



SORTEX® B Optical Sorter for Grain.

Innovations for a better world.

BÜHLER



Global Leaders in optimised grain sorting. **Equipment and solutions.**

Grain sorting solutions – The SORTEX range of optical sorters is suitable for small, medium or large-scale processing and is able to cater for a wide variety of grain applications. The applications showcased here are just a small selection of optical sorting solutions the SORTEX range can offer. Bühler is a leading global supplier of optical sorting solutions to the food and non-food processing industries and has been at the forefront of optical sorting technology for over 70 years.

Bühler offers complete solutions for processors who demand the highest standard of product quality. The SORTEX range is specifically engineered for grain sorting and delivers improved food safety. The commitment to substantial investment in Research and Development ensures that this advanced optical sorting technology produces outstanding results in removing even the most challenging of defects and foreign material.

SORTEX B. Optimising conventional sorting.

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.



Two/Three module

Four/Five module

Six/Seven module

Available in three variants – the SORTEX B, SORTEX B DualVision™ and SORTEX B MultiVision™ are offered in four 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.

Benefits

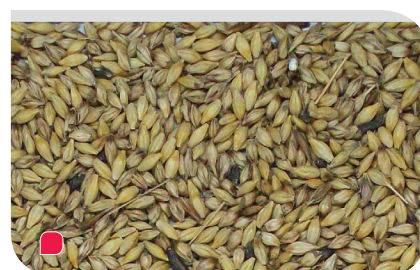
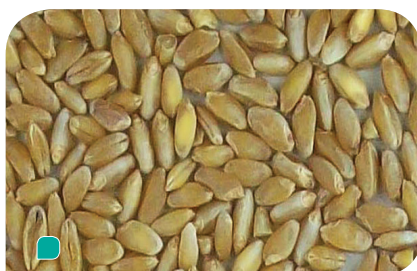
- Optimising sorting performance
- Configuration flexibility
- Trusted Bühler quality and reliability

Precision and Power.

An integral partner in grain sorting.

Damaged, diseased and discoloured grains can all affect food safety and product value. SORTEX technology significantly reduces these issues to maximize yield, increase profitability and ensure consistent product safety.

Accept Reject



Wheat

The SORTEX range can remove diseased grains, discoloured, damaged or bug infested grains and can reduce cross contamination from Barley, Oats, Soya and a range of other grains and foreign materials.

Durum

The SORTEX range can remove small spot and tip defects as well as diseased grains.

For Protein Durum wheat sorting, low protein grains can be removed.

Barley

Highly efficient in removing contaminated kernels, minimising the risk of gushing in beer.

Optimised optical system allows removal of cracked kernels as well as cross contamination by wheat, rye and oats.

Suitable for all grain varieties.



Soft/hard wheat



Durum wheat



Corn/maize



Rye



Oats



Barley



Rye

Delivers the highest level of food safety with consistent removal of Ergot and damaged grains.

