SORTEX B range.

Optimising conventional sorting.

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Changing the game - demonstrating a commitment to help processors get the most value from optical sorting, Bühler's high capacity sorter delivers truly outstanding performance in mainstream commodity sorting applications.

Available in three variants - the standard SORTEX B, DualVision™ and ColorVision™ are offered in three frame sizes to suit all capacity requirements. Using up to three wavelengths, the range has excellent colour sorting capabilities and delivers extraordinary product quality.

Including superior feed and vision systems with processing capabilities, the SORTEX B range is the first choice for processors who seek the assurance, functionality and trusted performance of the SORTEX brand.

- Enhanced sorting performance
- Trusted Bühler quality and reliability
- Greater configuration flexibility and capacity

Developed for commodities

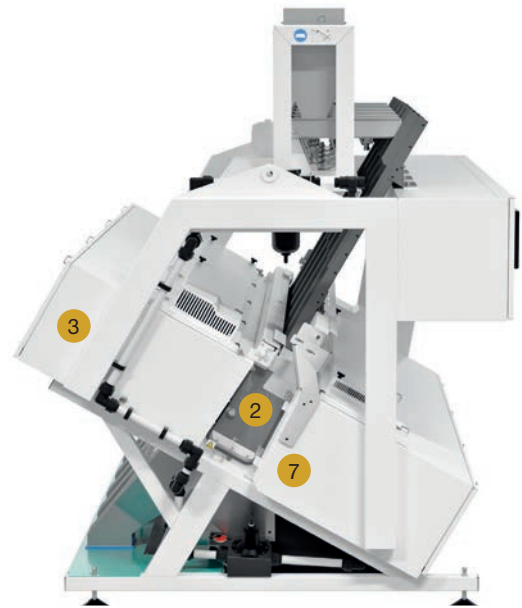| Nuts | Seeds | Grains | Coffee | Pulses | Plastics |

SORTEX B optical sorter at a glance.

1 **High capacity**
Available in up to 5 chutes and with customised options to meet individual sorting requirements

2 **Broadband LED lighting**
Flexible solid state LED lighting that improves illumination and enhance defect recognition

3 **Custom built-cameras**
High resolution visible colour cameras and Standard InGaAs cameras

4 **Bühler's operating software**
Proprietary software targets individual defects with unmatched processing speed

5 **Product Modes**
Featuring up to 100 user-defined modes

6 **Simultaneous re-sorting**
Maximises recovery of good product by providing the highest reject concentration

7 **Automated Background**
Background adjusts as light levels vary delivering consistent operation

8 **Remote access for real-time monitoring**
Bühler engineers can monitor the performance of the sorter from anywhere in the world

9 **Low power and air consumption**
For reduced operational costs

SORTEX B variants.
Visible inspection system.

Bühler's comprehensive product portfolio has been carefully developed to offer processors dependable solutions for conventional sorting applications. The SORTEX B range has three technology variants, each designed for different levels of defect detection.

What does each variant detect?

SORTEX B ColorVision™

| Good Product | Visible Defect 1 | Visible Defect 2 | Visible Defect 3 |

Excellent colour sorting
The ColorVision™ uses two visible wavelengths (in this example: red and green).

This can detect not only light and dark defects but also other colour variations.

SORTEX B DualVision™

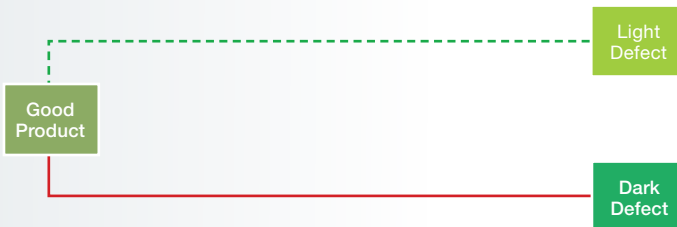| Good Product | Light Defect | Dark Defect |

Simultaneous light and dark sorting
The DualVision™ uses two visible wavelengths independently (in this example: red and green).

