

Better Stoneworks



www.dalprete.com







Wastewater treatment plants

Since 1964, our company has been designing and manufacturing **water treatment solutions** for stone working processes or other processes that require the use and recovery of wastewater.

With **Dal Prete's automated systems** you can almost completely eliminate the cost of recharging your company's water system, reusing high-quality clarified water for your processes.

The level of water clarification achieved by our plants extends the **life of processing tools** up to 20%, saves you up to 30% on **water consumption** and reduces the **cost of disposing** residual sludge up to 50%.

Cleaner water, more efficient processing.

Dal Prete Clear Water, Better Stoneworks

Index

- ▼ 05 About us
- ▼ 06 How we work
- 08 Water treatment
- ▼ 09 Air treatment
- IO Super Compact 2.1
- 12 Mini Compact M 2.1
- 14 Mini Compact L 2.1
- 16 Mini Compact L 3.1 Premium
- 18 Just Water 3.1
- 20 IWATER Suction Wall
- 22 DRY Suction Wall
- 24 DPURE Software
- Z6 Consumable and accessories
- Z7 Water consumptions















Super Compact 2.1

Mini Compact M 2.1

Mini Compact L 2.1

Mini Compact L 3.1 premium

Just Water 3.1

IWATER Suction Wall

DRY Suction Wall

Who we are

Since 1964, we have been listening to stone entrepreneurs who want to be more competitive on the market and achieve a high level of organization and efficiency.

We create **solutions for water clarification** and sludge dehydration with filter presses and for air filtration that meet the specific needs of each stone workshop. Our goal is to **save space, time and resources for companies** that produce semi-finished and finished marble, granite, stone, composite materials, ceramics and cement.

Our simple, intuitive and automatic solutions allow to keep workplaces always clean, both in small and new stone workshops and in structured companies, ensuring continuity of work and saving on operating costs.



We are a team of people working in full synergy with a workflow that is always efficient, thanks to a high level of individual specialization in each position.

VERIFIED WORK METHOD, GOOD PERFORMANCES AND SAVINGS ARE GUARANTEED



COMPANY ANALYSIS

We get to know and study your business reality and your needs.

WATER TESTING

We identify the correct management of coagulant and flocculant.

FUNCTIONING SCHEMES

We explain the simplicity of our solutions for the treatment of water and air.

PRESENTATION OF SOLUTIONS

We identify the specific answer to your problem.

How we work

COMPANY ANALYSIS

In the preliminary phase of analysis of your production, we transform your problems and needs into tangible solutions. We are able to calculate your water consumption by knowing what type of business you are in, what materials you work with, what machines you have and their distribution in your stone workshop.

- If you already have a water management system: we are interested in understanding the problems you are experiencing, in order to maximize what you have and integrate our solutions.
- If you don't have a water clarification system: we analyze your production line, in order to identify the most suitable system to manage wastewater more efficiently.
- If you are a new company: we can realize the most suitable solution to your needs by designing complete and automated plants for water clarification.

We meet the needs of small and large stone workshops, because **all our solutions are customizable** to achieve the desired goals.

In this getting-to-know-you phase, **we turn your questions into specific benefits.** We help you extend the life of your processing tools and **reduce costs during every stage of water management.**

With Dal Prete's plants you reuse high quality clarified water for new processes, **you save on water consumption** and **optimize waste disposal costs**, thanks to the dehydration process of residual sludge.

INTEGRATED SOLUTIONS FOR WASTEWATER MANAGEMENT. HIGH EFFICIENCY AUTOMATIC PLANTS

Change your approach to water management: reduce costs and improve the performance of your production with a Dal Prete clarification plant.

?	Do you have little space in your industrial hall?	SAVE space with a compact solution.	Do you want to have a clean workplace at all times?	ADOPT a fully organized process.
?	Do you want to keep labor costs down?	SIMPLIFY maneuvers and operators' work with an automatic solution.	Do you want to avoid wastes of time on your wastewater management?	OPTIMIZE your water and time consumption with a simple and intuitive solution.
		in a plant is just an expense?	EARN M	IONEY

Do you think investing in a plant is just an expense?

by saving your resources.