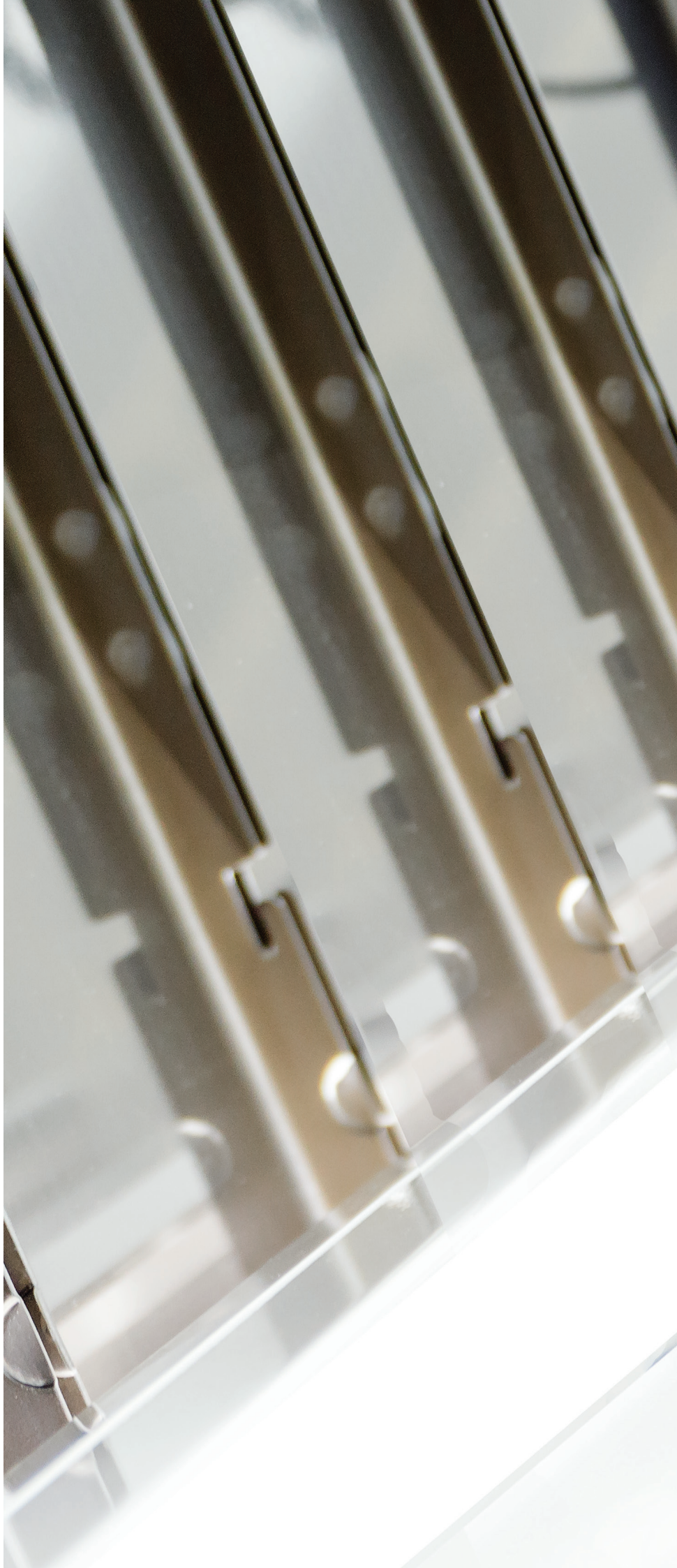
Foreign grains such as barley, wheat and wild oats can also, all be removed with high efficiency.



