

Confectionery
Optical Sorting.

Confectionery Sorting from Bühler. **Equipment and Solutions.**

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1 Bühler in partnership with processors. **An integral part of the confectionery industry.**

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 since 1947.

With a commitment to substantial investment in research and development, Bühler's proprietary sorting technology delivers excellent results in removing the most challenging defects and foreign materials in a wide range of applications.

Flexible to handle small and large scale processing requirements, Bühler's SORTEX® range of optical sorters present the ideal choice for a wide range of confectionery applications including chewing gum, candy, chocolates, mints, pastilles and many others.

Why Bühler?

- The most hygienic optical sorters, lowering the risk of contamination
- Exceptional detection of gross and subtle colour defects, mishapen products and foreign material
- Flexible solutions for small and large scale processors

2 Sophisticated optical sorting solutions. For multiple confectionery applications.



Jelly sweets

SORTEX® optical sorters are equipped with advanced detection technologies to identify and remove gross and subtle colour defects from both non-coated and sugar coated jelly sweets whilst PROfile™ (shape) technology actively targets mishapen products and product clumps.



Cocoa nibs

Hazardous field foreign materials such as sticks, stones and leaves are removed from natural cocoa nibs as well as unwanted colour defects such as dark and rotten nibs.



Hard coated chocolates

Bühler's advanced visible and PROfile™ (shape) technology actively targets chipped and mishapen hard coated chocolates. SORTEX® sorters are also equipped with gentle handling to avoid any damage to your valuable product.



