

High performing flaking technology For maximum food safety



The flaking roller mill MDFA has been specially developed for flaking various types of grain. As an integrated component in the overall process for grain processing, it sets new sanitation, food safety, product quality and convenience of use standards.

Premium flakes with uniform quality

The flaking roller mill is ideally suited for flaking oats, rye, wheat, spelt and barley. It delivers uniformly high product quality at a throughput capacity of one to four tons per hour, depending on the product. It can be easily and quickly integrated into new plants, as well as retrofitted into existing production lines.

Optimal sanitation, easy control

The intelligent design makes cleaning easy. This ensures maximum sanitation and the highest level of food safety. Low maintenance and a sturdy design ensure both low operating costs and safe operation. The EasyFlake machine control system, with touch screen panel, simplifies control and increases ease of use.

Benefits

- Meets the highest sanitation and food safety standards
- Uniform product quality
- Low maintenance
- Sturdy design
- Easy installation and operation

Increased capacity and efficiency

For top flakes and safe operation







Oat flakes

Rve flake

Spelt flakes





Wheat flakes

Barley flake

Uniformly high product quality

A roll temperature control unit, combined with peripherally drilled rolls, ensure a consistent roll temperature. Additionally, 600 mm diameter, high-quality rolls enable optimal surface pressure. Both contribute significantly to uniformly high flake quality.

Sturdy design

During the development of the flaking roller mill, special attention was paid to designing a sturdy machine. This ensures safe, continuous operation even under demanding production conditions.

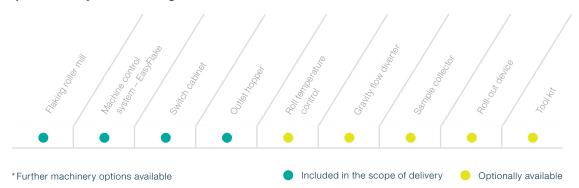
Low maintenance

The flaking roller mill has a centrally positioned lubricating point, which considerably reduces maintenance time. The rolls can be changed from the front or from the rear, shortening maintenance processes and minimizing expensive downtime.

Easy installation

The flaking roller mill is delivered with installed rolls, geared motors and feeder unit, reducing installation time to a minimum.

Scope of delivery for the flaking roller mill MDFA*



Smart design

For optimal sanitation



Beltless direct drive

The flaking roller mill has a direct drive without belts. The speed ratio for the flaking roller mill can be accurately adjusted using the EasyFlake control system. This drive principle, and the automatic roll gap adjustment with spindle instead of hydraulics, improve food safety by limiting the risk of contamination by oil.



Integrated aspiration

The integrated aspiration air feed efficiently prevents condensation. All parts which touch product are made of food safety-approved and corrosion-resistant materials.



Easy cleaning

The maintenance-friendly construction of the flaking roller mill with its easy access simplifies and speeds up cleaning. With just a few movements the machine convers can be removed, providing fast access to the interior. The roller wedge is also easy to disassemble for cleaning.



Safe sampling

To check the flake quality at any time, a sample collector can be used to take samples along the entire length of the roll. The integrated flap ensures that the sample can be taken safely.

Customized installation and automation

For seamless production processes



Easy integration into the plant control or stand-alone operation

Easy installation and integration

Successfully integrated components increase the efficiency of the overall process. Therefore, Bühler offers customers an integrated flaking line that coordinates all individual components within the overall process. This includes the upstream steamer MBDA, the flaking roller mill MDFA, the roll temperature control unit, as well as the downstream dryer OTW.

Efficient automation

The flaking line, with the flaking roller mill, can be easily integrated into the existing plant control system. This allows control processes to be automated and optimized. In addition, the flaking roller mill can also be operated as a stand-alone solution without being integrated into the plant control system.

Intuitive EasyFlake control

For convenient operation



The EasyFlake machine control system with touch screen interface makes configuration of production parameters easy and safe

Convenient operating interface

The flaking roller mill has a user-friendly EasyFlake machine control system with a touch screen panel and 3D visualization. The control for the machine can be quickly learned, reducing training effort and increasing operating safety at the same time.

With the EasyFlake system, operating personnel have a clear overview of the motor current, the adjustment of the roller gap, the product temperature at inlet and the roll temperature.

Comprehensive control functions

A variety of control functions ensure that the production parameters can be accurately configured. In addition to regulating the throughput capacity by adjusting the feed roll speed, the roller gap, the flaking roller mill speed ratio and the roll temperature can be conveniently regulated.

Variety of monitoring functions

The operation of the flaking roller mill can also be monitored at all times.



All machinery data at a glance

High throughput capacity

For every type of grain

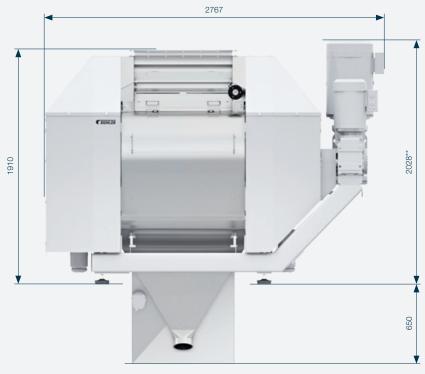
An overview of the technical data for the flaking roller mill MDFA:

| | | Typ 608 |
|-----------------------|--------|---------|
| Roll diameter | nm | 600 |
| Roll length | mm | 800 |
| Maximum roll pressure | kN | 450 |
| Weight | kg | 6500 |
| Aspiration volume | m³/min | 30 |

Throughput capacity:

| | | Typ 608 | |
|--------|------|---------|--|
| Oats | t/h* | 1-4 | |
| Wheat | t/h* | 1-3,2 | |
| Rye | t/h* | 1-3,2 | |
| Spelt | t/h* | 1-3,2 | |
| Barley | t/h* | 1-2,5 | |

 $^{^\}star \mbox{Depends}$ on the thickness of the flakes





^{**}Depends on the motor capacity installed

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