



BUHLER

Flaking Mill. **OLFB.**

Innovations for a **better world.**

BUHLER

State-of-the-art technology.

The flaking mill for all kinds of oilseeds.

This modern and sturdy flaking mill is designed for the flaking of cracked soybeans and soft seeds such as sunflower kernels, rapeseed and corn (maize) germs. Other seeds and a wide range of different raw materials can also be processed.

Mode of operation.

The raw material is homogenized in the integrated mixer and - with the assistance of a variable frequency drive (VFD) controlled feed roll - equally distributed into the roll nip. Large diameter rolls (Ø 800 mm) guarantee an optimal product intake. Ideal flake thickness is achieved by hydraulic cylinders, powered by a single hydraulic system. An optional central hydraulic set-up is available for use with multiple flakers. Easily accessible from the outside of the machine, the roll gap and the flake thickness can be adjusted during operation.

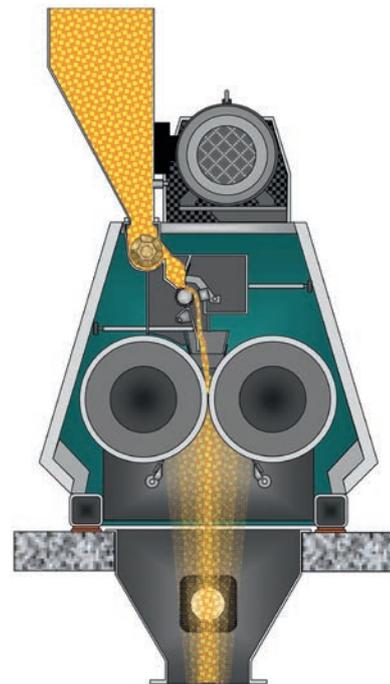
Innovative design.

Maximum throughput and optimal flake quality with minimized space and power consumption are only few of the innovative characteristics of the OLFB.

A sophisticated damping concept ensures low vibrations and perfectly quiet running. The premium grade rolls using newly designed roll end seals, with "zero cracks" leakage, eliminate leftover oil in the extraction meal.

Flake adjustment during operation.

Manual and hydraulic adjustment of flake thickness can be performed without shutting down the flaking mill. This results in excellent flake thickness as well as increased plant uptime for better production capacity utilization and hence lower operating costs.



Customer benefits of the OLFB

- High throughputs with excellent flaking quality
- Flake thickness adjustable during operation
- Quick access for maintenance
- Space and energy reducing design
- Quiet, clean and safe operation
- Control unit (PLC) mounted on door
- Low energy consumption

Excellent flaking quality and throughputs. Maximized results – minimized operating costs.

High throughputs and convincing economic efficiency.

The flaking mill OLFB has been designed for highest capacities of >500 t / 24 h for the larger version OLFB 821 and >380 t / 24 h for the smaller OLFB 816*: Higher capacities are possible depending on product characteristics and process settings.

A single overhead drive (160, 132, 110 or 90 kW) allows a flexible and space-saving design requiring only 8.5 m² plant space (OLFB 821) – 25 % less than conventional flaking mills. The friction-optimized main and serpentine drive system reduces power consumption and therefore is economically and environmentally friendly.

In addition, this drive system (including the drive differential) ensures excellent flaking quality due to optimal flake shear forces.

* Throughputs may vary depending on product characteristics and process settings

PLC control unit mounted on door.

A convenient and easy-to-operate control panel is installed on the flaker's door. Easy monitoring of hydraulic pressures, motor amps, percentage of full load amps, operating hours and alarms along with local control of motor starting/stopping and roll engagement is readily available. Connection to the plant's control system is managed via Profibus, Ethernet/IP or Profinet.

Integrated seed processing.

The flaking mill OLFB can be operated in stand-alone mode or can be part of an integrated solution. Best seed processing results are achieved with the following Bühler products or processes:

- Oilseed Cleaners
- Cracking Mills
- Conditioner
- Fluid Bed

Technical Data

		OLFB 816	OLFB 821
Dimensions			
Length	mm	3295	3795
Width	mm	2229	2229
Height	mm	2647	2647
Roll dimensions			
Diameter	mm	800	800
Length	mm	1600	2100
Roll pressure	kN	550	550
Roll hardness	HB	400 - 580	400 - 580
Motor			
Main drive	kW	90/110	110/132/160
Feeding drive	kW	0.75	0.75
Mixing drive	kW	1.5	1.5
Noise level approx.	dB(A)	84	84
Footprint	m ²	7.4	8.5
Aspiration air	m ³ /min	60	80
Approx. weights	kg	17480	21300
Peripheral speed	m/s	8.7 to 11	8.7 to 11
Roll differentials	%	0, 3, 5, 8	0, 3, 5, 8

Easy maintenance. **Fast access to all major parts saves you time.**



Quick access for high productivity.

