SORTEX® B optical sorter.

Optimising conventional sorting.
Bühler in partnership with processors. An integrated partner in commodity processing.

Demonstrating a commitment to help processors get the most value from optical sorting, Bühler’s SORTEX® B high capacity sorter delivers truly outstanding performance in mainstream commodity sorting applications.

Available in three variants - the SORTEX B, the SORTEX B DualVision™ and the SORTEX B MultiVision™ in up to four frame sizes designed to suit all capacity requirements. The SORTEX B range is offered with up to three visible wavelengths and optional InGaAs on selected models. With the choice of additional capabilities, the range features excellent colour sorting capabilities and delivers extraordinary product quality.

Including superior feed and vision systems with processing capabilities, SORTEX optical sorters are always the first choice for processors who seek assurance, functionality and optimised performance.

**Benefits**
- Optimised sorting performance
- Trusted Bühler quality and reliability
- Greater configuration flexibility and capacity
Demonstrating a commitment to help processors secure the most value from optical sorting, Bühler’s high capacity sorter delivers truly outstanding performance in mainstream commodity sorting applications.

Trusted performance across a range of commodities.
SORTEX B optical sorter at a glance.

1. **High capacity**
   - Available in up to 7 chutes and with customised options to meet individual sorting requirements

2. **Long life, low energy consumption LED lighting**
   - Options include Broadband and High-lumen solid state LED lighting that improves illumination and enhance defect recognition

3. **Custom built-cameras**
   - High resolution visible monochromatic or colour cameras and optional InGaAs camera technology

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. **Product Tracking**
   - Provides consistent product quality by registering changes in input and product colour variation, adjusting inspection settings automatically

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

8. **Automated Background**
   - Background adjusts as light levels vary delivering consistent operation

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

10. **Low power and air consumption**
    - For reduced operational costs

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Rice  Coffee  Seeds  Grain  Nuts  Plastic
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**

Independent light or dark sorting
The SORTEX B uses one visible wavelength selected based on commodity to offer the best visual defect detection possible. Best suited for mainstream colour sorting applications which include removing light or dark defects.

**SORTEX B DualVision™**

Simultaneous light and dark sorting
The DualVision™ uses two visible wavelengths independently. Colours are selected based on commodity to detect both light and dark defects simultaneously.

**SORTEX B MultiVision™**

Complex colour detection
The MultiVision™ uses multiple visible wavelengths (red, green and blue) to detect the subtlest colour variations maximising product quality.
Bühler Innovative Technologies.
The Bühler competitive edge.

**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, or optional Xenon lighting for InGaAs options, the sorters can target defects within and outside the 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 lighting, SORTEX B can detect defects in the infra-red range.

InGaAs camera technology is also available as an upgrade on existing SORTEX B machines - please contact your local representative for details.

**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

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 PROsize™ operating software

Bühler’s PROsize™ technology is a detection solution which sorts objects based on size characteristics to maximise product uniformity and value.

Far advanced from traditional grading solutions, PROsize™ can be employed in situations where product is too delicate or difficult to be sorted using conventional mechanical graders, maximising profitability by distinguishing the premium product.

PROsize™ is an ideal solution to separate under sized products and remove broken produce.

SORTEX B MultiVision™

Featuring trusted SORTEX® technology and employing high resolution colour cameras front and rear, the SORTEX B MultiVision™ is developed to offer processors solutions for conventional and challenging sorting applications.

Combined with Bühler’s unique classifying processors, the SORTEX B MultiVision™ delivers an efficient, robust sorting performance on multiple commodities.

Combining multiple visible wavelengths, the SORTEX B MultiVision™ system classifies the very subtlest of colour variations, unique and specific to each customers sorting requirements.
The Bühler advantage

Balanced, stable and consistent sorting.

Built into all SORTEX 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 consistent product quality.

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 any accept or defect material 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. 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**
  During a balanced stable sorting performance, 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, a technology unique to Bühler, that maintains the consistency of the performance.
SORTEX B Sizes and features.
Technical details.

### Product options

<table>
<thead>
<tr>
<th>SORTEX B</th>
<th>SORTEX B</th>
<th>SORTEX B DualVision™</th>
<th>SORTEX B MultiVision™</th>
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<tbody>
<tr>
<td>Dark or light camera</td>
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<td>Dark and light camera</td>
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<td>Colour camera</td>
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<td>InGaAs Technology</td>
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<td>PROsize™ technology</td>
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<td>CE Certification</td>
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<td>Available Modules 1-7</td>
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<td>1 - 5</td>
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- Standard
- Optional

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

### Dimensions

<table>
<thead>
<tr>
<th>Machine</th>
<th>Width mm</th>
<th>Depth (Doors Open) mm</th>
<th>Depth (Doors Shut) mm</th>
<th>Height mm</th>
<th>Weight* kg</th>
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* Unpacked weight. Figures will vary based on machine specifications.

### Air and power requirements

<table>
<thead>
<tr>
<th>Machine</th>
<th>Typical air requirements (L/s)* 72-102 psi (5-7bar)</th>
<th>Typical Power consumption (kW)** (200-240V, 50/60 Hz single phase)</th>
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<td>3.1</td>
</tr>
</tbody>
</table>

* Figures will vary based on contamination levels.
** Figures will vary based on machine specifications.
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.
TotalCare™
Performance protection.

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 24 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.

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.

Customers can tailor their individual package from the following options

* 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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