Take a look at our jar test

WATER TESTING

The supply of the plant comes with a support **phase for the correct management of the chemical agents to be used.** This is a **dedicated service for testing your water** that is performed during the pre-installation phase, **preventing the occurrence of problems.**

For us, a correct management of these aspects means to carry out 3 steps before the installation so that you can benefit from them:

- Choice of coagulant and flocculant suitable for the type of processing and production you perform.
 You will have a high water quality.
- 2. Correct mixing of coagulant and flocculant. **Cost savings for chemical agents.**
- Correct dosing of the mixture according to the raw materials you process.

You have certain and stable results.

AFTER-SALES CONSULTING

Our preparation, our company organization and our distributors present in different locations allow us to assure you a **punctual and specific intervention** even after the sale and the startup of the plant.

Just as we are able to understand your needs before purchasing, **we are able to turn your future needs into better solutions** for your production.

In case of subsequent **changes to the processing materials**, we offer a service of **specific water analysis** and change the recipe of chemical agents, in order to always ensure maximum performance in water clarification.

WE ARE THERE IN TWO MOMENTS:

Pre-installation assistance

- Management of delivery and installation times and methods.
- Support for installation preparations, including water testing.
- Customization of structure, components and software.
- > Training and support to distributors, to your operators and technicians.



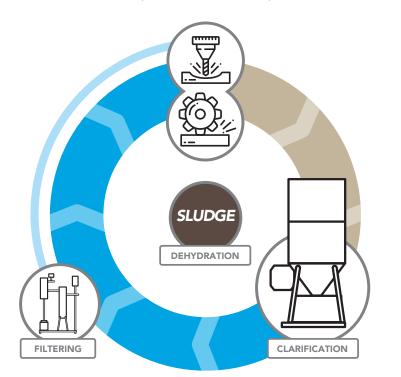


Post-installation assistance

- Resolution of specific requests or malfunctioning problems.
- > Supply of spare parts, accessories, coagulant and flocculant.
- > Assistance and continuous training to verify the correct use of the plant.
- > Specific assistance based on your needs, which may change over time.
- > Adjustment of chemical agents in case of production changes.

Water treatment

We have studied a wastewater clarification solution that allows you to obtain a closed water recycling circle. It optimizes human, organizational and material resources and time. It is a virtuous circle with improvements from an economic and productive efficiency point of view.



GLOSSARY

COAGULANT Chemical agent that breaks the electrical charges of the particles of the processed material present in water, and often with a specific weight equal to or less than the water itself. It serves to activate a first coagulation process in micro-flakes.

FLOCCULANT Chemical agent that works like a "glue". Captures the micro-flakes dispersed in the water, turning them into larger, heavier flakes that fall downwards





The wastewater, coming from the machines designed for processing of raw materials, flows into the **CLARIFICATION** plant.

Here the powder and particles of processed material are aggregated thanks to the use of a **coagulant** and a **flocculant** identified in the water test phase.

The **DEHYDRATION** process in which the **SLUDGE** becomes solid takes place inside the filter press.

The clarified water returns to the processing circuit of the machines, therefore lengthening its life cycle.

In this system you can add our FILTERING unit (Just Water 3.1) in order to use the filtered water for the internal cooling of the CNC spindle units.

All of this is done without introducing new water into the circuit.

ADVANTAGES

- > Compact system with integrated filter press. Space optimization.
- > The system is easy to understand. Simplified management of manual operations.
- > High level of automation. Time saving.
- > Study of the chemical agent's dosages, customized according to the needs.
 - Better management of coagulant and flocculant.

