



**Grist Mill
Maltomat™ III.
MDBA**

The new Maltomat™ III.

Increase the efficiency of your plant.

The universal grist mill Maltomat III is a highly modern and flexible grinding system for dry or conditioned malt and unmalted grain.

Increased brewhouse yield.

With the automatic grinding gap adjustment the grinding gap can be adjusted during operation for various unmalted grain and malt types as well as variations in product quality through the plant control system. When grinding is consistently optimal, yield is increased, the volume of malt needed is decreased, and costs are optimized.

Reduced lautering time.

The optimized horizontal principle of “grinding-grinding-sifting-grinding” produces an accurate separation of husk, grist and flour. This exact separation, along with obtaining the husk and the optimal grinding, shorten the lautering times.

Low energy consumption.

The efficient direct drive leads to a reduction in energy consumption of up to 10% compared to conventional dry grist milling. The elimination of transmission and V-belts also reduces the need for maintenance and increases plant availability.

Well-designed maintenance concept.

Uncomplicated access to the machinery makes changing rolls and sieves fast and cleaning easy. Plus, by sampling after every grinding passage, the quality can be accurately and reliably controlled.

Versatility in use.

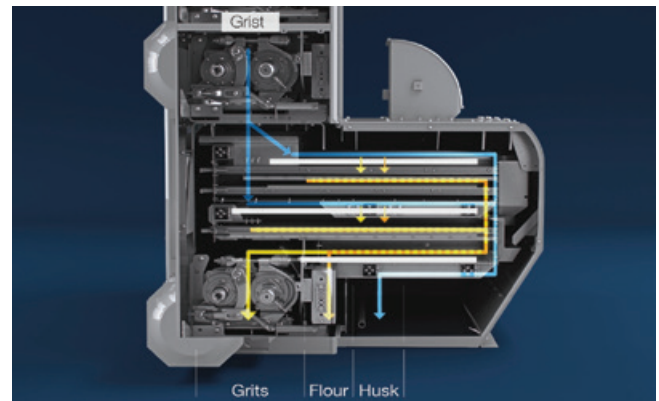
The Maltomat III flexibility includes various machine sizes, motors and number of passages, and it is suitable for all malt and unmalted grain types (wheat, barley, maize, rice, sorghum, etc.). The Maltomat III, with its individually controllable grinding gap adjustment, can be used in any brewery or distillery.

Benefits.

- Increased brewhouse yield
- Reduced lautering time
- Well-designed maintenance concept
- Low energy consumption
- Versatility in use



Outstanding husk separation. **Reduced lautering time.**



Integrated Bühler control.

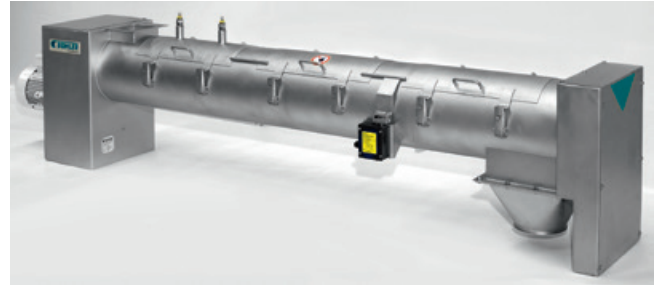
The integration of the Bühler control element through a bus or ethernet connection to the brewhouse control allows the grinding gap to be adjusted depending on the type of unmalted grain or malt and the product quality, which increases the grist yield while remaining true to the recipe.

Grinding-grinding-sifting-grinding.

Grinding in three passages accurately separates grits, flour and husks. The sifting concept is conducive to improved separation and reduced lautering time:

1. Passage: Pre-grinding roll pack: Kernels are broken open.
 2. Passage: Husk roll pack: Endosperms are ground while protecting the husks.
- Sieve module: Husks are sifted out with two large husk sieves and the new type of long-stroke sifter movement.
3. Passage: Grits roll pack: The coarse grits are reduced.

Optimization of the entire process. By integrating the latest innovations.



Flexible transport for your plant.

