

WORLD-LEADING  
CONCRETE MACHINERY



**CASSANI**  
**SINCE 1904**

# THE WORLD OF **CASSANI**

CREATING THE MACHINES OUR CUSTOMERS NEED.  
IMPROVING THEIR PERFORMANCE OVER TIME.  
AND MAKING THEM ROBUST AND EASY TO USE.  
THOSE ARE OUR GOALS.

**AND AFTER 4 GENERATIONS,  
WE'VE BECOME VERY GOOD AT THEM.**

## CASSANI Longinotti Group Highlights:

**120 YEARS  
AND 4 GENERATIONS**  
of family ownership

**4,500 MACHINES**  
sold across 60 countries

Hundreds of **FULL  
TURNKEY PRODUCTION**  
plant projects

Dry cast and wet cast machinery

**UNDISPUTED LEADER**  
of terrazzo technology today  
Patents registered in all continents

15% of workforce  
in technical department

100% owned,  
managed and  
**MADE IN ITALY**

This catalog is designed to follow the logic of a slab or block production plant (see illustration in Section 3): starting from materials batching and ending in palletizing and water treatment, **CASSANI can offer the full range of machines required for your production.**

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Technical features and commercial information reported in present catalogue are not binding, we reserve the right to update and modify at any time.



CASSANI

# THE CONCRETE CHOICE



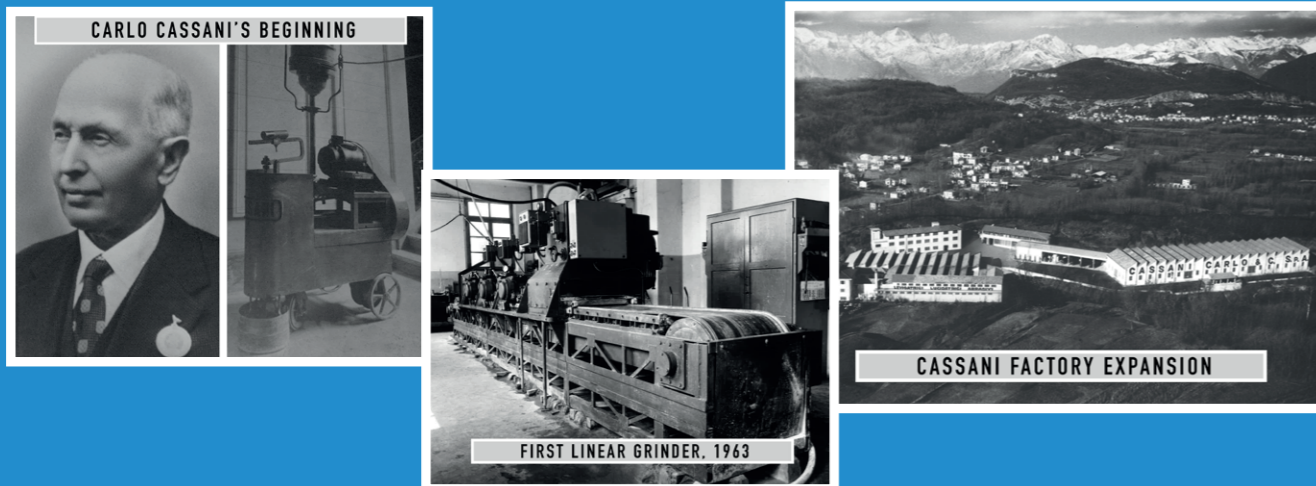
## 120 YEARS OF INTEGRITY

"Our goal is concrete:  
durable machines and durable relationships."

**CARLO CASSANI**, GROUP PRESIDENT

## 2020: ACQUIRING LONGINOTTI GROUP

Recognizing the important transition in the agglomerated concrete slab market, in 2020 CASSANI acquires Longinotti Group, undisputed king of single-layer slab machinery with its multiple technoindustrial process patents.



The last 120 years have seen unprecedented change in the world. Some decades have been good; others more difficult. But since 1904, CASSANI has been synonymous with integrity. Four generations of our family have staked their name and reputation on manufacturing high-quality machines that last for decades. Generations of local families have worked in our company.

In 1904 Carlo Cassani, a humble floor grinder, **creates the first manual grinding machine for floors**, building a business on the technology still in use today. Sixty years later, **CASSANI launches the first linear grinding machine** revolutionising the industrial application of this technology. In the following decades, CASSANI consolidates its leadership position in turnkey project delivery and particularly in finishing equipment, while expanding into all other areas of slab and block manufacturing: CASSANI's machines do it all.

The acquisition of the world's favourite hermetic presses completes our range of machines.

We are constantly building for the future,  
so that our methods and machines may travel  
through to future generations.

**YOU CAN TRUST US WITH CONFIDENCE  
FOR THE VERY BEST IN CONCRETE MANUFACTURING EQUIPMENT.**

## CUSTOM SOLUTIONS SO YOUR PRODUCTS ARE UNIQUE

"Quality, strength, power, reliability, production, durability. Important characteristics to aim for, but our greatest strength is delivering what our clients ask for."

Whether you work with concrete, stone, marble or engineering stone, our aim is to give you what you need. For this reason, we have developed many variations of our most popular machines, offering different productivity and automations.

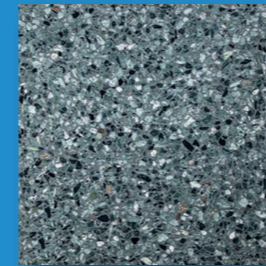
From manual to full automation, in analog or digital modes, with water cooling or in dry-mode: our machine families have a range of sizes and working stations and heads, all customisable.

Each machine is designed with optionals to adapt to your resources and way of working, and to make your products unique. And where we don't have a solution, we'll invent it.

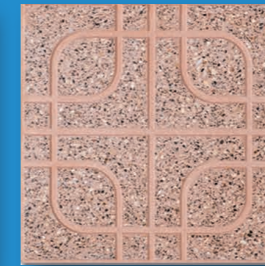
### Not sure exactly what you need?

That's completely fine: tell us what you want to produce, at what speed, the level of automation required, and the space available, and we will do the rest.

You can pursue your plant design and manufacturing aspirations with confidence, knowing that we are here to support you every step of the way.



Polishes, grains and moulds



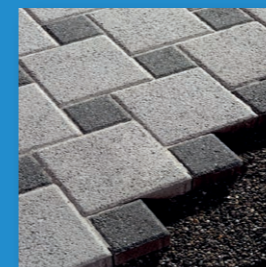
Technical properties of surfaces



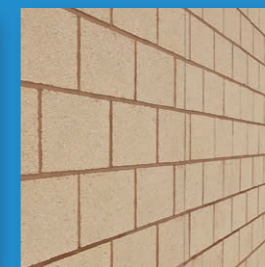
Different sizes and larger format



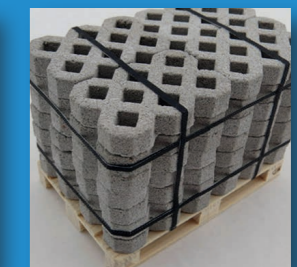
Different widths and edge effect



Blocks and pavers finishing



Packaging and Palletising



Our machines deliver the full range of finishes for both slabs and blocks: raw concrete, traditional terrazzo, molded surface finishes, manufacturer logos, raw or polished, wash-beton, polished or textured with brushing and shotblasting, waxed, and more.

**PERPETUALLY INNOVATING**

“We’ve been around a long time, and we try to learn something with every installation.”

Leading the concrete market with successive innovations:

1904

CASSANI

Creates the world’s first floor grinders

1963

CASSANI

Launches the world’s first linear grinders

1987

LONGINOTTI

Introduces automatization of washbeton

2005

CASSANI

Launches the world’s first digital printing lines for cement

1960

LONGINOTTI

Creates the first automatic slab movement machines

1970

LONGINOTTI

Patents the first single-layer technology

1990

LONGINOTTI

Patents moisture extraction technology for pressing

**Our design and engineering team makes up 15% of our workforce.**

When they aren’t working on your orders, they are developing new solutions for the future. They test innovative agglomerate mixes for mechanical performance, water absorption and other quality and safety aspects. They also test the performance of chemical additives, fibers and polymers, leading to consistent improvement in our production equipment.

Through constant dialogue with our customers all over the world, we review and upgrade all our constructions to address market needs.

Every mechanism, tool and control system has been incrementally re-engineered over the decades to optimize performance, speed, maintenance and safety.

From introducing multiple industry innovations, to popularising the quick-mount replacement for abrasive stones on grinder heads, CASSANI takes pride in its industry leadership role.

The acquisition of Longinotti Group has added a new layer of single-layer expertise to our product family, which has already been.



**INDUSTRY 4.0 AND THE FUTURE:**



Our machines can be equipped with a tele-service system, so our engineers can connect directly to check and correct working conditions and settings of the PLC. We can also automate data collection and transmission, and production set-ups can be automate and performance tracked remotely, helping improve production cycles and efficiency and reduce downtime.

Technological progress will remain a touchstone as we strive to better serve our customers as quality innovators and manufacturers.

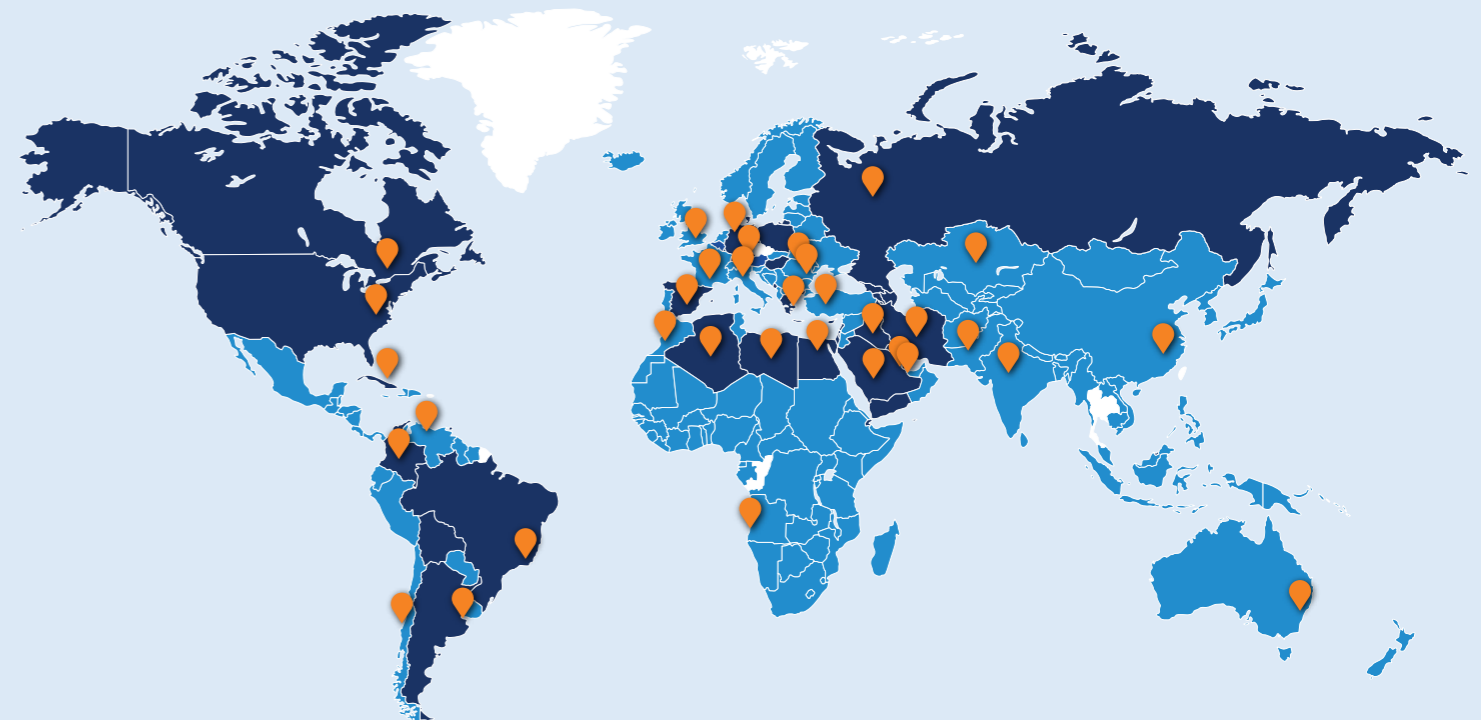
**A ROBUST AND USER-FRIENDLY PARTNER**

Our customers have trusted us on over **4,500 machines across 60 countries**, with hundreds of turnkey plant projects for full slab production and finishing lines.

Our multilingual commercial and technical teams are here to give you peace of mind on your investment, minimise your down-time and optimise your maintenance processes.

The CASSANI Longinotti Group has an extensive global sales and technical assistance network through **30 sales agencies covering 50 countries**.

They are in constant contact with the head office in Besozzo, Italy, guaranteeing sales coverage and an extensive network of aftersales service and spare parts.



**A designation which stands for quality:**  
 our approach remains the same as always: **we manufacture in Italian production plants using the highest quality** components and we certify the absolute originality and origin of each of our technological products.

When you buy CASSANI machines, you are buying the precise technical, manufacturing and regulatory requirements of our national designation.

**OUR SERVICE TEAM**



Our Service team consists of mechanics, engineers and software engineers, supporting the customer for specific needs. Multilingual technicians travel all over the world to set up our plants and support our customers through the after sales service.

Our original spare parts are synonymous with guarantee, reliability and durability. Orders for wear components and spare parts are addressed by our service team in short timeframes and our service engineers are always available to answer client calls.

# CONCRETE APPLICATIONS: AN ARCHITECTURAL AND DESIGN RENAISSANCE

From brutalist building exteriors to colourful terrazzo home interiors, concrete has taken center stage again as complement to more traditional uses.

Concrete is the most widely used construction material, thanks to its qualities: strength, low porosity, high resistance and economic advantage over granite, marble and natural stone. And in the last decade, it has become mainstream again in exterior and interior design aesthetics.

Cassani and Longinotti machines play a critical role in manufacturing and treating concrete slabs and blocks to deliver those qualities in a near-infinite range of decorative styles.

## HERE WE SHOWCASE

SOME OF THE MANY APPLICATIONS OUR MACHINES ARE USED FOR.



## RESIDENTIAL & COMMERCIAL

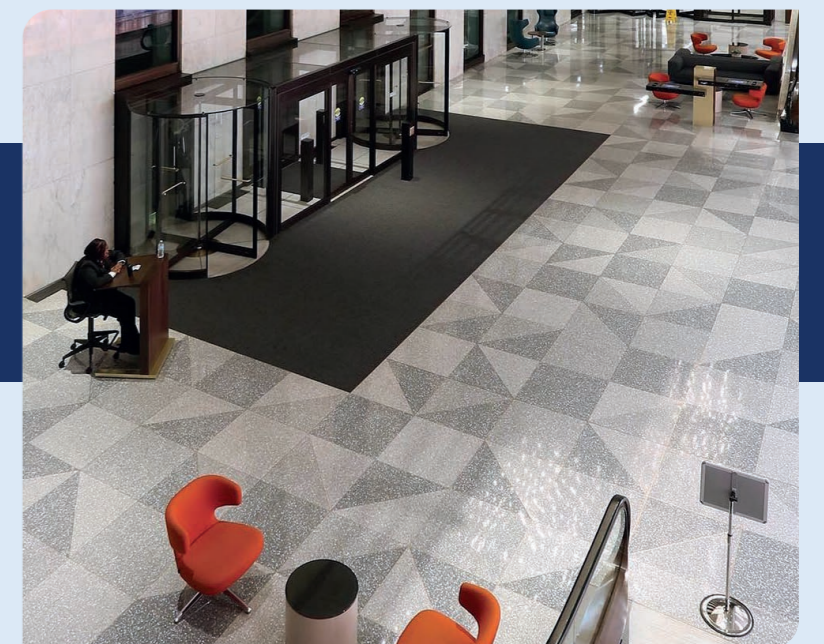




## RESIDENTIAL & COMMERCIAL



Image by Otto Tiles & Design





CASSANI

# 2 CONCRETE APPLICATIONS: AN ARCHITECTURAL AND DESIGN RENAISSANCE



RESIDENTIAL & COMMERCIAL



Image by Otto Tiles & Design



CASSANI

# CONCRETE APPLICATIONS: AN ARCHITECTURAL AND DESIGN RENAISSANCE



## MASONRY BLOCKS, PAVERS, CURBSTONES AND MORE



Cassani's finishing lines have dedicated machines for slabs, masonry blocks, interlocking pavers and curbstones, performing all of the same treatments including polishing, shotblasting, brushing, chamfering and more.



## BEYOND FLOORS: WALLS, STEPS, RAISED FLOORING, AND DECORATIVE SLABS

We manufacture and install machines and turnkey projects allowing the production of the widest range of agglomerated cement products:



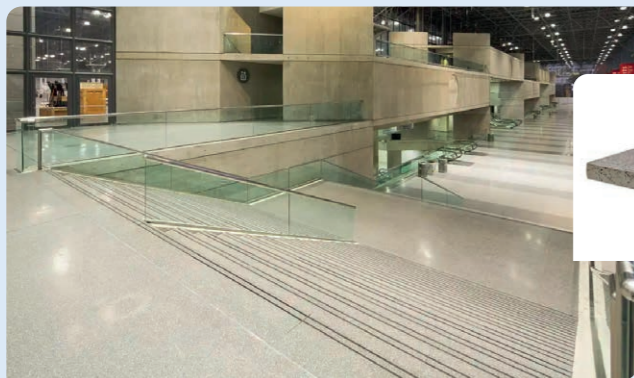
Countertops and decorative slabs for kitchens and bathrooms.



Wall-cladding tiles: low relative weight and high compactness of the tiles produced allow use for exterior cladding of buildings and industrial units.



Raised Flooring slabs: the lower weight, reinforced structure, tolerance, stability and possibility of chamfering (all following regulations UNI 7998 UNI 10462 UNI 10467)



Stairway slabs: treads and risers for high traffic areas, up to 1350 x 370 mm and up to 60 mm thick, hard-wearing and with infinitely customizable finishes.

## DIGITAL LINES

Our concrete digital printing lines provide the ultimate level of personalisation, allowing virtually any image to be transferred onto the surface of a tile.

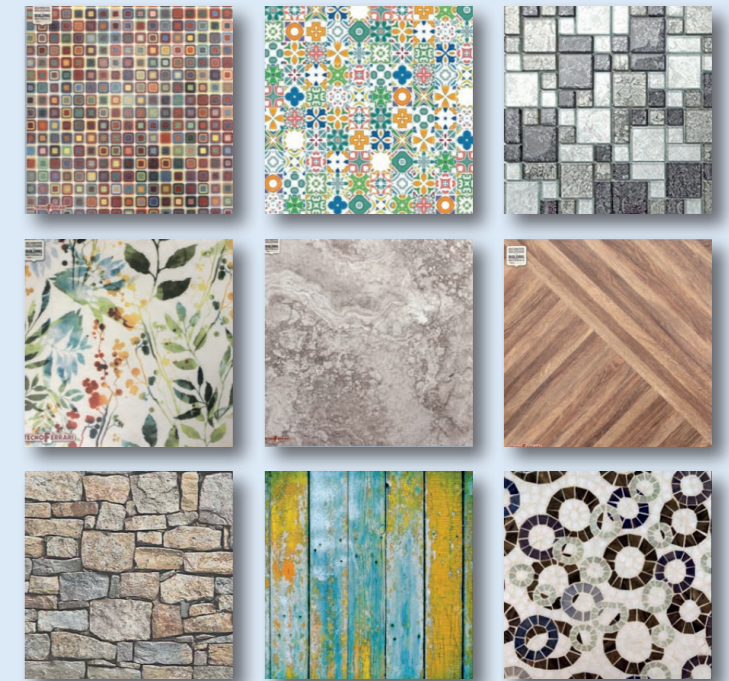
We set out to deliver a new technology with creativity as the only limit.

