

**matec**<sup>®</sup>  
machinery technology

**WATER TREATMENT & SILT MANAGEMENT**





## WATER TREATMENT & SILT MANAGEMENT

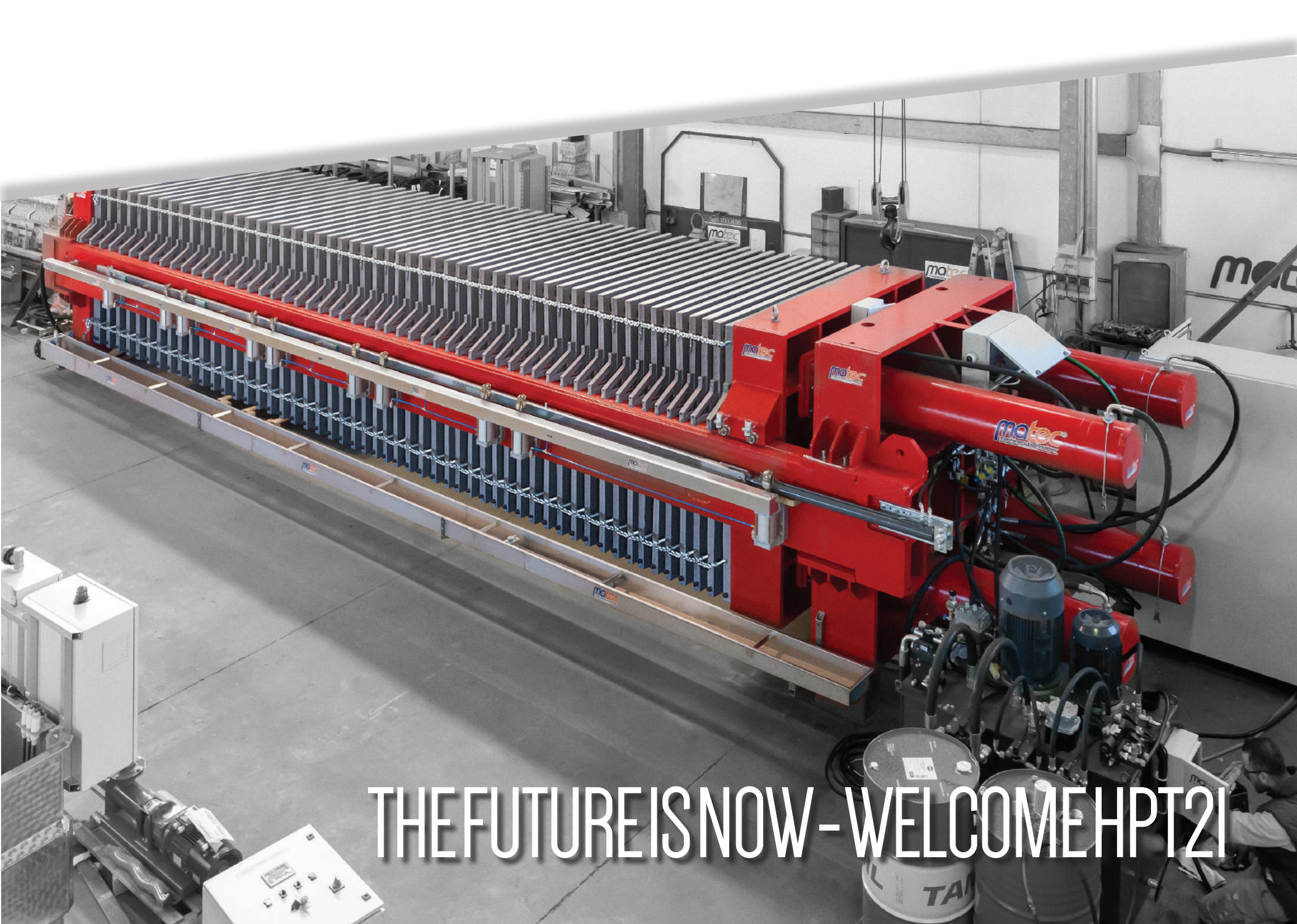
### X GENERATION FILTER PRESS

Matec has developed the new X Generation line of filter press to work on heavy duty projects and guarantee the best performances ever in the field of water treatment and silt management.

- ✓ UNMATCHED RESULTS
- ✓ HEAVY DUTY







THE FUTURE IS NOW - WELCOME HPT21





## WATER TREATMENT & SILT MANAGEMENT

### THE EVOLUTION OF FILTRATION

The X Generation filterpresses are the next step in the filter press evolution. For this line, our range goes from the TERRÆ 1300x1300 to the MAGNUM 2000x2000.

