



THE EXCELLENCE IN FILTRATION, BY NATURE



WATER TREATMENT & SILT MANAGEMENT



**STONE CUTTING, MARBLE & GRANITE
DIVISION**





WATER TREATMENT & SILT MANAGEMENT

THE EXCELLENCE IN FILTRATION, BY NATURE

MATEC is a worldwide leader in the design and manufacturing of filtration and purification plants for waste water and silt. We design, manufacture and install complete and turnkey plants in any sector which deals with waste water and silt. The most important ones are mining, aggregates, sand and gravel, stone, concrete, ceramics, plastic and glass. We have developed extensive experience over 10 years and thousands of successful projects all across the world. Through our systems we can guarantee the best results, allowing any working site to reach its maximum efficiency and production, because Matec systems maximize the returns of the plant, recovering precious materials and reducing disposal costs. We can provide our customers with the best quality machines, also thanks to components by top brands and the best assistance service.

Matec headquarters are in Massa, Tuscany, Italy. Our workshop and offices cover a 5000 m² area, here we design and manufacture all our machines to offer 100% Made in Italy products. Matec is a well-established presence in every continent and we have developed branch offices in America, Brazil and India, plus a global dealer network. Through our warehouses and dealers, we can easily supply the spare parts you need and give assistance. The need of constantly keeping a high level of both service and operational skills must be translated into a strong integration between Customer's needs and the daily comparison to the evolution of our reference markets. Our company mission is to create values through the supply of cutting edge products and services for customer's greatest satisfaction, at the same time respecting mankind and the environment.

FIELDS OF APPLICATION

- ✓ MINING COAL AND IRON-ORE
- ✓ AGGREGATES - SAND AND GRAVEL
- ✓ STONE CUTTING MARBLE AND GRANITE
- ✓ CONCRETE AND TUNNELING
- ✓ RECYCLING AND SOIL WASHING
- ✓ GLASS AND CERAMIC
- ✓ CHEMICAL, PLASTIC, INDUSTRIAL APPLICATION
- ✓ C&D RECYCLING AND SOIL WASHING



- ✓ 1800 INSTALLATIONS IN THE WORLD
- ✓ OVER 150 COUNTRIES
- ✓ 4 FACTORIES ITALY USA BRAZIL INDIA
- ✓ GLOBAL DEALER NETWORK



PRODUCTIVITY



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STONE CUTTING, MARBLE & GRANITE DIVISION

MARBLE & STONE-CUTTING

MATEC is a leader and the leading producer of hi-tech water filtration plants in stone sector.

Matec designs and manufactures complete filtration plants in stone sector. By using the filter press, our plants allow the treatment, recovery and re-use of waste water and the disposal of arising sludge.

MATEC treatment plants are designed to maximize the returns of stone workshops and working sites. We have developed great experience in this sector which has always been the most important one of Massa-Carrara area, where Matec has its headquarters.

STONE CUTTING

In marble, granite and stone working, both at quarries and at stone factories, water has many applications. From stone-cutting to polishing, water is necessary to avoid tools' overheating and to reduce by-product dust from various processes. Then water must be treated to be re-use in closed production cycle.



View of Carrara quarries

MATEC GUARANTEES:



DRY CAKES

The average residual moisture is 20%, but we can squeeze cakes to obtain 7-8% residual moisture.



CLEAN WATER

The water obtained from the dewatering is clean water ready to be reused or disposed of safely.



COMPLETE TURNKEY PLANTS





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HIGH THICKNESS STEEL



AUTOMATIC REAL WASHING



HPT HIGH PRESSURE
TECHNOLOGY FOR FEEDING PUMP



OPEN FILTRATE DESIGN

BORN TO BE PERFECT

TURNKEY WATER TREATMENT AND FILTER PRESS
NO PERSON, NO POLYMER, NO PROBLEMS!