This is for detecting both light and dark defects simultaneously.

SORTEX B

| Good Product | Light Defect | Dark Defect |

Independent light or dark sorting
The standard SORTEX B uses one visible wavelength (in this example: either red or green).

This is best suited for mainstream colour sorting applications which include removing light or dark defects.

Frame sizes and features.

The SORTEX B range is available from one to five modules (three different frame sizes), designed to handle small to large capacities. Depending on requirements, SORTEX B can also offer customised options tailored to customer needs.
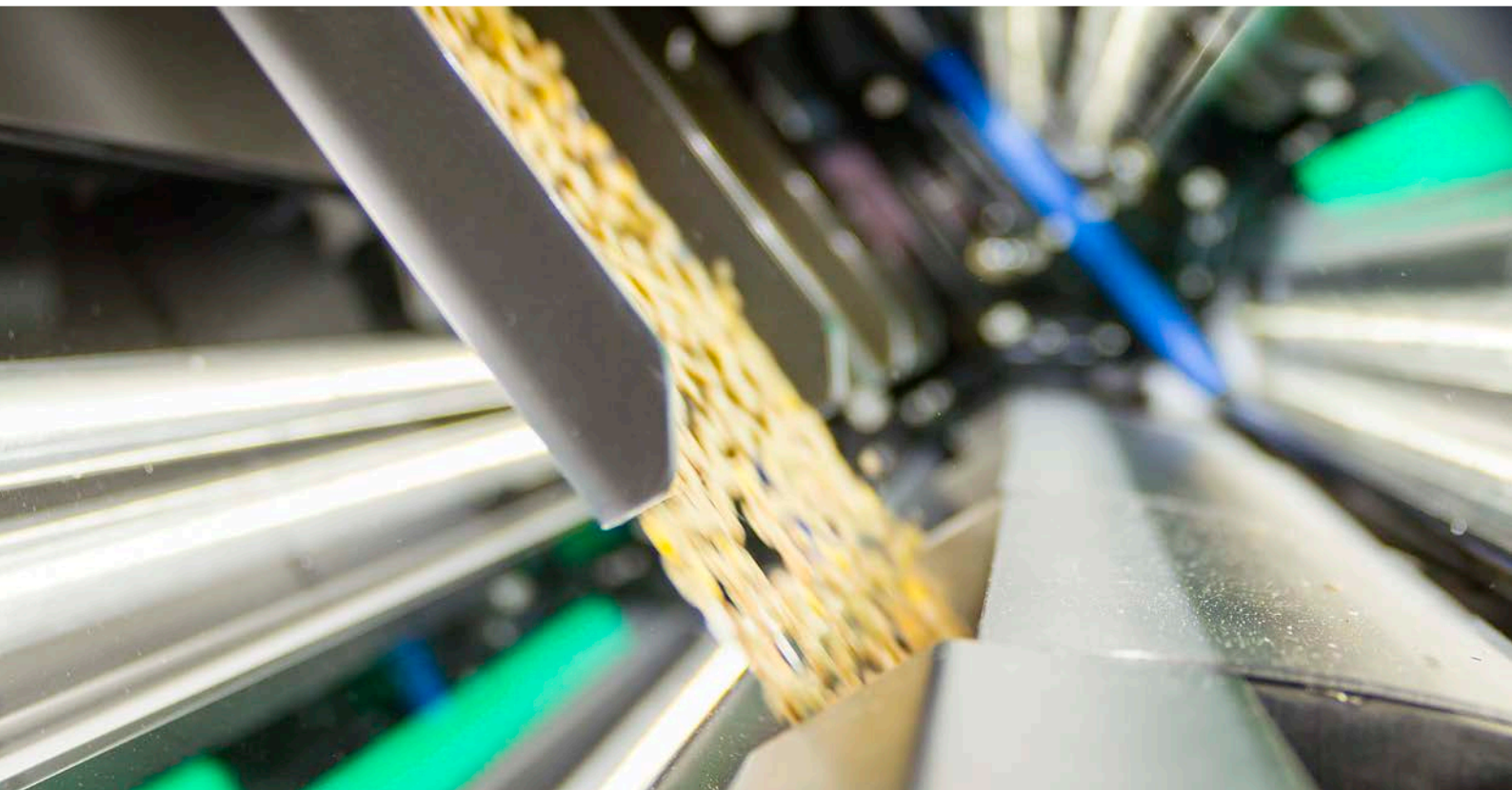
One module   Two/Three module   Four/Five module