**We are proud** to be the first movers in the field of digital decoration of cement:

**we have delivered** complete lines for printing on agglomerate tiles, pavers and concrete products.

**We have worked** with the most prestigious leaders in this sector to develop colour supplies, chemical products and inkjet printing machines.

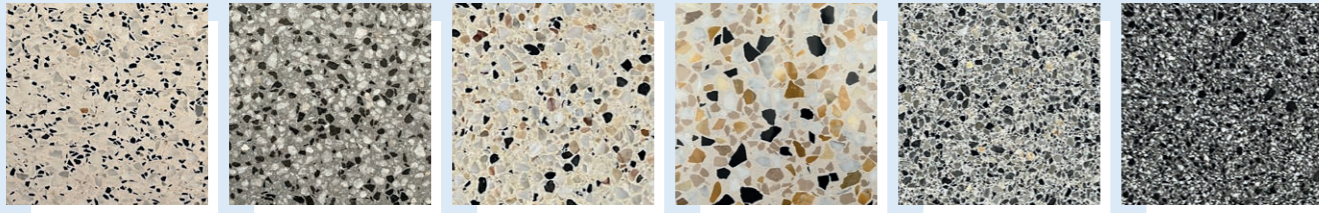
Cement products are pre-treated and primed, digitally printed and then given special anti-wear coating treatments for a long-lasting finish.



**WE SHOW HERE A VERY SMALL SAMPLE OF THE INCREDIBLE RESULTS ALREADY OBTAINED: WE ARE EXCITED TO CONTINUE TO PUSH THIS TECHNOLOGY.**

## ENDLESS FINISHES OF FINAL PRODUCTS

### POLISHED TERRAZZO TILES



### PRESSED AND WASHED TILES



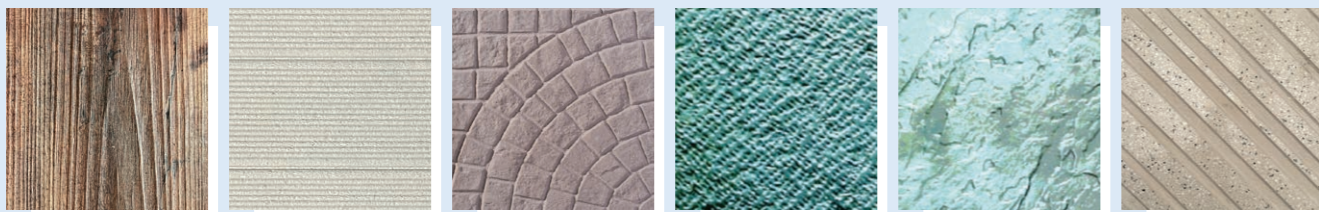
### TEXTURE PRESSED TILES



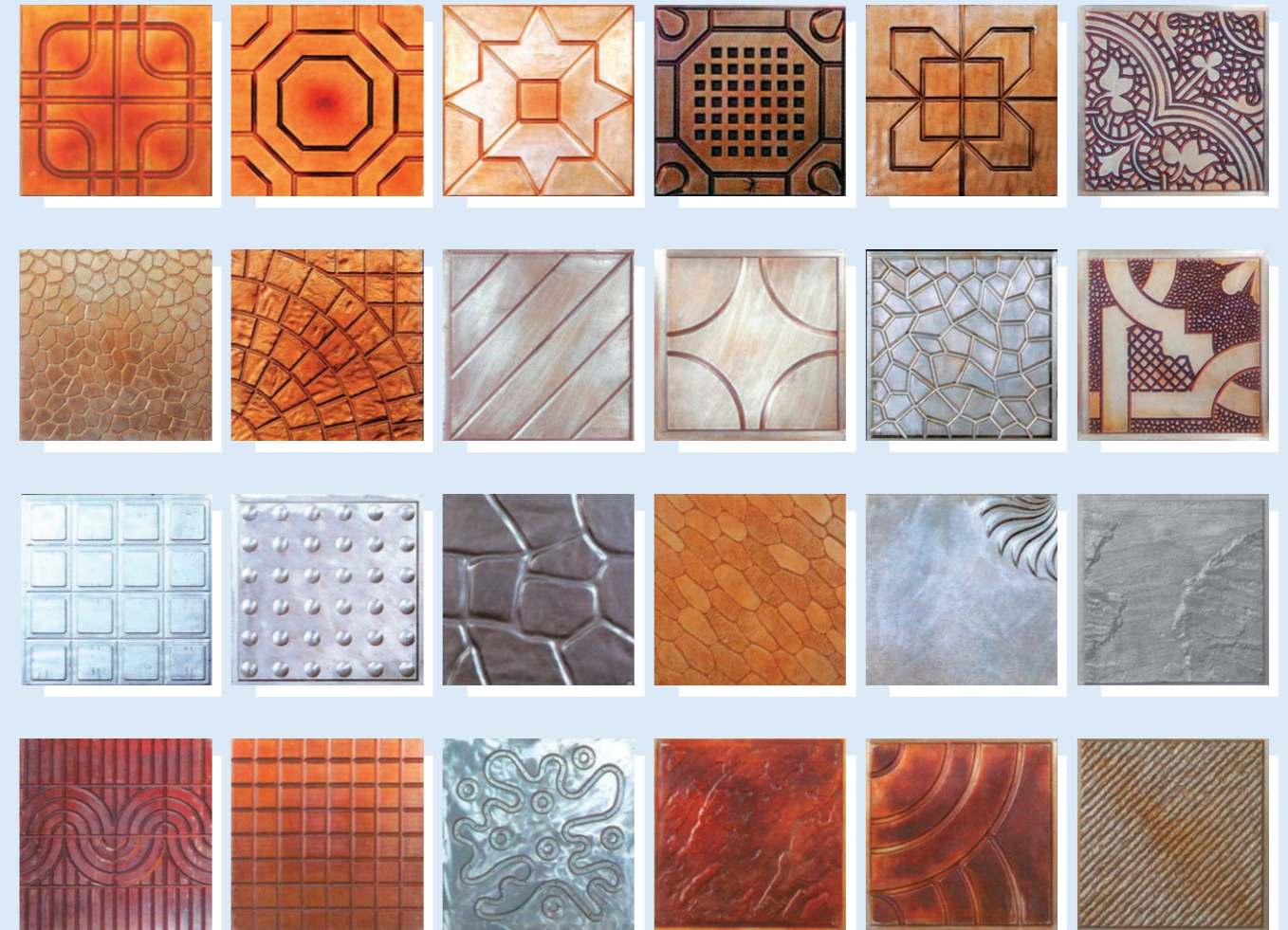
### TEXTURE PRESSED, POLISHED AND SHOTBLASTED



### TEXTURE PRESSING EXAMPLES



### EXAMPLE OF PRESS MOULDS



# TURNKEY PLANTS AND LINES FOR CONCRETE PRODUCTS

Our core strength is the design and delivery of full production plants and multi-machine lines.

Starting from your end-product specification, plant space and budget, our multi-lingual technical department will work alongside you to design a custom production line that meets your needs. This same technical team provides **direct and constant ongoing support** to assist you during all the implementation phases.

On delivery of the equipment, our team of mechanical and electrical engineering team will arrive at your location for assembly and testing. These engineers are **always on call** and can travel to **any destination** to assist customers. Furthermore, they train and educate your personnel on how to get the most out of your CASSANI Longinotti equipment.



### CONSULTATION

An initial discussion with our technical team helps us understand your plant, production and performance needs



### DESIGN

Our technical team customises our worldclass equipment in the most cost efficient way, working alongside other suppliers and your engineers if required



### BUILD

Our purchasing and production teams transform the plans into a custom fit for your situation



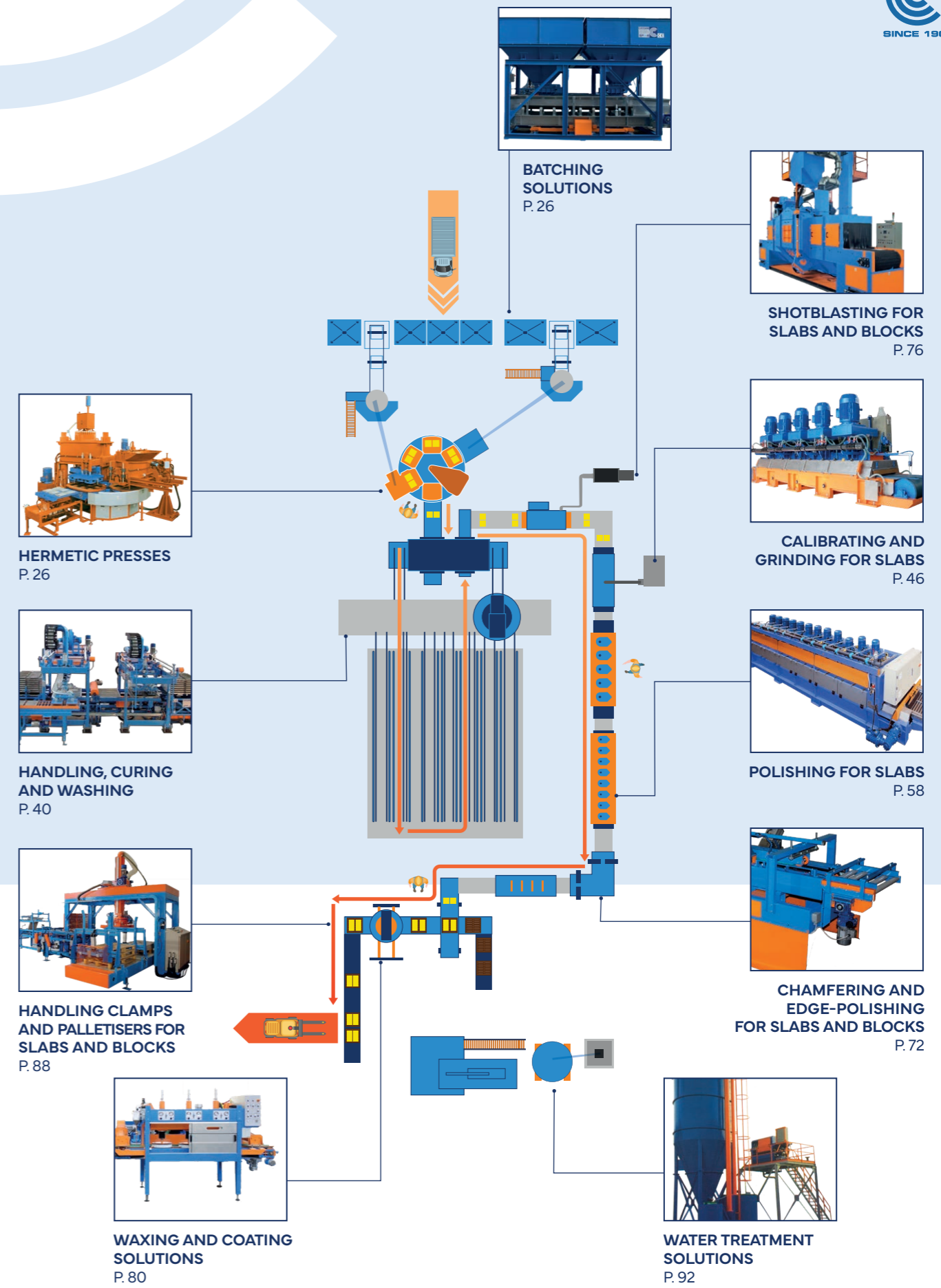
### DELIVERY & INSTALLATION

We ship worldwide and our technicians follow to install our equipment and train your staff



### AFTER SALES SERVICE

Our teams remain on hand to provide supplies, spare parts and resolve any technical issues





CASSANI

# BATCHING SOLUTIONS

**CASSANI'S BATCHING PLANTS** ARE SPECIFICALLY DESIGNED FOR MEASURING AND TRANSFERRING ALL THE COMPONENTS USED TO MANUFACTURE CONCRETE AND AGGLOMERATE MARBLE SLABS AND BLOCKS, FOR BOTH SINGLE-LAYER AND DOUBLE-LAYER SLABS.

## TAILORED TO YOUR NEEDS



Manual, semi- or fully-automatic batching plants using advanced programmable electronic weight measuring systems with storage and programming of mixes.



Planetary mixers from 100 to 600 litres and over.



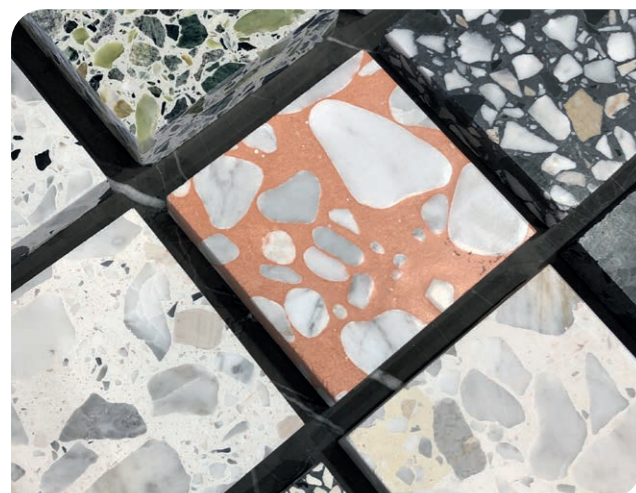
Simpler solutions available for the base (second) layer, using continuous worm-screw batching equipment for the volumetric measurement version of components.



Possibility of feeding 2 different mixers with different mixes.



Full modularity of number of hoppers and capacity.



## ENGINEERED FOR EXCELLENT RESULTS

- Electro-mechanic or electronic programmable weighing systems. The conveying belt is suspended above the scale and allows multiple-sequence weight measurement with minimal error tolerance.
- Our batching plants are fitted with probes, sensors, and micro-switches for maximum automation and reliability.
- Water is added using high-precision measurement with litre counter, solenoid valves and impulse counter, all controlled by the central electric panel.



BATCHING SOLUTIONS

## ROBUST, SAFE, AND EASY TO USE

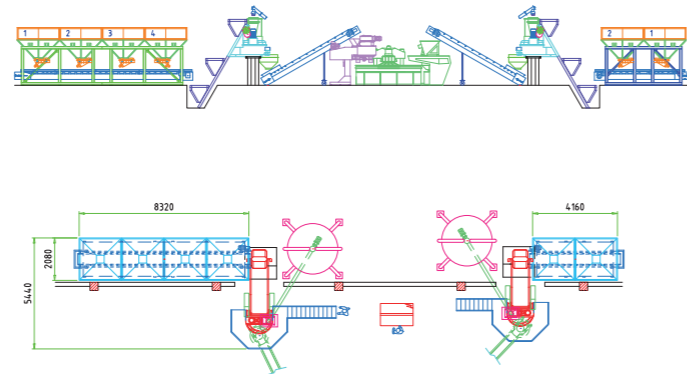
- Oversize steel and high-thickness plate structure. Belt structures in galvanized zinc.
- Real time continuous control of all functions through touch-screen control panel (on automated batching plants).
- Centralised control equipment in a sealed cabinet, with easy-to-use controls.
- Simplicity of construction allows easy cleaning and maintainance.

## OPTIONAL

- AUTOMATIC COLOUR BATCHER: HIGH PRECISION COLOUR MEASURING DEVICE. WHEN NOT FITTED, AN INDICATOR WILL SIGNAL THE OPERATOR TO CARRY OUT THE OPERATION.
- AUTOMATED CEMENT BAG BREAKERS.
- TELESCOPIC CEMENT SILOS (STANDARD DIAMETER: 2500 MM) COMPLETE WITH FLUIDIFICATION SYSTEM, MIN/MAX LEVEL INDICATORS, STAIRS AND PLATFORM WITH SAFETY HANDRAILS, DUST FILTERS AND SAFETY SYSTEMS FOR LOADING OPERATIONS, ALL OPERATED BY CENTRAL SWITCHBOARD.

**GRA AND GRB:**

HIGHEST PRECISION  
BATCHING BY  
ELECTRONIC WEIGHING



**GR4 /A**

Automatic concrete batching and mixing plant with electronic weighing belt for the preparation by weight of the 1st layer of double-layer tiles or of the wet mix of single-layer tiles.

**GR2 /B**

Automatic concrete batching and mixing plant with electronic weighing belt for the preparation by weight of the 2nd layer of double-layer tiles.



**Mixer Platform for GR4 /A and GR2 /B**

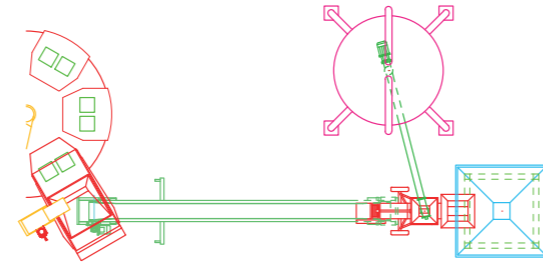
Mixer Platform for GR4A and GR2B: raised to optimum height for the plant, with central support, access ladder, platform and balustrade, and fed from the hoppers with a dedicated trolley.



GR5A with weighing belt delivers material to the trolley for transportation up to the mixer platform (inside building).

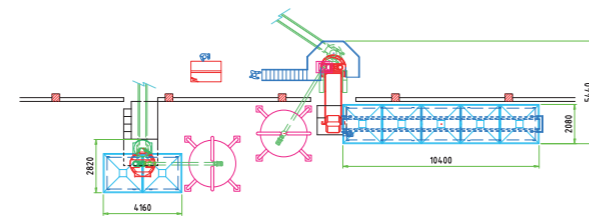


**GRBNT:**  
| VOLUMETRIC BATCHING



**GRB/NT/IS:**

Volumetric batching plant for the preparation of the 2nd layer of double-layer tiles using a continuous mixer (CASSANI BC Mixer).



**GRBP:**  
| BATCHING USING WEIGHING CELLS

**GRB /2P**

Automatic batching and mixing plant using weighing cells: a more compact, lower-precision option for the 2nd layer of double-layer tiles.



PRODUCT  
DETAIL IMAGES



1 MPB 250 Planetary Mixer.



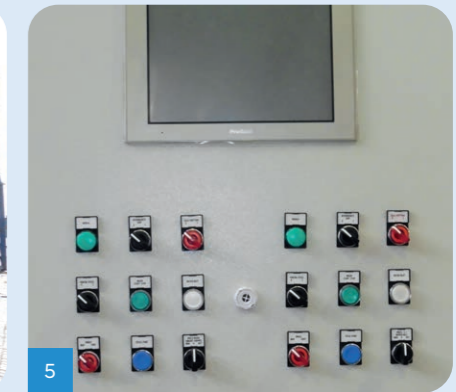
2 Automatic colour batcher as optional.



3 Vibrating Channel detail.



4 Exterior of plant with GR3A and cement silo.



5 Control panel with proface.



6 Batching mix variations.



CASSANI

# HERMETIC PRESSES

**CASSANI HERMETIC PRESSES** ARE THE ABSOLUTE QUALITY LEADERS FOR HIGH-VOLUME SINGLE-LAYER AND DOUBLE-LAYER SLAB PRODUCTION FROM SIZE 200 MM TO 1400 MM. FOLLOWING CASSANI'S ACQUISITION OF LONGINOTTI GROUP, LONGINOTTI'S WORLD-LEADING PRESSES HAVE BEEN SEAMLESSLY INTEGRATED INTO CASSANI'S TURNKEY SOLUTIONS.