TUBO – the new push conveyor from Bühler – combines the advantages of the mechanical and pneumatic transport at reduced energy consumption. TUBO provides the basis for efficient operation through gentle handling and hygienic transport. By connecting the loose pusher elements, a three-dimensional conveying is possible. The closed transport at low speed eliminates the need for additional explosion protection measures, reduces energy consumption and lowers investment costs needed for the process and the building.

Well-measured malt conditioning.

The liquids flow controller regulates the exact volume of water for conditioning. The Condimat ensures that the water distribution is quick and homogeneous and that water and malt are perfectly mixed. The Condimat has mixing paddles with a self-cleaning effect that makes it very low maintenance. When combined with the Maltomat III, husk volume is increased, which accelerates lautering up to 13 l/m² x min. Plus, the brewhouse yield is optimized.

	Conditioned dry milling	Wet milling
Rolls	6 (4)	2 (4)
Conditioning	Up to 6 %	Up to 16 %
Ratio malt : water	1 : 2.0-3.5 Thicker mash, higher first wort, reduced lautering time, reduced energy consumption	1 : 3.0-3.5 Water is needed for pumping the grist
Brewhouse output	Up to 80.0 %	76.4 %
Energy consumption	1.85 – 2.55 kWh/t	3.7-3.9 kWh/t

Energy-saving grist production. Also for mash filters.

Suitable for mash filters.

Instead of a hammer mill, the Maltomat III can be utilized not only for the lauter tun but for the mash filter as well. The husks are separated from the flour and grits and fed to the vibro sifter. This makes efficient sifting and recovery of the starch possible as well as a separation of the husks.

Increased production.

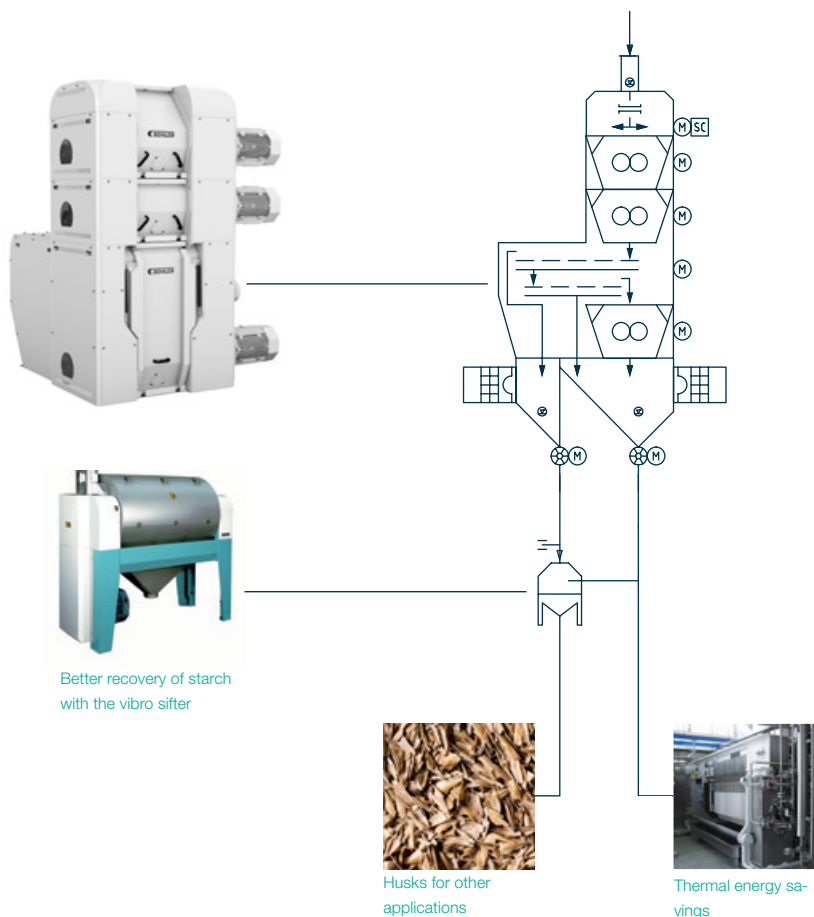
The husk separation reduces the overall product volume in the process. Relatively more starch-containing grist is fed to the brewhouse, which increases the overall brewhouse efficiency.

