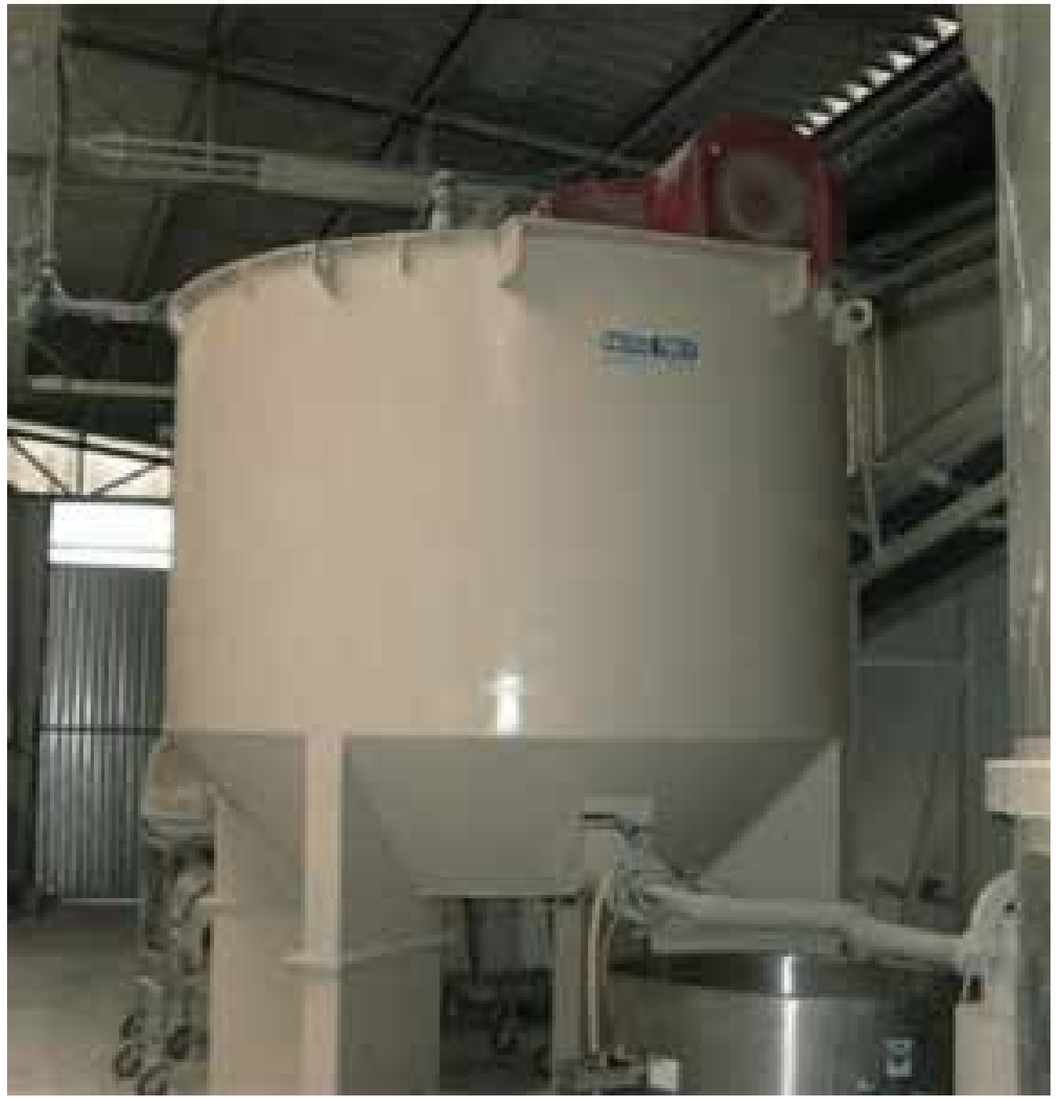
Blinger for slip preparation

These machines consist of a cylindrical tank in thick steel sheet capable of dissolving mixtures with a tendency to sediment.
Turbo dissolvers Containers, with the capacities and dimensions desired by the customer, can be made compatibly with the necessary functional checks.