The plus of these machines are:

- ✓ **REINFORCED FRAMEWORK**
- ✓ **4 PISTONS - Pushing**
- ✓ **HPT - (High Pressure Technology)**
- ✓ **TT2 Fast - (The fastest plate opening system)**
- ✓ **Gasser Shakers - For the perfect cake discharging**
- ✓ **PLC Control Panel - Top quality brands**



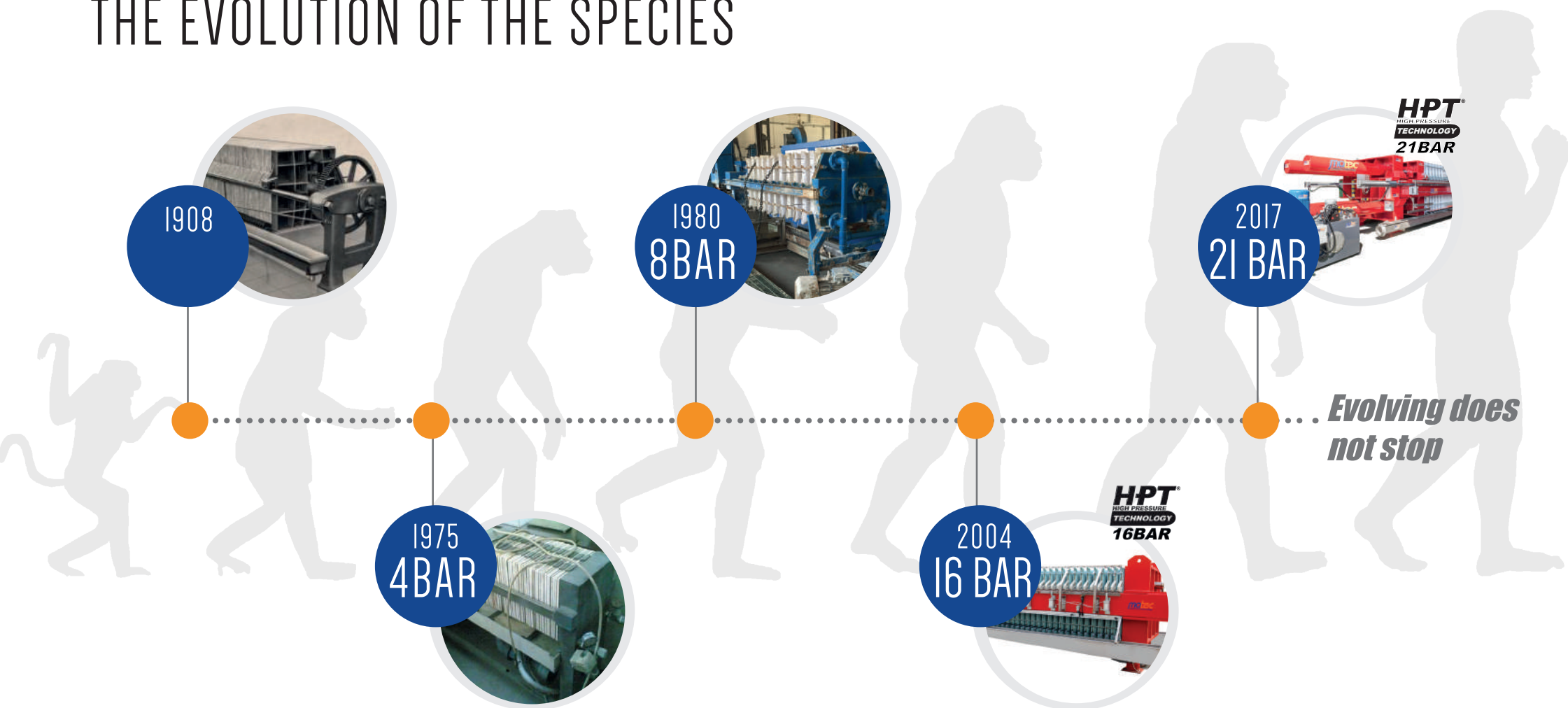




HEAVY DUTY NO PROBLEM 24/24 IS OUR AIM



## THE EVOLUTION OF THE SPECIES







ALWAYS INNOVATING





## WATER TREATMENT & SILT MANAGEMENT

### REINFORCED FRAMEWORK

The 2000x2000 Magnum filter press by Matec uses a reinforced framework consisting of two square beams welded together to a further side plate.

The square shape assures a better withstanding to the forces. That is essential in applications with HPT.







NEVER STOP





## WATER TREATMENT & SILT MANAGEMENT

### 4 PISTONS - Pushing

#### 4 pistons for the new hi-performance filter presses

The new X-generation filter presses must work at increasingly high pressures (HPT 21 Bar), thus ensuring a shorter workcycle and lower humidity.

It was therefore necessary one significant evolutionary step, using 4 pistons instead of the two (or one) normally used.

