

FSC OEM - Compact Design

Optimized flat screen changer
for processing of plastics



The flow optimized new version of MAAG's FSC hydraulic and manual screen changers assist operators of plastic extrusion lines in achieving a reduced equipment footprint, reduced residence time and improved residence time distribution. The ultra compact design is maintenance friendly, and provides precise flow even at high discharge pressures. The ultra short flow channels reduce pressure drop, promote a more uniform product temperature, allowing this generation of screen changer to perform where others have reached their limits.

Superior performance benefits compared to existing designs

Holistic design of the complete screen changer package results in many major improvements:

- Reduction in pressure loss, residence time and residence time distribution due to shorter, flow optimized channels
- Increased production rate, product quality, energy efficiency and equipment life span
- Elimination of pressure fluctuations allowing a significant reduction in rate of material consumption
- Maintenance friendly due to easy access to the sealing package

FSC OEM

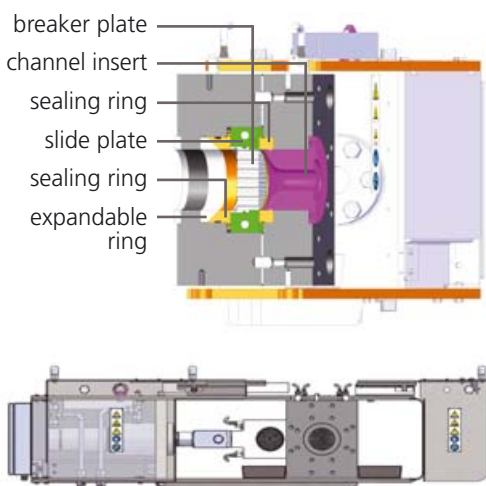
Flat screen changer for processing of plastics

Technical specifications screen changer:

| | |
|------------------------|----------------------|
| Housing, cover: | Alloy steel |
| Slide plate: | Hardened alloy steel |
| Breaker plate: | Hardened alloy steel |
| Heating: | Electric / liquid |

Application limits:

| | |
|-------------------------------|-----------------------|
| Viscosity: | from 10 to 10,000 Pas |
| Temperature: | up to 325°C |
| Operational pressure: | up to 700 bar |
| Differential pressure: | up to 200 bar |



Typical range of products

Plastic melts such as: LDPE/HDPE/HIPS/ABS/PET/PP/PS/PC/PBT/PLA/PA6.

Specific melt density range of 0.73-1.7

Accessories

- Base and support cart
- Adapter flanges standard
- Pressure and melt temperature transducers
- Drive systems, controls and complete system solutions

Sealing technology

Different application in melt filtration require flexible sealing systems which can manage low viscosities and challenging high operation temperatures. MAAG offers dedicated flexibility based on a hybrid based material mix and unique performance.

Options

- Covers made of pulver coating in different colours
- Fluid heating
- Terminal switch box UL/ATEX
- Vertical mounting
- Collector baskets different sizes
- Adapter flange disk design
- Quick entry tool for screen removal
- Fastening system for safe lifting
- Handling bars in different materials
- Engineered clearance classes

Overview FSC OEM typical throughputs per application

| Capacity* [kg/h] | Product viscosity [Pas/10-1s] | 1,500 - 4,500 | 3,000 - 4,500 | 1,500 - 4,500 | 800 - 3,000 | 1,000 - 2,000 | 800 - 2,500 | 800 - 3,000 | | |
|---------------------|----------------------------------|------------------|------------------|------------------|----------------|------------------|----------------|----------------|---------------|---------------|
| | Specific weight [gr/ccm] | 0.75 | 0.95 | 0.75 | 1.15 | 0.75 | 1.2 | 1.5 | | |
| | | HDPE | ABS | LLDPE | PC | PP | PET | PA | Extruder size | |
| | | | | | | | | | [inch] | [mm] |
| 120 - 300 | | 96 | 76 | 76 | 76 | 76 | 76 | 76 | 2.3 - 3.5 | 63.5 - 88.9 |
| 300 - 500 | | 125 | 125 | 125 | 125 | 125 | 125 | 125 | 3.5 - 4.5 | 88.9 - 114.3 |
| 500 - 800 | | 176 | 148 | 148 | 148 | 148 | 148 | 148 | 4.5 - 6 | 114.3 - 152.4 |
| 800 - 1,100 | | 200 | 176 | 176 | 176 | 176 | 176 | 176 | 6 - 8 | 152.4 - 203.5 |
| 1,100 - 2,000 | | 230 | 230 | 176 | 230 | 230 | 230 | 230 | 8 - 10 | 203.5 - 254 |
| 2,000 - 3,000 | | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 10 | 254 |

* theoretical data assumed at 2,500 Pas and 100 bar differential pressure and 100 micron aperture width, at fluxrate of approx. 5.5 kg/h x cm², depending on viscosity, filtration grade and degree of contamination