## TAILORED TO YOUR NEEDS



The broadest range of presses to satisfy your format and productivity needs, with huge productivity up to 200m<sup>2</sup>/hr.



New system allows switching from indoor to outdoor tiles by simple and quick replacement of the polyurethane mould.



4 to 6 stations with patented technology allowing production of single-layer, double-layer slabs, or both.



Our single-layer presses are equipped with the unique, patented Longinotti "MS" system for the evacuation of the excess water from the wet mix through the pressing pad.

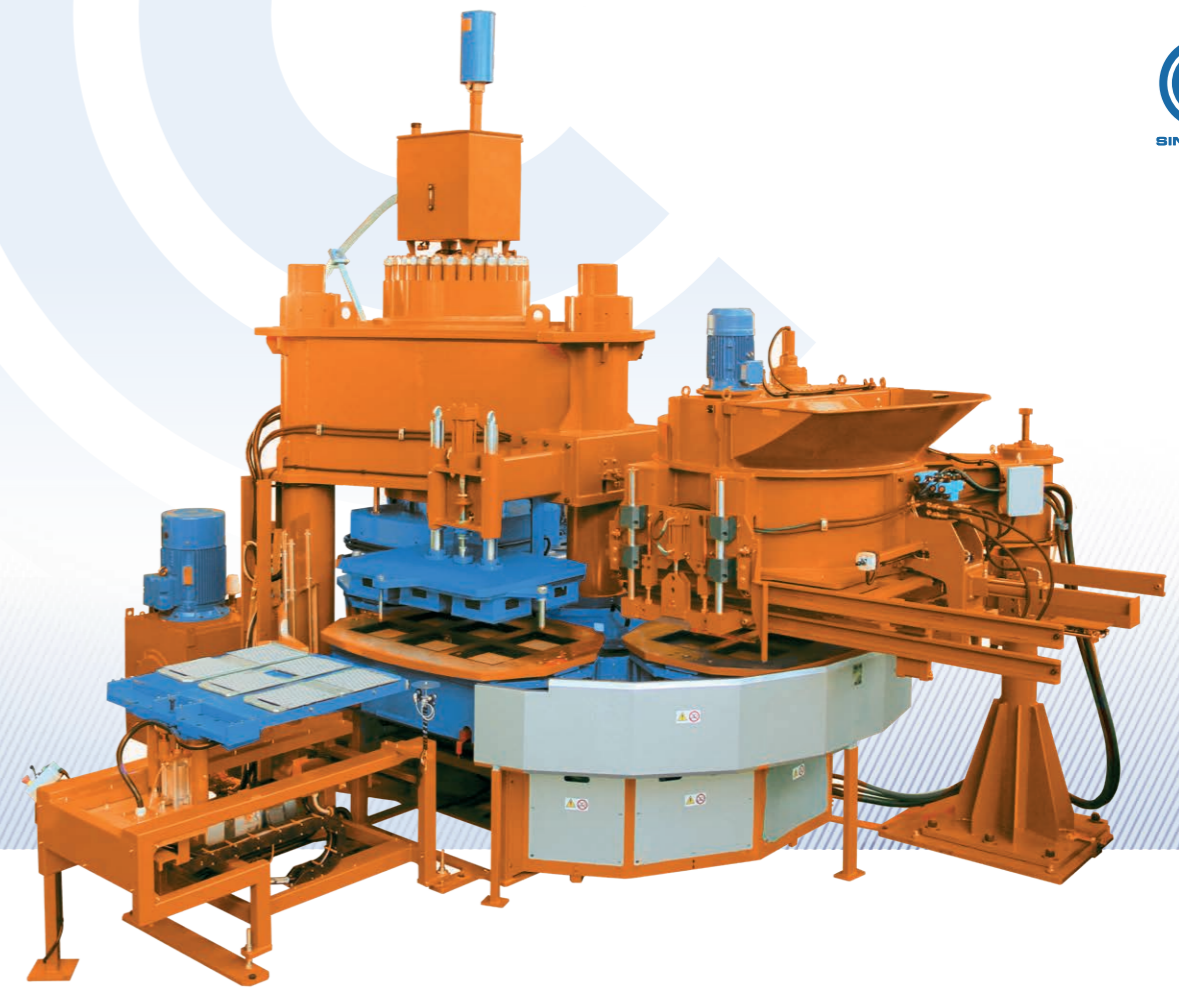


A wide range of application including indoor and outdoor floors and wall surfaces: chamfers and moulds can be used to obtain endless tile effects and surface finishes.

## ENGINEERED FOR EXCELLENT RESULTS

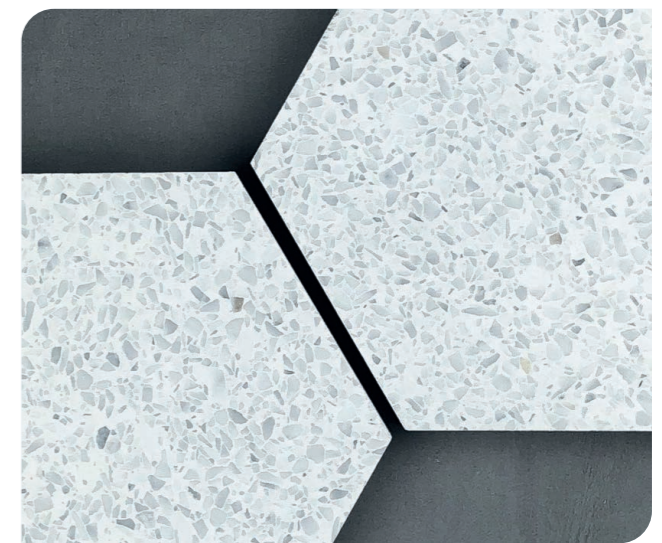
- Automatic mortar dosator with two-speed planetary mixing. Direct delivery from dosing buckets into moulds using a special system and level sensors to fill and empty the doser cups, ensuring high precision and consistency of the mixture.
- Exclusive proportional pressing system programmable up to 5 different stages for excellent, fast compacting. The draining-filtering action and high pressing force results in a very compact, porosityfree product.
- Exclusive electromagnetic encasement of the draining pads for quick and easy replacement of filters.

- Special extracting shovel linked to a flexible demoulding system.
- New "closed-loop" control system of the rotating table: shortens rotation time and improves displacement precision.
- Station failsafe: in case of single station failure, press continues production with the remaining ones.
- Vibrocompacting unit for high thickness slab/blocks increases productivity and compacting.



## ROBUST, SAFE, AND EASY TO USE

- Frame made of exceptionally sturdy steel construction.
- Hydraulic unit specially designed for reduced energy consumption, with programmable s valve for optimal compacting of the mix.
- Revolving of the table by means of large-diameter toothed wheel and pinion, driven by geared motor and fed by a separate inverter.
- Easily adjustable, powerful twin vibrators for high-efficiency vibration of the moulds.
- Wear-proof intuitive control panel using Siemens S7 touchscreen technology.
- Anti-wear steel plates under the vibrating boxes.



## OPTIONAL

- STANDBY KIT OF DRAINING PAD AND ACCESSORIES FOR MINIMAL DOWNTIME DURING CLEANING.
- CHILLER FOR THE COOLING OF THE HYDRAULIC OIL IN HOTTER CLIMATES.
- TELE-ASSISTANCE THROUGH DEDICATED OR CENTRALISED MODEM.
- OPERATING DATA COLLECTION FOR PERFORMANCE AND BATCH MONITORING.

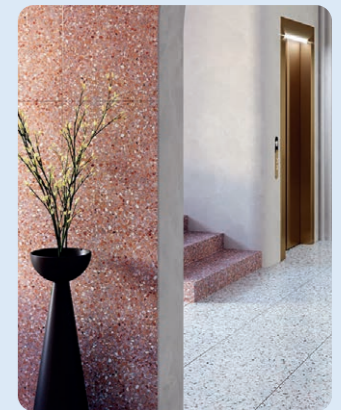
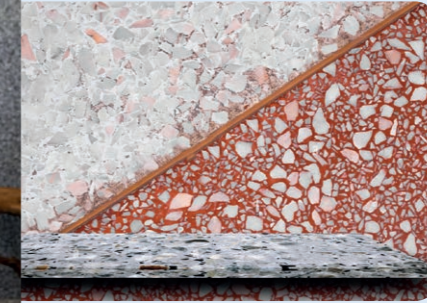
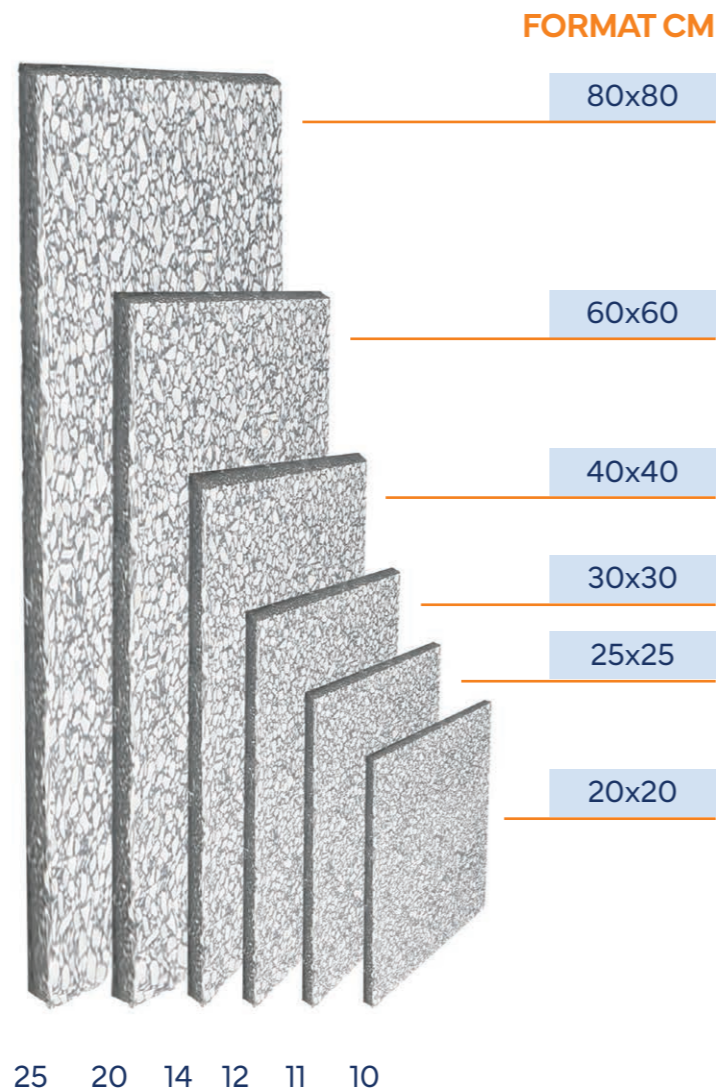
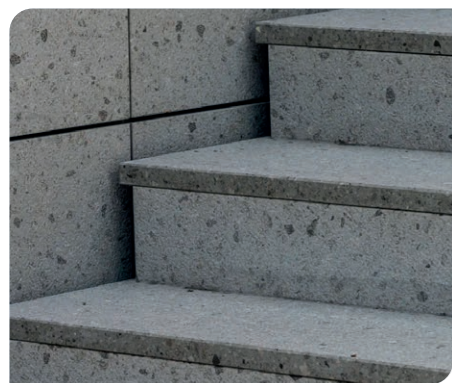
HERMETIC PRESSES



LONGINOTTI MS™  
THE KING  
OF SINGLE-LAYER  
TILES

LONGINOTTI CREATED AND PATENTED THE TECHNOLOGY FOR CONCRETE SLAB PRESSING THAT LEADS THE MARKET TODAY: A COMPACT, LIGHT, NON-POROUS, HIGHLY DURABLE AND EASY-TO-FIT TILE.

- Create the art of Venetian mosaics with all its splendor, color and contrasts using only cement, marble powder and chips and water.
- Adaptable from smaller (200x200mm) to larger formats one (1400x600mm) in square, hex or rectangular formats with thickness from 10mm to 60mm.
- For flooring or wall cladding, even over existing surfaces, and can be treated in many different finishes.
- Can be produced with interior lattice armour to increase resistance under pressure.



COMPONENTS		
Binder	Portland Cement 525	
Aggregates	Marble powder and chips	

Notes: Aggregate / Cement Ratio 0.32

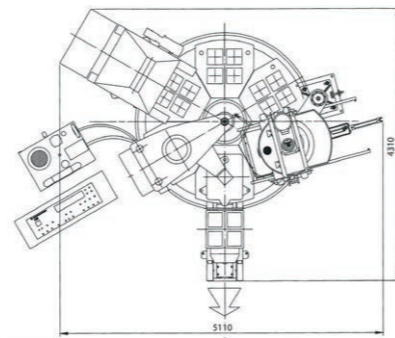
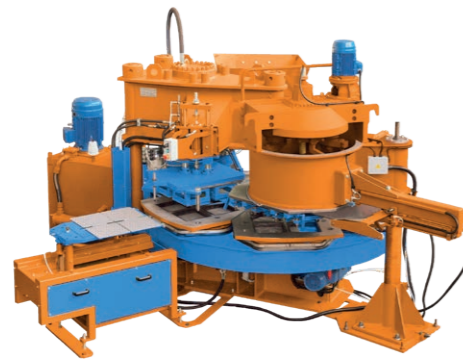
TECHNICAL QUALITIES AFTER 28 DAYS		
TECHNICAL CHARACTERISTICS	RESULT	APPLICABLE STANDARD
Max Dimension of Crushed Aggregate	4-8 mm	
Specific Weight	2.5-2.6 kh / dm3	UNI 10444
Flexural Strength	11.7-12.0 N/mm2	UNI 6133
Compressive Strength	90-100 N/mm2	DIN 52105
Abrasion Resistance	430-460 mm2	UNI 10532
Water Absorption	4.0-4.5% (of weight)	UNI 10444
Fire Classification	Class 0	ISO / DIS 11822
Behaviour of Freeze and Thaw	Resistant	DIN 52104

**FORMAT PRODUCTIVITY FOR SAMPLE PRESSES**

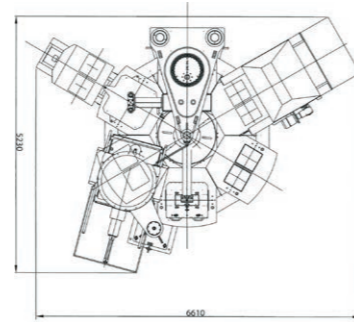
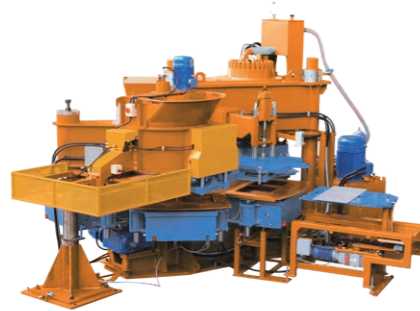
**MODELS**

10 AVAILABLE SIZES BASED ON  
YOU NEEDS OF PRODUCT  
AND PRODUCTIVITY.

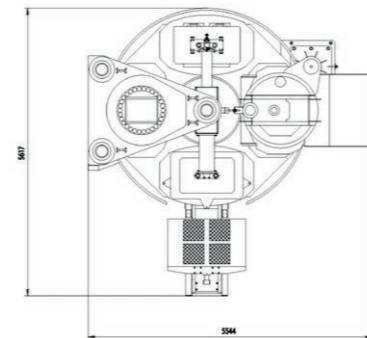
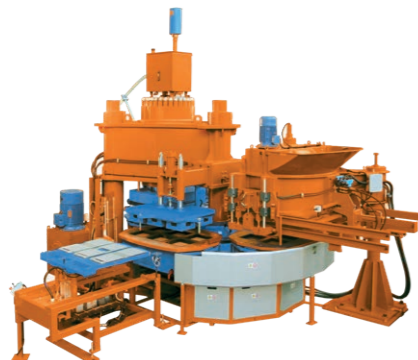
**K256**



**K606**



**K1204**



<b>K205</b>	Production m <sup>2</sup> /hr	16	44	31	39	56	
	Formats	200x200 (4)	250x250 (2)	300x300 (1)	333x333 (1)	400x400 (1)	
<b>K256</b>	Production m <sup>2</sup> /hr	85	90	78-65	60	90	85-65
	Formats	200x200 (6)	250x250 (4)	333x333 (2) 300x300 (2)	400x400 (1)	500x500 (1)	300x600 (1) 400x600 (1)
<b>K606</b>	Production m <sup>2</sup> /hr	135	130	155	115	160	160
	Formats	250x250 (6)	300x300 (4)	333x333 (4)	400x400 (2)	400x600 (2)	700x700 (1)
<b>K754</b>	Production m <sup>2</sup> /hr	130	100	110	140	75	110
	Formats	333x333 (4)	400x400 (2)	300x600 (2)	400x600 (2)	500x500 (1)	600x600 (1)
<b>K1204</b>	Production m <sup>2</sup> /hr	195	190	160	145	200	150
	Formats	333x333 (6)	400x400 (4)	300x600 (3)	400x600 (2)	600x600 (1)	1350x370 (1)
<b>K1406</b>	Production m <sup>2</sup> /hr	200	190	150	145	216	250
	Formats	333x333 (6)	333x333 (4)	500x500 (2)	400x600 (2)	600x600 (1)	800x800 (1)



**A SAMPLE SELECTION OF  
HERMETIC PRESSES TO MEET YOUR NEEDS**

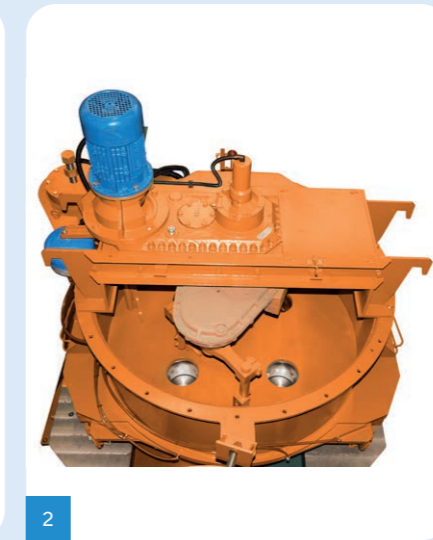
Our proprietary technology is customisable to your specific needs: if your requirements are not in the table below, please let us know and we will propose alternatives.

HERMETIC PRESS MODEL	K165-K205	K256-K306	K606	K754	K1204	1406
Production in m2/hr*	56	60	115	100	190	200
Max Pressing Force (Ton)	200	300	600	750	1200	1400
Installed Power (Kw)	17	27	51	65	84	91
No. of Stations	5	6	6	4	4	6
Max Format Size**	400 x 400	400 x 600	700 x 700	800 x 800 1350 x 370	800 x 800 1400 x 600	800 x 800 1400 x 600
Max Slab Thickness	60	60	80	80	80	80
Total Weight (Ton)	8	14	31	32	61	63

**PRODUCT  
DETAIL IMAGES**



1 Upper Vibrating Detail.



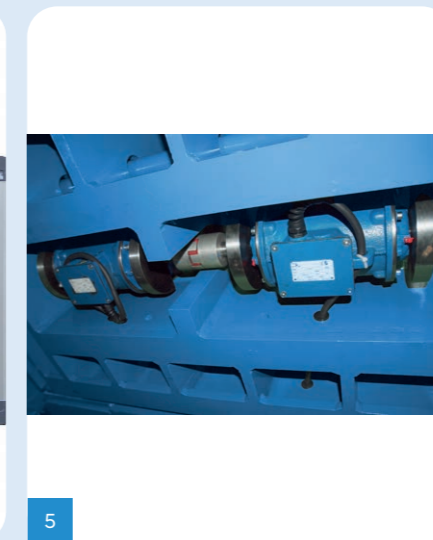
2 Planetary mixer detail.