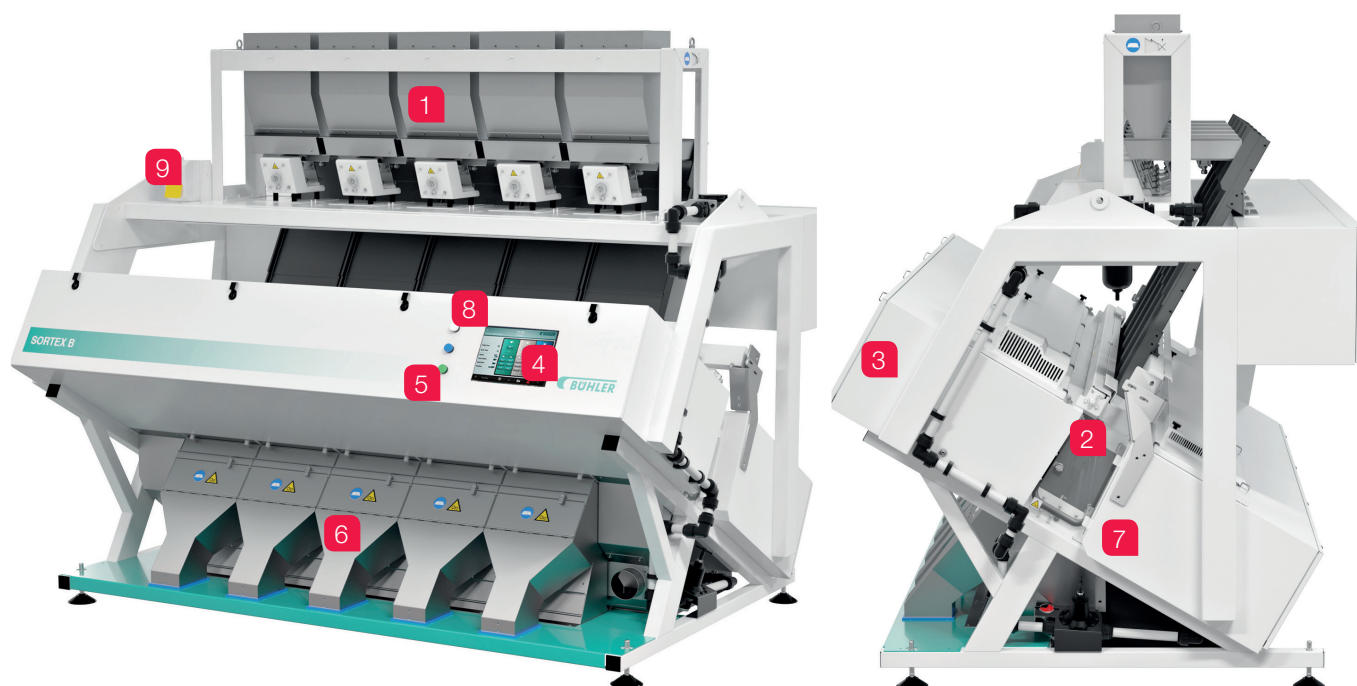
Millet/Sorghum



Buckwheat



SORTEX B. Optical sorter at a glance.



1 High capacity

Available in up to seven chutes and with customised options to meet individual sorting requirements. Each module is capable of processing up to 8 tonnes per hour (wheat).

2 High Performance 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 SORTEX ProSortX™ operating software

Simplifies a wealth of configurable options 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 lighting

Background lighting adjusts as light levels vary delivering consistent operation

8 Remote access for realtime 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 Sizes and features.

Technical details.

Product options

SORTEX B	SORTEX B (BSBA)	SORTEX B DualVision™ (BSBB)	SORTEX B MultiVision™ (BSBC)
Dark or light camera	Standard		
Dark and light camera		Standard	
Colour camera			Standard
InGaAs Technology	Optional	Optional	
PROsize™ technology			Standard
LED Lighting	Standard	Standard	Standard
IR Lighting	Optional	Optional	
Remote Access	Optional	Optional	Optional
SORTEX TotalCare™	Optional	Optional	Optional
CE Certification	Standard	Standard	Standard
Available Modules	1-7	1-7	1 - 5

■ Standard
 ● Optional

For the full feature list and product specifications contact your local representative.

Dimensions

Machine	Width mm	Depth (Doors Open) mm	Depth (Doors Shut) mm	Height mm	Weight* kg
B1	1000	2340	1625	2088	500
B2	1787	2340	1625	2088	927
B3	1787	2340	1625	2088	970
B4	2387	2340	1625	2088	1107
B5	2387	2340	1625	2088	1150
B6	3047	2340	1625	2088	1303
B7	3047	2340	1625	2088	1350

