



UltraWhite™  
Rice Whitener.  
The new art of  
whitening.



# UltraWhite™ DRWA high capacity rice whitener. **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 tonnes per hour) and premium product quality rice whilst driving down the processing cost.

## **Pioneering energy-efficient rice processing for 21<sup>st</sup> century.**

Designed and engineered to deliver the optimum rice finish and quality, Bühler UltraWhite™ DRWA sets the benchmark for high capacity whitening delivering up to 12 tonnes per hour for long grain and 16 tonnes per hour for medium grain. Proprietary technologies deliver maximum count of head rice and a uniformed consistency of superior whitening performance even during high capacity processing - all whilst offering an extremely low processing cost per tonne. Featuring multiple patented features; double aspiration system, stone arrangement and shaftless milling chamber, processors can now also control the degree of whitening performance required.

- ° Setting benchmarks in rice whitening with Bühler's highest ever capacity and lowest energy consumption
- ° Delivering exceptional performance, superior yields and maximum profitability

# UltraWhite™ DRWA

## At a glance.



- 1 Bühler's highest capacity rice whitener**  
Featuring multiple international patents it delivers better whitening performance at higher capacity; 12 tonne per hour for long grain and up to 16 tons per hour for medium grain
- 2 Superior whitening performance**  
Patented shaftless milling chamber allows cool air to pass freely around the rice kernels, aiding the removal of bran and further improving whitening quality
- 3 Double aspiration system**  
Unique double aspiration system efficiently removes bran enabling a cleaner output

- 4 Flexible universal application**  
Developed to process a wide range of rice varieties and varying capacities
- 5 Easy access to component parts**  
Designed with a hollow top shaft for easier access to stones for easier maintenance
- 6 Consistent premium rice quality**  
Proprietary shaftless milling chamber delivers superior whitening performance and prepares rice kernels for the polishing stage - delivering silky smooth rice finish



# UltraWhite™ DRWA.

## High Capacity, Low Energy Consumption.

The Bühler UltraWhite™ DRWA features multiple patented innovations by setting benchmarks with Bühler's highest ever capacity and lowest energy consumption.



Whitened Basmati rice



Whitened Sona Masuri rice



Whitened Parboiled rice



Whitened Short grain rice

### Exceptional performance

A unique patented feature of the UltraWhite™ is its shaftless milling chamber. This feature removes bran from rice and prepares it for a better polishing performance

### Hygienic operation

Equipped with Bühler's unique double aspiration system for even better removal of bran

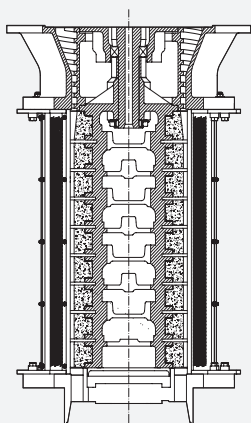
### Universal application

Designed with flexibility and scalability, UltraWhite™ is capable of processing a wide range of rice varieties and adjusted for varying capacities

### Adding value and profit

UltraWhite™ sets a new industry standard - high capacity rice whitening solution with low processing cost per tonne and a smaller machine footprint

### Feature Highlight:



### Shaftless Milling Chamber

The centre of the milling chamber is designed for unrestricted air movement and for air to move freely around each rice kernel. This feature efficiently removes bran resulting in a cleaner output of rice.

The unrestricted movement of air also aids in the cooling of rice kernels. This process helps prepare rice kernels for a better polished rice finish during the polishing stage - delivering a premium export quality of silky smooth rice.

Designed and engineered for superior serviceability and ease of maintenance, UltraWhite™ features effortless access and a commitment to product safety to deliver a superior rice whitening performance and higher yields.



#### Ultra whitening performance

- ° A Bühler innovation - special stone arrangement evens the distribution of rice kernels inside the milling chamber to deliver a uniform finish
- ° The stone arrangement also offers a gentle whitening process to reduce the loss of head rice