Large hinged swinging doors allow quick access to every important part of the machine, so that cleaning or adjusting of mixer, feeder, magnet, product guide plate and scraper knives is easily accomplished. In addition, the machine is locally controlled via the integrated control panel and thus reducing maintenance time.



Roll quality and maintenance.

Rolls are the centerpiece of a flaking mill. Bühler will support you in choosing the highest quality roll type for your application - from softer but tougher rolls up to harder and longer-living rolls. Bühler also offers tools to help you reach the maximum lifespan of your valuable flaking rolls; permanent magnets protect the rolls from metal objects, pneumatically operated scraper knives keep the rolls clean and an optional automatic roll grinding machine maintains roll surface quality.



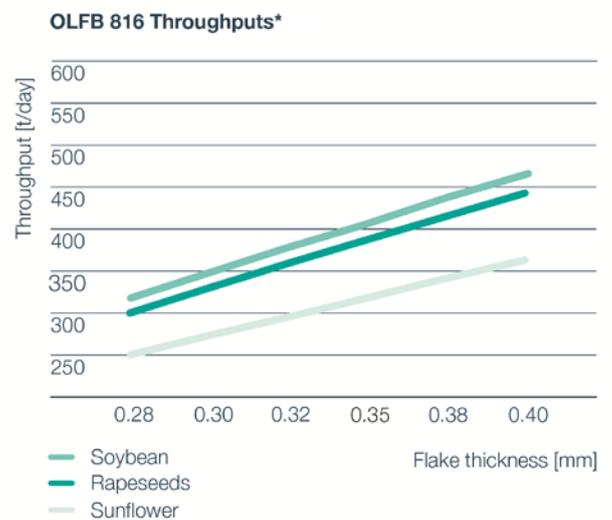
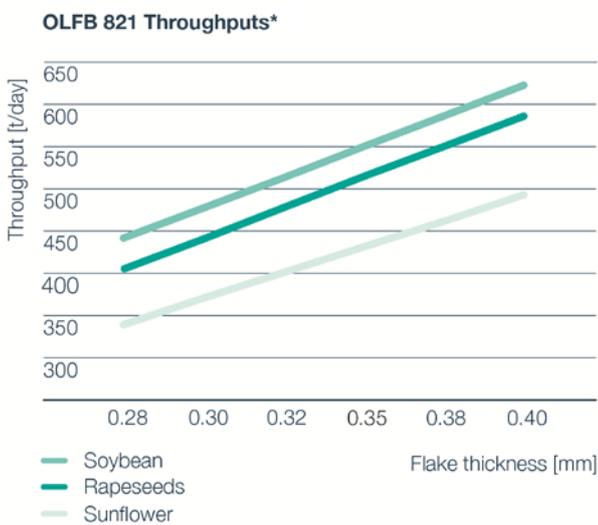
Accessories and options.

- Roll-grinding unit OLFS
- Roll removal device
- Motor control cabinet
- Central hydraulic unit
- Bearing temperature monitoring
- Vibration monitoring

High performance flaking mill OLFB. **Convincing arguments for efficient flaking.**

The high performance flaking mill OLFB incorporates latest state-of-the-art technology and an innovative design that results in several unique characteristics:

- A single overhead drive results in efficient space usage and low power consumption
- Integrated mixer and feeder as well as a door mounted control unit contribute to a truly compact design
- Manual adjustment of the roll gap is possible during operation and ensures optimal flake thickness at all times



* Throughputs may vary depending on product characteristics and process settings



Global expertise. Local presence. **A lifetime of customer service.**

Bühler customer service provides assistance not only to keep your machines, plants and facilities running at a high operational level, but also to prolong lifetime, thus maximizing your return on investment.