ALLEN BRADLEY AND SIEMENS
TECHNOLOGY FOR PLC



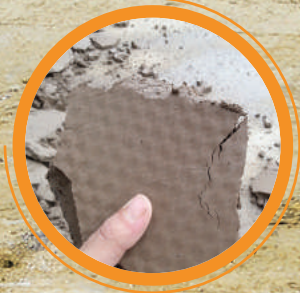
"GASSER" SHAKER

TT2FAST THE FASTEST
OPENING SYSTEM

TESTED 10.000 PSI (700 BAR)



MOISTURE < 20%





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THE FILTER PRESS

Compliance with environmental laws has become important for plant owners in most countries. Cutting-edge technologies have been developed in the industrial wastewater and slurry treatment field.

Matec technology complies with the latest environmental regulations, while maximizing the returns of the plant, through savings and earnings. That is what clients have been asking for.

Matec offers four ranges of filter presses:

ACQUAE, IGNIS, TERRAE, MAGNUM. Our machines can handle all kinds of capacities and flow rates, and are designed for heavy duty projects. Automation, top brands, 24-month warranty, HPT and TT2 Fast are what Matec can offer compared to our competitors.

OUR MACHINES' FEATURES ARE:

All made of single-block steel from thick slabs; Plasma, laser or water-jet manufacturing process; Purified water drained through external manifolds; First choice components by major manufacturers; Stainless steel accessories; High speed and high pressure hydraulic system

MATEC SUPPLIES COMPLETE TURNKEY PLANTS:

- 100% Made in Italy;
- Assembled also in North America;
- With:
 - HPT (High Pressure Technology);
 - Gasser Shakers;
 - Real automatic washing;
 - Filter cloths easy to replace;
 - Open design to identify cloth damages;
 - PLC with remote control and assistance;
 - Variable number of plates;
 - Different models for the best technical/economical solution.

Customize your filter press system to your needs.



1000x1000 - 40 plates filterpress machines, Israel





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CAPACITY, COMPETENCE, COURTESY





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WHAT MAKES MATEC THE BEST SOLUTION FOR YOUR BUSINESS



PRESSURE

MATEC is the only 100% HPT company using pressure up to 16 and 21 BAR



OPENING TIME

The TT2 patented system reduces discharging times of big machines from 15/20 minutes to less than 3 minutes



CAPACITY

We design and build plants to process from 0,5 to 100 m³/h, every plant is automatic and customized



AUTOMATION

MATEC produces only 100% automatic and hi-tech plants



HIGH QUALITY

Matec only uses top brands: Siemens and Allen Bradley for the electrical part, Bosch Rexroth for the mechanical part and feeding pumps 100% made in Italy



WARRANTY AND ASSISTANCE

MATEC has a technical office with 5 engineers dedicated to blueprint design, project engineering and the providing of different platforms, 1 dedicated engineer during installation, 10 technicians for the plant assembling and start-up, and for the after-sale assistance within 24/48 hours