#### Energy efficient

- ° Designed to operate with lower energy consumption, reducing running costs

#### Easy maintenance

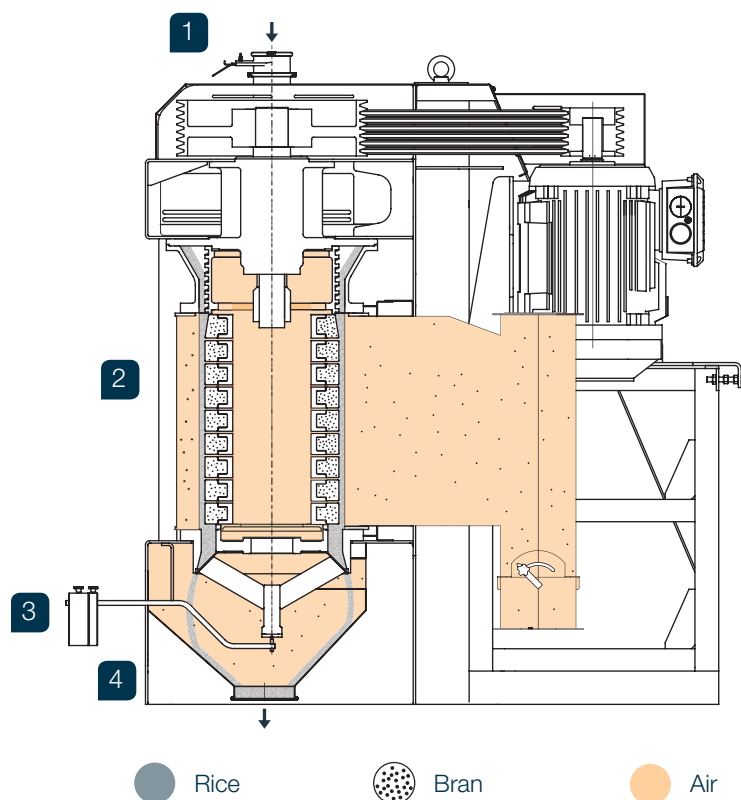
- ° Bühler patented stone arrangement allows easy removal of grinding stones
- ° Designed with easier access for cleaning operations
- ° Easy removal of feed screws

#### Safety all round

- ° Bühler proprietary design - hollow top shaft gives easy access for the fitting or removing of stones

# UltraWhite™ DRWA.

## Working principles.



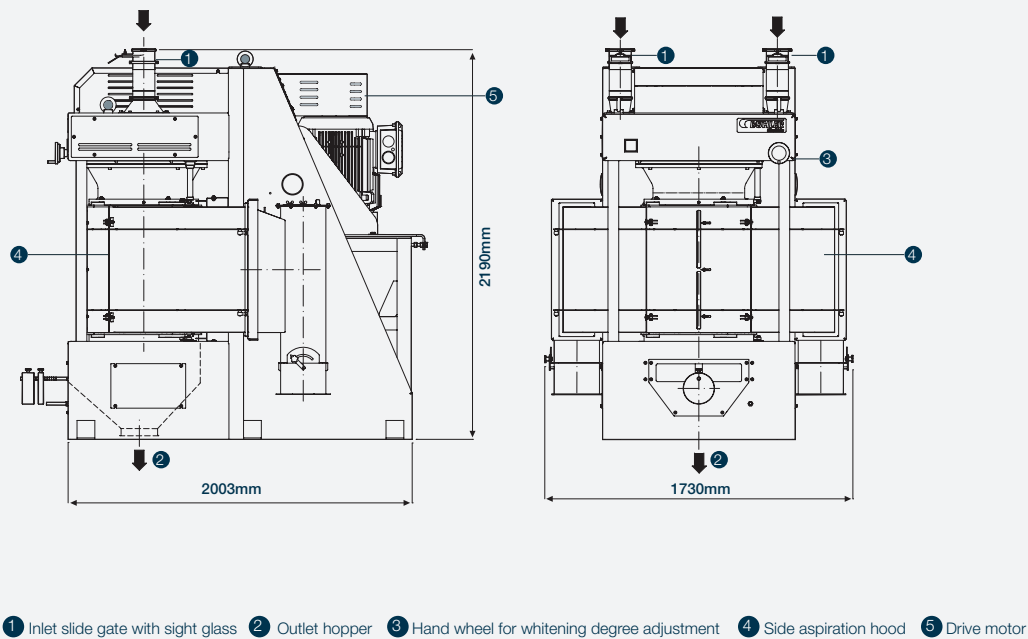
### Quick guide to working principles

- 1** The UltraWhite™ uses the vertical, abrasive principle, which has been proven to achieve the highest head rice yield. Brown rice enters the whitener via two inlets and is guided into the processing chamber by a feed screw.
- 2** In the whitening chamber, rice moves downwards in a spiral path and leaves the machine via the conical retarding plate and the outlet hopper. The vertical brake bars reduce the speed of the product in the whitening chamber, thus increasing the whitening time and improving the whitening efficiency.
- 3** The whitening intensity is adjustable by shifting the counterweights at the retarding plate. Whitening intensity can be also adjusted by changing the position of the screen frames, using a hand wheel.
- 4** During whitening, air is drawn into the cavity of the rotor from the top and the bottom. Air, then penetrates through the annular gaps between the emery rings, cooling down the rice kernels. At this point, bran is separated via the aspiration spout by passing through the screen basket. In case of high volume of bran, additional air can be aspirated by opening the air slot in the aspiration hood.

# UltraWhite™ DRWA.

## Technical Details.

### UltraWhite™ DRWA



## Technical details

### UltraWhite™ (DRWA)

Capacity** (tph)	9-12**
Motor (kW)	55-75 (Standard: 55kW)
Aspiration m³/min	90-110
Approx. weight kg - Unpacked	2700
Approx. weight kg - Rail worthy packing	2950
Approx. weight kg - Sea worthy packing	3100
Volume m³ seaworthy packing	9.5

\* Depending on input of brown rice. \*\* Depending on the type of product and finished product quality required.

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