Maximum beer quality.

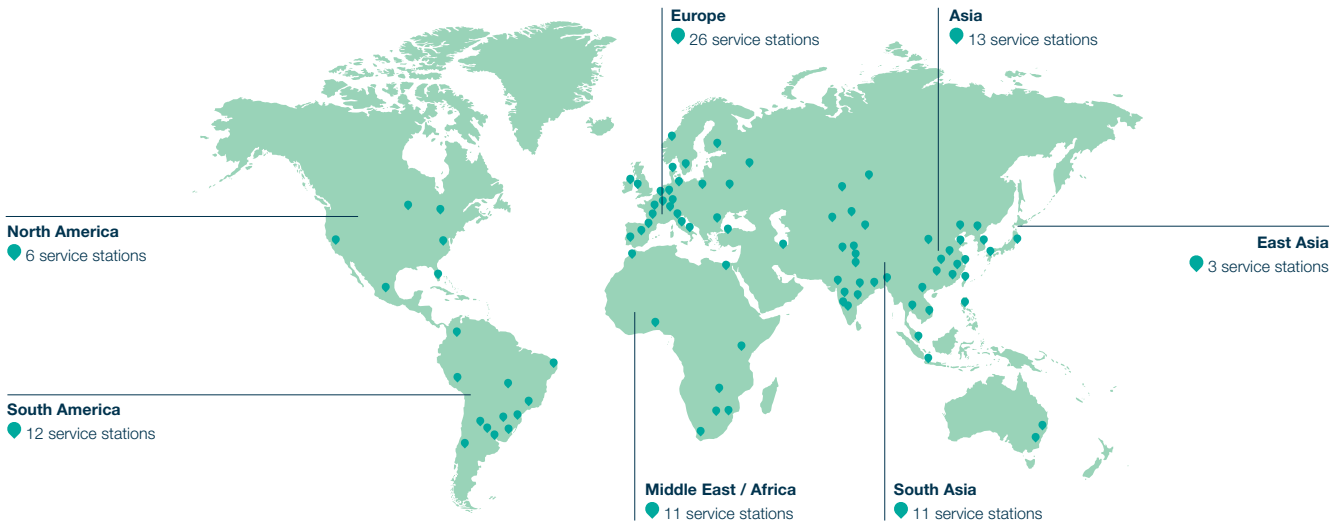
The surface treatment of the raw product reduces biological and chemical contamination. This increases the quality of the end product and makes it more consistent.

Reduced energy costs.

Reduced volume of product for the process can result in thermal costs that are up to 5% lower. Even the electrical costs are about 30 - 50% lower compared to hammer mills.



Customer service – anytime, anywhere. For Maltomat III.



Support from the Bühler service network.

Bühler's global service network guarantees support, which means maximum plant availability with minimum downtime.

Low maintenance.

