

Maxa™ Filter Plate

As a direct result of FLSmidth innovation, the Maxa™ Filter Plate delivers as much as 10% more volume, improved filtration times and a longer plate lifecycle for your Automatic Filter Press (AFP) operation.

When we set about improving AFP production, we turned to the plates themselves. The result? The Maxa Filter Plate. Design adjustments to our plate geometry have resolved common issues related to filter plate performance, including area, volume, flow and durability. Optimisation of the filter plate's physical characteristics increases cloth life and maximises productivity, further reducing operational costs.

Key benefits

- Expanded filtration surface area improves throughput
- Greater chamber volume allows for increased cake mass per cycle
- Increased filtrate port area reduces velocity of filtrate and cake blow air, extending plate life
- Engineered port locations and size promote filtrate flow and eliminate areas that fatigue filter media



Small design changes - big impact

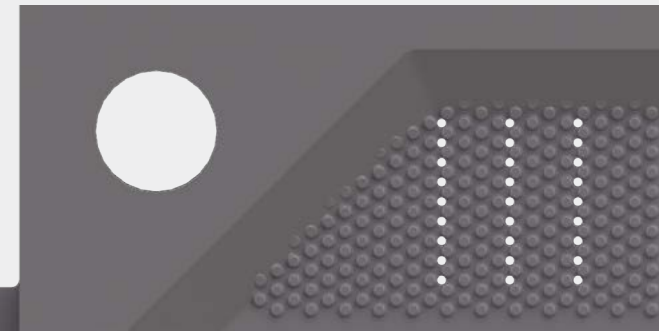
FLSmidth engineers analysed all of the plate elements and made several enhancements to improve performance in four core areas. The end result is a design that ultimately boosts productivity and cuts operational costs.

Greater filtration surface area improves production

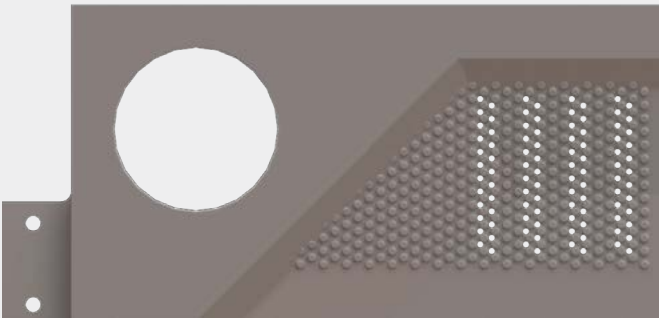
When it comes to throughput, every millimetre on the surface of the plate counts. By maximising the plate area and volume, your operation becomes more efficient and ultimately more profitable.

- Optimised staybosses maximise cake volume
- Maximum energy transfer with pip pattern design
- Expanded cake formation zone
- Streamlined filtrate path from edge to edge
- Compatible with all M1500 and M2020 AFPs

M1500



M2020



Maxa™ Filter Plate Improvements

Area

Volume

Flow

Lifecycle

Streamlined plate anatomy prolongs cloth life

Cloth changeout is time consuming and expensive. The Maxa Filter Plate addresses the most common points of cloth failure.

- Air for cake blow is introduced at a lower velocity to reduce abrasion
- A modified interface between the plate and cloth provides greater support, minimizing high stress areas
- Better pip design provides more consistent cloth support
- Engineered port locations and size promote filtrate flow

Port size and arrangement extends plate life

Filtrate port design affects how air flow wears the plate over time; a reduction in air velocity promotes better filtrate flow through the plate. This reduces wear on the cloth, extending the plate's overall lifecycle.

- Increased porting lowers filtrate and air velocity
- Optimised plate transitions reduce abrasion

Fast Facts

- 5-10% more volume depending on plate size and chamber depth
- 15% more filtrate port open area
- 3-5% increase in filtration area

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