All motorizations are made with transmission organs of primary brands and with systems that allow simple disassembly and easy maintenance.
The photo shows a turbodissolver with raised feet to facilitate unloading.
All containers can be mounted on load cell weighing systems with weight displays or predeterminers



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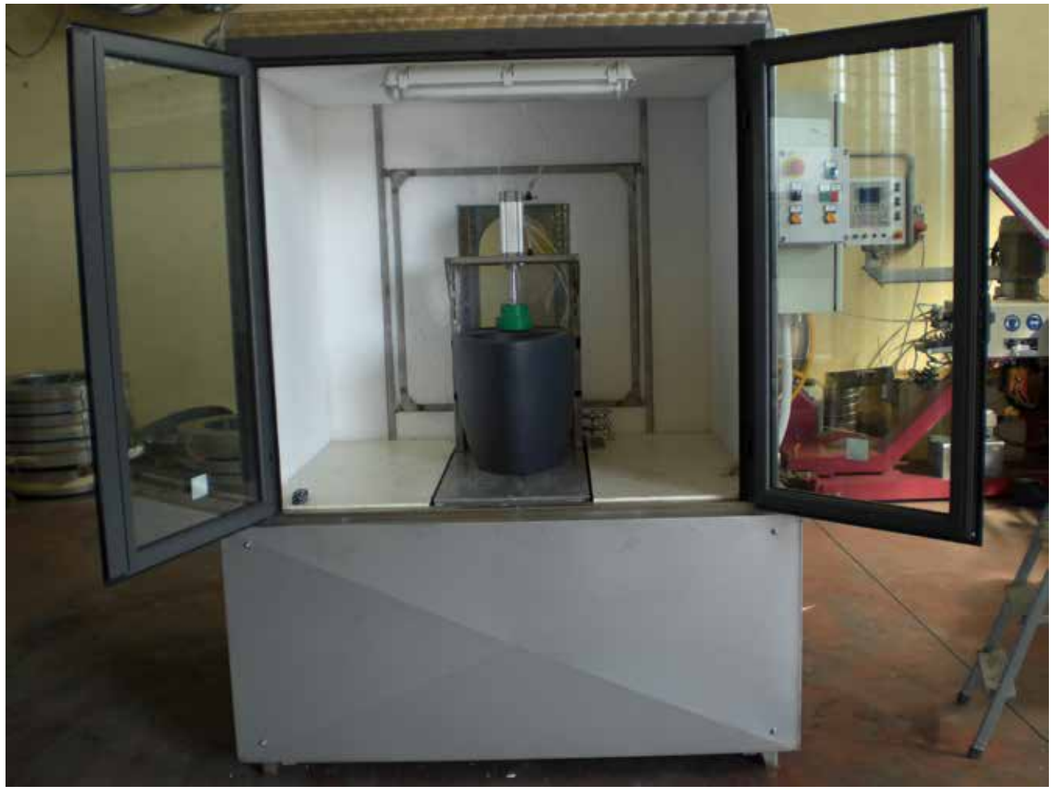
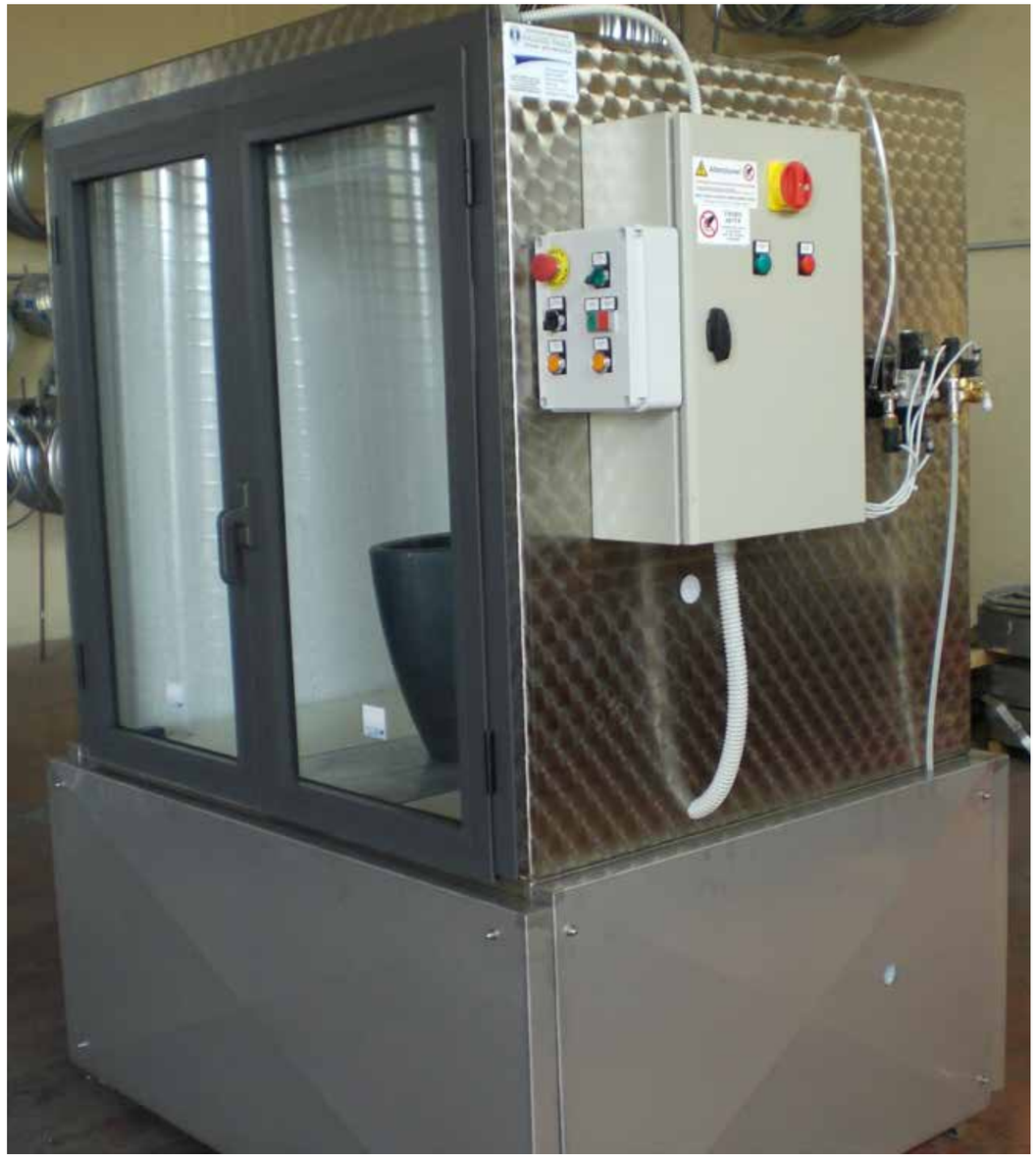


