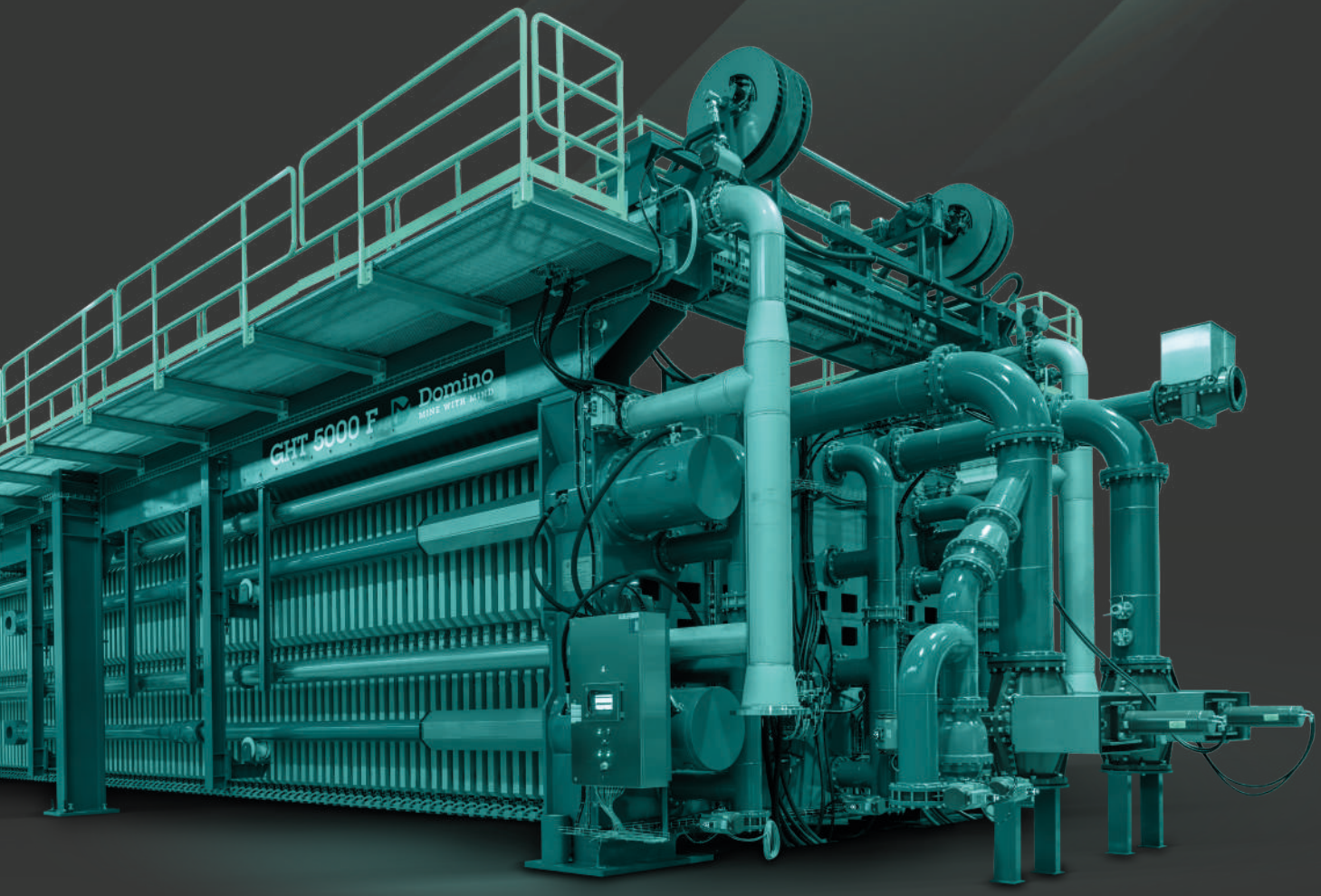
Diemme Filtration

Trust Never Ends.



Filterpress GHT5000F DOMINO

Solid-liquid separation technology for industrial processes

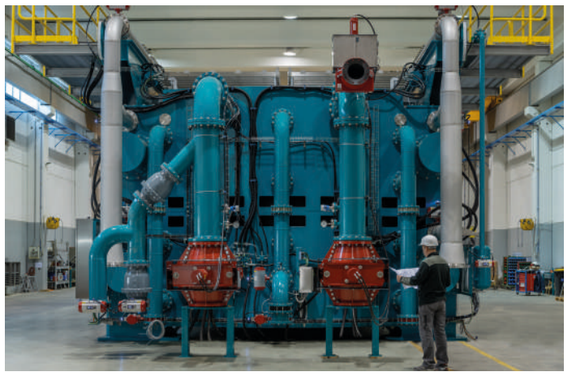
GHT5000F DOMINO the largest filterpress in the world





Performance

Increasingly, mining companies are extracting huge amounts of ore. The GHT5000F DOMINO is a new generation pressure filter capable of tripling the production capacity of the largest filter press currently in operation. The innovative plate design allows up to 191 plates to be mounted in each filter press achieving a daily throughput range of 12,000 to 15,000 tpd dry solids, depending on the product processed.



