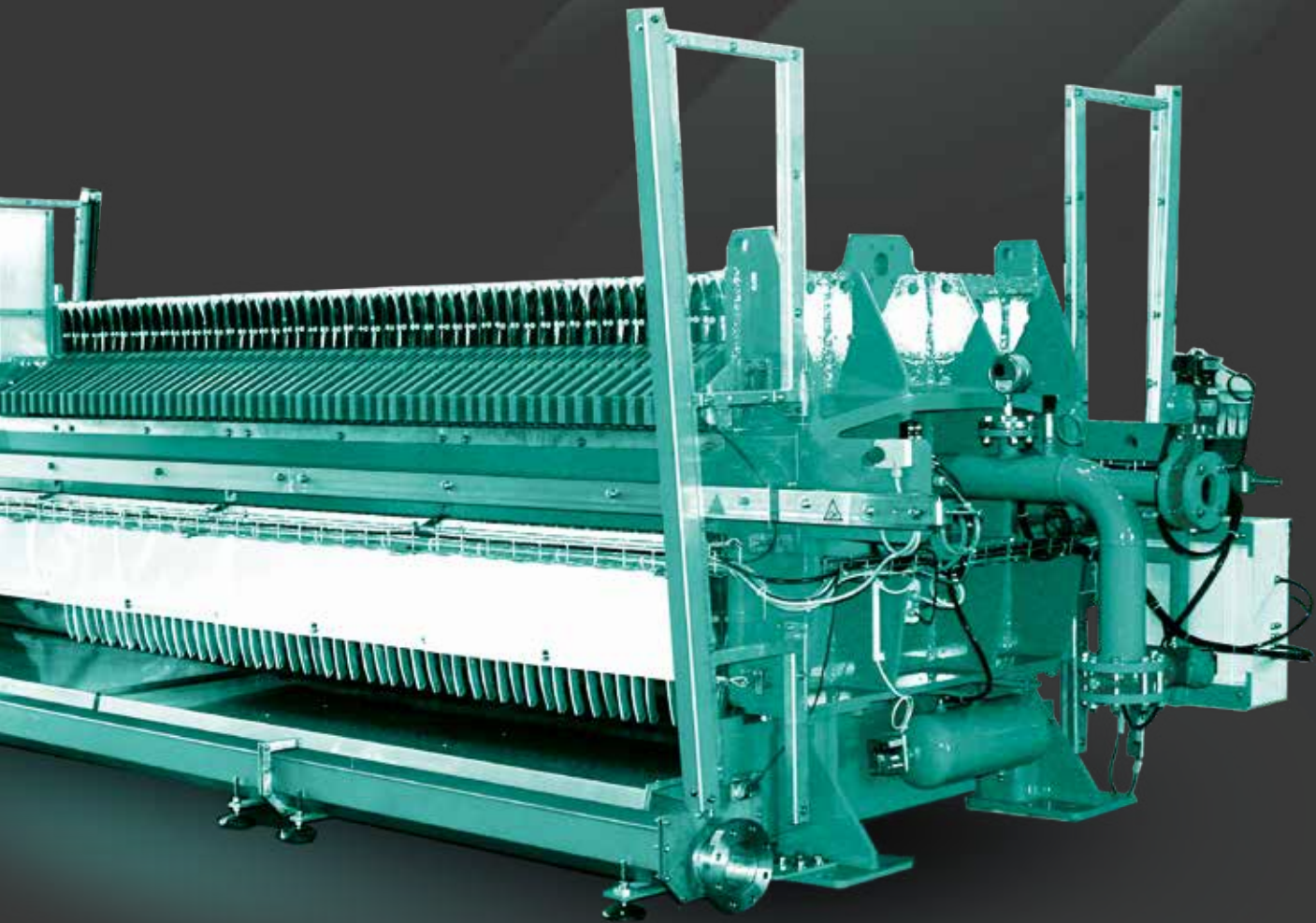




**Diemme  
Filtration**

Trust Never Ends.