3 Large format moulding equipment.



4 High-resistance Touchscreen control panel.



5 Vibrator units detail.



6 Pneumatic control unit.

# HANDLING, CURING AND WASHING

## CASSANI LINEAR: FOR MEDIUM AND LARGE PRODUCTION

FULLY AUTOMATED LINES FOR THE HANDLING OF FRESH AND CURED SLABS. FRESHLY-PRESSED SLABS ARE DEPOSITED ON STEEL TRAYS, WHICH ARE THEN STACKED AND CAN BE TAKEN TO A CURING AREA BY FORKLIFT OR DEDICATED ROBOT. WHEN TRAYS ARE RETURNED, SLABS ARE AUTOMATICALLY RETRIEVED AND ADVANCED TO THE FINISHING LINE.

### TAILORED TO YOUR NEEDS



We provide transport robots and curing chambers for full automation; alternatively, stacks can be handled by forklift truck.



Available as a single unit connected to both the press and the finishing line, or as two independent units for greater flexibility of plant layout.



Available with different station combinations for different operations.



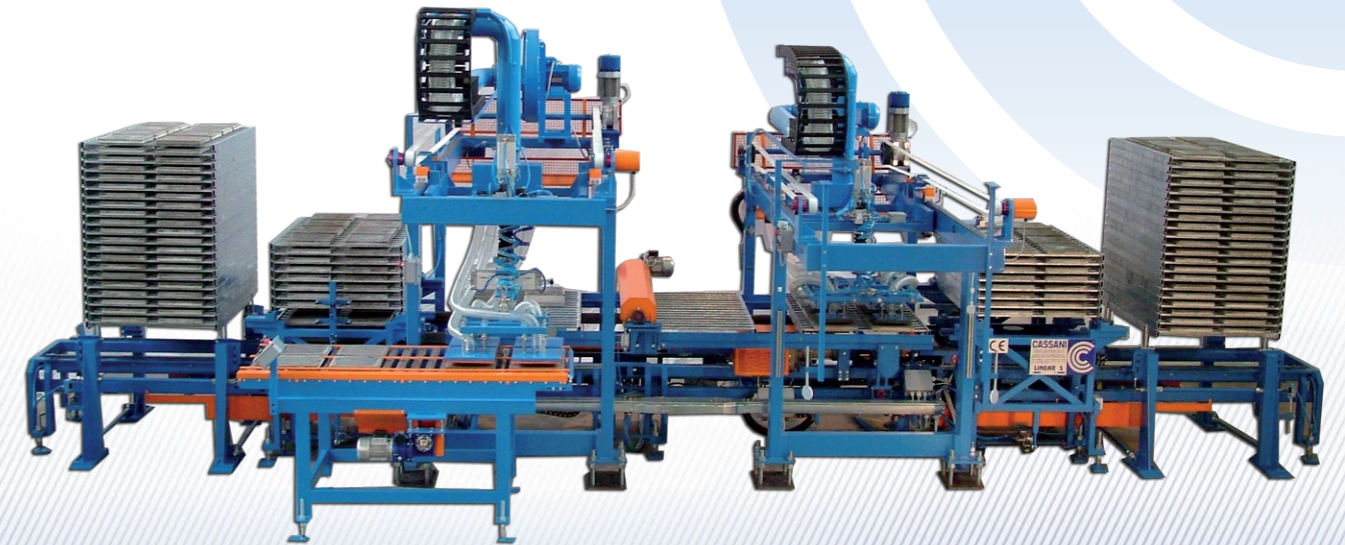
Customisable self-bearing trays of variable dimension subject to customer needs and sized according to loads, based on the press, and the tile format and thickness.

### ENGINEERED FOR EXCELLENT RESULTS

**7-station line** is composed by the following stations:

- Vacuum pick-up of fresh slabs from the extracting shovel of the press, rotating and laying on the tray with the sight-side facing upwards, eliminating risk of damage and warping during the curing process.
- Stacking-up of the self-bearing trays with the fresh slabs for easy transportation and storage to the curing area.

- Removal of the stacks of trays containing the fresh slabs.
- Loading of the stacks of trays containing cured slabs.
- Unstacking of the trays returned from the curing chambers.
- Vacuum pick-up of cured slabs and their transfer to the discharging path towards the finishing line.
- Moving of the empty trays to the beginning of the line.
- All vertical, horizontal and lateral movements via servo drives, thus dynamic acceleration and freely-positionable slab pick-up and handover points.



### SOLID CONSTRUCTION YOU CAN RELY ON

- Lifting and lowering of the stacks of trays is carried out by means of electro-mechanic jacks.
- Galvanized steel pallets for steam treatment and vaporization in the curing chamber.
- Horizontal pallet conveyor system via frequency-controlled gear drive.
- Vertical pallet stack movements via hydraulic stroke.
- Simplicity of construction allows easy cleaning and maintainance.
- Complete with switch-and control board provided with Siemens Proface allowing operations in automatic or manual mode.

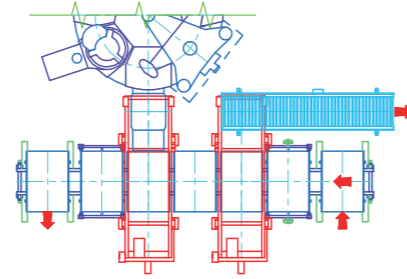
### OPTIONAL

- WASH-BETON EFFECT: DIRECT-WASHING DEVICE AND WATER PUMP.
- FULL CURING CHAMBER SOLUTIONS FOR AIR CURING OR STEAM CURING.
- FULLY AUTOMATED ROBOTIC TROLLEY FOR TRANSPORTATION OF STACKED TRAYS FROM THE DEPOSITING DEVICE TO THE CURING CHAMBERS AND BACK.

**PRODUCT  
 DETAIL IMAGES**

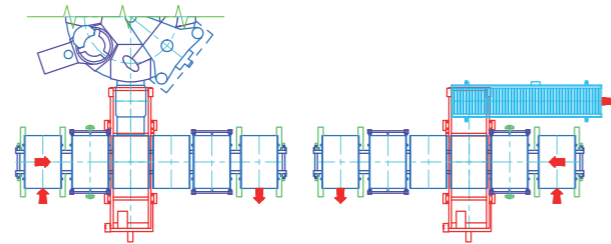
**LINEAR 7 STATION**

| SINGLE UNIT



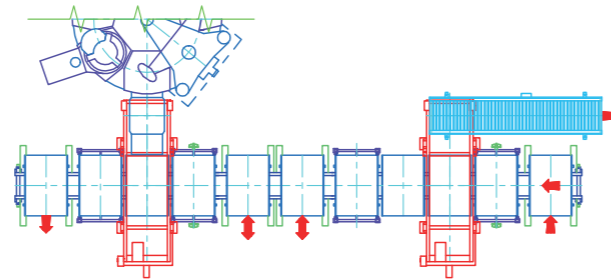
**LINEAR 6 STATION**

| SPLIT UNITS

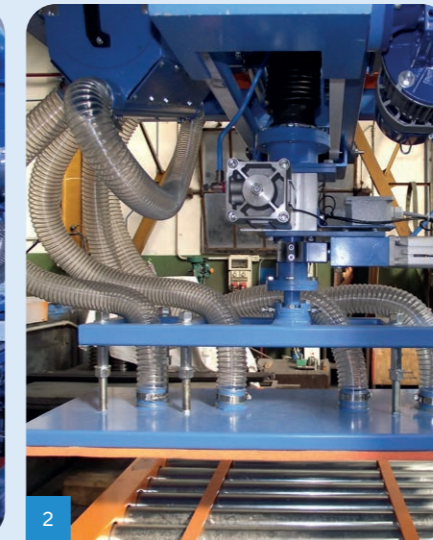


**LINEAR 11 STATION**

| STATION VARIANT



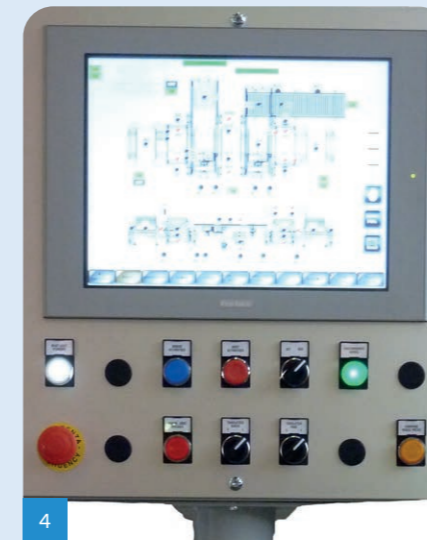
Horizontal depositing on trays.



Large single vacuum head configuration.



An expertly-designed structure.



Integrated touch-screen control system.



Robot trolley feeding curing chambers.



Robot trolley vertical loading of stack.

LONGINOTTI  
WASHBETON



**Washbeton:** rounded aggregates are used to create the natural pebble look. The tiles are washed in a manner to expose approximately one third of the pebble diameter. This way, two thirds of the pebble still remains embedded in the tile and will not come off even when subjected to extremely abrasive stress.

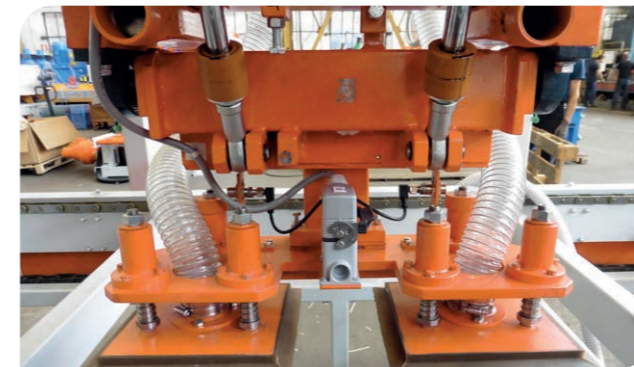


Wash-beton effect from direct washing process.



CASSANI  
VERTIMATIC

FOR LOWER/DOUBLE-LAYER  
PRODUCTIONS



Vacuum Loading Unit (2 head 400x400 version)



**Automatic deposit and movement solution for smaller productions of double-layer tiles.**

- Automatic collection of fresh product from the shovel of the press and depositing onto special metal pallets for curing in **vertical position** (on a slightly inclined plane). Can also operate in reverse to transfer cured slabs to the finishing line.
- Specially designed suction heads collect multiple slabs in parallel, moving independently to compensate for any differences in slab thickness.

- Integrated pallet chain for pallet transition, allowing the regular feeding of pallets for a continuous production cycle.
- Pallet feeding time based on the press production cycle time, the pallet size and the product thickness (generally 6 – 12 minutes).
- The machine can also be fitted with a unit for full pallet stacking and for empty pallet unstacking.





CASSANI

# CALIBRATING AND GRINDING FOR SLABS

TWO PRODUCT SERIES REPRESENTING 120 YEARS OF EXPERIENCE IN DEVELOPING GRINDING MACHINERY: **M SERIES** (LIGHT/MEDIUM GRIND) AND **S SERIES** (MEDIUM/HEAVY GRIND), GUARANTEEING THE HIGHEST PERFORMANCE, ENGINEERING QUALITY AND SAFETY.

| TAILORED TO YOUR NEEDS

1 OR 2 LAYER

Two dedicated machine families depending on your intended use.



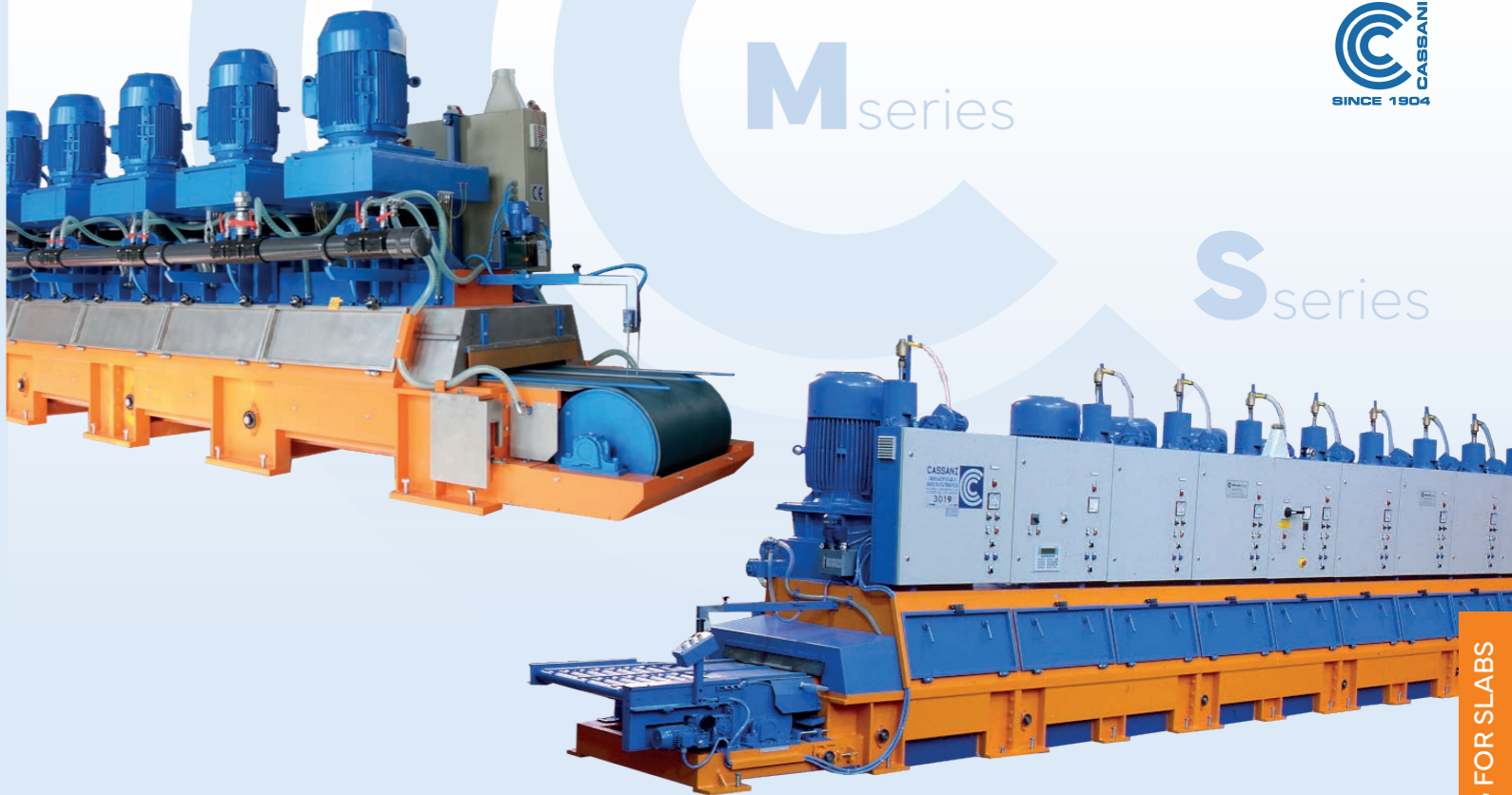
Each head is independent, with diamond-tipped tool or abrasive tool, depending on requirement.



Modular construction with up to 17 working heads, according to the production and required finish style and grade.



Available in Wet working or Dry working version (waterless – see Section 10).



M series

S series

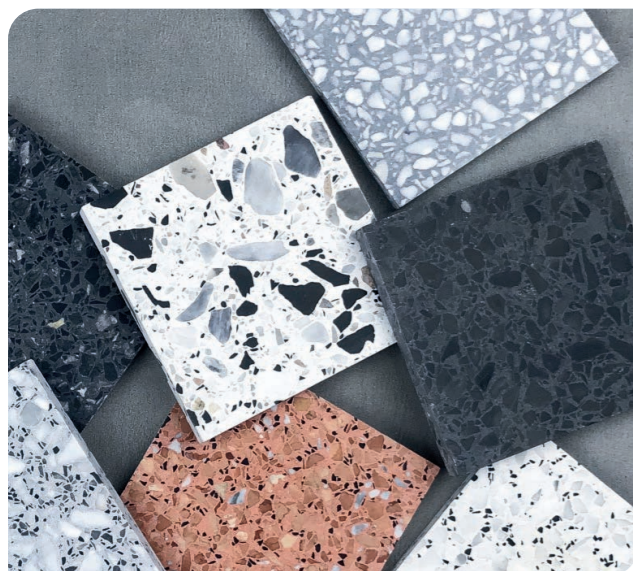


## | ROBUST, SAFE AND EASY TO MAINTAIN

- Sturdy, oversized steel structure suitable for hard-working conditions.
- Multilayer PVC conveyor belt high resistance sliding on interchangeable, monolithic bearing plates made in special steel.
- Machine structure conceived for easy cleaning, inspection and maintenance operation as well as conveyor belt replacement.
- Head structure with double doors for easy replacement of abrasive tools.
- Bridge head structure with double berth.
- Tiles contained in special steel guides during processing.
- Discharge of muddy waters by large passages in the base flowing into into the discharge channel.

## OPTIONAL

- QUICK-CHANGE ABRASIVE MOUNTS AND ABRASIVE SUPPLY.
- LOADING, UNLOADING ROLLER CONVEYORS FOR PROCESSED MATERIAL, MOTORIZED WITH INDEPENDENT SPEED VARIATORS.
- STAINLESS STEEL DOORS AND METAL GUARD RAILS FOR ADDITIONAL PROTECTION.
- STANDARD OR BARREL-TYPE TURNOVER MACHINES TO FLIP UPSIDE/DOWN ONE OR TWO ROWS OF SLABS FOR FURTHER PROCESSING.
- OPERATING DATA COLLECTION FOR PERFORMANCE AND BATCH MONITORING.
- FULL SUPPLY OF DIAMOND AND FRANKFURT ABRASIVE DISCS.



## | ENGINEERED FOR EXCELLENT RESULTS

- Power transmission from motor to shaft using toothed belts eliminating power leakage.
- Dual flow of grinding water through the center of the grinder shaft and as well as on the periphery of the tool.
- Centralized, programmed automatic lubrication by pump of all concerned points.

< Aggregate details surface and shine caused by grinding.

CALIBRATING AND GRINDING FOR SLABS

**| SAMPLE CONFIGURATION: CALIBRATOR, TILTER AND GRINDER GROUPING**

**M and S series** have two types of machines: calibrators (typically 1-3 heads) and grinders (typically 4-10 heads). Calibrators and Grinders are similar machines, but perform different tasks on different sides of a slab or block, as described below.

If only one task is required, they can be used independently, without the need for a tilter in between.



Calibrator, Tilter and Grinder

**SLABS OR BLOCKS ARRIVE SIGHT-SIDE DOWNWARDS FROM THE CURING STAGE TO THE START OF THE FINISHING LINE, WHERE THEY TRAVEL THROUGH:**

1. A 2-head calibrator evens out production differences in height between products, to tolerances of tenths of a millimeter.
2. A tilter rotates the product sideways or upside down so the sight-side faces upwards.
3. A 6-head grinder with motor groups of decreasing strength to grind and polish the sight-side face.