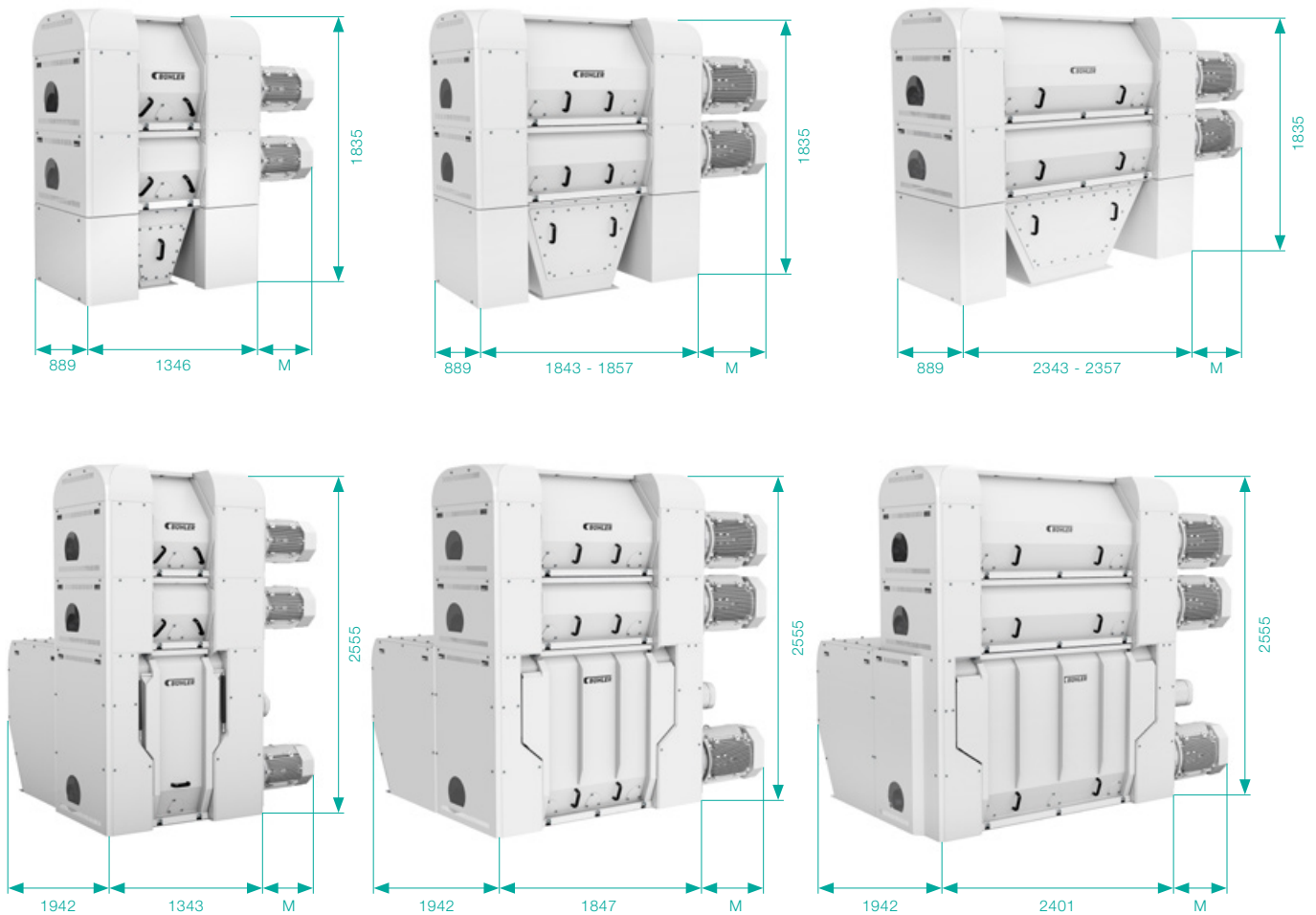
The sturdy design and easy machine access reduce maintenance time. For instance, by measuring the corrugation profile through the Bühler rollDetect Service, the best time for changing the rolls can be determined. Plus, the unique sieve frame made of aluminum and the quick-release fastenings mean only one person is needed to change them.

High safety standards.

The Maltomat III has an eye-catching shock pressure-proof design. The safety concept has been supplemented with the most modern sensor monitoring and a magnet that protects the machine. In addition, a distribution paddle in front of the feed roll ensures the product is spread across the entire length of the roll. Manual control is possible by taking a sample after every passage.