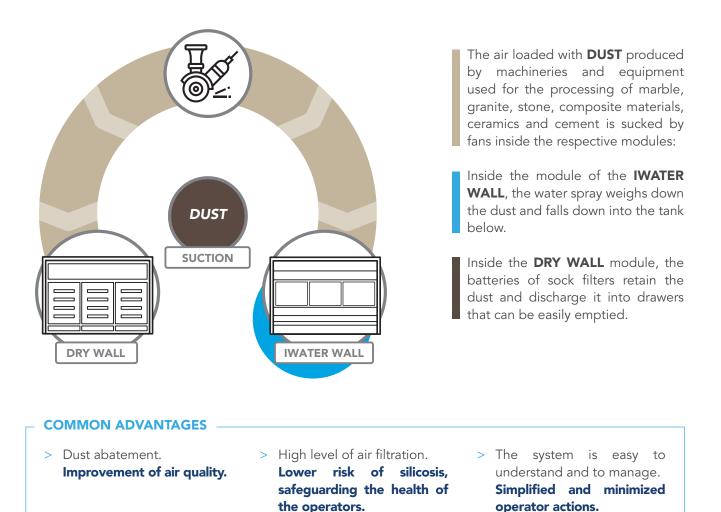
> Solid final waste that is not dirty and easy to dispose of.

The area around the plant is always clean.

- > Integrated filtration system. The water is always clean, when and where needed.
- > High quality of clarified water. Reduced risk of silicosis, safeguarding the health of the operators.
- Recycling of the water resource in a closed cycle. > Water saving and no waste.

Air treatment

We have studied two air filtration systems: one uses water, one is dry. These are **effective dust abatement solutions** that can be tailored to the needs of every stone workshop.



DRY WALL ADVANTAGES

- The final waste is solid and is collected in easilyremovable drawers.
 Easy disposal.
- It has an automatic cleaning cycle.
 Operator's maneuvers are reduced to a minimum.
- No water is used.
 Humidity-free environment.

IWATER WALL ADVANTAGES

- The nebulization remains inside the cabin chamber and does not wet the outside area.
 The surrounding environment is dry.
- > Machine with simple structure and process. **Easier maintenance.**

Super Compact 2.1

The **Super Compact 2.1** is the smallest in capacity and size of the whole range of Dal Prete compact systems.

WHO IS IT DESIGNED FOR

- If you have a new stone workshop and you install only the machines strictly necessary: bridge saw and manual polisher.
- If you have a company that wants to start a specific production using one or two machine centers that need a lot of water but do not produce large quantities of sludge.

FEATURES AND ADVANTAGES

- Single block of only 4 m².
 Space saving.
- > Square shape.
 Maximized decanter volume.
- Automatic operations.
 Save time and reduce human error.
- Integrated clarification and dehydration.
 Ease of use.
- > The waste product is dehydrated

sludge. The working place is always clean.

- > 10" touch screen with intuitive software.
- > Control via LAN.
- IP55 protection against dust and water jets.
- > Free space under the filter press.
- > Shipped as a single piece.

CUSTOMIZATIONS

- > Insulation of the plant, if you place it outside.
- > Integrated system of tanks, for dirty and clarified water.



Clarified water production

Total installed power

Transport space

150 l/min

5,0 kW

3 m on a truck or container





Flocculant automatic-dosing station.



Detail of the overflow pipe on top of the decanter.





Hot-dip galvanized filter press with stainless steel cover and drain channel.

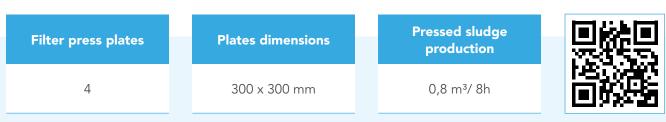


Internal sludgehomogenization tank with the related mixer.





Automatic sludge discharge and filter press feeding system.



Mini Compact M 2.1

The **Mini Compact M 2.1** is the second largest system in the Dal Prete range of compact plants.

WHO IS IT DESIGNED FOR

- > **If you have a new stone workshop on the rise** and you are installing new machinery to move from an artisan to an industrial production.
- If you have a company that needs a fair amount of clarified water but produces a few sludge.