SORTEX B range features

	SORTEX B	SORTEX B InGaAs	SORTEX B DualVision™	SORTEX B DualVision™ InGaAs	SORTEX B ColorVision™	SORTEX B ColorVision™ InGaAs
Standard InGaAs		■		■		■
LED Lighting	■	■	■	■	■	■
IR Lighting		■		■		■
Remote monitoring	●	●	●	●	●	●
CE Certification	■	■	■	■	■	■

■ Standard   ● Optional

SORTEX B benefits.
Enhanced sorting performance.

Delivering extraordinary product quality

The Bühler SORTEX B range consists of three variants: the standard SORTEX B, DualVision™ and ColorVision™. Bühler custom-built cameras use up to three wavelengths (for visible and Infra-red range) to detect different colour variations, spot defects and foreign material ensuring optimised sorting performance to deliver high quality product.

Standard InGaAs technology provides reliable detection of foreign material that is the same colour as the good product, while flexible broadband LED and broad spectrum IR lighting can see defects within the entire visible (Red, Green and Blue wavelengths) and infra-red spectrum.

Trusted Bühler quality and reliability.

Reliable with superior build quality
The SORTEX B range has been designed to Bühler's high build quality standards. Our manufacturing expertise and stringent quality control ensure dependable, reliable performance, while cutting edge product design ensures durable machine quality with sealed control and optical cabinets that provide easy access and stability.

Delivering productivity
The auto-calibration and product tracking functions deliver reliable product quality by effortlessly handling both changes in input and product colour variation with self-adjustment. This is further improved with the fully automated background that adjusts as light levels vary.

Durability and consistency
Solid state flexible broadband LED lighting is extremely durable, and, in conjunction with the long-life serviceable ejectors, ensures the sorters operate at their peak performance over a longer period of time. This helps to maintain a consistent sorting operation.

SORTEX B benefits.
Greater configuration flexibility and capacity.

Flexibility and capacity

Modular systems provide flexibility in the sorting configuration to produce the required product grades. In conjunction with up to five high capacity modules customised to individual sorting requirements, the SORTEX B can match varied capacity needs and manage unexpected contamination levels.

Simultaneous resorting capabilities ensure accurate product rejection and the highest reject concentration, thereby maximising recovery of good product. The enhanced feed system also uses new vibrators with the latest low-voltage digital drive technology to produce even feed and consistent throughput across modules.

This is all supported with SORTEX AnyWare, which offers remote machine monitoring, alerts and access to support Bühler's customers globally. This valuable system helps to maximise uptime and ensures quicker service responses.

SORTEX B technology.
Maximum precision and efficiency.

