

A large industrial rice polisher machine, the UltraPoly™ model, is shown in a white and stainless steel finish. The machine features a large hopper at the top for rice, a central processing unit with a control panel, and a collection bin at the bottom. The background is a collage of three images: a close-up of the machine's internal components, a view of the hopper, and a view of the collection bin. The text "UltraPoly™ Rice Polisher. The new art of polishing." is overlaid on the left side of the image.

UltraPoly™
Rice Polisher.
The new art of polishing.

UltraPoly™ DRPG high capacity rice polisher. **An integral part of Bühler UltraLine.**

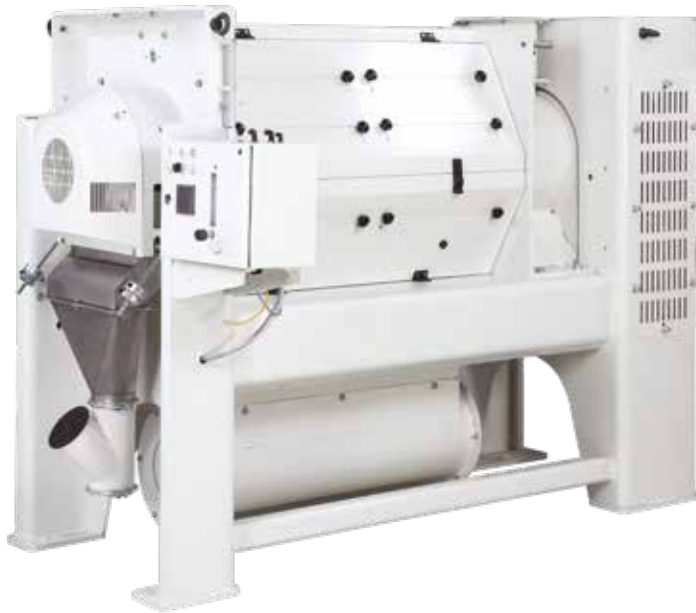
Introducing Bühler UltraLine - a technological triumph of modern rice processing for today's mills. Driven by Bühler's commitment to encouraging sustainable rice milling, the UltraLine portfolio ushers in a revolution in high capacity, energy-efficient processing. With three new machine innovations featuring multiple international patents, SORTEX S UltraVision™, UltraWhite™ DRWA and UltraPoly™ DRPG - Bühler UltraLine have been industry-proven to deliver unprecedented levels of processing capacity (up to 16 tons per hour) and premium product quality rice whilst driving down the processing cost.

Pioneering energy-efficient rice processing for 21st century.

Designed and engineered to Bühler's highest quality standards, Bühler UltraPoly™ DRPG delivers new standards and sets the benchmark in rice polishing. Proprietary technologies deliver maximum count of head rice and a uniformed consistency of superior polishing performance even during high capacity processing - all whilst offering an extremely low processing cost per ton.

- Setting benchmarks in rice polishing with highest ever capacity and low energy consumption
- Designed and engineered for low maintenance and hygienic processing

UltraPoly™ DRPG. At a glance.



- 1 Bühler's highest capacity rice polisher**
Unique geometry of sieves with reversed bands enables better polishing performance at high capacity
- 2 Energy efficient operation**
Designed and engineered for low energy consumption resulting in extremely low processing cost per ton
- 3 Reduced vibration and uniformed milling**
Firmly fixed screens restrict vibration and help maintain a uniform gap between sieve and cam to ensure uniformed milling and higher yield of head rice
- 4 All-new Bühler innovative technologies**
Patented sieve design combined with our unique arrangement of cam and teeth allows processors to adjust required polishing degree
- 5 Hands-free operation**
Unique locking arrangement of sieve frame allows for a hands free operation
- 6 Easy access for cleaning**
Unique replaceable teeth design on cam provides slot for cleaning inside the cam, thus improving hygiene standards
- 7 Easy access to sieves**
Easy to open sieve frame for cleaning and maintenance
- 8 Ease of operation**
A slidegate at feed screw housing allows for a trouble free operation
- 9 Optional pre-conditioner feature**
A pre-conditioner attachment is available as an option for polishing specific rice varieties - easier removal of bran

UltraPoly™ DRPG. High Capacity, Lower Energy.