* Unpacked weight. Figures will vary based on machine specifications

Air and power requirements

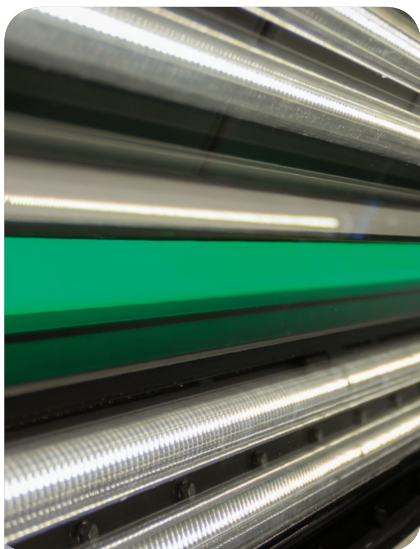
Machine	Typical air requirements (L/s)* 72-102 psi (5-7bar)	Typical Power consumption (kW)** (200-240V; 50/60 Hz single phase)
B1	8	0.9
B2	16	1.2
B3	24	1.5
B4	32	2.1
B5	40	2.9
B6	48	2.9
B7	56	3.1

* Figures will vary based on contamination levels

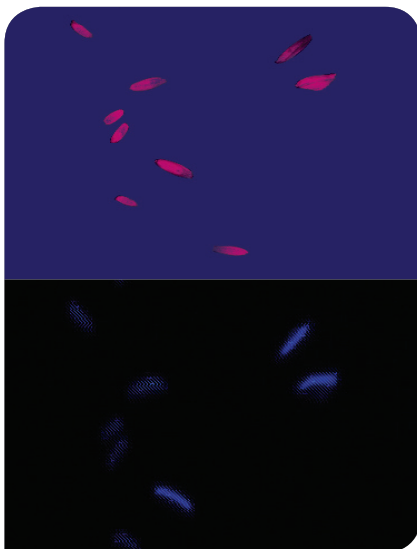
** Figures will vary based on machine specifications

SORTEX B Technology.

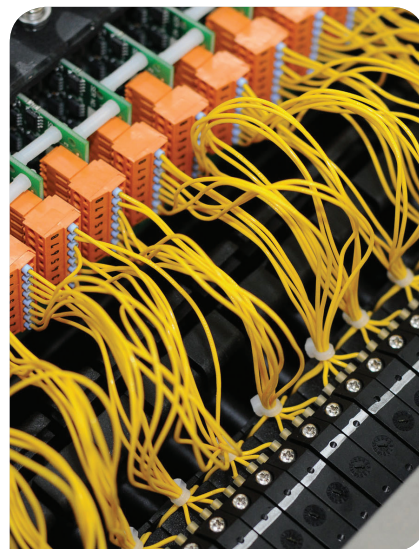
Technology leadership in grain sorting.



Flexible broadband LED lighting



Visible camera frame capture
InGaAs camera frame capture



Serviceable high speed ejectors

Inspection system with variable 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 or High-lumen LED lighting, the sorters can target defects within the entire visible spectrum.

InGaAs technology

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 Xenon lighting, SORTEX B can detect defects in the infra-red range.