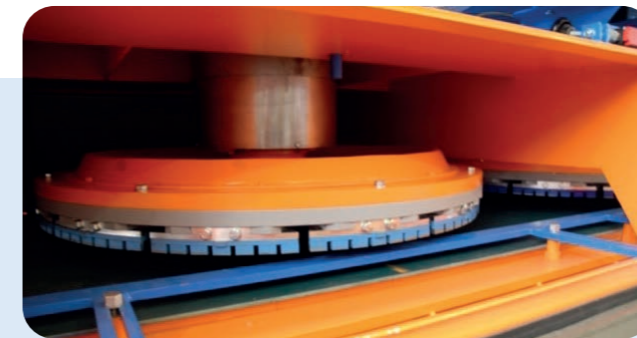
Slabs or Blocks then continue on to further finishing machines, which may include further polishing, shotblasting, brushing, waxing or others according to your needs.



Calibrator, tilter and grinder in a plant (slabs are depalletized on the right and travel towards the left here)

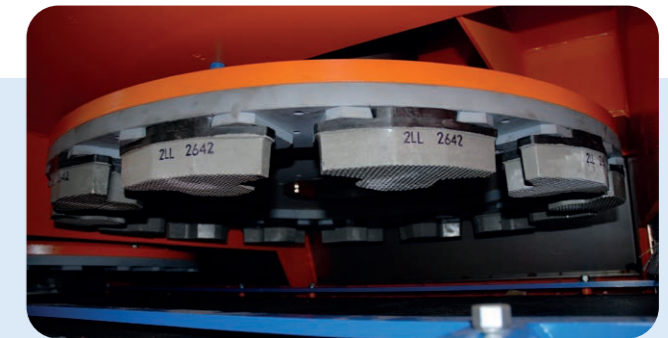
**| WORKING HEADS: DIAMOND AND SILICON CARBIDE ABRASIVES**

- Head structure with double doors for the easy substitution of abrasive stones.
- Automatic spindle upstroke when the abrasive is worn through.
- Abrasives can be pre-mounted on easily-centered aluminium disks for fast replacement.
- High-speed rise and descent of abrasive mount for replacement.



**HEADS WITH VERTICAL AXE SPINDLE AND DIAMOND TOOLS.**

The diamond ring is placed at the chosen working height and locked in position for working. When necessary, the height is adjusted to compensate for tool wear, which in short time is negligible. The positioning is automatic with digital display of working height.



**Heads with vertical shaft spindle and traditional silicon carbide abrasive stones.**

The abrasives stones are pushed against the material by a constant and controlled mechanical pressure, and the abrasive consumption is compensated by an equal spindle descent. This operation maintains perfect amperometric absorption and ensures excellent performance.

**| CONTROL UNIT AND PLC**

**Control panels and PLC installed directly on the machine in watertight cabinets on antivibration supports, one for each head.**

- Automatic positioning of abrasive on material at startup.
- Adjust the pressure of work for each head with abrasive tools and the position of diamond tools.
- Displays speed of the belt, the main working data, work functions and safety devices.
- Displays amperometric absorption of each motor.
- Displays abrasive consumption with visual and acoustic alarms for working height.
- Indication of faults to determine the cause.



### M SERIES

LIGHTER AND LOWER INSTALLED POWER FOR SINGLE-LAYER PRODUCTION.

Especially designed for single-layer production, the M series is lighter and with lower installed power (individual heads up to 45kW). In the M series, the entire motor group, transmission belt and shaft of each working head travels vertically to reach the desired working height.

Some examples (for complete series see pag. 52-53):

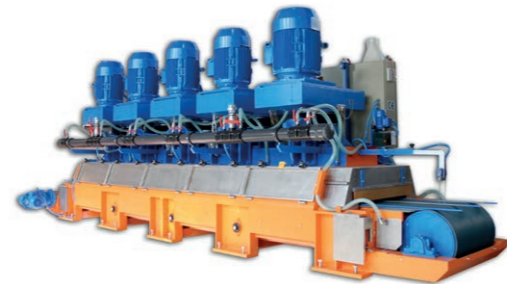
#### M SERIES 70 / 5 Heads

Seen from the front



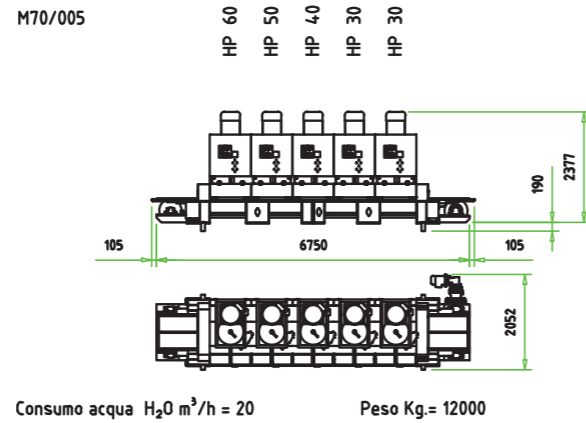
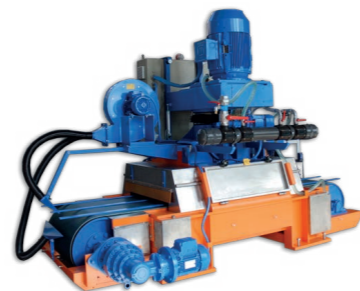
#### M SERIES 70 Grinder / 5 Heads

Seen from the back

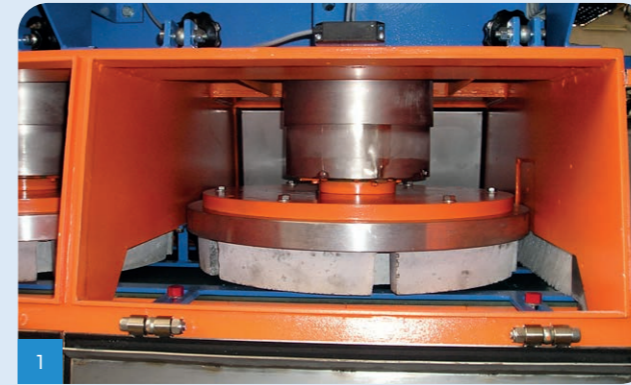


#### M SERIES 70 Calibrator / 1 Head

Seen from the front



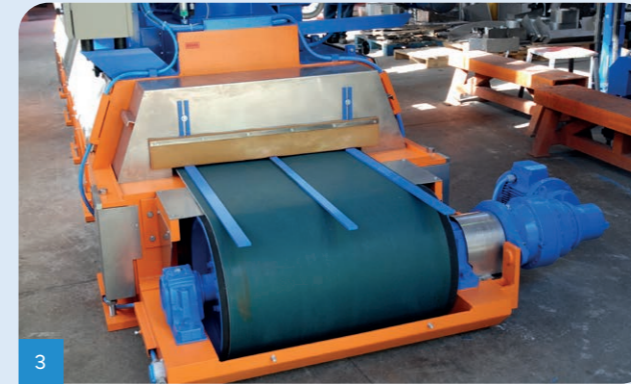
### PRODUCT DETAIL IMAGES



1 Abrasive head detail.



2 Belt conveyor moto-reductor.



3 Exit bay.



4 Lighter, fully-mounted motor group.

**M SERIES** Technical Specifications

M SERIES	40	50
Useful Belt Width (mm)	430	500
Abrasive Diameter (mm)	570	640
Max Slab Width Travelling in Single File (mm)	400	500
Max Slab Width Travelling in Double File (mm)	200	250
Range of Worked Product Height (mm)	15 - 60	15 - 60
Belt Speed (m/min)	1 - 6	1 - 6

M SERIES	70	80
Useful Belt Width (mm)	700	800
Abrasive Diameter	790	850
Max Slab Width Travelling in Single File (mm)	600	600
Max Slab Width Travelling in Double File (mm)	333	400
Range of Worked Product Height (mm)	15 - 60	15 - 60
Belt Speed (m / min)	1 - 6	1 - 6

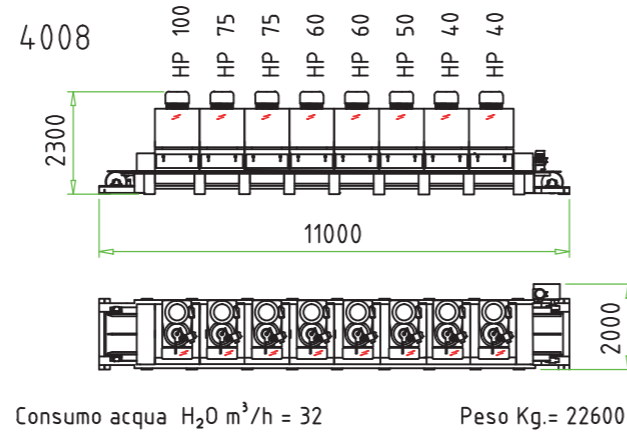
	40			50		
	Max Length (mm)	Total Connected Load (kW)	Water Consumed (m3/hr)	Max Length (mm)	Total Connected Load (kW)	Water Consumed (m3/hr)
CALIBRATOR 1 HEAD	1950	32	3	2130	39	3
CALIBRATOR 2 HEADS	2600	62	5	2840	57	6
TILTER	3300	2		3300	2	
GRINDER 3 HEADS	3250	69	8	3550	91	9
GRINDER 4 HEADS	3900	91	10	4260	105	12
GRINDER 5 HEADS	4550	106	13	4970	121	15
GRINDER 6 HEADS	5200	122	15	5680	136	18
GRINDER 7 HEADS	5850	152	18	6390	151	21
GRINDER 8 HEADS	6500	167	20	7100	174	24
GRINDER 9 HEADS	7150	183	23	7810	189	27
GRINDER 10 HEADS	7800	208	25	8520	219	30

	70			80		
	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)
CALIBRATOR 1 HEAD	3190	39	4	3450	39	4
CALIBRATOR 2 HEADS	4080	76	8	4500	76	8
TILTER	3300	2		3300	2	
GRINDER 3 HEADS	4970	114	12	5550	129	12
GRINDER 4 HEADS	5860	136	16	6600	158	16
GRINDER 5 HEADS	6750	153	20	7650	181	20
GRINDER 6 HEADS	7640	189	24	8700	226	24
GRINDER 7 HEADS	8530	217	28	9750	263	28
GRINDER 8 HEADS	9420	241	32	10800	286	32
GRINDER 9 HEADS	10310	257	36			
GRINDER 10 HEADS	11200	279	40			

Additional machine configurations are available on demand.

## S SERIES

GREATER INSTALLED POWER FOR SINGLE AND DOUBLE LAYER PRODUCTION



Heavier-duty machines for larger productions and double-layer tiles. In the S series, the motor, belt and driving pulley of each head are fixed in the structure, allowing more powerful motor groups (individual heads up to 75kW).

Some examples (for complete series see pag. 56-57):

### S 70 Calibrator / 2 Heads

Seen from the front



### S 80 Grinder / 9 heads

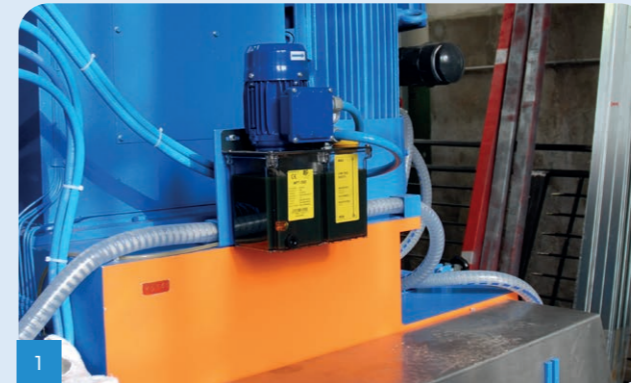
Seen from the front



### S 105 Grinder / 5 Heads



## PRODUCT DETAIL IMAGES



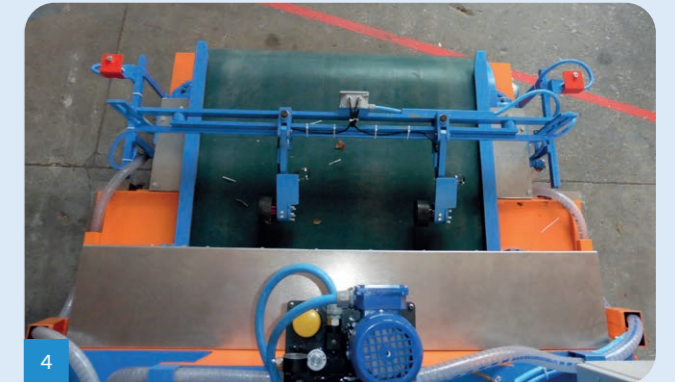
Centralized, programmed lubrication by pump.



Stainless steel for doors, pans and protections.



Cooling water distribution.



Steel guides and product entry sensors.



CASSANI

# CALIBRATING AND GRINDING FOR SLABS



SINCE 1904

S series

## | S SERIES Technical Specifications

S SERIES	70	80
Useful Belt Width (mm)	680	830
Abrasive Diameter (mm)	790	900
Max Slab Width Travelling in Single File (mm)	600	600
Max Slab Width Travelling in Double File (mm)	333	400
Range of Worked Product Height (mm)	15 - 60	15 - 60
Belt Speed (m/min)	1 - 6	1 - 6

S SERIES	105	125
Useful Belt Width (mm)	1050	1250
Abrasive Diameter (mm)	1170	1370
Max Slab Width Travelling in Single File (mm)	1000	1200
Max Slab Width Travelling in Double File (mm)	500	600
Range of Worked Product Height (mm)	20 - 150	20 - 150
Belt Speed (m/min)	1 - 6	1 - 6

	70			80		
	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)
CALIBRATOR 1 HEAD	3190	39	4	3450	43	4
CALIBRATOR 2 HEADS	4080	76	8	4500	81	8
TILTER	70	2		3300	2	
GRINDER 3 HEADS	4970	138	12	5550	237	12
GRINDER 4 HEADS	5860	170	16	6600	215	16
GRINDER 5 HEADS	6750	191	20	7650	244	20
GRINDER 6 HEADS	7640	235	24	8700	301	24
GRINDER 7 HEADS	8530	274	28	9750	346	28
GRINDER 8 HEADS	9420	297	32	10800	376	32
GRINDER 9 HEADS	10310	320	36	11850	413	36
GRINDER 10 HEADS	11200	349	40			

	105			125		
	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)
CALIBRATOR 1 HEAD	3700	57	5,0	4100	57	6,0
CALIBRATOR 2 HEADS	5000	115	10,0	5600	115	12,0
TILTER	3300	2		3300	2	
GRINDER 3 HEADS	6300	207	15,0	7100	207	18,0
GRINDER 4 HEADS	7600	253	20,0	8600	253	24,0
GRINDER 5 HEADS	8900	290	25,0	10100	290	30,0
GRINDER 6 HEADS	10200	346	30,0	11600	346	36,0
GRINDER 7 HEADS	11500	391	35,0			

Additional machine configurations are available on demand.

CALIBRATING AND GRINDING FOR SLABS

# POLISHING FOR SLABS

**CASSANI'S CTS SERIES** IS DESIGNED FOR POLISHING MARBLE AND AGGLOMERATED CEMENT AND ENGINEERED STONE TILES.

## TAILORED TO YOUR NEEDS



Two classes of machines differing in the useful width of the conveyor belt, 70 (700mm) and 80 (830mm).



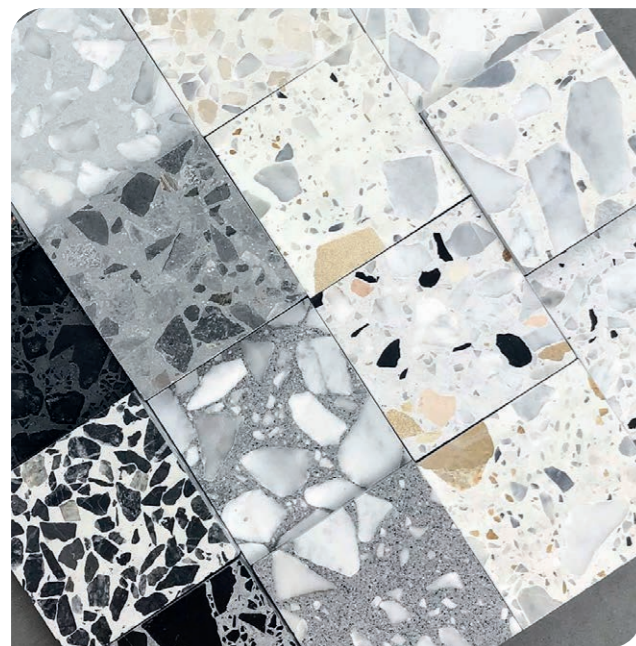
Up to 12 pneumatic polishing heads mounted on the 70 on a monolithic and sturdy mobile bridge; up to 16 on the 80.



The 70 has an optional integrated sight-side calibration/grinding unit in the same structure, with 3-5 fixed mechanical-pressure heads that provide vibration-free calibration before the polishing stage. For the 80, this calibration unit is a separate machine (see technical diagram).

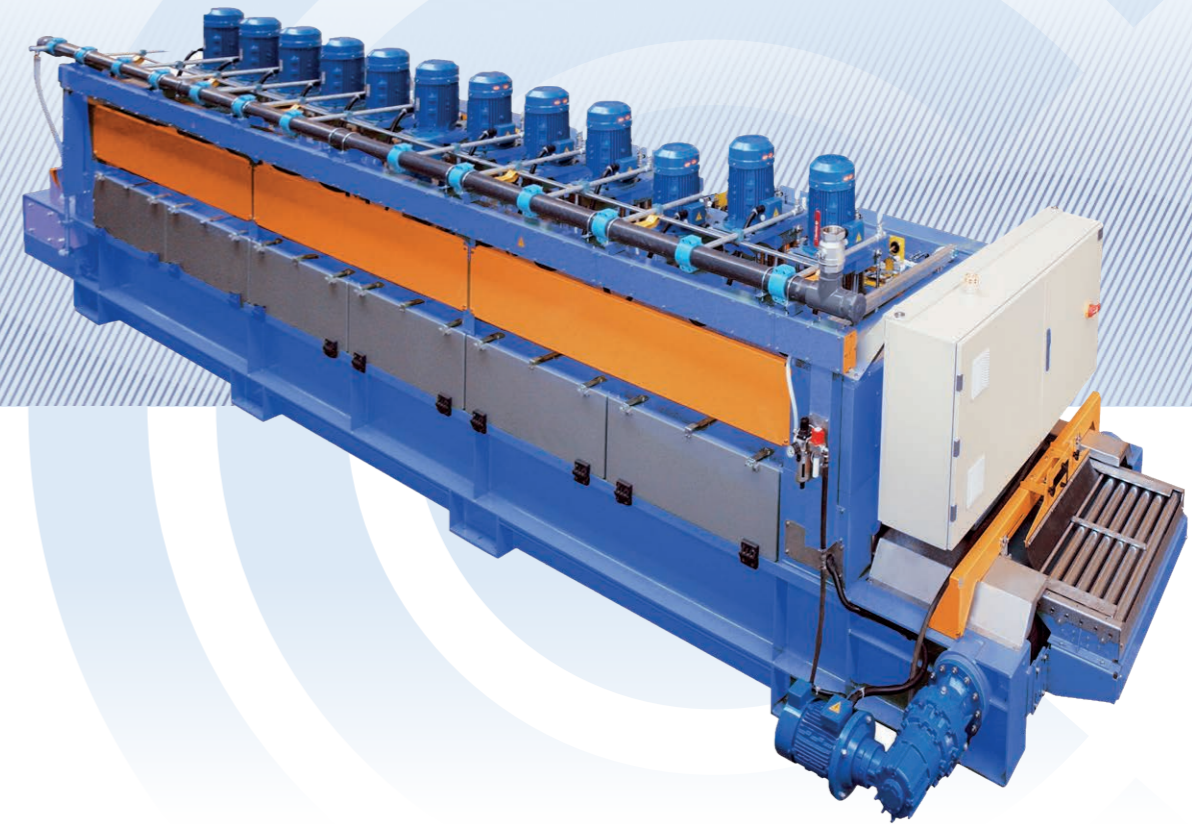


The width of the stroke is adjustable according to the format to be processed.