This machine removes from the sanitary ware the anti-deformation bars.

The sanitary ware is put on a motorized slide moving along circular, grounded and rectified guides.
Inside the machine there is a workpiece holder equipped with a pneumatic block system with adjustable force.
The machine is made of a set of steel sheets and aphonic panels connected by bolts or welding.
Inside the machine there is a workpiece holder equipped with a pneumatic block system with adjustable force.

The whole is placed inside an aphonic booth , to minimize noise and vibration and to prevent the operator from approaching the moving parts.
All sheets are aisi 304 15/10 thick, a material which is fully resistant to the mechanical and chemical stresses to which it is subjected.

Machine for cutting joists



The circulation of the working and washing water is ensured by the direct supply of the mains with a pre-filter to stop the coarse part of the impurities.
On the side is a control panel allowing the control of the various working phases

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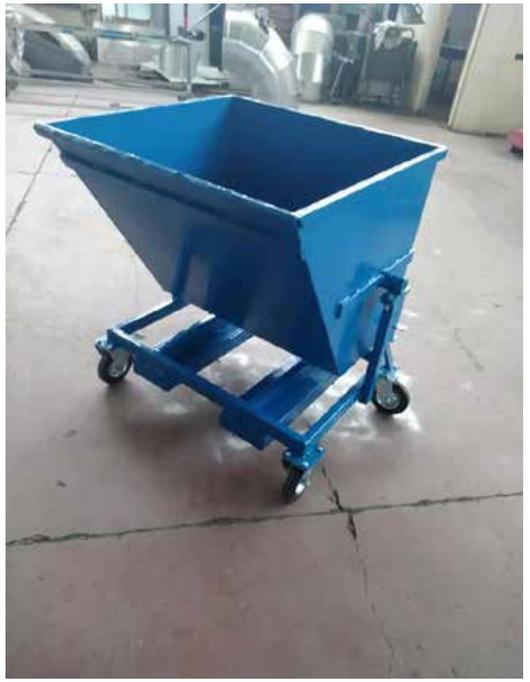
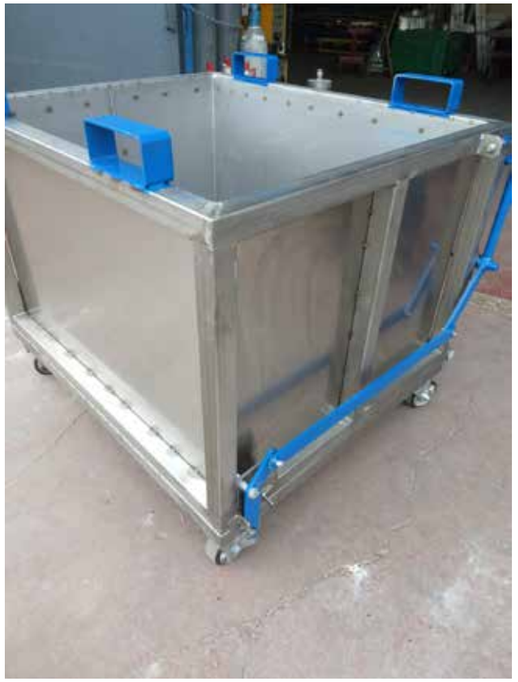
Container for ceramic waste