Reliability

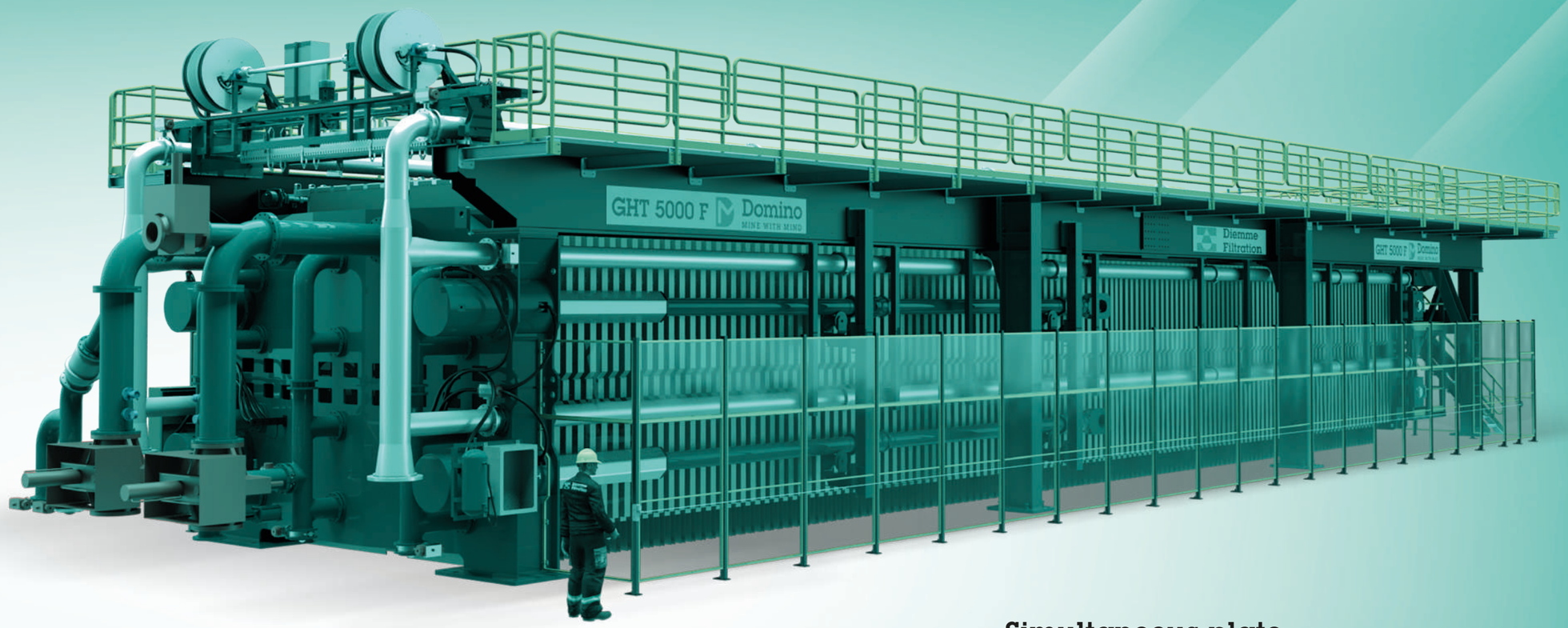
The top side beam structure allows the installation of numerous value added features such as the cloth rain wash and shaking systems while also allowing access to the top of the machine, a necessary condition to make routine maintenance operations easier. The filter closure system using 4 hydraulic cylinders ensures perfect operation by compensating for any misalignment of the plate pack. Sealing of the machine is automatically guaranteed by the hydraulic system.

Opex reduction and Capex optimization

The filter press is designed to be transported entirely in containers except for the top side beams. The overall size and large number of plates also make it possible to reduce the number of machines required to dewater the same amount of mining tailings compared to existing conventionally sized machines resulting in optimization of initial investment costs. The filter cloths have been made with a simplified design to facilitate maintenance and further lower operating costs by about 20 percent.