Wafers



Chocolate balls



Chewing gum



Non sugar-coated
jelly sweets



Chocolate coated
nuts

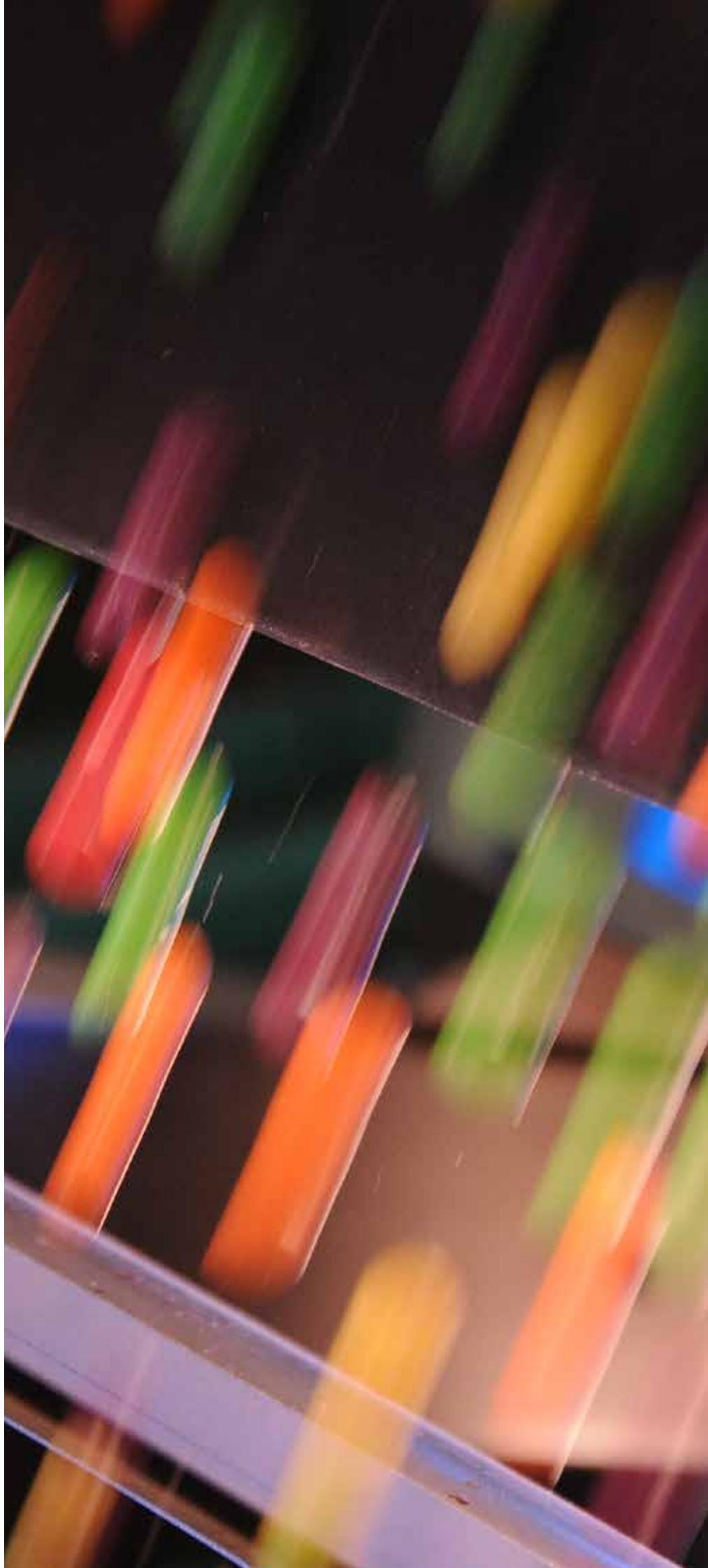


Mints



Wrapped sweets

SORTEX® sorters efficiently remove loose wrappers and packing materials, unwrapped sweets, brittle and damaged sweets and product clumps from wrapped sweets. Visible cameras can also be configured to separated wrapped sweets by colour.



InGaAs
technology™

BUHLER



SORTEX E



3 High performance in a small footprint. **SORTEX® E.**

The SORTEX® E is designed for confectionery processors looking for a hygienic sorting solution at lower processing capacities with advanced camera technology to detect gross and subtle colour defects, mishapen product and hazardous foreign materials with ease.



SORTEX® E.

The SORTEX® E offers processors a high performance sorting experience in a small footprint. Designed to bring the benefits of larger sorters to smaller processors, whilst delivering nothing but the highest quality confectionery products.

Available with Bühler's custom-built visible cameras, state-of-the-art high definition InGaAs^{HD} and PROfile™ detection technologies, the SORTEX® E is capable of handling multiple confectionery applications for best in class colour and mishapen defects as well as hazardous foreign materials.

- 600mm chute
- Custom-built colour cameras
- High definition InGaAs^{HD} technology
- PROfile™ (shape) technology
- SmartEject™ technology
- Broad spectrum lighting
- Re-sort option
- ProSortX™ operating software

4 The industry's most hygienic optical sorter. **SORTEX® F.**

The industry's most hygienic optical sorter enhanced for confectionery processors. Featuring a 600mm (FB1) or 1200mm (FB2) viewing area, LED-Xenon lighting and smart sorting capabilities for unprecedented defect and foreign material detection.



SORTEX® F.

The SORTEX® F optical sorter for confectionery processors pushes the boundaries in hygienic design with the most open and accessible frame the market has ever seen. Combine this with Bühler's world renowned detection technologies and new LED-Xenon lighting for unprecedented defect and foreign material detection.

The pioneering sorter can be configured for all areas of the confectionery processing industry including sugar coated jellies, non-coated jellies, chewing gum and hard coated chocolates to remove gross and subtle colour defects, mishapen products, product clumps and hazardous foreign materials.

- Adjustable 1200mm double chute (FB2)
- Lower capacity 600mm single chute (FB1)
- Open receptable
- Custom-built colour cameras
- High defintion InGaAs^{HD} cameras
- PROfile™ (shape) technology
- LED-Xenon lighting
- 17inch touch screen, user interface
- Re-sort capabilities
- Climate control system

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SORTEX F

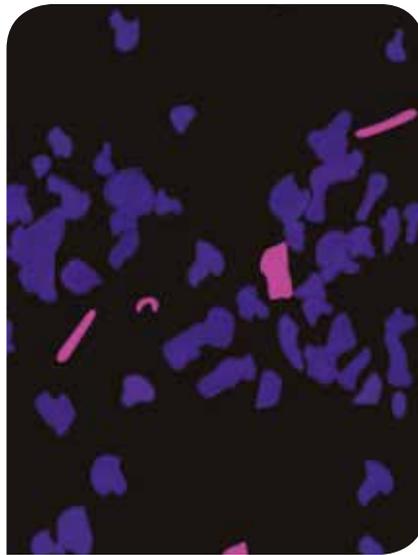


5 Innovative technologies. Leading the way through innovation.



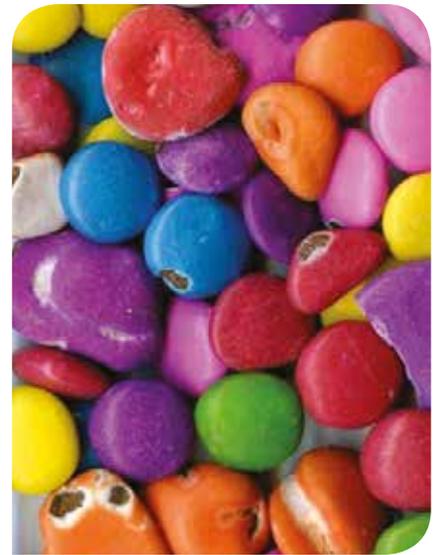
Custom-built visible cameras

Bühler's high resolution colour cameras which are designed and custom-built in house remove gross and subtle colour defects from a variety of confectionery applications to increase product quality and uniformity.