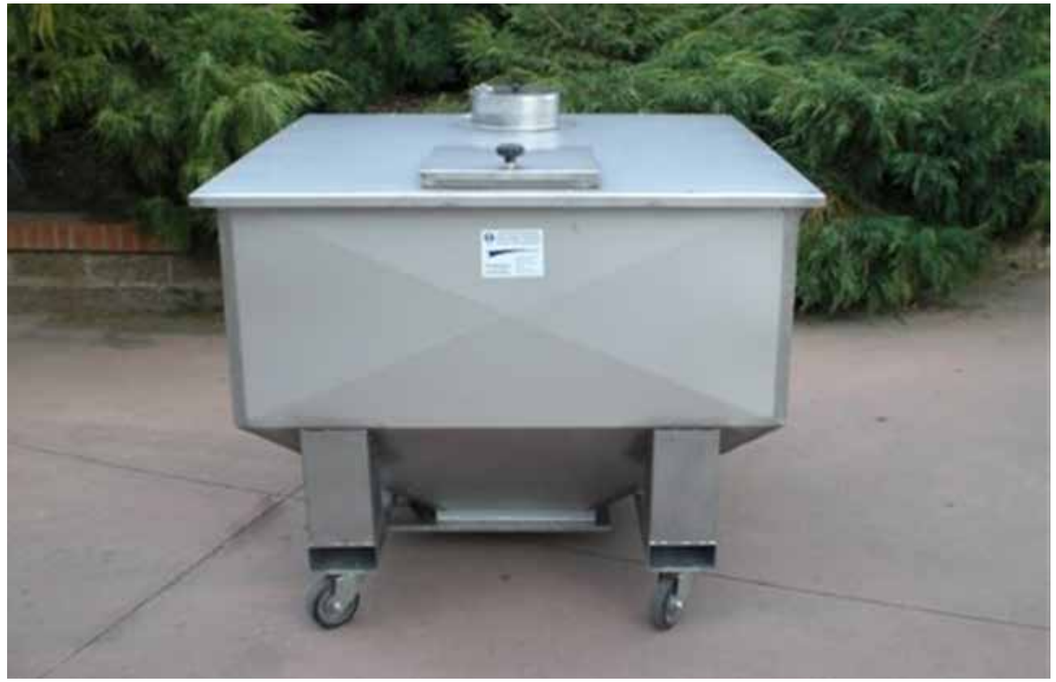




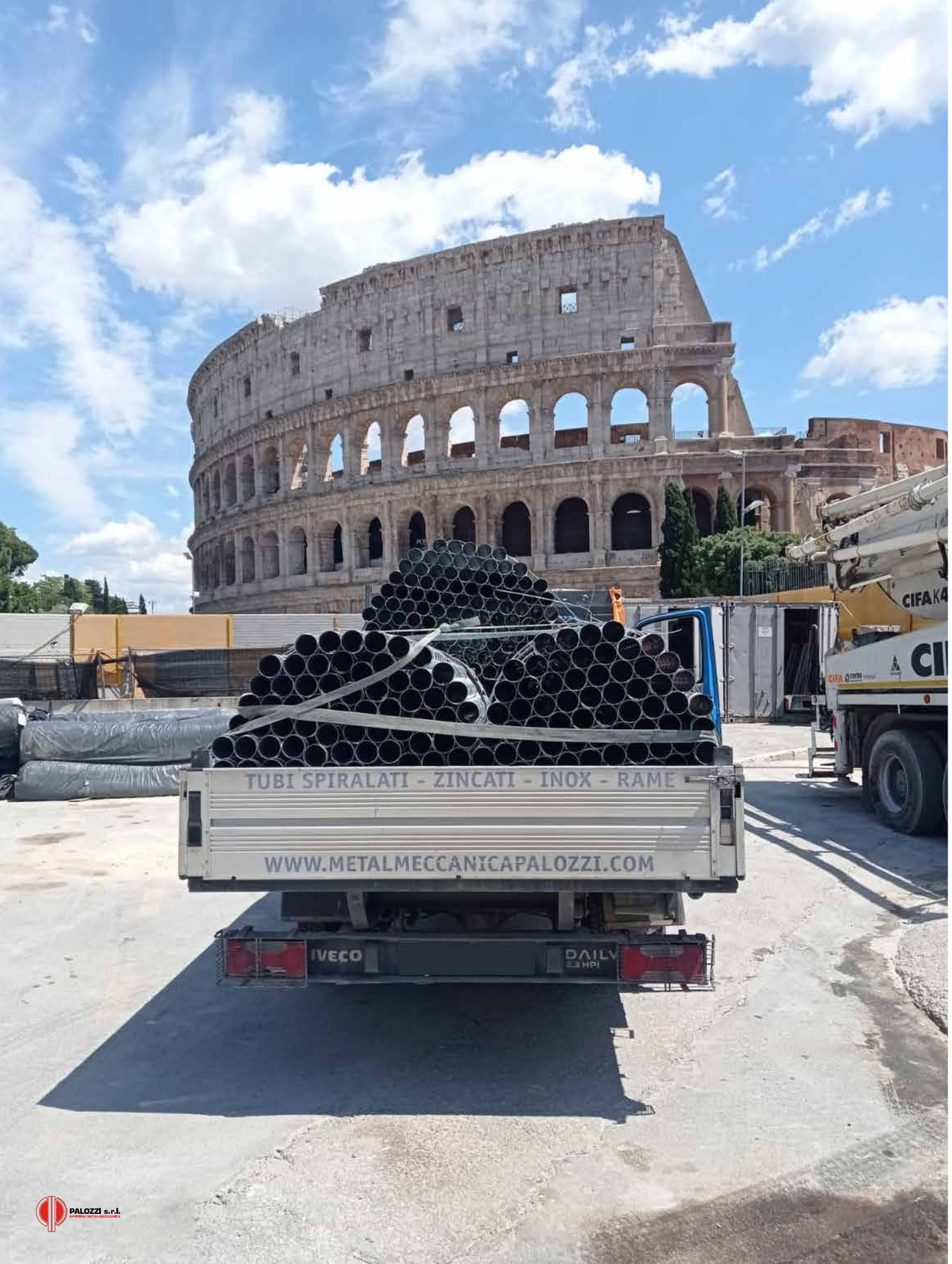
Reinforced metal container for ceramic glazing recovery

On request it can be tipped or not.
The container is complete with wheels.