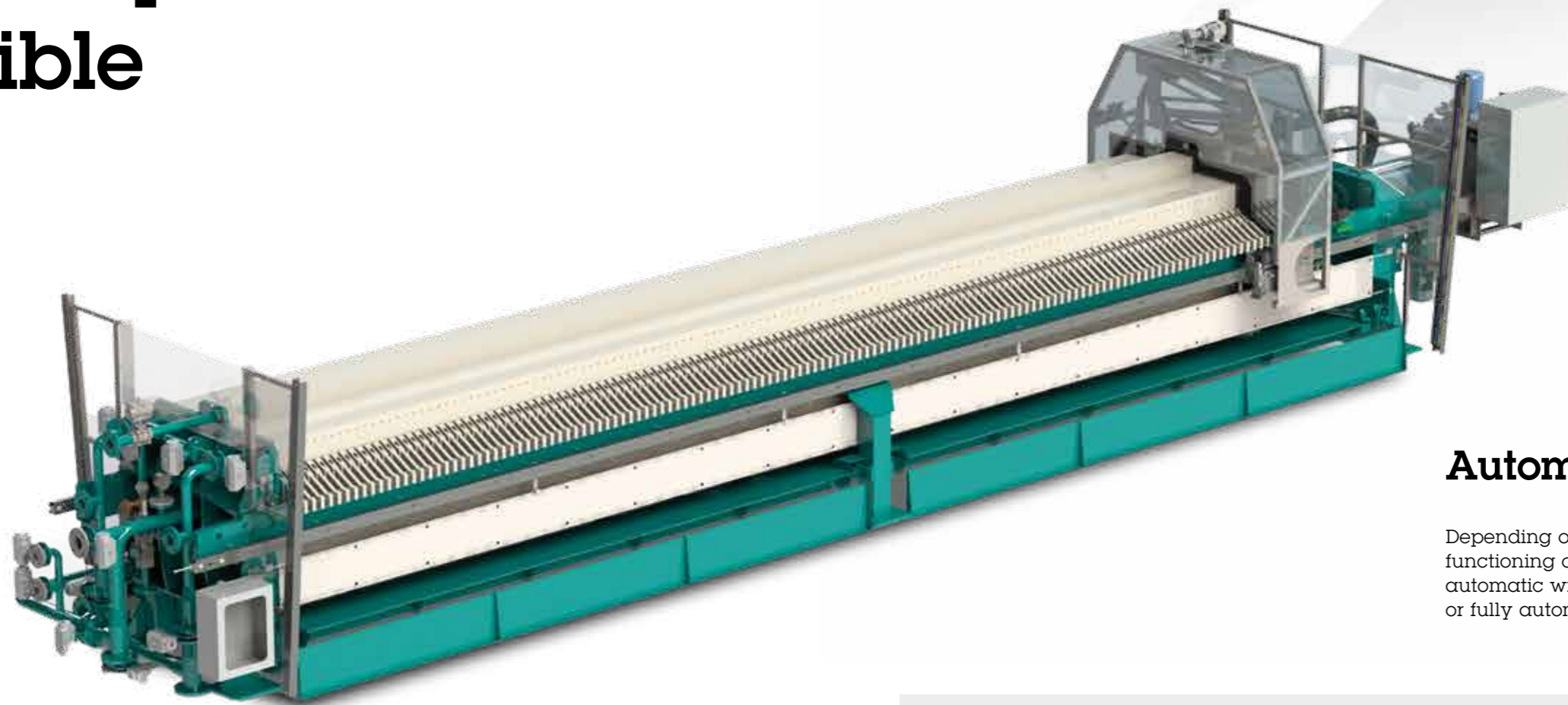


# Side Beam Filter Press AUTOMAT

Solid-Liquid Separation Technologies For Industrial Processes

**A brand of  
Aqseptence Group**

# User friendly and flexible



## Automation

Depending on the needs of the filter plant, the functioning of the AUTOMAT filter can be semi-automatic with limited need of operator intervention, or fully automatic.

## Characteristics

The AUTOMAT filter press is a new-generation machine that combines the following features: user-friendliness, reliability, flexibility, safety and structural simplicity. The AUTOMAT is Diemme® Filtration's side-beam filter press designed specifically for biological and industrial products with low filterability.

## Design

All of the filter components are optimally designed using advanced engineering software tools thereby minimizing stresses and preventing deformation. The frame of the machine is fabricated from high-quality construction steels.



