

Bühler W optical sorter.

High capacity rice optical sorter.



Bühler W optical sorter.

Cost-effective high capacity rice sorting.

Bühler W optical sorter - offering up to 7 chutes for high processing capabilities of up to 12 tonnes per hour. Featuring Bühler developed processing software and LED illumination detection systems, the new Bühler W range offers rice processors entry into Bühler's optical sorting technology and processing expertise, delivering accurate and reliable accept quality and cost-effective operation.

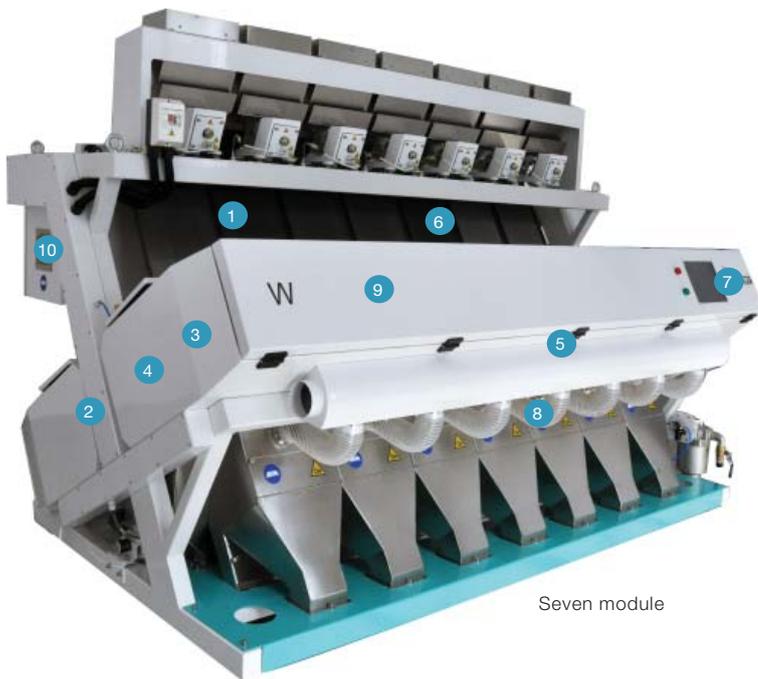


Based on industry proven Bühler optical sorting technologies, the new Bühler W range features monochromatic inspection technology, tertiary sorting capabilities and LED illumination to provide dependable and reliable colour sorting with high processing capabilities.

The new Bühler W is the first choice for rice processors seeking ownership, assurance and the functionality of Bühler's optical sorting heritage and technology at an affordable price.

- High processing capacity
- Consistent product quality
- Trusted Bühler design and reliability
- Simple ease of use
- Balanced and stable performance

Bühler W optical sorter at a glance.



Seven module



Four module

- 1 High processing capacity**
Available with up to 7 chutes to deliver up to 12 tonnes per hour
- 2 LED Lighting**
Enhanced defect recognition through long-life LED solid state illumination
- 3 Custom-built cameras**
Front and rear high resolution CCD visible cameras to detect all common defect types
- 4 Auto-Calibration**
The optical sorter automatically reviews and adjusts the sorter set-up on start-up, removing the need for laborious manual set-up
- 5 Automatic Product Tracking**
The optical sorter consistently scans and automatically adjusts to changes in the incoming product
- 6 Balanced and Stable Performance**
Consistent accept quality and minimised product re-circulation maximise revenue and reduce wear on the optical sorter
- 7 Product Modes**
Up to 100 user-defined modes can be saved
- 8 Long life powerful ejectors**
64 powerful, high speed ejectors per chute for accurate rejection of defects and high capacity
- 9 Fixed Background**
Static background ensures that all vibration is minimised
- 10 Bühler robust design quality**
Designed and constructed to Bühler's high quality standards

Bühler W benefits.

High capacity rice optical sorter.



High processing capacity and product quality

Up to 7 chutes delivering capacities of up to 12 tonnes per hour

Bühler W can be customised to specific sorting requirements - primary, secondary and tertiary of up to 12 tonnes per hour as well as manage unexpected contamination levels in a balanced and stable manner.

Delivering excellent product quality

Equipped with custom-built cameras that can detect different colour variations, spot defects including chalky, peck, pale, light

yellow and foreign material to deliver high quality product.

Flexible configuration

A modular system offering flexibility in sorting configuration - 7 chutes for one-time sorting; 4 chutes for primary and 3 recommended chutes for secondary sorting; 3 chute for primary + 2 chutes secondary and +2 recommended chutes for tertiary sorting.