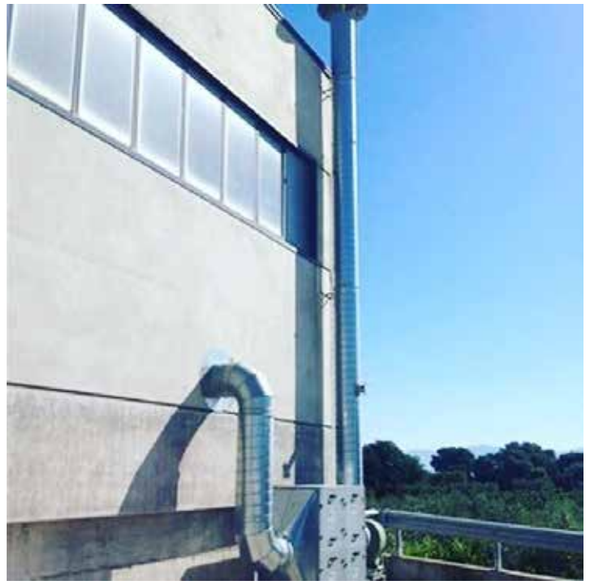
Stainless steel container



CONTAINER FOR DUST RECOVERY
It is a container in stainless steel used for dust recovery.
It is equipped with wheels, forks for forklift and a cover.