FEATURES AND ADVANTAGES

- Single block of only 6 m².
 Space saving.
- Automatic operations.
 Save time and reduce human error.
- Integrated clarification and dehydration.
 Ease of use.
- > The waste product is dehydrated sludge. Always clean working place.
- > 10" touch screen with intuitive software.
- > Control via LAN.
- > IP55 protection against dust and water jets.
- > Shipped in two parts: the cylinder and the platform containing all the components.

CUSTOMIZATION

- > Material of the decanter: stainless or galvanized steel.
- > Height: available also lower (3.400 mm).
- > Clarified water production: up to 600 l/min.
- > Base insulation.



Ø 2.200 mm



Clarified water production

Total installed power

Transport space

300 l/min

6,5 kW

4,5 m on a truck or container



Control panel with 10" touch screen, managing all plant operations.





Flocculant automatic-dosing station.



Hot-dip galvanized filter press with stainless steel cover and drain channel.





Overflow pipe for clarified water on the upper part of the cylinder.



Automatic sludge discharge from the decanter through pneumatic valve and manual valve for safety closing.



4





Hot galvanized sludge homogenization station.



Plates dimensions

300 × 300 mm



0,8 m³/ 8h

Mini Compact L 2.1

The **Mini Compact L 2.1** is the most sold compact wastewater treatment plant, as it meets the needs of most companies in the stone sector.

WHO WE DESIGNED IT FOR

- If you have a structured stone workshop working with raw materials such as marble, granite, stone, composite materials, ceramics or concrete.
- > **If you want to reduce the operator's intervention** on the wastewater treatment plant.
- If you have a company expecting to expand quickly.

FEATURES AND ADVANTAGES

- Single block of only 6 m².
 Space saving.
- Automatic operations.
 Save time and reduce human error.
- Integrated clarification and dehydration.
 Ease of use.
- > The waste product is dehydrated sludge. Always clean working place.
- > 10" touch screen with intuitive software.
- > Control via LAN.
- > IP55 protection against dust and water jets.
- Shipped in two parts: the cylinder and the platform containing all the components.

CUSTOMIZATION

- Material of the decanter: stainless or galvanized steel.
- > Height: available also lowered (4.900 mm).
- > Clarified water production: up to 750 l/min.
- > Base insulation.



Ø 2.200 mm



Clarified water production

Total installed power

Transport space

600 l/min

6,5 kW

6 m on a truck or container



Mini Compact L 3.1 Premium

The Mini Compact L 3.1 Premium is the compact wastewater treatment plant with extremely high automation and safety features.

WHO WE DESIGNED IT FOR

- > If you want to minimize the intervention of the **operator** in the management of wastewater.
- > If you want to reach high levels of safety.
- If you want to improve your competitiveness by optimizing time, resources and organization.

FEATURES AND ADVANTAGES

- > Single block of only 6 m². Space saving.
- > Integrated clarification and dehydration. Ease of use.
- > Automatic and plannable operations. You save time and reduce human error.
- > Maintenance reminder service. High performance maintenance.
- > Self-maintenance. Minimized operator activities.
- > Automatic flocculant preparation and dosing. You save on the costs of chemical agents and eliminate human error.
- > Automatic washing of the main accessories in contact with the mud. High plant lifetime.
- > The product waste is dehydrated sludge. An always-clean working place.
- > Ultrasonic sensors and pressure transducer return a digital signal to the plant software.
- > 15" touch screen with intuitive software.
- > Manual loaded in the control panel.
- Remote control. >
- > IP55 protection against dust and water jets.
- > Free space under the filter press.

- Movement also from below.
- Shipped in two parts: the cylinder and the platform containing all components.

CUSTOMIZATIONS

- > Decanter material: stainless steel or galvanized steel.
- > Height: also available lowered (3.950 mm).
- Clarified water production: up to 750 l/min. >
- > Base insulation.