Trusted Bühler design and reliability

Reliable with robust build quality

Built to Bühler's stringent quality standards for reliability, with smart product design; sealed control and optical cabinets ensures a robust machine and dust containment.

Durability and consistency

Combination of solid-state LED lighting system and long-life high speed ejectors, allows the optical sorter to operate at its

peak performance over a long period of time.

High productivity

Advanced technologies; lighting system that adjusts as light levels vary, fixed background lighting that minimises vibrations from outside and a feed system that uses new low voltage vibrator to produce consistent throughput across the chutes and improve operational stability.



Flexibility and ease of use

Bühler proprietary operating system

The Bühler W features a proprietary operational software, embedded on an easy to use graphical user interface (GUI).

Effortless product changeover

Developed by Bühler software engineers, the software can support 100 user defined modes to provide operators with effortless handling of product changeover and changes in input and product variation.

High productivity

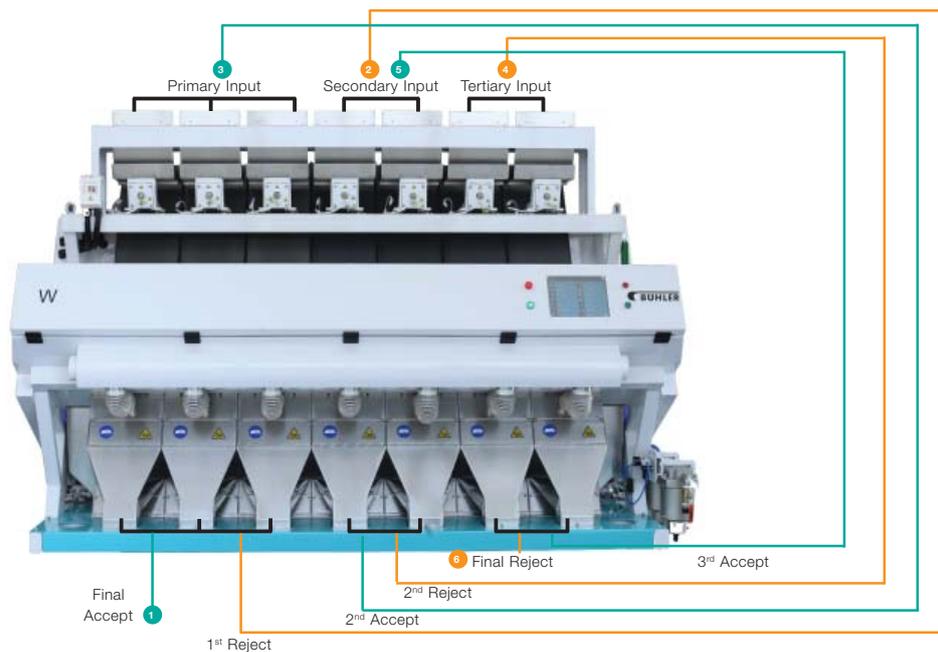
Additionally, Bühler's operating system also features an alert and performance monitoring capability - maximising uptime and ensuring faster service responses.

Balanced, stable sorting. The Bühler competitive edge.

Built into all Bühler optical sorting machines is the ethos of balanced and stable sorting. This is what provides Bühler customers with the competitive edge over other manufacturers' machines. This guide explains how we achieve a balanced and stable sorting performance and the benefits it brings - increased revenue, reduced costs and achieve consistent product quality.

Bühler's guide to a balanced and stable performance.

- Accept
- Reject



Balanced and stable sorting is ideal for processors running a resort (secondary) and/or a third (tertiary) sort. Optimising the configurations of modules/chutes to perform in a balanced manner avoids unnecessary re-circulation of good product whilst maintaining a consistent percentage of even lower reject concentration during re-sorting.

Balanced and stable sorting is also achieved through a combination of software and technologies pre-equipped in Bühler optical sorters notably; Auto calibration system and Product Tracking/Intelligent Automation. This removes the need for laborious manual set-ups and delivers consistent sorting performance - all day, every day.

Key Benefits

- **Consistent accept quality**

The percentage of accept quality remains consistent throughout the day. Additionally, there is no unsorted product left in the optical sorter once a batch process is completed.

- **Product circulation avoided**

In a balanced and stable sorting, based on a customer's requirements, a Bühler optical sorter intelligently sorts a grain into the reject or accept stream, with no re-circulation of undecided grains stuck in the process loop. This feature reduces the consumption of

compressed air, energy use, wear of optical sorter and ensures the optical sorter maximises its capacity.