Bühler's service includes:

- Roll refluting and grinding at local service stations
- Fast access to support your language and time zone
- Competent service specialists throughout the entire product service life – from installation to commissioning and maintenance
- Genuine Bühler spare parts
- Innovative retrofit packages
- Preventive maintenance concepts
- Analysis and consulting
- Standardized and customized training and education courses



● intake, cleaning, weighing



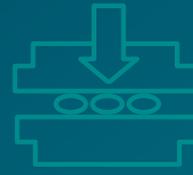
● conditioning



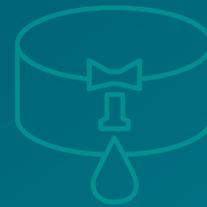
● cracking, dehulling



● flaking



● pressing



● extraction



● hull aspiration



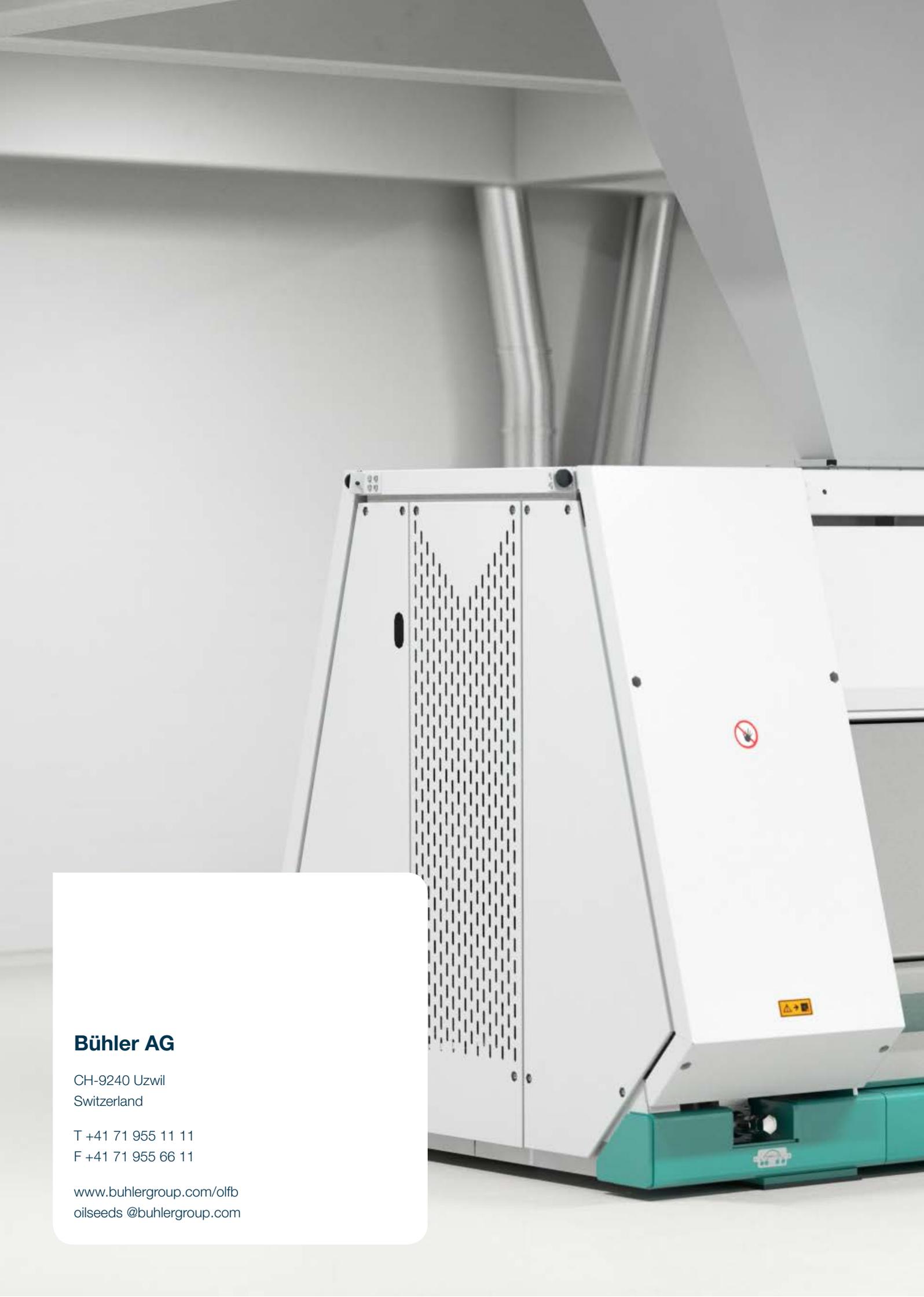
● hull & meal treatment

● crude oil



● bagging





Bühler AG

CH-9240 Uzwil
Switzerland

T +41 71 955 11 11
F +41 71 955 66 11

www.buhlergroup.com/olfb
oilseeds@buhlergroup.com