## ENGINEERED FOR EXCELLENT RESULTS

- Calibrating heads raised/lowered by electromechanical system; polishing pressure is pneumatic.
- Transversally mobile beam along which the polishing heads are arranged.
- The Frankfurt-holder plate is fixed to the spindle through an elastic joint for an excellent adaptation to the tile surface.
- Cooling water fed through an axial cavity in the spindle itself and also by a radial distribution on the diamond-tipped heads.
- Centralized, programmed automatic lubrication by pump of all concerned points.
- Belt speed is 1-6 m/min.



## ROBUST, SAFE, AND EASY TO USE

- Tiles held in position by stainless steel guides.
- Conveyor belt made of multi-layer PVC, sliding on replaceable anti-wear steel plates.
- Access doors are made from thick aluminium sheeting, with safety control devices that interrupt the electrical feed when they are opened.
- Each head is provided with its own control panel.
- Special device for creating a small gap between consecutive tiles when entering the machine.

## OPTIONAL

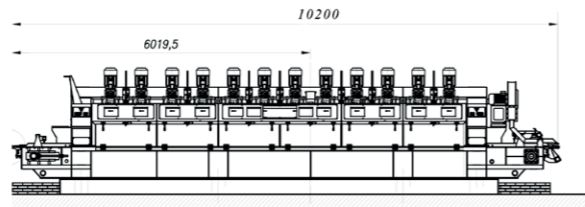
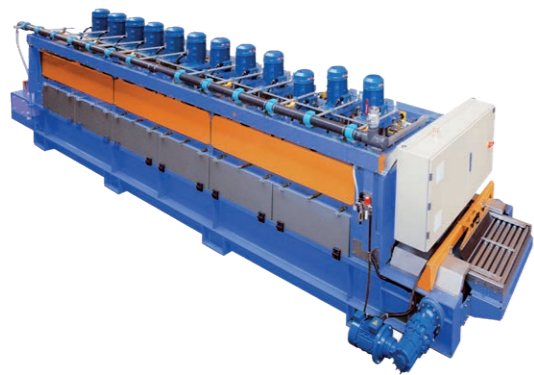
- SIRIUS 80 MACHINES CAN BE PRECEDED IN A SERIES BY A SMALLER, 1-4 HEAD MACHINE TO CALIBRATE THE BOTTOM OF THE TILES, EQUALIZING HEIGHT TO A TOLERANCE OF TENTHS OF A MILLIMETRE.
- QUICK-CHANGE ABRASIVE MOUNTS AND ABRASIVE SUPPLY.

**CTS SERIES**

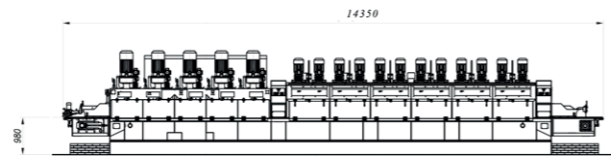
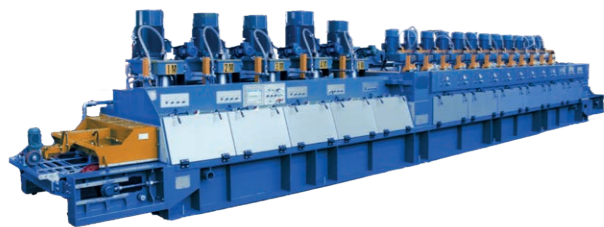
AVAILABLE IN TWO BELT SIZES,  
 WITH AND WITHOUT  
 INTEGRATED CALIBRATION

Some examples (for complete series see pag. 62-63):

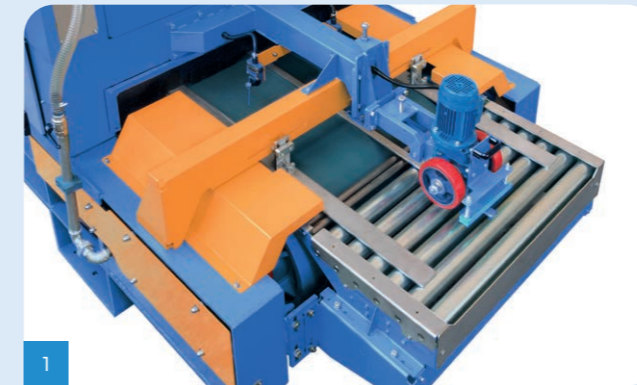
**CTS 80 Polisher**  
 / 12 Heads



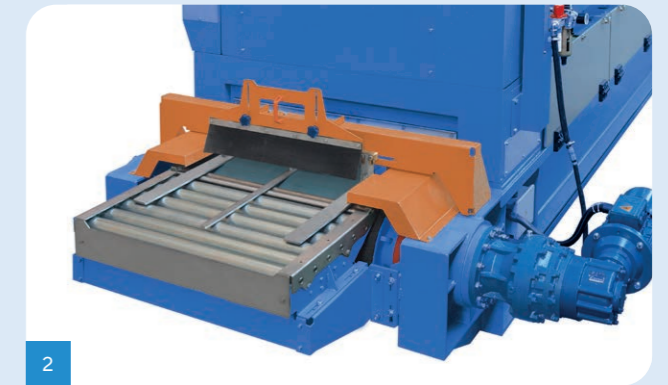
**CTS 70 with Calibration**  
 / 5 + 12, with 5 Calibrating  
 and 12 Polishing heads



**PRODUCT  
 DETAIL IMAGES**



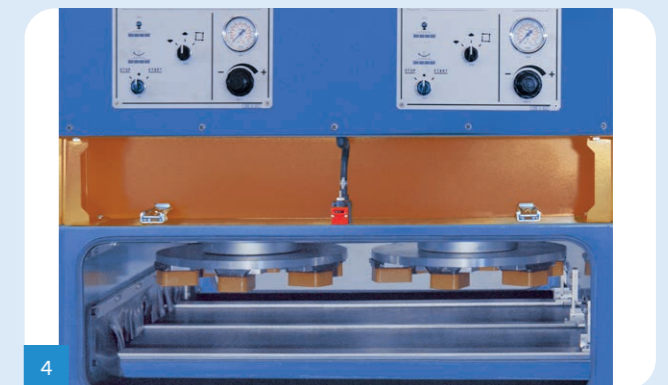
1 Loading bay detail.



2 Unloading bay detail.



3 Diamond head tool detail.



4 Frankfurt head tool detail.



**CTS SERIES** Technical Specifications

CTS SERIES	70 / with Calibration	70 Polish-Only
Useful Belt Width (mm)	710	710
Abrasive Diameter	790	790
Range of Worked Product Height (mm)	15 - 60	15 - 60
Belt Speed (m / min)	1 - 5	1 - 5

CTS SERIES	80
Useful Belt Width (mm)	840
Abrasive Diameter	890
Range of Worked Product Height (mm)	15 - 60
Belt Speed (m / min)	1 - 5

	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)
POLISHER 8 HEADS				7700	60	25
POLISHER 10 HEADS				8950	78	31
POLISHER 12 HEADS				10200	96	37

	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)
POLISHER 12 HEADS	11100	117	37
POLISHER 14 HEADS	12350	135	43
POLISHER 16 HEADS	15000	160	50

3 CALIBRATOR + 10 POLISHER HEADS	11950	147	40			
3 CALIBRATOR + 12 POLISHER HEADS	12700	162	47			
4 CALIBRATOR + 12 POLISHER HEADS	13450	184	51			
5 CALIBRATOR + 12 POLISHER HEADS	14350	206	55			

Additional machine configurations are available on demand.

# CALIBRATING, GRINDING AND POLISHING SOLUTIONS FOR BLOCKS

OUR **BK SERIES** IS SPECIFICALLY DESIGNED TO DELIVER EXCEPTIONAL RESULTS WHEN GRINDING AND CALIBRATING BLOCKS, PAVERS AND KERBSTONES FROM CONCRETE, STONE, MARBLE AND ENGINEERED STONE.

## TAILORED TO YOUR NEEDS



Customisable for a full range of product height from 25mm to 400mm.



Customisable number of independent working heads, with a wide range of diamond-tipped tools and silicon carbide abrasive mounts and motor powers up to 38kW.



Can be aligned with separate grinding and chamfering machine for corner pieces and bevelled edges.

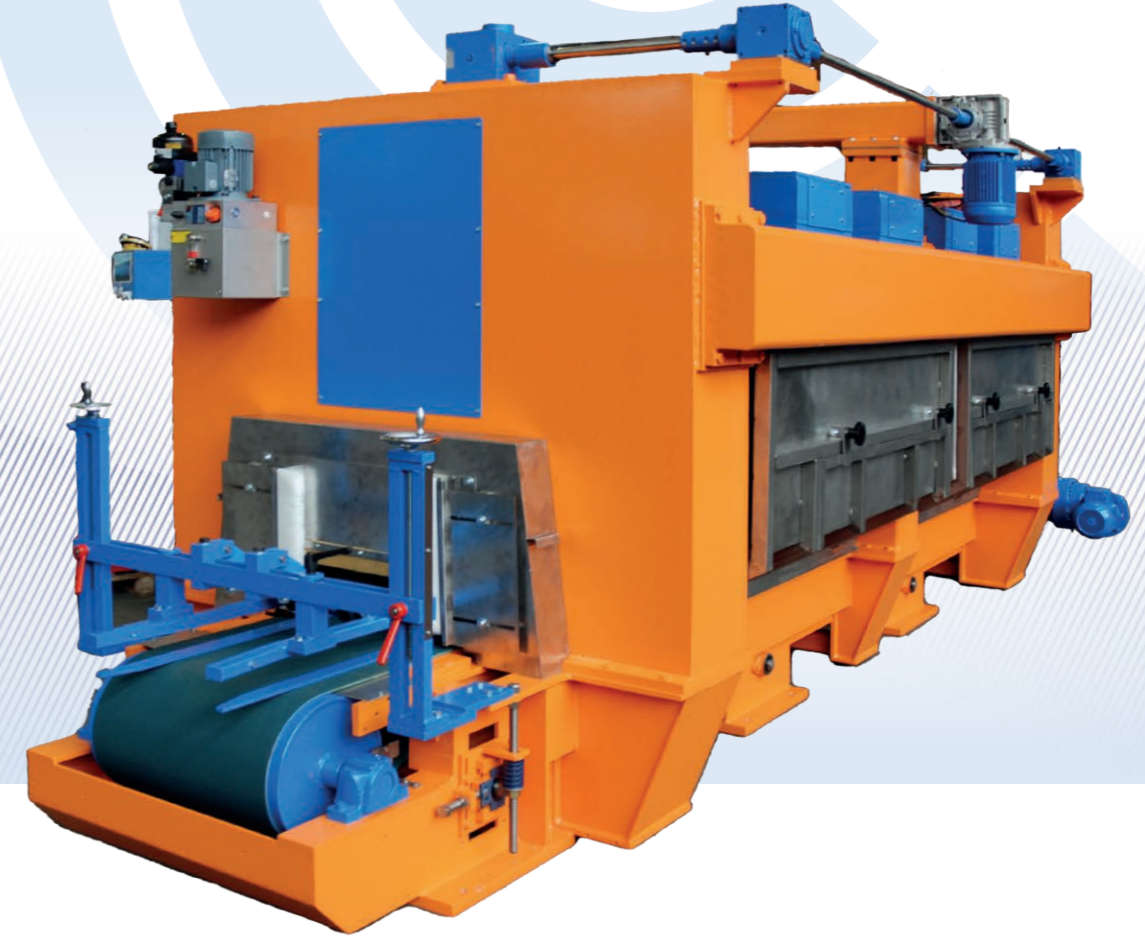


Available in Wet working or Dry working version (see Section 10).



## ENGINEERED FOR EXCELLENT RESULTS

- Mechanical working pressure applied with electronic continuous monitoring of motor ampere absorption.
- A control panel drives belt speed and the servo-assisted system which positions the working heads at the correct height, and hydraulic brakes firmly lock the beam in position.
- Grinding surfaces cooled by water injection at the contact point with the grinding tools (in the wet working version).



## ROBUST, SAFE, AND EASY TO USE

- CASSANI commitment to the robustness of its grinding equipment, with all the power required for higher production volumes and quality.
- All working heads are fixed on an exceptionally robust beam which travels vertically along the solid fixed pillars of the machine.
- Easy to set up batches of different heights, without complex tunings.
- Steel guides holding the block in place are easily adjusted for different dimensions.
- Reinforced PVC belt sliding over steel anti-wear plates.

## OPTIONAL

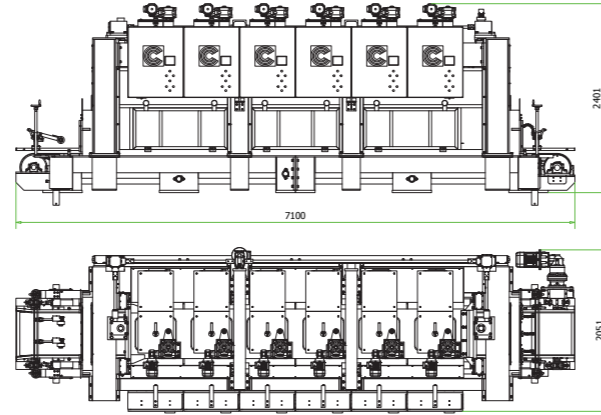
- OPERATING DATA COLLECTION FOR PERFORMANCE AND BATCH MONITORING.

CALIBRATING, GRINDING AND POLISHING SOLUTIONS FOR BLOCKS

## BK SERIES

AVAILABLE IN A RANGE OF USEFUL BELT SIZES AND NUMBER OF WORKING HEADS.

Some examples (for complete series see pag. 68-69):



### BK 50 / 1 Head



### BK 70 / 4 Heads

Seen from the back

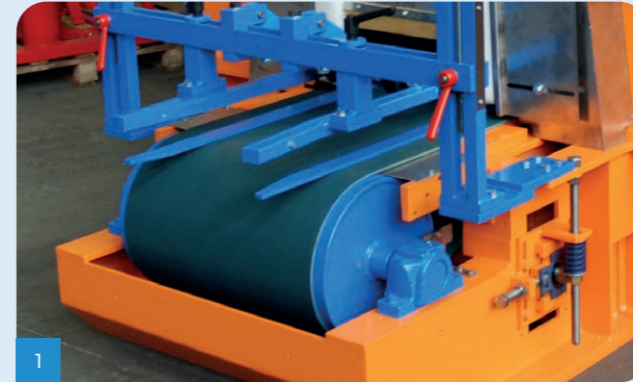


### BK 70 / 6 Heads

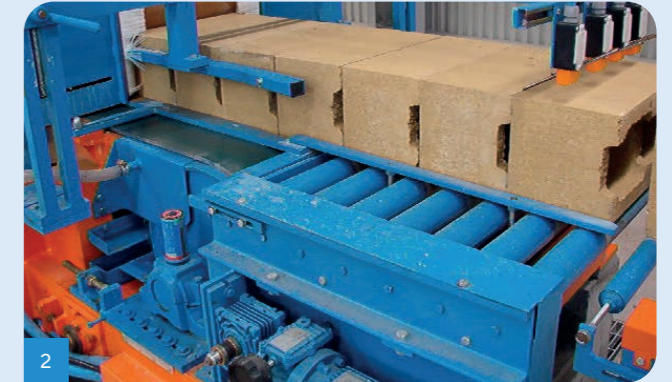
Seen from the front



## PRODUCT DETAIL IMAGES



Machine entry detail.



Stainless steel for doors, pans and protections.



Grinding head view.

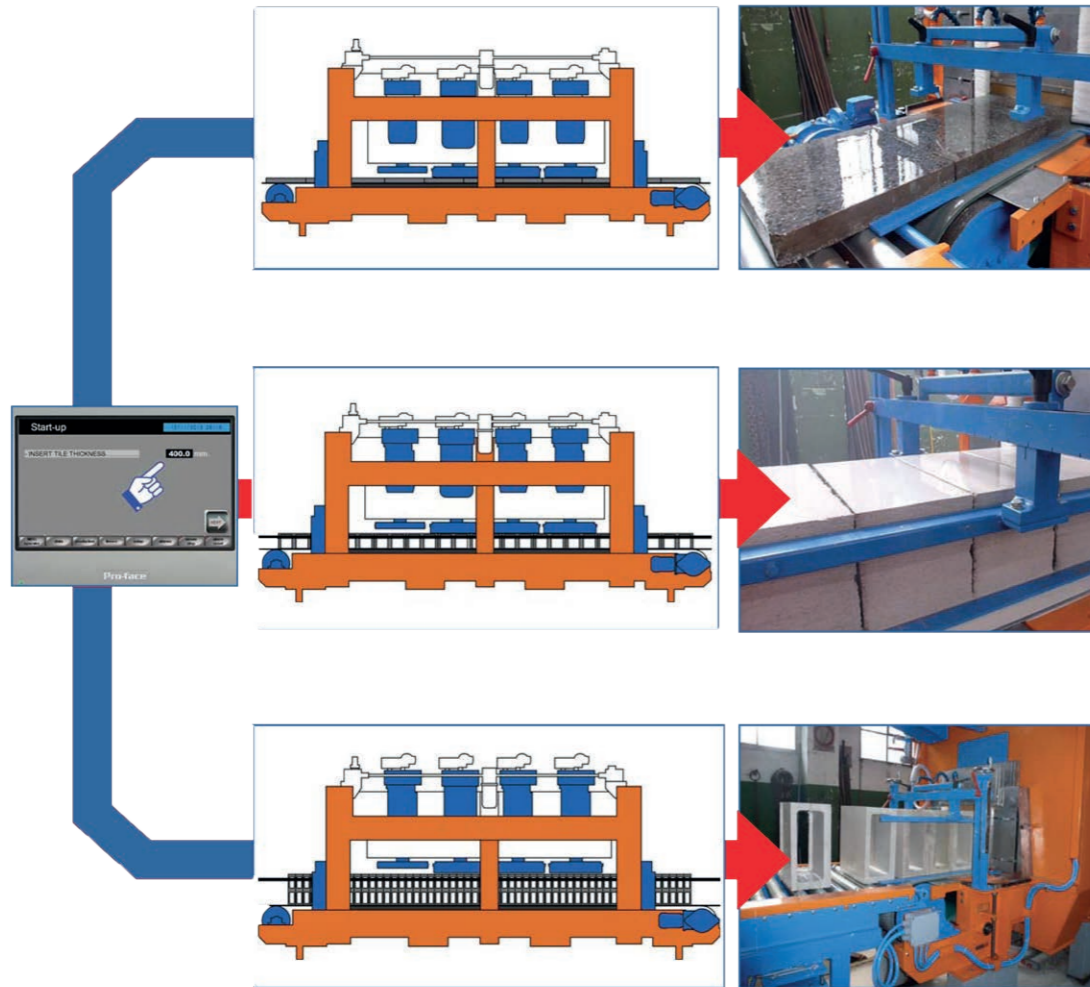


Control Panel with Proface.