X-generation Line models:

1300x1300 - 1500x1500 - 1500x2000 - 2000x2000 - 1200x1200







100% ITALIAN MADE PROUDLY



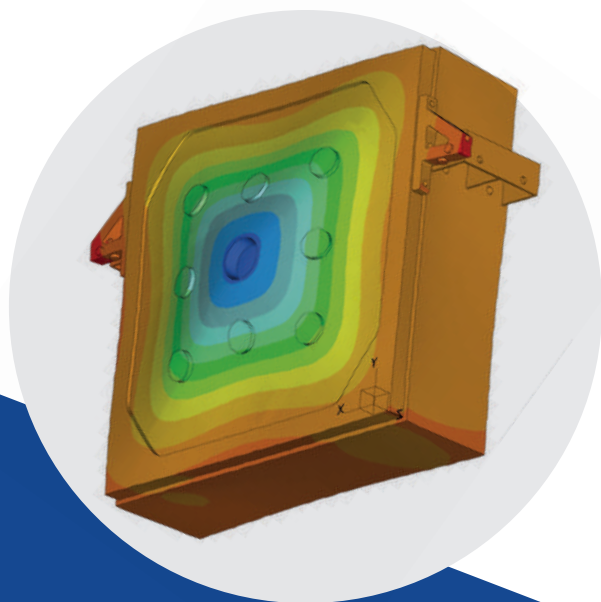
## WATER TREATMENT & SILT MANAGEMENT

### 4 PISTONS

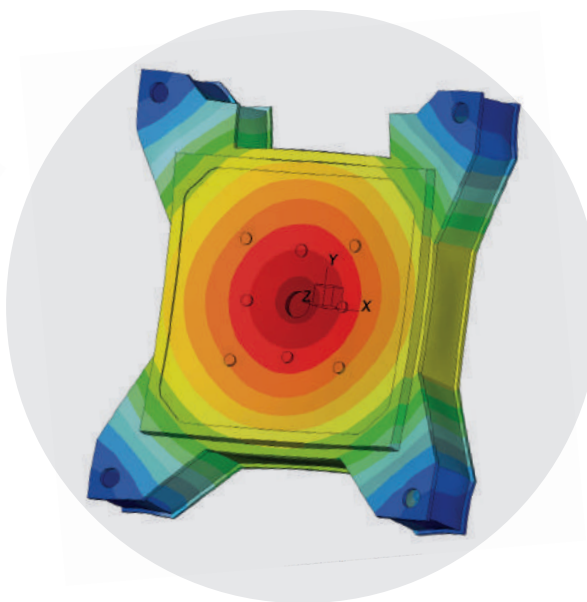
Matec 4 pistons solution guarantees a better working of the machine. The plates will suffer less deformation, reducing any spraying risk. To work with higher pressure, every single component had to be rethought, to match the 21 BAR feeding pressure.

The 4 piston solution is also the result of research carried out on the stressing of the plate; it can be easily noticed how the feeding pressure affects an area of the plate which is way smaller in the Matec 4 piston machine, if compared to the 1 piston machine or also the 4 piston solution by our competitors.

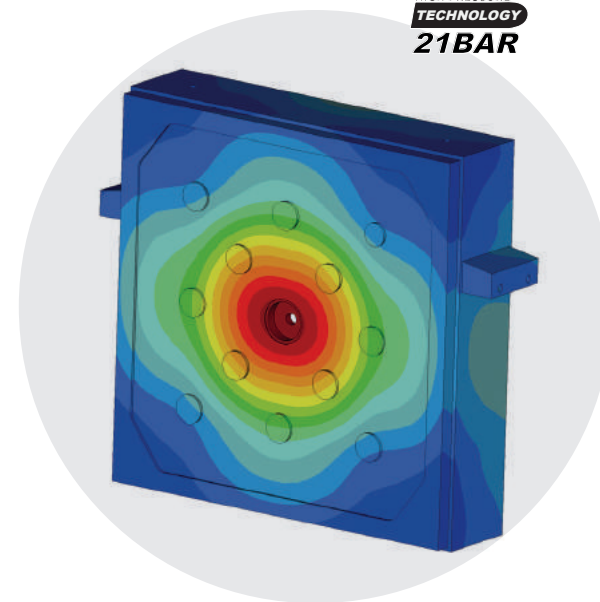
### 1 PISTON



### COMPETITORS' 4 PISTONS PULLING



### MATEC 4 PISTONS PUSHING





A high-angle, perspective shot of a large industrial facility, likely a water treatment plant. The image shows multiple long, parallel rows of rectangular filtration modules. Each module is composed of numerous vertical, pleated filter elements held within a metal frame. The frames are supported by a complex system of steel beams and walkways. The floor is a dark, polished concrete. To the right, there are yellow safety railings and additional industrial structures. The lighting is bright, coming from large windows or skylights on the left, creating strong highlights and shadows. The overall impression is one of a large-scale, modern industrial process.