FROM 400x400 TO 2000x2000 PLATE SIZE
FROM 3 TO 220 PLATES
OVER 150 TPH



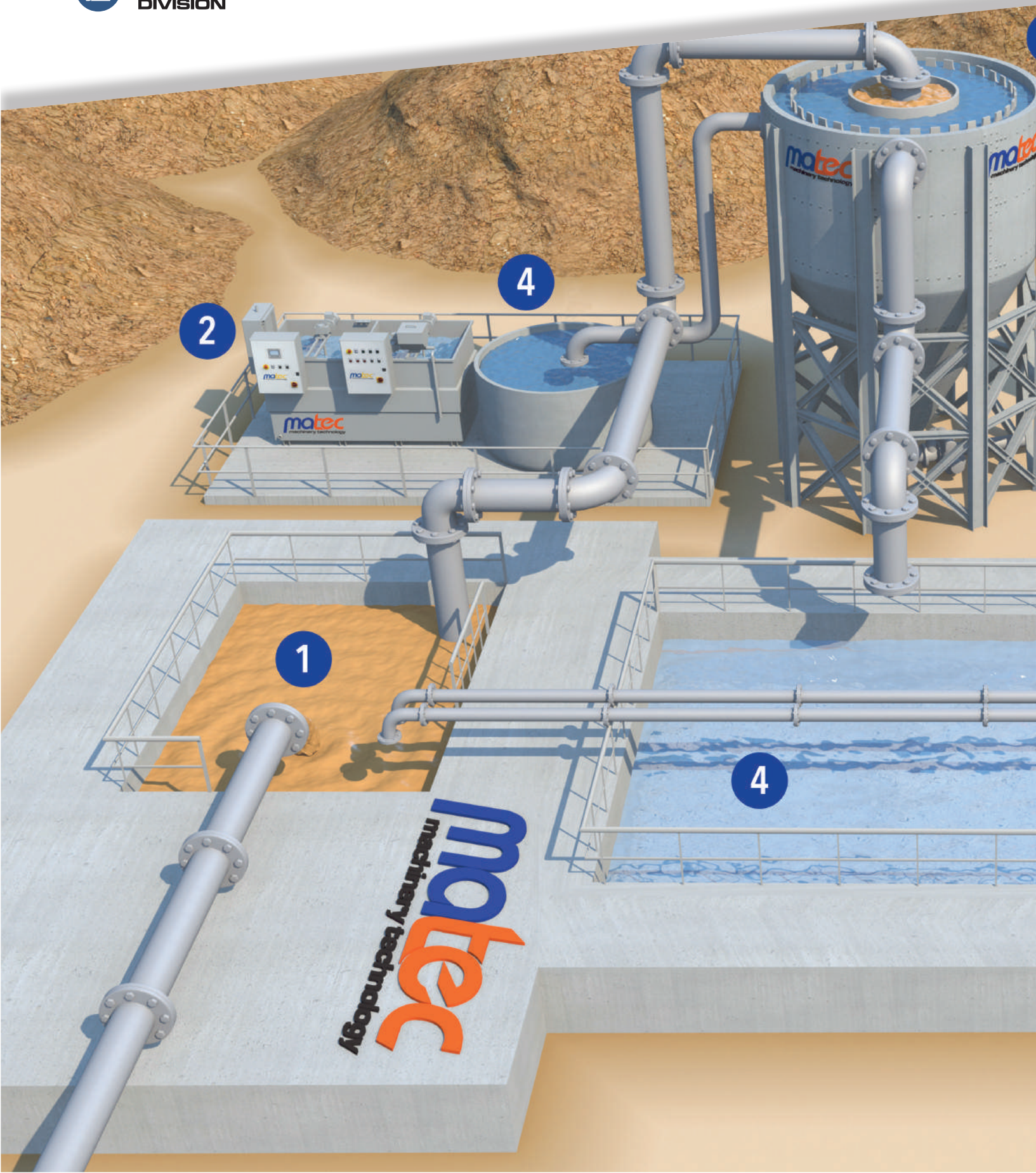
500x500 Matec plant in England



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PLANT LEGEND

- | | |
|-----------------------------|---------------------------|
| ① Dirty Water Pit | ⑤ Bifang Homogenizer Tank |
| ② Bifloc Flocculant Station | ⑥ HPT Pump |
| ③ Deep Cone Thickener | ⑦ TT2 Fast Filter Press |
| ④ Clean Water Pit/Tank | |



- The waste water from washing is collected into the dirty water tank ①
- The submersible pump sends the dirty water in the deep cone vertical thickener ③
- Flocculant prepared by the Bifloc ② is injected in the dirty water pipe,
- before entering the vertical thickener ③, in which the decantation process takes place.
- Purified water overflows from the top of the thickener ③ and ends
- into the clean water collecting pit/tank ④
- Thickened mud is sent into the Bifang homogenizer tank ⑤
- The filter press ⑦ closes and the HPT pump ⑥ sends the mud into it.
- The New TT2 Fast opens the filter press ⑦
- in sections (for machines with over 50 plates) and the dry cakes are discharged.

matec
machinery technology



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MATEC specializes in the design and development of waste water purification and filtration plants. We work for many different industries, the most important are: mining, aggregates, gravel, sand, stone, ceramics and glass. Our mission is the customer's satisfaction. That is why we offer timely after-sale service, as well as before-sale advice to understand the real requirements of our potential customers.



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