- **Greater product control**

The reject and accept quality is the true representation of what a Bühler optical sorter can achieve during a batch process as no undecided grain is recirculated. This means that a processor can confidently adjust the accept quality/reject ratio to meet their requirements. This is supported by Product Tracking/Intelligent Automation, a technology unique to Bühler, that maintains the consistency of the performance.

Bühler W technologies and Customer Care. Precision, performance and efficiency.



LED lighting as standard

Inspection system with LED lighting

High resolution CCD cameras are built in-house with optic sensors that deliver the colour registration needed to detect defects and foreign material. When combined with the long-life LED advanced lighting system, the Bühler W optical sorter can target defects within the entire visible spectrum.



Tertiary sorting is available for maximum yield

Tertiary sorting

Thanks to a flexible sorting configuration, tertiary sorting is available as an option on the Bühler W optical sorter to deliver exact customer accept quality requirement; maximising yields and revenue.



High speed ejectors

High speed ejectors

The Bühler W optical sorter features 64 powerful ejectors per chute. These are built for high speed, long-life span and reliability, enabling a low cost of ownership of the sorter.



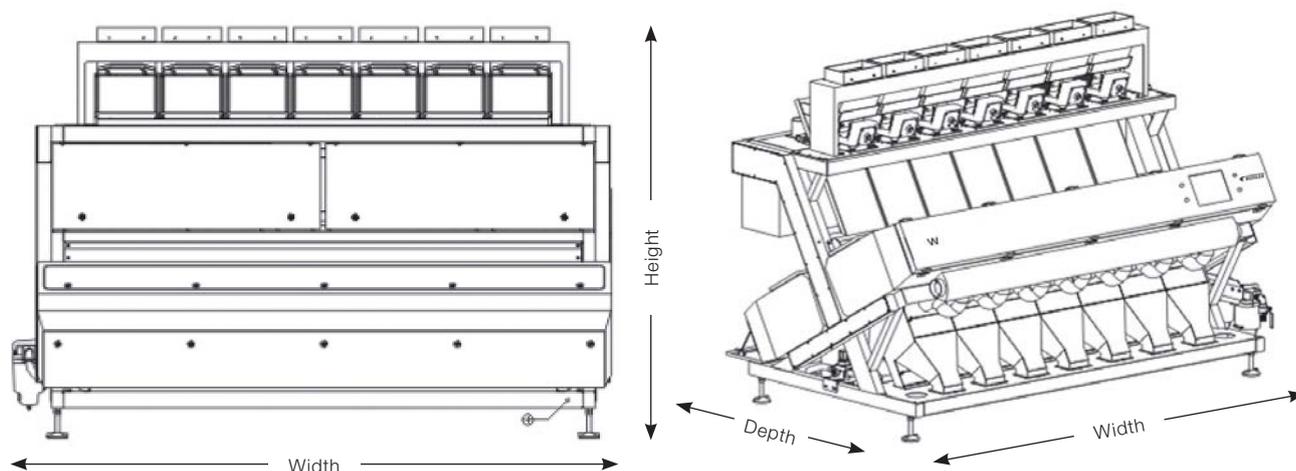
Customer Service

Bühler Customer Care

Bühler's worldwide Customer Care organisation provides the highest quality local support, offering a variety of services and solutions to ensure your optical sorter performs to maximum efficiency, delivering productivity and making a maximum return on investment.

Bühler W specifications.

Technical details.



Technical details

Model	Air Pressure	Voltage	Power	Capacity	Air Consumption
4 Module	0.6–0.8Mpa	200–240v,50/60Hz	3KW	up to 6 TPH	≤3.2m ³ /min
7 Module	0.6–0.8 Mpa	200–240v, 50/60 Hz	4KW	up to 12 TPH	≤4.5 m ³ /min

Dimensions and weight

Model	Width (mm)	Depth (mm)	Height (mm)	Weight (Kg)
4 Module	1,956	1,615	1,987	1,000
7 Module	2,920	1,620	2,020	1,600

Remarks: ±10mm tolerance is acceptable by real calculation

Sorting Examples

Raw rice sorting



Accept



Reject

Parboiled rice sorting



Accept



Reject

Performance Data

	Maximum Capacity	Performance
4 chutes primary + 3 chutes secondary sort	12 TPH	Accept: 99.5%
3 chutes primary + 2 chutes secondary + 2 tertiary sort	9 TPH	Accept: 99.5%

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