600 mm (lowered 3.950 mm)

Transport space

Clarified water production

600 l/min

Total installed power

6,5 kW

6 m on a truck or container

Ø 2.200 mm



Just Water 3.1

Just Water 3.1 is a clarified water filtration unit composed of two filters, J and W.

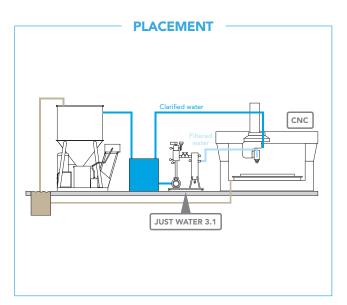
The **filter J** is a 25 μm mesh filter with an automatic rotary cleaning system.

Filter W refines the filtration process by retaining particles up to 5 μ m.

Just Water 3.1 guarantees a constant, high-quality water flow to the CNC spindle units even during self-cleaning.

WHO WE DESIGNED IT FOR

- If you have one or more CNCs. With this filter you don't use new water and therefore you reduce your water costs.
- If you have wastewater spills. Avoid new water intake because the filter refines the clarified water already in circulation.





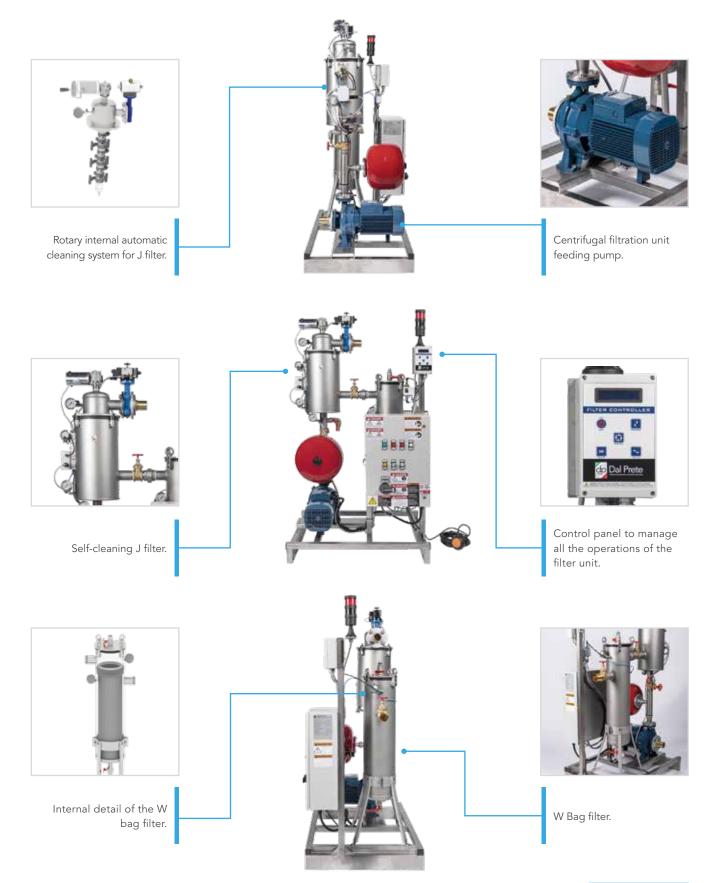
FEATURES AND ADVANTAGES

- > Filtration of clarified water.Saving water and no waste.
- > Self-cleaning rotary system. Less maintenance.
- > Automatic operation.Save time and reduce human error.
- Continuous and constant water flow even during washing.
 Production continuity.

CUSTOMIZATIONS

- > The filters can be separated.
- > Degrees of filtration.
- > Water flow.

Filtration	Flow rate
Up to 5 µm	Up to 40 l/min
Up to 5 μm	Up to 40 l/min





IWATER Suction Wall

The **wall air purifier model IWATER** works in a simple way: the air charged with dust is sucked by special fans inside the cabin. Here the atomized water weighs it down and precipitates it into the tank below.