High speed ejectors

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



SORTEX ProSortX™ operating software

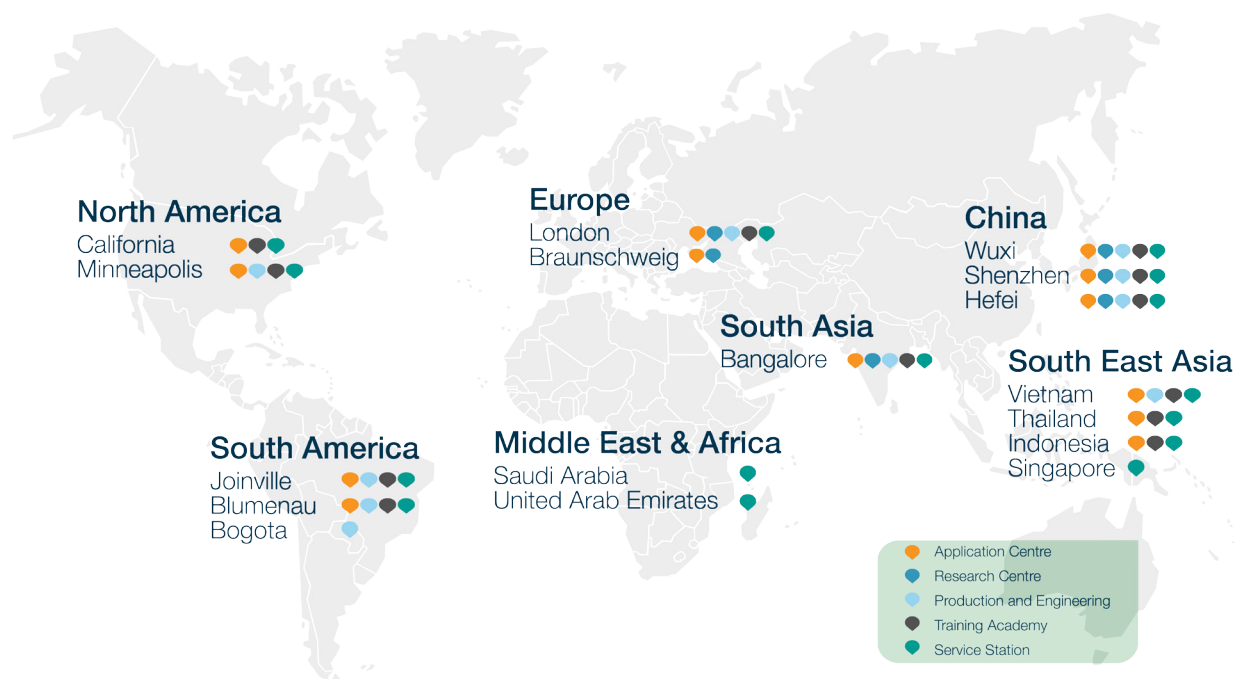
SORTEX ProSortX™ operating software

The latest update of Bühler's proprietary operating software comes with a fresh new interface that's modern, clean and intuitive to use. Featuring innovative navigation control, impeccable user functionality and simple, easy set-up.



SORTEX Customer Care. Secure tomorrow's profits today.

Bühler's worldwide Customer Care organisation delivers the highest quality local support ensuring optical sorters perform at maximum possible efficiency, deliver optimum productivity and make the best return on investment.



The SORTEX Spare Parts promise.

Customer satisfaction is our priority. This is why we strive to deliver spare and wear parts within 48 hours, doing our best to limit your downtime and maximise your profitability.

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

SORTEX TotalCare™

Performance protection.



SORTEX TotalCare™ allows customers to create their own service package, composed of individual service features that best suit their needs. Customers can create a tailored programme from a variety of packages. Contract options vary from basic to fully comprehensive cover. This way, investments can remain fully protected.

TotalCare Protect

Minimise Downtime

Based on an agreed number of annual visits, Bühler engineers will replace key wear parts, provide consultation and advise on future maintenance requirements.

Protecting Investment.

TotalCare Perform

Performance Optimisation

Aspiring to keep downtime to under 48 hours, sorters will be safeguarded against any failed components. Bühler engineers will ensure first-rate performance once the repair is carried out.

Repair and Optimise.

TotalCare PerformPLUS

Ejector Refurbishment

Making certain that sorters are running at peak performance, ejectors are replaced when the stipulated life-cycle is reached.

Performance is maintained for the future.

Maximum Capacity and Quality.

Customers can tailor their individual package from the following options

TotalCare Anyware

Supervised Functionality

Provides a working record of operational information as well as reports that enable machine health to be monitored and preventative maintenance scheduled.

Maintain Optimised Performance.

TotalCare AnywarePRO

Remote Access and Assistance

Sorter performance can be viewed remotely by customers and Bühler engineers. Faults can be diagnosed and performance optimised in any location using a laptop, tablet or smartphone.

Ultimate control.

* All contracts are available for variable durations

SORTEX upgrade kits.

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

New technologies and innovations are continuously in development. Upgrade kits allow customers with existing machinery to enhance their production line with the very latest proprietary optical sorting technology.

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