CALIBRATING, GRINDING AND POLISHING SOLUTIONS FOR BLOCKS

ADJUSTABLE WORKING HEIGHT FOR DIFFERENT PRODUCT TYPES.

BK SERIES Technical Specifications



BK SERIES	50	70	80
Useful Belt Width (mm)	500	700	800
Abrasive Diameter	640	790	890
Range of Worked Product Height (mm)	25 - 400	25 - 400	25 - 400
Belt Speed (m / min)	1 - 6	1-6	1 - 6

	50		
	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)
GRINDER 4 HEADS	5680	105	12
GRINDER 6 HEADS	7100	135	18
GRINDER 8 HEADS	8520	165	24

	70		
	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)
GRINDER 4 HEADS	7640	135	16
GRINDER 6 HEADS	9420	165	24
GRINDER 8 HEADS	11200	195	32

	80		
	Max Length (mm)	Total Connected Load (kW)	Water consumed (m3/hr)
GRINDER 4 HEADS	8700	155	16
GRINDER 6 HEADS	10800	185	24

Additional machine configurations are available on demand.

# DRY GRINDING AND POLISHING FOR SLABS AND BLOCKS

WE HAVE REDESIGNED OUR STANDARD LINES TO DELIVER THE SAME STRENGTH AND PRECISION WITHOUT CONSUMING WATER FOR COOLING.

MACHINE SERIES AVAILABLE IN DRY WORKING MODE

Our diamond and abrasive tools, working speeds, and protection on parts and working areas have been adapted for the significant dust and absence of water lubrication. The principal processing area of the machine is lower than on standard machines, with a pneumatic and automatic system to seal the base, and the addition of a dedicated aspiration and filtering system. The grinding dust is collected in special containers with no spread to the surrounding environment.

M series 50, 70 and 80

S series, 80, 105 and 125

## OPTIONAL

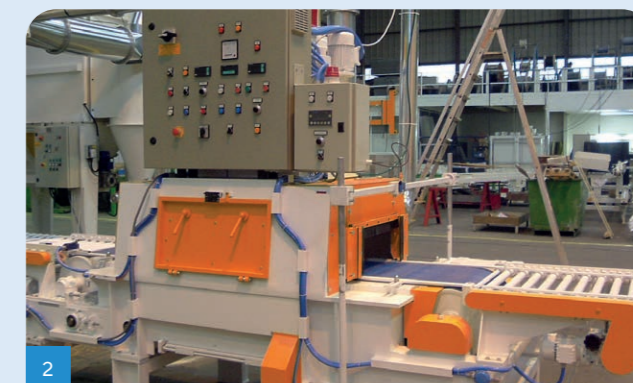
- OPERATING DATA COLLECTION FOR PERFORMANCE AND BATCH MONITORING.



## PRODUCT DETAIL IMAGES



M 50 DRY / 1 Head, dust aspiration detail.



M 50 DRY / 1 Head, front.



Dust processing plant.



Dry working diamond tool chamber.

# CHAMFERING AND EDGE-POLISHING FOR SLABS AND BLOCKS

LINEAR CHAMFERING MACHINE DESIGNED TO MAKE RADIAL OR CHAMFERED EDGES OF SLABS, BLOCKS AND SOCLES OF AGGLOMERATED CONCRETE, MARBLE AND GRANITE.

## TAILORED TO YOUR NEEDS



Machine can be angular (L-shaped) or linear (all heads in single line).



Rotation devices can be added between groups of heads to perform chamfers on multiple sides of the product.



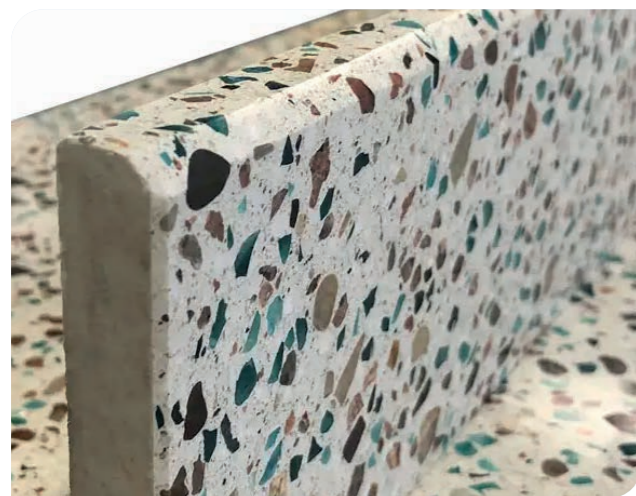
For products with height from 12mm (single-layer slabs) to 400mm (concrete blocks), creating chamfers up to 30mm.



Dry working mode available (without requirement of water treatment).



Customisable grinding heads (with diamond wheels) and polishing heads (with abrasive wheels) depending on the chamfer finish required.



## ENGINEERED FOR EXCELLENT RESULTS

- Adjustable belt speed between 1 and 6 m/min.
- Useful belt width: 600mm as standard, larger on request.
- Easily adjustable steel guides to hold slabs or blocks in place.



• CASSANI Chamfering Machine: on this example, product is grinded on two parallel sides, passed through a 90° diversion and grinded on the other two sides.

## ROBUST, SAFE, AND EASY TO USE

- Vertical adjustment of chamfering heads using manual adjustment levers.
- Automatic arrest control in case of water failure.
- Controlled by separate switch-and-control-board.

## OPTIONAL

- CALIBRATION SECTION TO REMOVE HEIGHT DIFFERENCES ON BLOCKS COMING OUT OF THE VIBROPRESS MOULDS, GUARANTEEING UNIFORMITY OF CHAMFERS ON ALL SIDES OF THE BLOCK.
- CLEANING AND DRYING PATH: EQUIPPED WITH ROLLER BRUSHES AND TANK FOR COLLECTION OF THE DIRTY WATER, AND AIR BLOWING UNITS ABOVE AND BELOW FOR QUICK DRYING OF THE SLAB SURFACE.
- BULLNOSE EFFECT GRINDER HEADS.



CASSANI

# CHAMFERING AND EDGE-POLISHING FOR SLABS AND BLOCKS



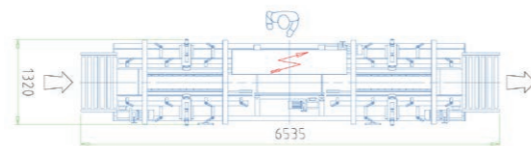
## CHAMFER series

### CHAMFER SERIES

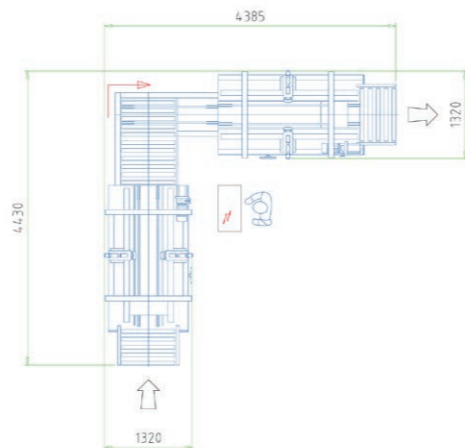
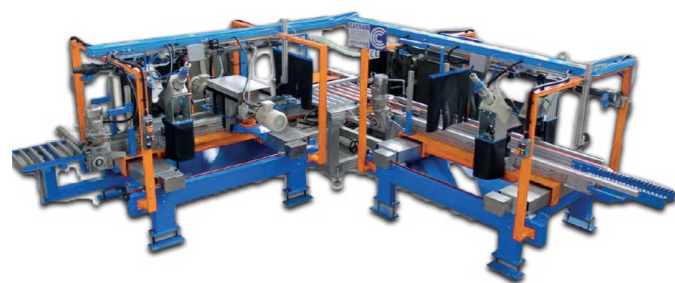
THE SHAPE AND HEAD LAYOUT IS CUSTOMISABLE TO THE TASK REQUIRED.

Customized versions available on demand.

#### Linear Version.



#### Angular Version.



### PRODUCT DETAIL IMAGES



Details of chamfering heads at 45°.



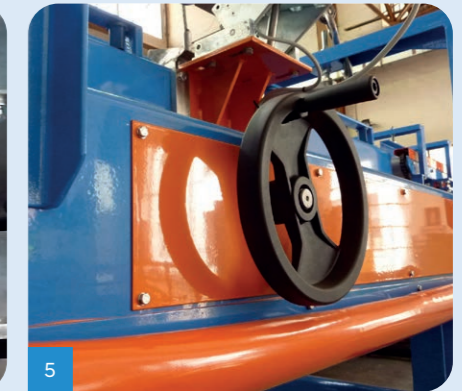
Details of the grinding heads.



Chamfering of slabs.



Chamfering of blocks.



Chamfer working height adjustment lever.



Chamfering tool detail.



Bullnose effect.

CHAMFERING AND EDGE-POLISHING FOR SLABS AND BLOCKS

# SHOTBLASTING FOR SLABS AND BLOCKS

CASSANI OFFERS SHOTBLASTERS FOR SLABS, PAVERS AND BLOCKS, IDEAL FOR HARD LANDSCAPING APPLICATIONS REQUIRING ROUGHNESS, ANTI-SKID OR THE MUCH-LOVED HAMMERED EFFECT DECORATIVE TEXTURE.

## | TAILORED TO YOUR NEEDS



Available in a range of belt width and tunnel heights depending on size of product.



With mesh belt or roller conveyor as required.



Feed speed adjustment and regulation of steel-shot flow.



- Shotblasted by a series of turbines appropriately positioned to obtain optimal blasting angle, velocity and energy-savings, and avoid any dead angles.
- Controlled abrasion by steel shots at a high velocity to impart texture to the product.
- Excellent, efflorescence-free finish of textured surface and exposed aggregates.
- Surface left ready to carry out further impregnation or sealing (coating) of product.
- Structure and flows designed to ensure no pollution in the surrounding environment.



SHOTBLASTING FOR SLABS AND BLOCKS

## | ROBUST, SAFE, AND EASY TO USE

- Robust housing is protected by wear-resistant shields in high-thickness manganese steel.
- The exit vestibule features a special rotating sweeping system and a high-pressure fan blowing device removes the abrasive from treated objects before exit.
- The entrance and exit have a special abrasion-resistant rubber belt to keep the abrasive out.
- Flat conveyor belt made from highly-resistant metallic wire mesh.
- High efficiency dust collection system, designed for minimal noise and easy maintenance.

### OPTIONAL

- SHOT SUPPLY AS REQUIRED.





Drying machine leading to shotblaster.

**SHOT Technical Specifications**

SHOT Technical Specifications	Useful Belt Area Width x Height (mm x mm)	Number of Turbines	Total Installed Power (kw)
SHOT 6 / 5	600 x 500	4	30
SHOT 8 / 6	850 x 600	4-8	30-60
SHOT 12 / 6	1200 x 600	4-8	30-60
SHOT 15 / 6	1500 x 600	8	60
SHOT 15 / 10	1500 x 1000	8	60
SHOT 20 / 6	2000 x 600	8	60
SHOT 20 / 10	2000 x 1000	8	88

Representative selection, more on request.

**PRODUCT  
 DETAIL IMAGES**



1 Pavers exiting machine.



2 Entrance bay with metal mesh belt.

# WAXING AND COATING SOLUTIONS

## WAXING MACHINE LUX 700

THE WAXING TREATMENT CAN ADD GREAT VALUE TO INTERIOR TILES THAT HAVE BEEN GRINDED AND POLISHED: AN ENHANCED APPEARANCE OF THE POLISH AND SHINE AND STRENGTHENED ABSORPTION RESISTANCE AGAINST SPOTS OR STAINS FROM LIQUIDS. COATING IS ALTERNATIVE TREATMENT TO ADD BRIGHTNESS AND SHINE AND HYDRO-REPELLENCE, USING EASILY AVAILABLE WATER-BASED PAINTS INSTEAD OF WAX.

### | CUSTOMISABLE. ENGINEERED. ROBUST



Methane or GPL burning tunnel oven to open up tiles for wax treatment.



Oscillating bridge with adjustable pneumatic pressure stroke and speed.



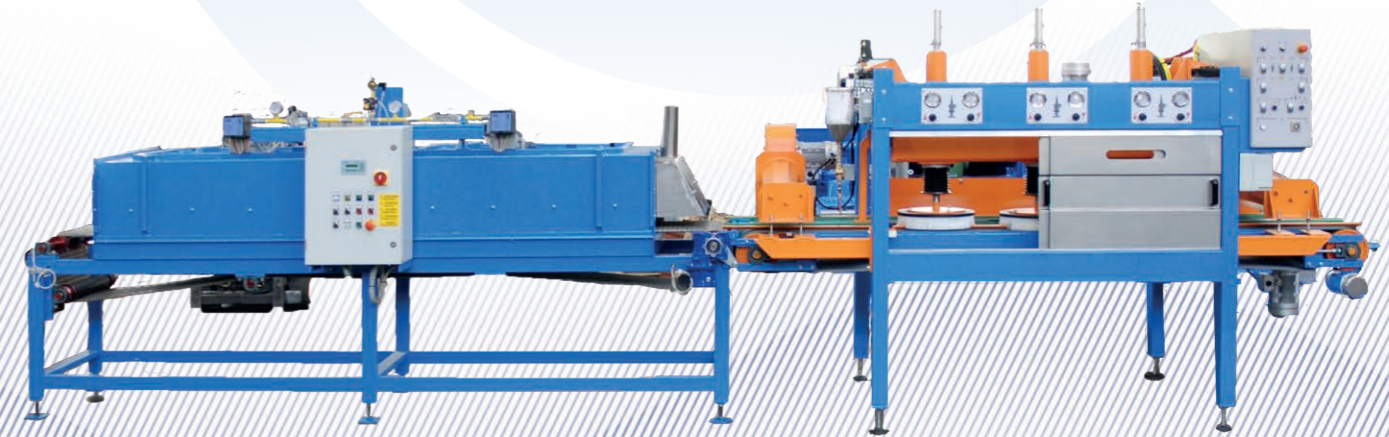
Waxing machine with customisable number of brushes.



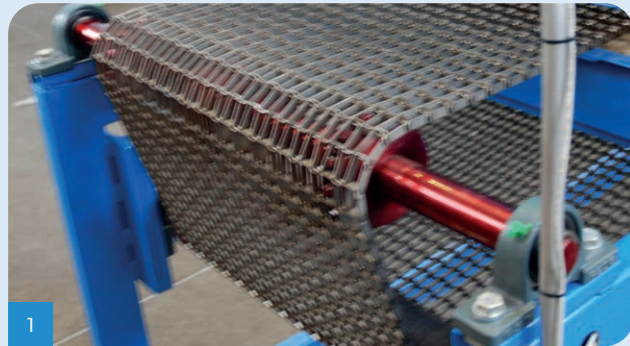
The coating alternative works in a similar manner, with a furnace tunnel, a coating machine where atomised paint is applied, and a final furnace tunnel to dry the paint.

### | ENGINEERED FOR EXCELLENT RESULTS

- Dry tiles made to pass in a tunnel drying oven to bring them to the right temperature and make them absorbent to the liquid wax.
- In the LUX, a wax dispenser with adjustable flow releases wax over passing product and brushes spread the wax for full absorption.
- The oscillating bridge and adjustable pneumatic pressure of the brushes guarantee uniform waxing.



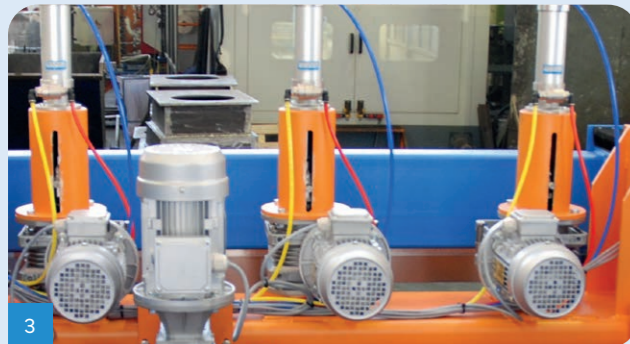
**PRODUCT  
 DETAIL IMAGES**



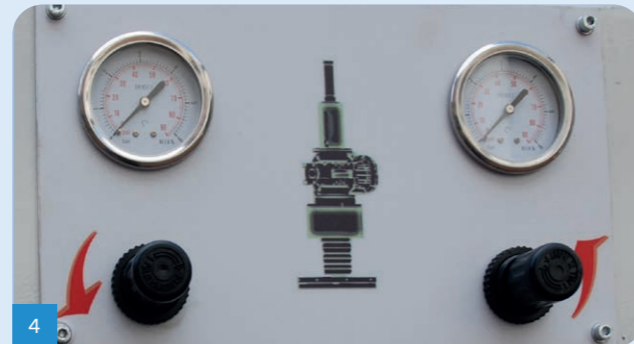
1  
 Stainless steel belt for drying machine.



2  
 Waxing machine air dryer.



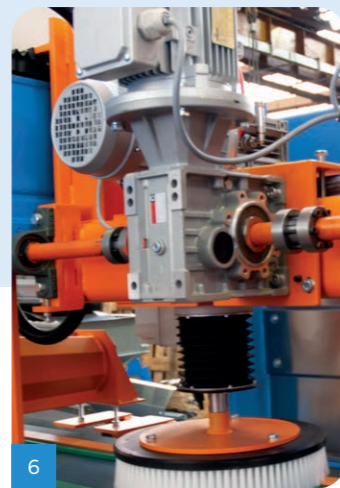
3  
 Pneumatic pressure of brushes.



4  
 Brush pressure adjustment.



5  
 Wax tank and dosator.



6  
 Detail of brush and motor.



7  
 Control board and temperature management.

**| LUX 700 / 003 WAXING MACHINE Technical Specifications**

	Drying Machine	Waxing Machine
Useful Belt Width (mm)	700	700
Belt Conveyor Speed (m/min)	0 - 4	0 - 4
Total Connected Load (kW)	0,7	11
Dimensions (L x W x H)	3,500 x 1,300 x 1,600	2,900 x 1,600 x 2,000

Brush Diameter (mm)		450
Oven Temp (°C)	300	
Thermal Power (kcal/hr)	30,000	

• Sample Characteristics of 3-brush version. For faster processing, the machine can be extended.

# DIGITAL PRINTING SOLUTIONS

CASSANI HAS BROUGHT THE FIELD IN OF **DIGITAL DECORATION** TO AGGLOMERATED CONCRETE SLABS AND BLOCKS, THANKS TO A PARTNERSHIP WITH THE WORLD'S MOST PRESTIGIOUS LEADERS IN DIGITAL DECORATION.

| TAILORED TO YOUR NEEDS

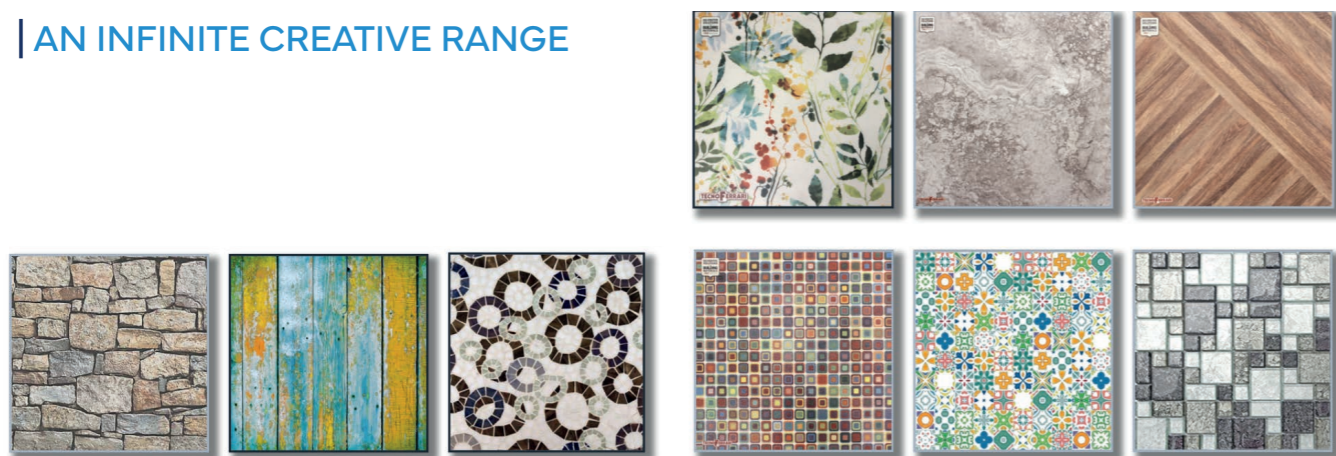


Digital printing in concrete products for paving and building construction, opening up an infinite range of productive creativity.