The Bühler UltraPoly™ is packed with multiple patented innovations and cost reduction features setting benchmarks with highest ever capacity and lower energy consumption, whilst also delivering premium quality finish.



Polished Basmati rice



Polished Sona Masuri rice



Polished Jasmine rice



Polished Short grain rice

High capacity

The UltraPoly™ DRPG features multiple patents and proprietary Bühler technologies to deliver a superior polishing finish even at very high capacity processing

Energy efficient operation

Featuring newly fitted energy reduction features allows the smaller framed UltraPoly™ DRPG to process at very high capacities with lower energy consumption per ton

Custom adjust to polishing requirement

UltraPoly's cam teeth are fitted at an angle of 45° on the cam periphery to enable the teeth height to be easily adjusted according to required polishing degree

Super, silky smooth polishing performance

Built on a modularity approach, having different paddle options or water injection points. A pre-conditioner can be also supplied as an optional fitting to meet process requirement

Uniformity in polishing finish

The incorporated water dosing system offer processors an option of shaft injection or mixing tube for a uniformed distribution of water film and control of flow to aid polishing performance required and deliver a better polish and bran streak removal

Product Highlight



Mixing tube

An optional unit, a pre-conditioner is used to decrease bran streaks and improve polishing performance. Manufactured from stainless steel for hygienic processing. Use of this mixing tube is based on Bühler technology recommendation.

Designed for reduced wear parts costs, maintenance and easier access for cleaning operations, the UltraPoly™ DRPG is the result of our investments into research and development; focusing on sustainable rice processing and food safety.



Reduced maintenance and wear parts cost

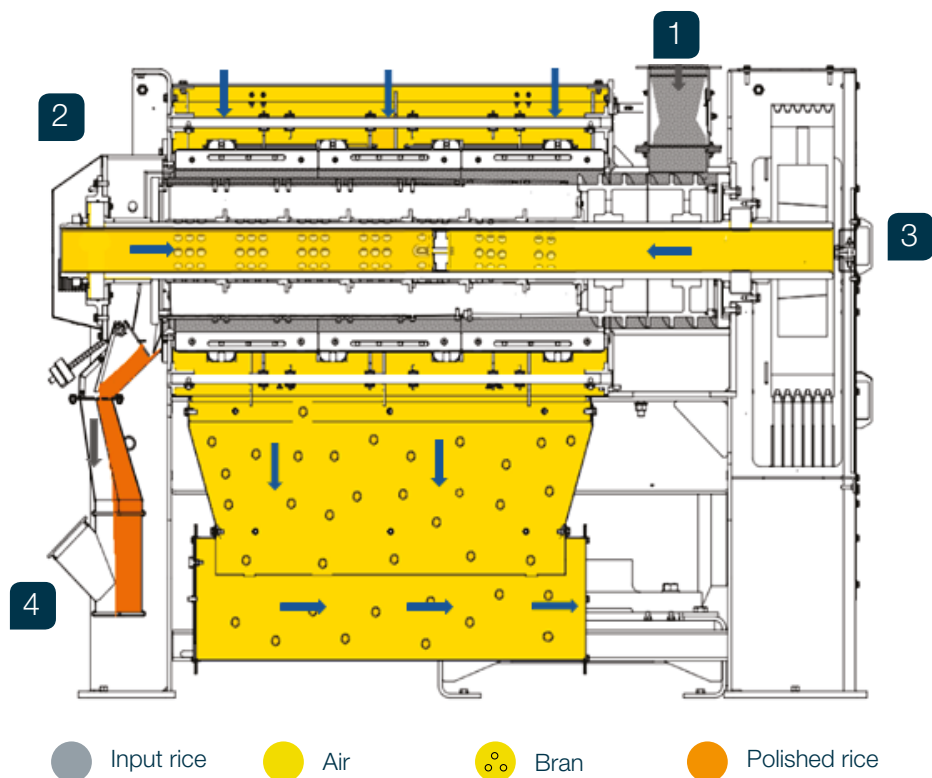
- Sieves are firmly locked in place to give added strength to surrounding local area and improve sieve life
- Sieves now have more splits along the milling chamber (axis) to minimize replacement cost
- UltraPoly's cam is split into 6 parts, so only worn out parts require replacing when worn. Teeth can also be individually replaced - reducing maintenance cost
- Unique reversible feed screw reduces maintenance costs
 - simply reverse feed screw to utilise the other side

Increase hygienic and safety operation

- Locking arrangement of sieve frame and slidegate at feed screw housing offer a hands-free operation
- Sieve frames are now easier to open for maintenance and cleaning
- Unique replaceable teeth design on cam provides opening for easier cleaning inside cam - for hygienic operation

UltraPoly™ DRPG.