Model	Working Pressure (bar) Min Max	N. of installed plates Min Max	Cake Volume (l) Min Max	Filtration Area (m2) Min Max	Length (mm) Min Max	Empty Weight (kg) Min Max
1000	15	68 ÷ 136	1300 ÷ 2700	95 ÷ 200	4000 ÷ 8000	6500 ÷ 16500
1200	15	94 ÷ 156	2500 ÷ 4220	200 ÷ 330	6000 ÷ 10000	13500 ÷ 23000
1500	15	85 ÷ 155	3700 ÷ 6850	335 ÷ 530	6000 ÷ 11000	20000 ÷ 38000

**Note:** The Max values reported in the table refer to plates with 25 mm chamber thickness and full plate packs.



# Construction details and safety



## Plate-shifting device



The plate-shifting mechanism allows the cake to discharge by opening each plate. The device is made up of two trolleys equipped with automatic hooks that anchor and shift the plates one by one. The trolleys move by means of toothed drive belts providing smooth and quiet operation. The belts are protected inside the trolley guide mechanism.

## Plate-pack closing control unit



A push-to-close hydraulic jack, controlled by a special hydraulic power unit installed on the machine, performs the closing and sealing of the plate pack. The pressure control system is connected directly to the jack ensuring safe operation.

## Safety protections and photoelectric barriers



In order to maximize the accessibility of the machine and make it more user-friendly for operators and maintenance staff, we designed safety protections comprising of fixed barriers on the headers and light curtains that allow the operator to laterally access the plate pack without stopping the machine.

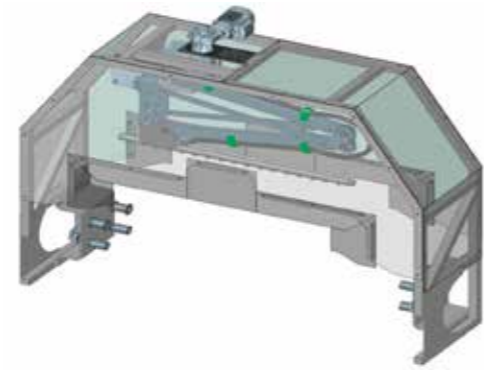
## PLC



AUTOMAT filters are equipped with a PLC-based automation system with human-machine interface (HMI) that facilitates the monitoring of the filter functioning, fault diagnostics and allows the continuous adjustment of the filtration parameters in order to optimize the variable process requirements.

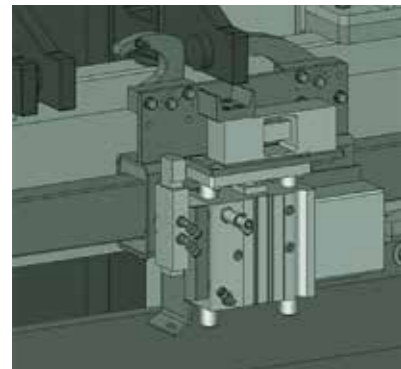


# Options and customization



## Materials of construction

Depending on the characteristics of the product to be treated, it is possible to customize the side beams with special liners in AISI 316 stainless steel or polypropylene.

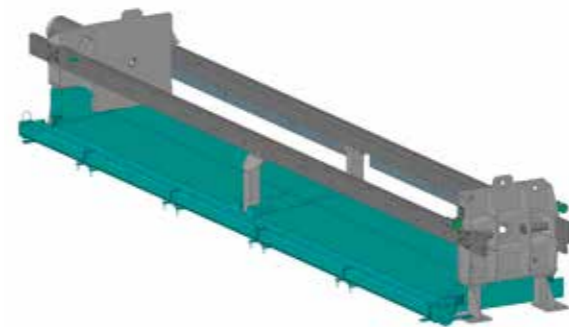


## Weighing system and plate shaking

A weight-control and plate-shaking system can be installed on the plate shifting device allowing the machine to operate automatically. This system lifts the plate and measures its weight by means of a load cell. This value is compared with the preset plate weight and, according to this measure, the system decides whether to shake and weigh the plate again or to continue with the plate shifting.

## High-pressure cloth washing

In order to increase the useful life of the filter cloths, the machine can be equipped with a high-pressure cloth washing device. This system will periodically perform a deep cleansing of the cloth to restore its performance characteristics.



## Drip Tray

The drip tray, installed between the feet of the machine, is a downward-opening device that, when closed, collects wash water and other drips and discharges via a launder. The drip tray opens completely at the end of the filtration cycle to allow the discharge of the filter cakes.



**AIDA is the IIoT solution of Diemme Filtration, to produce valuable information for assertive decision making.**

**AIDA that allows our customer to enhance optimize processes and enhance machine performance through data collection, and advanced data processing by our team of experts. to produce valuable information for assertive decision making.**



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