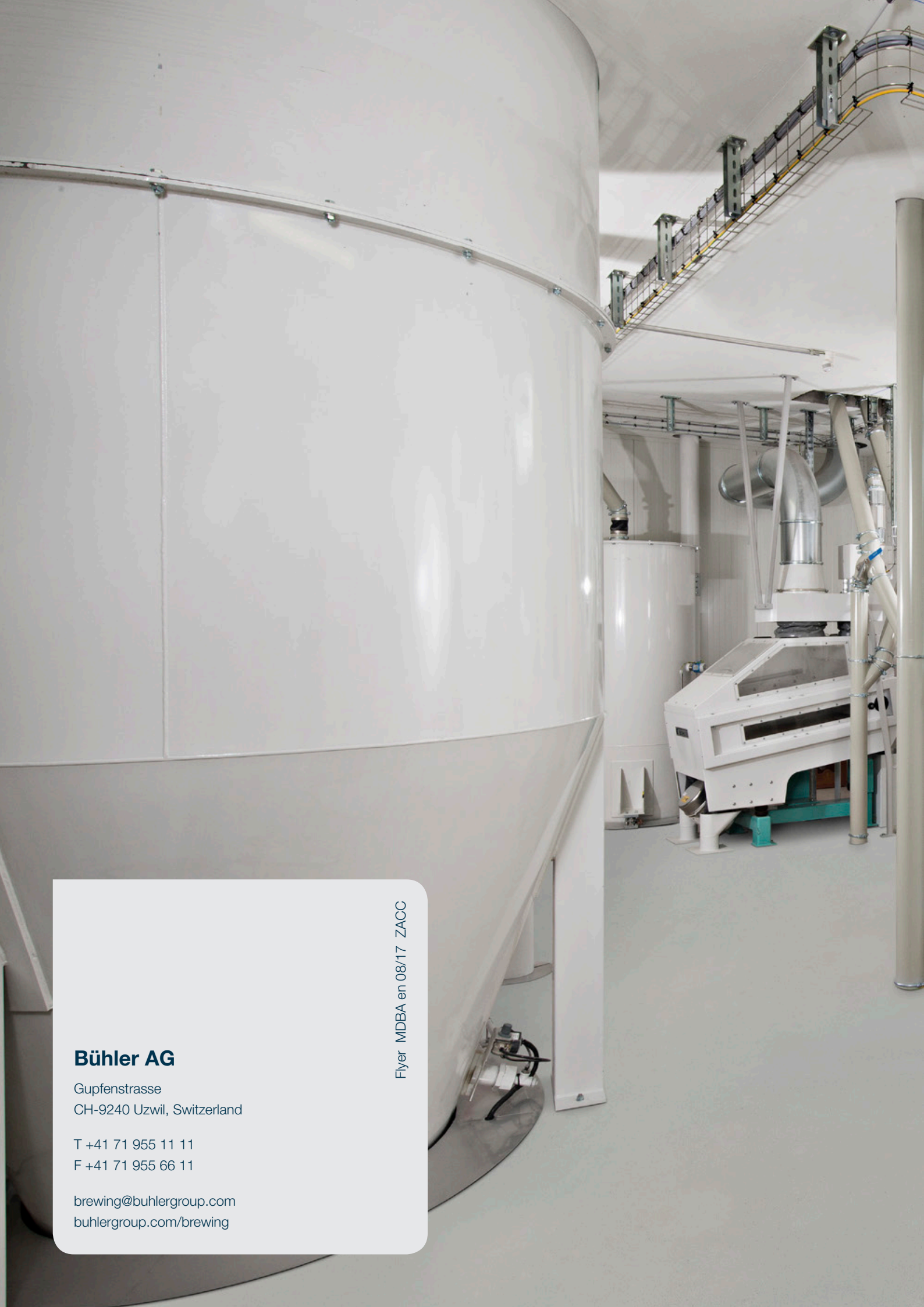
Universal use. Modularity means flexibility.



Modularity for maximum flexibility.

		MDBA-500-4	MDBA-1000-4			MDBA-1500-4		MDBA-500-6-S	MDBA-1000-6-S	MDBA-1500-6-S
Throughput barley	t/h	1-5	5-11	5-11	10-16	10-16	1-5	5-11	10-16	
Roll number	Stück	4	4	4	4	4	6	6	6	
Roll length	mm	500	1000	1000	1500	1500	500	1000	1500	
Weight	kg	3000	4000	4000	4800	4800	5000	6700	8300	
Sieve module		No	No	No	No	No	Yes*	Yes*	Yes*	
Motor power	kW	4-15	7.5-22	30-37	7.5-22	30-37	4-11	5.5-18.5	11-22	
Motor length M	mm	570-774	716-746	735-948	716-746	735-948	488-716	488-746	592-746	

*The sieve module enables gentle and optimal grinding of malt and unmalted grain to increase yield



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