Model	Working pressure (bar) Min	Working pressure (bar) Max	N. of installed plates Min	N. of installed plates Max	Cake Volume (l) Min	Cake Volume (l) Max	Filtration Area (m^2) Min	Filtration Area (m^2) Max	Length (mm) Min	Length (mm) Max	Empty weight (kg) Min	Empty weight (kg) Max
F20 C40	0 ÷ 15		71 - 91		28200 - 36200		1500 - 1900		2400		280000	
F20 C50	0 ÷ 15		71 - 91		35300 - 45200		1500 - 1900		2400		300000	
F30 C40	0 ÷ 15		121 - 141		48100 - 56000		2500 - 2900		3400		380000	
F30 C50	0 ÷ 15		121 - 141		60100 - 70000		2500 - 2900		3400		400000	
F40 C40	0 ÷ 15		171 - 191		67900 - 75900		3500 - 3900		4400		480000	
F40 C50	0 ÷ 15		171 - 191		84900 - 94800		3500 - 3900		4400		500000	

GHT5000F Technical Details

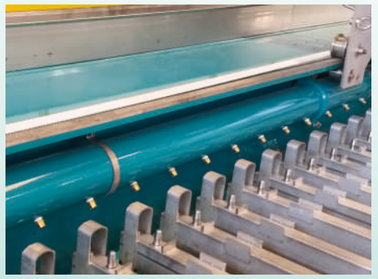


Integrated Drip Tray



Given the imposing size of the GHT5000F filter press, the drip tray is integrated into the system building allowing for easier installation and greater robustness.

Cloth Rain Wash



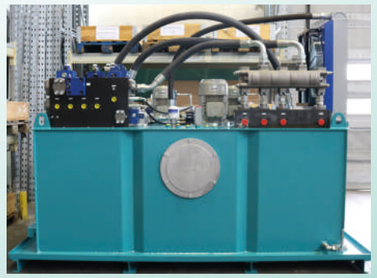
Overhead washing, carried out after each cycle, allows optimal cleaning in all areas of the filter cloths, avoiding the accumulation of cake residues or dust. The location of the washing bars, at the top side of the plates, ensures perfect rinsing of the entire filter cloth, leaving the upper area of the machine free for routine maintenance operations.

Double Bar High Pressure Washing System



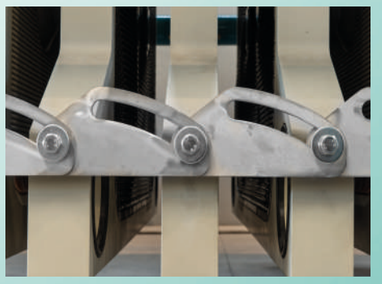
High-pressure washing, which can be programmed to run as needed, provides effective regeneration of filter fabric permeability and thus longer cloth life, while maintaining a consistent performance of the filtration process over time. The double washing bar reduces the time for this operation by 50%, by cleaning four filter cloths at a time.

Hydraulic Unit



The innovative hydraulic power unit, which is specially designed, uses variable displacement pumps to optimize energy consumption during filter operation. In addition, it is composed of 2 twin units that ensure that the filter can operate during the maintenance of one of the 2 units, with an efficiency of about 80% compared to its usual performance.

Simultaneous plate pack opening and cloth-shaking device



Simultaneous opening of the plate pack, greatly reduces the cake discharge times compared to traditional systems, thus minimizing total the cycle time and increasing filter productivity. The automatic cloth vibration system, programmed after each cycle, ensures reliable discharge of the cake and/or any residue from the cloth as well as ensuring total automatic operation of the machine.

Plc



The GHT5000F features a sophisticated automation system with a human-machine interface (HMI) that facilitates monitoring of filter operation, fault diagnostics, and enables continuous adjustment of filtration parameters to optimize variable process demands.

GHT5000F Features





Access ladder to the top of the machine and integrated platform for maintenance

Allows quick access to the top of the machine for routine cloth maintenance without requiring additional floors to the filter support structure. Side walkways and catwalks are integrated into the machine structure and provided with handrails for added safety.





Double washing system

High-pressure washing with a double bar design, in combination with the rain washing system, significantlyimproves the efficiency of the machine by preventing the accumulation of cake residue and allowing a hermetic seal of the plate pack.





Maintenance platform integrated with the mobile header

In order to allow the filter maintenance operators to reach all areas of the moving head, a multi-story platform integrated with the motorized carriage was developed.



Rapid cloth change system

The special design of the filter cloth allows it to be hung from above the filter plate and multiple cloths are replaced quickly, thus significantly reducing maintenance time.



Multiple feeding system

Distributes the flow in such a way as to reduce sludge inlet velocities and ensure homogeneous filling of the plates.

Aida

SYSTEM TUTOR

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.

GHT5000F DOMINO EMPLOYED AT A COPPER MINE IN PERU.



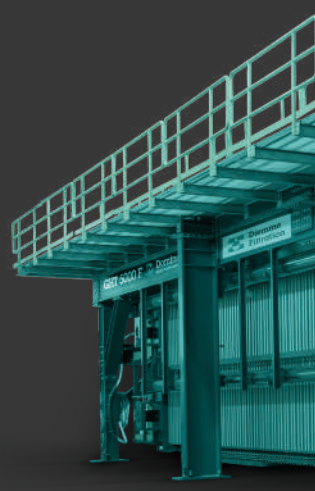




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