CASSANI coordinates the global leaders in color supply, chemical products and inkjet printing machines, known for the excellence of their products and their innovation in new technologies.

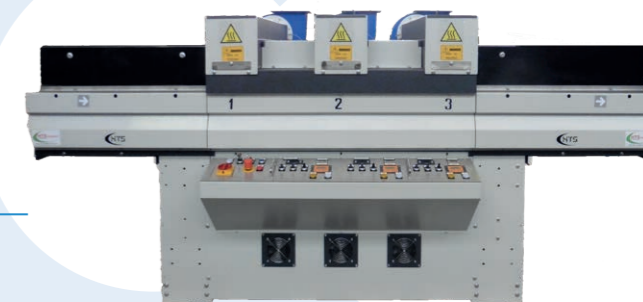
| AN INFINITE CREATIVE RANGE



## Digital Printers



## UV Ovens

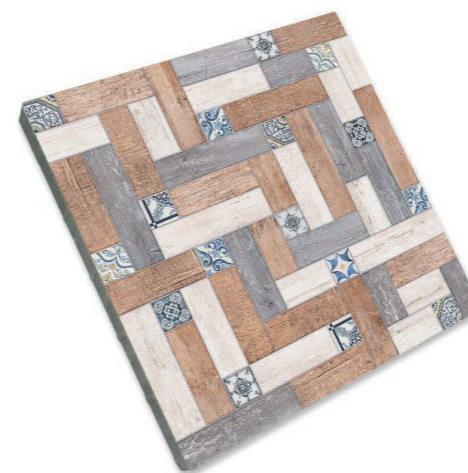


## Infrared Ovens



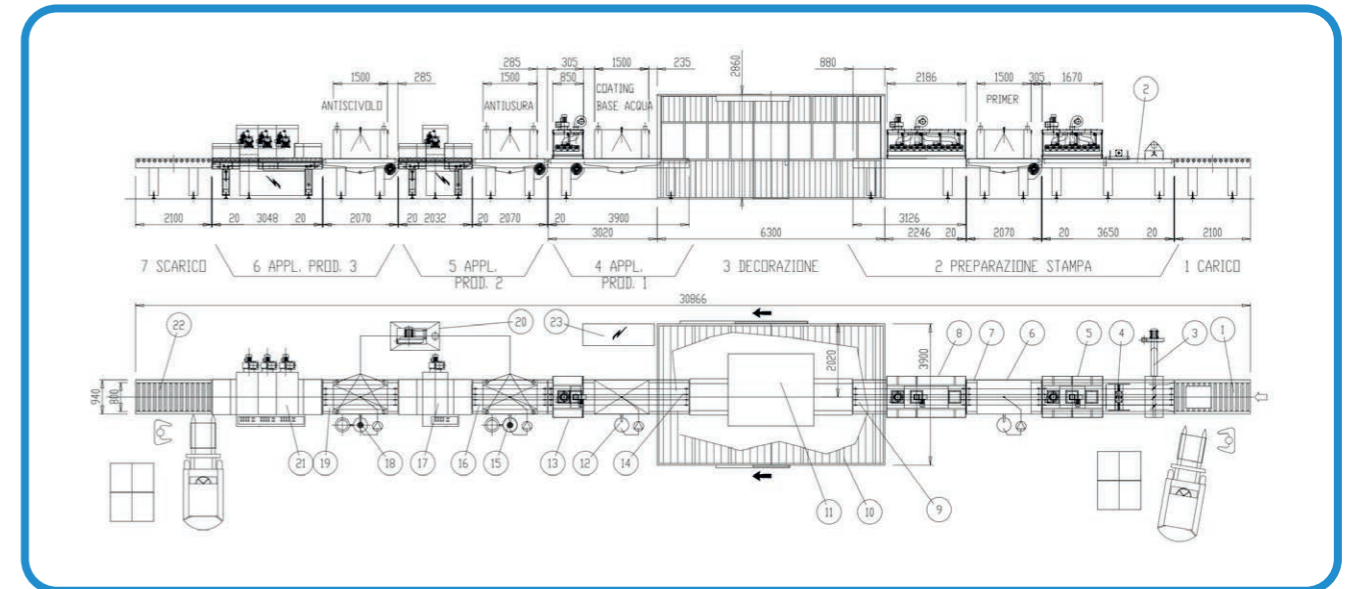
| HIGHLY ENGINEERED FOR EXCELLENT RESULTS

- Products are cleaned, heated and primed in multiple stages using infrared ovens.
- The digital printing is carried out by a special machine in a dedicated cabin, under controlled humidity and temperature.
- Different coatings are then applied, with various stages of infrared or UV drying after each stage.
- Belt speed 4 m/min.





ROBUST, SAFE, AND EASY TO USE



LAYOUT Linea mm 700 / Sp. Max. mm 200 / Peso Pz kg 65 cad. / Velocità linea mt. 4 min. - LAYOUT LINE 700 mm Thickness passage 200 mm. weight 65 kg / each. speed 4 mt/min.

PRODUCT  
DETAIL IMAGES



1 Cleaning Chamber Detail.



2 Digital Printing Control Panel.



3 Inside the Infrared Oven.



4 UV Lamp Detail.

**ZONE 1 LOADING**

1. Manual loading roller conveyor.

**ZONE 2 PREPARATION TO PRINT**

- 2. Transport chain L = 3650 mm.
- 3. Cleaning group of top part for the piece. Brush or rotating nozzles with compressed air.
- 4. Centering group piece to align the piece to the axis of the line.
- 5. IR Kiln for heating the upper piece for of a better application of the primer.
- 6. Spray cabin and airless pumps (high pressure) for Primer application on the piece surface.
- 7. Transport chain L = 2070 with lower steel brush for chain cleaning after spray application.
- 8. Kiln with IR lamps for the heating of the piece to 35-40°C for printing optimization.
- 9. Transport Chain L = 3125 mm.

**ZONE 3 DECORATION**

- 10. Pressurized Cabin with controlled temperature and humidity.
- 11. Digital printing.

**ZONE 4 PRODUCT APPLICATION 1 WATER BASE COATING**

- 12. Spray Cabin and airless pumps (high pressure) Coating protection application. Product 1.
- 13. IR Kiln for the heating of upper piece for subsequent application.
- 14. Transport chains to L = 3900 with lower steel brush for chain cleaning after spray application.

**ZONE 5 PRODUCT APPLICATION 2 ANTITABER COATING (WEARING)**

- 15. Spray Cabin with spray guns, and airless pumps (high pressure). Antitaber coating protective.
- 16. Transport chains L = 2070 with lower steel brush for chain cleaning after spray application.
- 17. Single-lamp UV Dryer.

**ZONE 6 PRODUCT APPLICATION 3 ANTISLIP COATING**

- 18. Spray cabin with spray guns and airless pumps (high pressure) Antislip coating application.
- 19. Transport chains to L = 2070 with lower steel brush for chain cleaning after spray application.
- 20. Filter group for spray cabin service pos. 15 / 18, Filtration and air recovery.
- 21. Three-lamp UV Dryer.

**Zone 7 UNLOADING Manual roller conveyor / General Electric Keyboard.**

# HANDLING CLAMPS AND PALLETISERS FOR SLABS AND BLOCKS

THE PALLET LINE DELIVERS AUTOMATIC VERTICAL OR HORIZONTAL STACKING ON WOODEN PALLETS FOR SLABS OR BLOCKS.

TAILOR TO YOUR NEEDS



Clamp variations for slabs and blocks of all sizes.



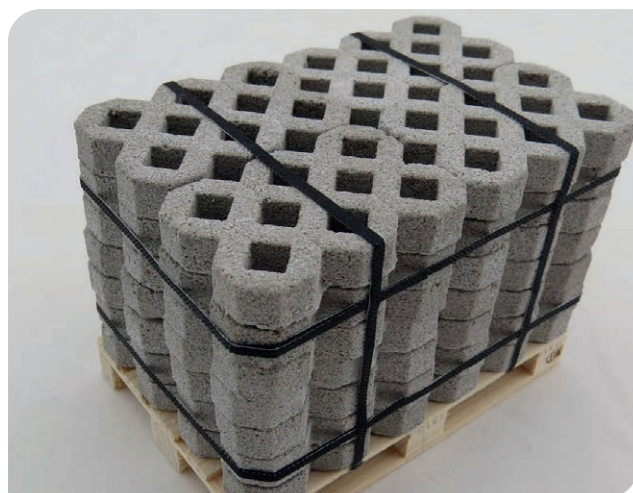
Optional programmable tilter to flip tiles arriving face down, or to tilt layer-by-layer to allow "face-to-face" palletizing.



Programmable layout and height of product stacks.



Waste line to remove rejected tiles at the touch of a button.



## ENGINEERED FOR EXCELLENT RESULTS

- Designed to handle even the highest production rate of large presses, guaranteeing excellent performance over the long run.
- Products arriving in single or double line are dragged, deviated, accelerated or slowed and put in position to form desired layer shape.
- Vacuum or clamp pickup then performs required translations and layering on the pallet. The entire process is completely automated with a Siemens PLC unit.



## ROBUST, SAFE, AND EASY TO USE

- Can be equipped with an alternate rotation of the suction plane to compensate for the wedge of non-calibrated tiles.
- Ample areas for loading/unloading the empty/full wooden pallets with trolleys.
- Controlled by a fully automated, programmable Siemens PLC.



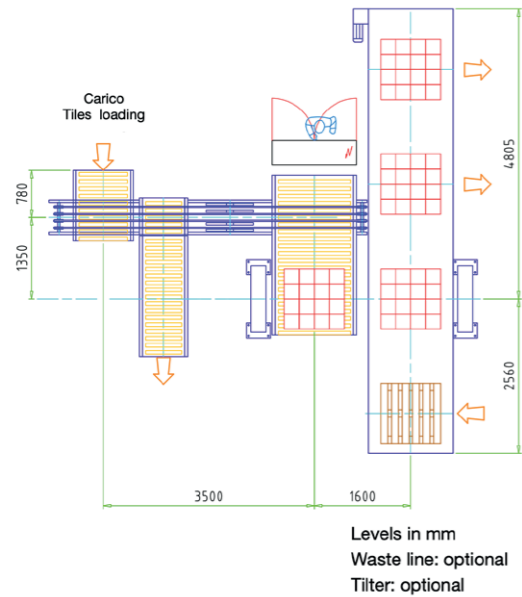
Tilter for slabs arriving face down.

## OPTIONAL

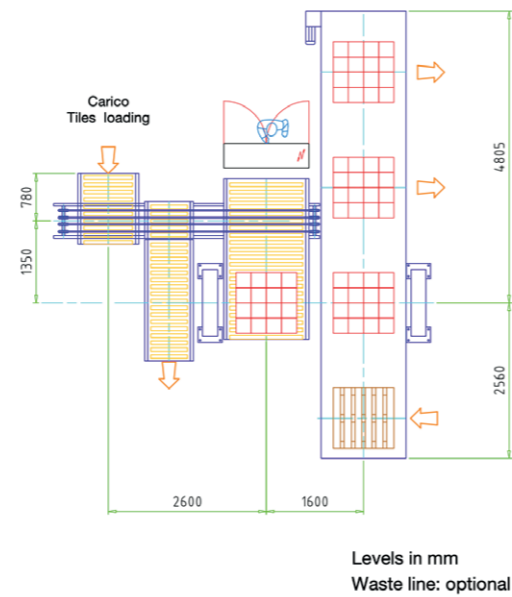
- BELT OR CHAIN TRAVEL UNITS TO TRANSPORT FULL PALLETS TO OTHER AREAS FOR PICKUP.
- PROGRAMMABLE TILTER TO FLIP INCOMING TILES.
- CORD WRAPPING UNIT, TO APPLY CORD BETWEEN LAYERS OF SLABS OR BLOCKS. • PLASTIC FILM WRAPPING UNIT TO STRENGTHEN THE PACKET.
- WASTE LINE FOR REJECTED TILES.

SAMPLE TECHNICAL DIAGRAM

Sample with optional tilter.



Sample without optional tilter.



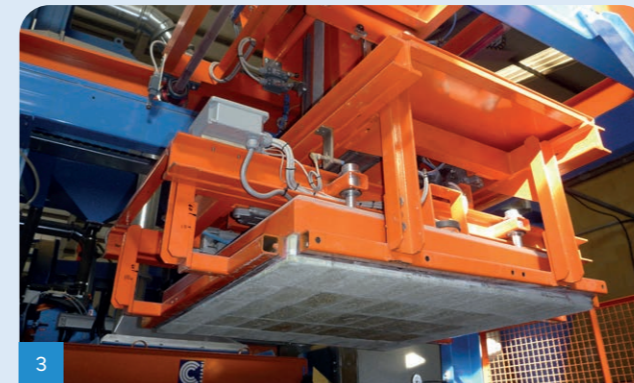
PRODUCT  
DETAIL IMAGES



Detail of cord-layering device.



Detail of block clamp.



Detail of paver clamp.



Motorised pallet loading/unloading bay.



Strapped pallet of tiles.

# WATER TREATMENT SOLUTIONS

CASSANI OFFERS A WIDE RANGE OF WATER TREATMENT SYSTEMS FOR THE PRODUCTION AND FINISHING OF CONCRETE, STONE AND MARBLE SLABS AND BLOCKS.

## TAILORED TO YOUR NEEDS



Large range of models allows solutions for your specific waste water composition and generation.



For heavier applications (up to 40,000 Lt/Min) we supply separate Decantation Unit and Filterpress.



COMPACT Line offers a complete, static decantation and press unit, up to 750 Lt/Min.



These can be easily accessorized for any other application.

## ENGINEERED FOR EXCELLENT RESULTS

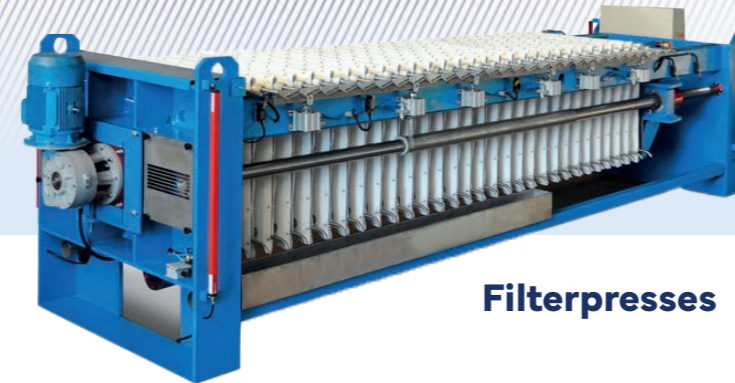
- Motorized device with scraping paddles fixed inside the main sedimentation tank (decanter) pushes sludge towards the discharge outlet, preventing suspended solids, including minute particles of lime and cement that over time can clog the system.
- The Mud feeding system to the filterpress is a steel container for sludge collection, complete with probe fittings. The filtration cycle end is determined by a level probe group located in the drainage collection channel or by flow meter.

- Filter press with hydraulic power unit, which automatically controls the opening and closing cycle of the plates. Polypropylene plates sliding on PVC plates and dragged by chains.
- Cake release facilitated by an automatic plate shaker.

Complete Unit



Compact Unit



Filterpresses

WATER TREATMENT SOLUTIONS

## ROBUST, SAFE, AND EASY TO USE

- Motorized scraping unit complete with access ladder and platform.
- Electro-welded composite steel, specially processed to guarantee perfect machine operation.
- Internally lined with a corrosion proof, anti-abrasive and stick-proof lining, protecting the metal from incrustations and allowing easy detaching of the sludge from the walls.
- Electric panel board in painted steel plate with remote controls and PLC.
- Possibility to supervise and control the whole plant from a remote station..

## OPTIONAL

- AUTOMATIC FLOCCULANT STATION FOR DOSING OF FLOCCULANT WITHOUT HUMAN INTERVENTION.
- FULL ACCESSORIES FOR THE DECANTATION UNIT, INCLUDING FLOCCULANT ANALYZER, SLURRY LEVEL DETECTING SYSTEM, TURBIDITY ALARM SYSTEM.
- FILTER PRESS CAN BE EQUIPPED WITH A TRAY FOR COLLECTION OF DRIPPING WATER, SUPPORTING
- PLATFORM, SUPPORTING STRUCTURE, ACCESS LADDER AND AUTOMATIC CLOTHES WASHER.



PRODUCT  
DETAIL IMAGES



COMPACT 2300  
on concrete platform.



Filter 800 / 15 on platform.



Filter 630 / 8 on platform.



Filter 800 / 15.

| WATER TREATMENT SOLUTIONS Technical Specifications

COMPACT Solution Model	Productivity (Lt/min)	Volume Decantation Unit (Lt)	Diameter Decantation Unit (mm)	Height Decantation Unit (mm)	Filterpress No. of Plates	Size of Plates (mm x mm)
COMPACT 2000 + clean water tank	max. 400	6000 + 5000	2000	5100	5	300 x 300
CCOMPACT 2300	max. 500	13000	2003	6250	6	300 x 300
COMPACT 2350	450		2350		5	400 x 400
COMPACT 2500			2500		5	400 x 400

DECANTATION Unit Only Model	Productivity (Lt/min)	Volume Decantation Unit (Lt)	Diameter Decantation Unit (mm)	Height Decantation Unit (mm)
DPM 3000	max. 900	35000	3000	8500
DPM 3500	max. 1200	50000	3500	9000
DPM 4000	max. 1500	65000	4000	9000
DPM 4500	max. 2000	85000	4500	9500
DPM 5000	max. 2500	107000	5000	10000

Notes: \*Includes waste water pump and flocculant pump. Representative Sample, more combinations of Plate Number and Size available on request.

FILTERPRESS Only Model	Productivity (Dm3/Cycle)	Filterpress No. of Plates	Size of Plates (mm x mm)	Minutes/Cycle (Min)
FILTER 300 / 6	0,014	6	300 x 300	10 - 15
FILTER 400 / 6	0,02	6	400 x 400	10 - 15
FILTER 630 / 5	0,04	5	630 x 630	10 - 15
FILTER 630 / 8	0,07	8	630 x 630	10 - 15
FILTER 800 / 10	0,151	10	800 x 800	15 - 20
FILTER 800 / 15	0,236	15	800 x 800	15 - 20
FILTER 1000 / 15	0,375	15	1000 x 1000	15 - 20
FILTER 1000 / 20	0,5	20	1000 x 1000	15 - 20

Notes: Larger and other combinations of Plate Number and Size available on request.



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