**Inspection system with broadband LED lighting**
Bühler's high resolution cameras are designed and built in-house with high-resolution optic sensors that deliver the colour registration needed to detect defects and foreign material. When combined with broadband LED lighting, the sorters can target defects within the entire visible spectrum.
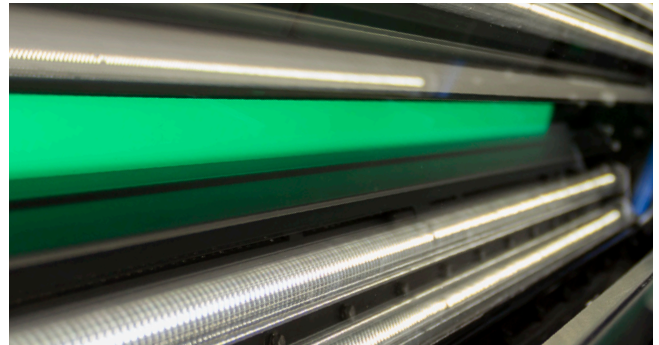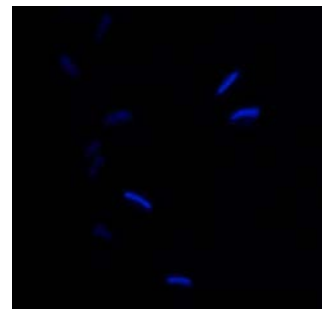

Flexible broadband LED lighting

InGaAs Technology
Standard InGaAs technology is used to provide better separation of defects which are the same colour as the good product and cannot be seen in the visible spectrum With broad spectrum lighting, SORTEX B can detect defects in the infra-red range.
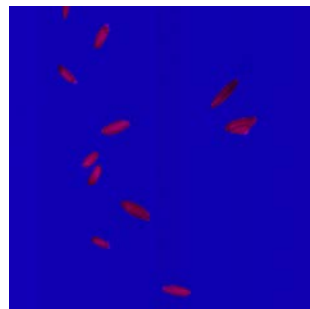

Visible camera frame capture   InGaAs camera frame capture

High speed ejectors
The Bühler ejectors are custom-designed and precision built for high speed, easy serviceability and long life. Through constant development, the ejector's life span has been increased significantly. This efficiency of operation and maintenance enables the low cost of ownership of SORTEX sorters.
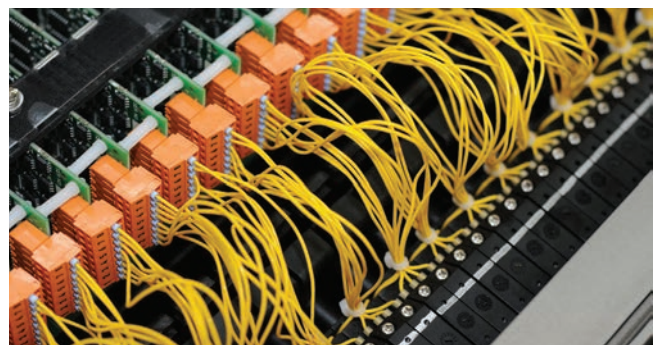
High speed serviceable ejectors

SORTEX B specifications.
Technical details.
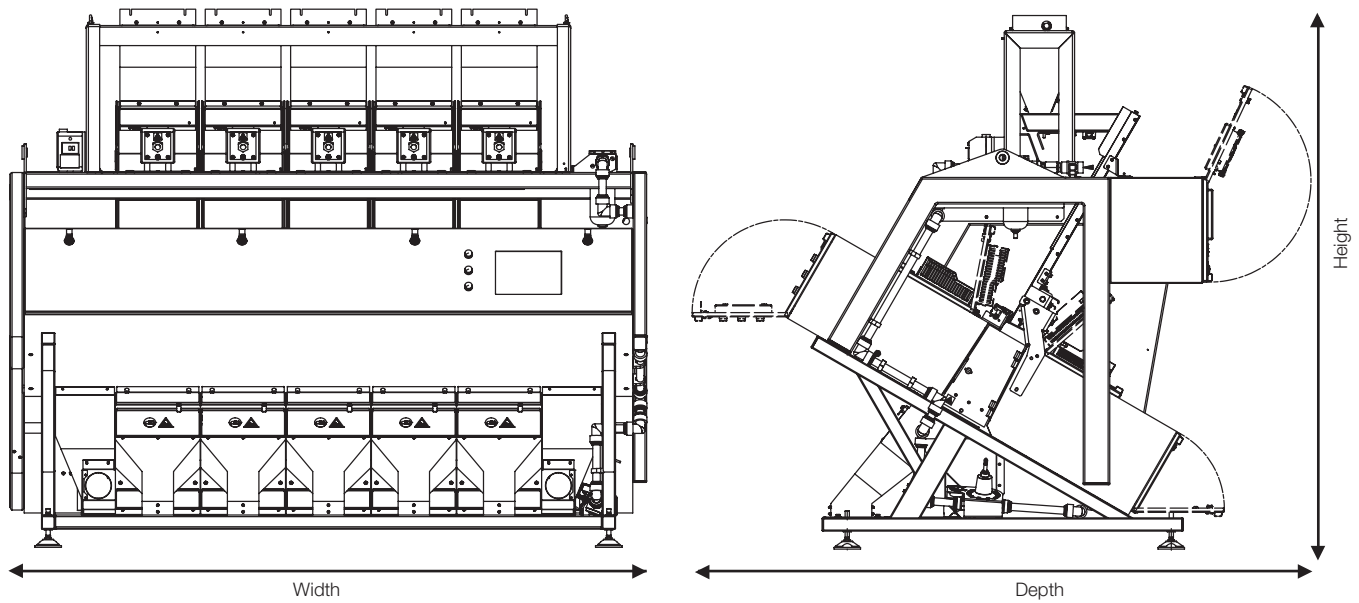
Width