Aspiration



The company can supply all the special pieces for both square and round ducts can also provide upon request of the customer louvered fans, simple suction with motor included, axial fans on frame,single speed extraction tower fan with horizontal and vertical flow.

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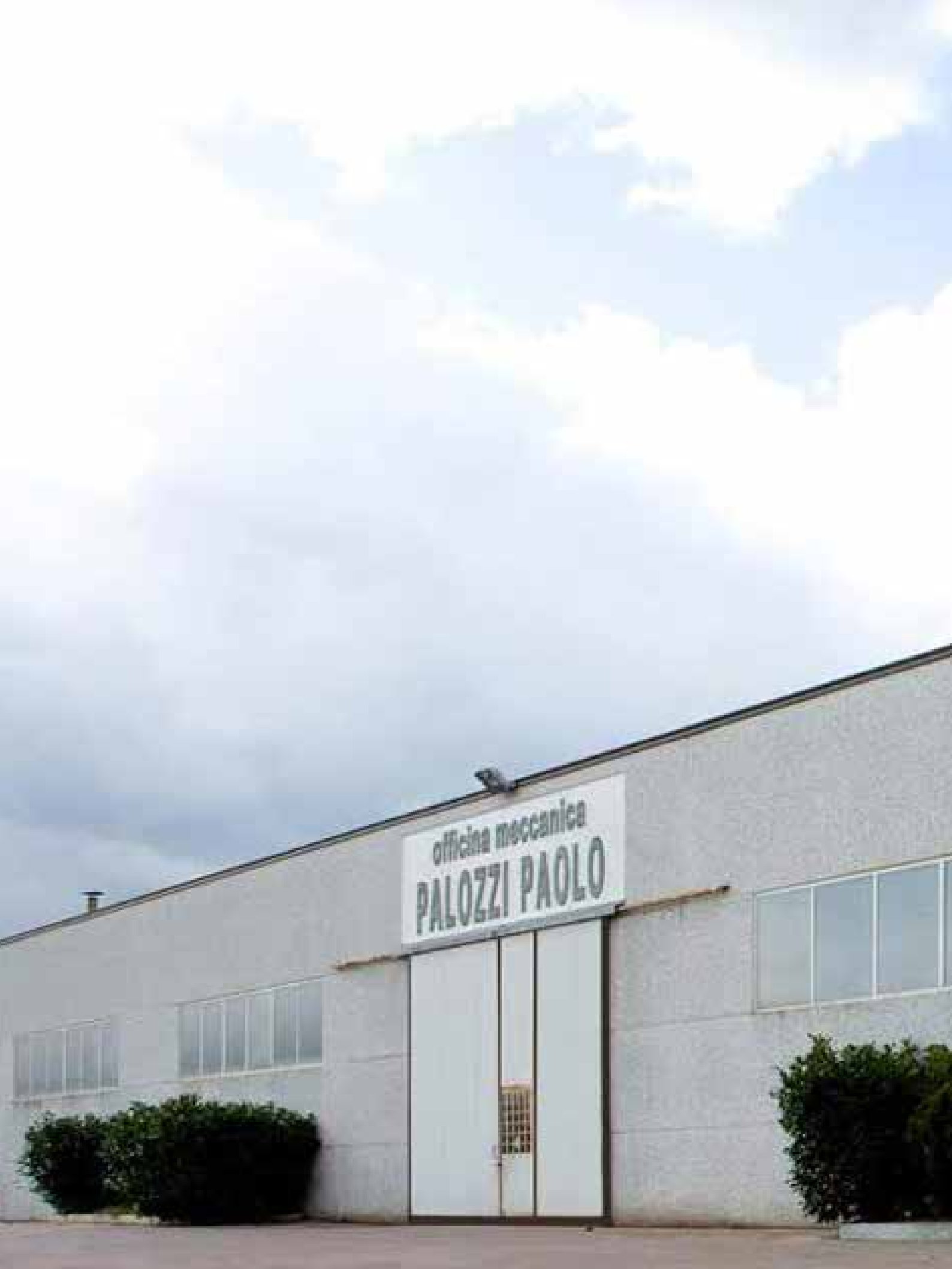
impianti per sanitari

www.metalmeccanicapalozzi.com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