

## Maxa<sup>™</sup> Modular Filter Plate

Building on the successful Maxa platform, FLSmidth's latest advancement – the Maxa Modular Filter Plate – presents patent-pending technology as the world's first filter plate to boast a replaceable sealing frame. Also featuring replaceable staybosses, the Maxa Modular's design elements deliver lower operating costs and decreased waste.

Over the years, we have strived to improve overall AFP productivity, from operation to maintenance. Our design adjustments to the Maxa Filter Plate geometry resolved common issues related to filter performance – including area, volume, flow and durability. A renewed focus on the plate's physical characteristics has resulted in increased cloth life, maximised production and reduced costs.

Our FLSmidth MissionZero commitment fueled further research and development to tackle the filter plate's single biggest issue: plate attrition. While the Maxa Modular Filter Plate shares all of the Maxa advancements, it also uniquely incorporates replaceable elements. The ability to replace the filter plates' most commonly worn components drives down the total cost of operation, and it significantly reduces the environmental impact of discarded plates.

### **Benefits**

- Replaceable plate-sealing surface allows damaged components to be changed in minutes – no need to remove plate hardware or assemble a new plate
- Replaceable components produce less waste
- 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 weaken filter media





## The next evolution in filter plate technology

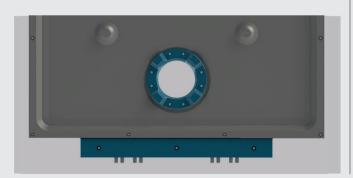
The Maxa Modular Filter Plate is the pinnacle of the Maxa Filter Plate family, providing the optimal balance between performance and operational efficiency. By offering the ability to be continually repaired, the Maxa Modular reduces inventory levels and greatly reduces the environmental impact.

### Modular plate lowers cost of ownership

Every year, filter press owners must plan on a percentage of the total plates in operation that will require replacement. If a filter plate suffers a blowout, its sealing edge is often damaged, and the entire plate is discarded. Blowouts are unpredictable and can occur to any plate of any age. The Maxa Modular Filter Plate eliminates the need to scrap an otherwise viable filter plate. Instead, the damaged plate component can be replaced in minutes, returning the plate to the filter for further production and increasing the overall life of the original investment.

- Replaceable sealing edges can be changed without removing plate hardware
- Replaceable staybosses maximise filtration surface area and minimise abrasion during cake discharge
- Redesigned plate and hardware require no lag bolts for assembly
- Compatible with all M1500 & M2020 AFPs





### Streamlined plate anatomy prolongs cloth life

Cloth changeout is time-consuming and expensive. The Maxa 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, minimising 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. Increased porting lowers filtrate and air velocity, promoting better filtrate flow through the plate. This optimises transitions and reduces wear on the cloth – extending the plate's overall lifecycle.

# Greater filtration surface area improves production

When it comes to throughput, every millimetre on the plate surface 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