PERFECTING THE FILTRATION PROCESS





## WATER TREATMENT & SILT MANAGEMENT

### HPT 21 BAR

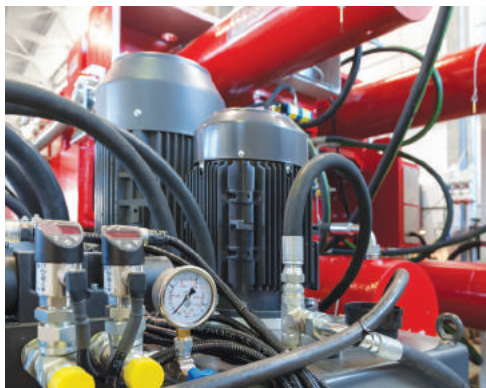
The 4 pistons and the reinforced framework allow us to run our machine safely with high pressure.

Because we work at pressure that competitors cannot match.

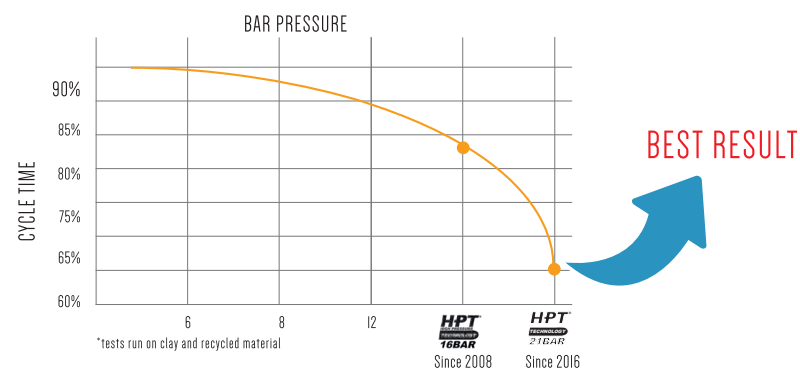
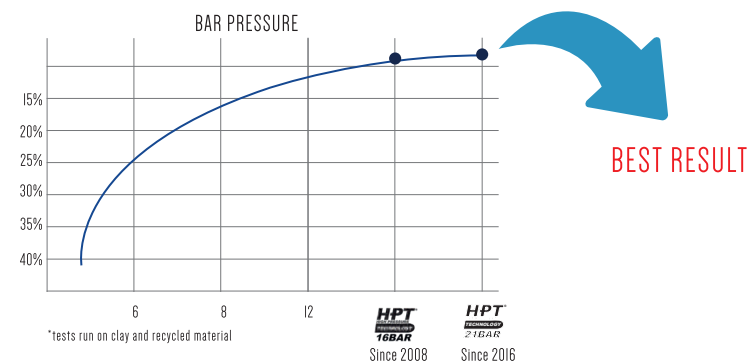
We do that with the triple case pumps (made in Italy).

To work with high pressure we do not need just a better pump. We also need a better hydraulic unit to give the strength to pistons to counter balance the feeding pressure.

Our hydraulic units and pistons are tested to work at double the pressure needed for high pressure filtration.



**HPT<sup>®</sup>**  
HIGH PRESSURE  
TECHNOLOGY  
**21BAR**







**matec**  
machinery technology  
EFFICIENCY





## WATER TREATMENT & SILT MANAGEMENT

### NEW TT2 FAST SYSTEM

TT2 FAST system guarantees an opening time of 2 minutes for 100 plates and 4 minutes for 200 plates (5 KW of power consumption roughly). It is the fastest discharging system on the market.

2 small dedicated hydraulic pistons to open the plate pack (low consumption). They move a bar on which the TT modules are placed. They will hook to the section to be opened.



### GASSER SHAKERS

Gasser Shakers are an air-operated system for a perfect separation of the cakes from the filter cloths.

Pneumatic pistons lift a stainless steel bar to lift the plates and then drop them, so they receive the appropriate vertical stress.

It is important to avoid mud remains attached to the cloths, as it can be very dangerous, causing the crossing of the plates.







**THE FASTEST AND SAFEST FILTER PRESS**





## WATER TREATMENT & SILT MANAGEMENT

### PLC CONTROL PANEL

To control every aspect of the machine operation, from the high pressure, to the closing and opening, the shaking and further optionals, there is the need of PLC.

We use PLC by the best brands (Siemens and Allen Bradley) because we need to work with the best to give the best working machine and finally the best results.







**GREAT BRAND PARTNERS FOR GREAT RESULTS**





## THE EXCELLENCE IN FILTRATION, BY NATURE

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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