WHO WE DESIGNED IT FOR

> If you want to **reduce the presence of dust** from dry processing.

CUSTOMIZATIONS

- > Length and width.
- > Number of fans.
- > Suction from both sides.

ACCESSORIES

- > Plenum.
- > External box.
- > Side extensions.

FEATURES AND ADVANTAGES

- Extremely intuitive and simple maintenance.
 Save time and reduce human error.
- Internal water atomization.
 Dry outdoor environment.
- > High level of air filtration.
 Lower risk of silicosis, safeguarding the health of the operators.
- > Stainless Steel Structure.
- > Air filtration efficiency 98.3%.
- > Purifier noise 69 dB.



Model	Dimensions W×H×D	Aspirators	Power	m³/hour
IWater 2 m	2.000×2.350×1.000 mm	1	4,1 kW	9.000
IWater 3 m	3.000×2.350×1.000 mm	1	4,1 kW	11.000
lWater 4 m	4.000×2.350×1.000 mm	2	7,1 kW	22.000
lWater 5 m	5.000×2.350×1.000 mm	2	7,1 kW	26.000
lWater 6 m	6.000×2.350×1.000 mm	2	7,1 kW	33.000



Detail of air intake fan.





Control panel managing all the cabin operations.





DRY Suction Wall

The **DRY model wall air purifier** works in a simple way: the air charged with dust, sucked in by the internal fans, passes through batteries of sock filters that retain the dust and drop it into the drawers below.

WHO WE DESIGNED IT FOR

- > If you want to **reduce the presence of dust** from dry processing.
- > If you want to **maintain high air quality** in a moisture-free working environment.

CUSTOMIZATIONS

- > Length and width.
- > Number of fans.
- > Suction from both sides.

ACCESSORIES

- > Plenum.
- > External box.
- > Side extensions.

FEATURES AND ADVANTAGES

- Extremely intuitive and simple maintenance.
 Save time and reduce human error.
- It has an automatic cleaning cycle.
 Operator maneuvers reduced to a minimum.
- No water is used.
 Humidity free environment.
- High level of air filtration.
 Less risk of silicosis, safeguarding the health of the operators.
- > Galvanized sheet metal structure.
- > Air filtration efficiency 99.0%.
- > Purifier noise 69 dB.



Model	Dimensions W×H×D	Aspirators	Power	m³/hour
Dry 2 m	2.000×2.350×1.000 mm	1	3,0 kW	9.000
Dry 3 m	3.000×2.350×1.000 mm	1	3,0 kW	11.000
Dry 4 m	4.000×2.350×1.000 mm	2	6,0 kW	22.000
Dry 5 m	5.000×2.350×1.000 mm	2	6,0 kW	26.000
Dry 6 m	6.000×2.350×1.000 mm	2	6,0 kW	33.000





DPURE Software

DPURE is the Dal Prete software created and optimized over the years, in order to adapt to the real needs of customers. Its customized solutions allow to **schedule activities** and manage clarification and dehydration operations more quickly and efficiently.

Increased automation guarantees a **systematic and error-free execution** of the different processes, enabling a **high level of customization** of the functionalities according to the specific objectives of the production.



The Super Compact 2.1 offers excellent performances in small spaces. It is ideal for managing a limited number of machines and **working efficiently even with small production volumes.**

Thanks to its essential and intuitive interface, the DPURE software installed on the Super Compact 2.1 **simplifies plant management** and eliminates the need for a dedicated operator.



The DPURE software of the Mini Compact M 2.1 is designed for small to medium-sized companies that work with **constant production cycles.**

Each activity is well identifiable through the touch screen allowing the operator to **manage all steps** of the process in a clear and distinct way.

MAIN FEATURES

- > 10" touch screen with display and control of all plant components.
- > LAN connection for telematic assistance.
- Complete and automated control of clarification and dehydration cycles.
- > Planning of dehydration cycles in line with production needs.
- > Complete management of alarms with alerts on the integrated touch screen and optionally also via sms.
- > Possibility of software customization.