Working principles.



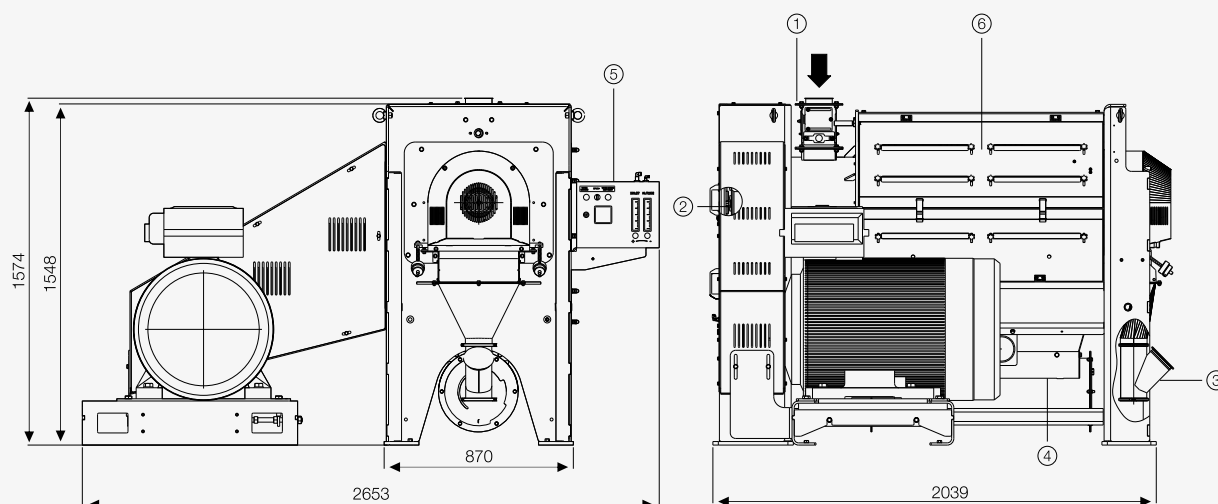
Quick guide to working principles

- 1** White, unpolished rice is delivered into the inlet. The product then falls into the feed screw of the rotor section and is then conveyed to the sieve basket.
- 2** A uniform water film is applied to the product via the hollow shaft, using a two-component nozzle (water/air). Diagram above is shown with the pre-conditioner mixing tube fitted.
- 3** The rice then gently grounds against itself in the sieve basket, using a rotating cam shaft. The now, fully polished rice leaves the machine through the outlet.
- 4** The aspiration system produces an air current that is routed through the work area and the hollow shaft, which is open on both sides. Additional air enters through the adjustable slots in the doors. This cools the rice. The polished rice is separated from unpolished rice by a sieve.

UltraPoly™ DRPG.

Technical details.

UltraPoly™ DRPG



- ① Inlet with capacity slide ② Water and Air ③ Out sampler ④ Aspiration ⑤ Water dosing system ⑥ Polishing chamber

Technical details

	UltraPoly™ (DRPG)	Pre-conditioner (optional)
Capacity** (tph)	8-12**	-
Motor (kW)	75-90 (Standard: 75kW)	4
Aspiration m³/min	90-110	-
Compressed air bar (max 150 lpm)	2-4	-
Water bar (max 250 lph)	2-4	-
Approx. weight kg - Unpacked	3200	-
Approx. weight kg - Rail worthy packing	3400	-
Approx. weight kg - Sea worthy packing	3400	-
Volume m³ seaworthy packing	6.5	-

* Depends upon the type of product and finished product quality. ** Capacity as white rice input.

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