Depth

Height

Dimensions

Machine	Width mm	Depth (Doors Open) mm	Depth (Doors Shut) mm	Height mm
B1	1000	2333	1708	2088
B2	1788	2333	1708	2088
B3	1788	2333	1708	2088
B4	2387	2333	1708	2088
B5	2387	2333	1708	2088

Air and power requirements

Machine	Typical air requirements (L/s) 72-102 psi (5-7bar)	Typical Power consumption (kW)* (200-240V; 50/60 Hz single phase)
B1	8	1.5
B2	16	2.3
B3	24	3.1
B4	32	3.4
B5	40	4.5

* Figures will vary based on contamination levels

** Figures will vary based on machine specifications

SORTEX Customer Care.
Secure tomorrow's profits today.

Solutions and support to ensure that your optical sorter performs to maximum efficiency, delivering maximum productivity and making a maximum return on investment.

Bühler's worldwide Customer Care organisation delivers the highest quality local support by offering a variety of services under SORTEX Total Care*.

SORTEX Total Care

SORTEX Total Care offer customers the opportunity to create their own service package, composed of individual service features that best suits their needs.

Customers have the flexibility to create their most suitable programme - whether that covers just those areas of prime concern, or a fully-comprehensive cover.

Comprehensive cover is suitable for customers who require continuous operation of the optical sorter where the processing line is of the utmost importance. This way, customers can ensure that their investment is fully protected.

Customers can tailor their individual package from the following options.

WearCare - Preventative Maintenance
A fixed number of visits per year. During the visit an engineer will carry out checks, adjustments and when necessary replace consumable or wear parts.

RepairCare - Emergency Repair
In the unlikely event of the machine failing, an engineer will visit and repair the optical sorter.

EjectorCare - Ejector Service and Repair
When the ejectors reach their refurbish point, an engineer will visit to replace the ejectors with the appropriate number of units for the whole machine.

AnywareCare - Anyware Health Check and Alerts
The Anyware system allows the performance of optical sorters to be monitored remotely.

This diagnostic system facilitates a quicker response to any issues that might emerge. It automatically emails an alert message to the server, if an optical sorter develops a fault, or begins to operate outside normal working parameters.

An authorised engineer reviews the information in the alert, and advises whether adjustment is needed, or if the problem needs further attention.

SORTEX Spares Kits

For customers who require spare parts available on site, Bühler's technologists have created appropriate spares kits for the different machinery available.

SORTEX Upgrade Kits

Suitable for customers who are seeking to upgrade sorters with an additional module, features or software.

* All contracts are available for different durations

BÜHLER