MAIN FEATURES

- > 10" touch screen with display and control of all plant components.
- > LAN connection for telematic assistance.
- Complete and automated control of clarification and dehydration cycles.
- > Planning of dehydration cycles in line with production needs.
- > Complete management of alarms with alerts on the integrated touch screen and optionally also via sms.
- > Possibility of software customization.



The DPURE software in the Mini Compact L 2.1 version is the ideal solution for stone workshops where the **quantities of treated sludge and water are very large.**

DPURE **facilitates the organization** of water treatment processes in **structured production facilities.**

In addition to managing the entire process flow, it also manages the filter press **water collection system**, with automatic drip trays for easier disposal.



The DPURE software applied to the Mini Compact L 3.1 Premium has been developed to **minimize the intervention of skilled workers** on the plant, through an **accurate planning** of its operation according to the **production schedule of the company.**

It allows to efficiently and automatically choose **when to wash** the components in contact with sludge, guaranteeing cleanliness and reliability of the machine.

MAIN FEATURES

- > 10" touch screen with display and control of all system components.
- > LAN connection for telematic assistance.
- Complete and automated control of clarification and dehydration cycles.
- > Planning of dehydration cycles in line with production needs.
- > Complete management of alarms with alerts on the integrated touch screen and optionally also via sms.
- > Possibility of software customization.

MAIN FEATURES

- > 15" touch screen with display and control of all system components and alerts.
- > Direct connection for remote assistance.
- > Ultrasonic sensors and pressure transducer return a digital signal to the plant software.
- > Cycle planning with weekly work calendar.
- > Automatic washing program for cleaning and rinsing of the parts in direct contact with the sludge.
- > Reminder of periodic maintenance.
- > Possibility of customizing the software.
- > Statistics of plant use.

Consumables and accessories

COAGULANT AND FLOCCULANT

Following the tests carried out on your water sample, we provide you with the identified chemical agents (coagulant and flocculant) for the entire life cycle of your plant.





PH CONTROL AND ADJUSTMENT STATION

It is an instrument for controlling and adjusting the PH of the water to be treated. By integrating it with your Dal Prete solution, you preserve the performance of the system and, where necessary, facilitate compliance with environmental protection regulations.



STATION FOR THE AUTOMATIC PREPARATION AND DOSING OF THE FLOCCULANT SOLUTION

It is an automated system for storage, powder measurement, solution preparation and dosing without needing the intervention of an operator. In this way you can reduce its consumption and avoid clogging of the pumps due to rough dosing of powder.



CLARIFIED WATER RELAUNCH SYSTEM

By analyzing your specific needs, we configure a system for the relaunch of clarified water that guarantees adequate pressurization and therefore an optimized coverage of water consumption on the processing machines.



SLUDGE COLLECTION BIN

The dehydrated sludge, which the system discharges automatically at the end of the dehydration cycle, must be collected in tilting bins placed in the space below the filter press.

We can supply them in different sizes, which can be moved manually or with forklifts.

Water consumptions

WORKSHOP BRIDGE SAW MACHINE Ø cutting disc L/min 200 mm 6 350 mm 10 500 mm 15 700 mm 20 800 mm 30 1000 mm 40 1200 mm 50 1500 mm 60 2500 mm 70 2700 mm 80 3000 mm 80

SAWMILL

BLOCK CUTTER		
	L/min	
34 granite discs	900	
56 granite discs	1200	
1 marble disc	80	

CALIBRATING - POLISHING MACHINE

	L/min
Calibrating marble	50
Calibrating granite	50
Marble calibrator head	25
Granite calibrator head	30

GANG SAW - MONOWIRE

L/min

Marble gang saw blade	10 x blade
Granite gang saw blade	5 x blade
Monoblade marble and granite	40
Monowire marble and granite	40

OTHER MACHINERY

	L/min
Arm polishing machine	10
CNC	80
Edge polishing head (every kind)	15
One-head polishing (marble and granite)	30



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