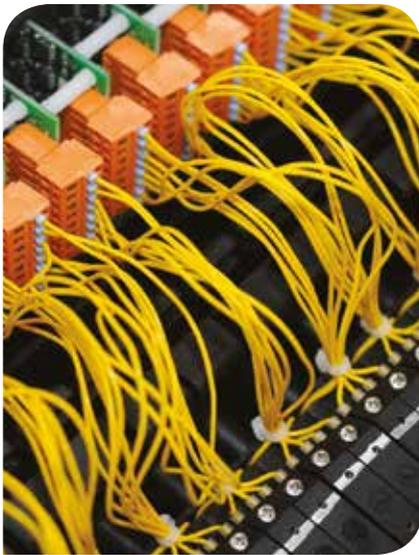
InGaAs^{HD} technology

The next generation infrared detection technology from Bühler now comes in high definition with double the resolution to detect foreign materials down to half the size. With twice as many pixels, InGaAs^{HD} detects the smallest pieces of hazardous materials that cannot be seen in the visible spectrum for an added layer of assurance.



PROfile™ technology

PROfile™ (shape) technology distinguishes objects such as sticks, stones and other foreign material from good product as well as mishapen sweets and product clumps using shape characteristics.



Intelligent Ejector technology

SmartEject™ - high speed, high flow ejectors efficiently remove defects with pinpoint precision and accuracy.

Ejector+ technology, Bühler's most powerful ejectors are available on the SORTEX® E and SORTEX® F optical sorters to remove heavier objects such as stones and glass.



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 FingerTipControl™ and all-new Bühler ATOM™ board for faster processing and navigation between screens.



Hygienic design

The SORTEX® range of optical sorters for confectionery processors are designed with a unique open and stainless steel construction that's easy to clean and maintain for the ultimate hygienic sorting solution.

6 Model Variants and Specifications.

Models and variants

	SORTEX® E	SORTEX® F
Flexible Colour Cameras	Standard	Standard
InGaAs ^{HD}	Optional	Optional
PROfile™ technology	Optional	Optional
LED-Xenon Lighting		Standard
Halogen lighting	Standard	
Broadband LED lighting		Standard
Climate Control	Standard	Standard
SORTEX ProSortX™	Standard	Standard
Remote Access	Optional	Optional
ATEX	Optional	
CE Certification	Standard	Standard

■ Standard ● Optional

For the full feature list, contact your local representative.

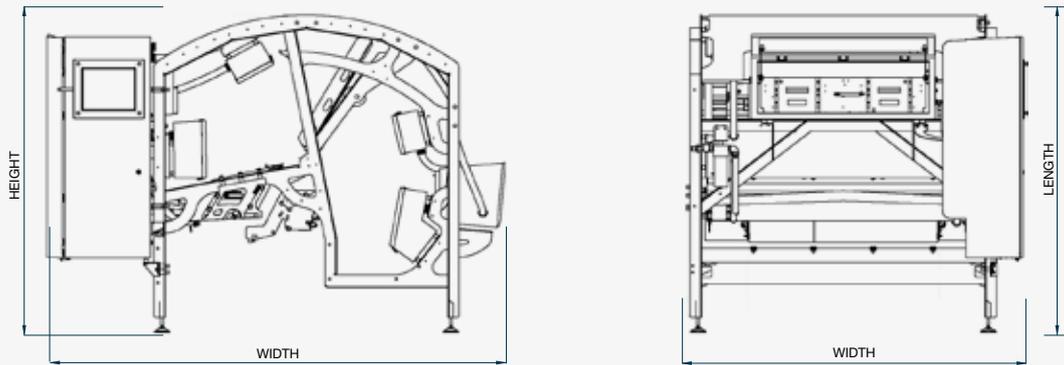
Dimensions, air and power requirements

	SORTEX® E	SORTEX® F	
	includes infeed vibrator	FB1	FB2
Width (mm/in)	1514/60	1610/63	2216/87
Length (mm/in)	3194/126	3010/118	2985/117
Height (mm/in)	2657/105	2112/83	2112/83
Weight (kg/lbs)	680/1500	850/1874	1200/2645
Typical air requirements (L/s)* 72-102 psi (5-7bar)	32	32	65
Typical Power consumption (kW)** (200-240V; 50/60 Hz single phase)	2.5kW	2.4kW	6kW

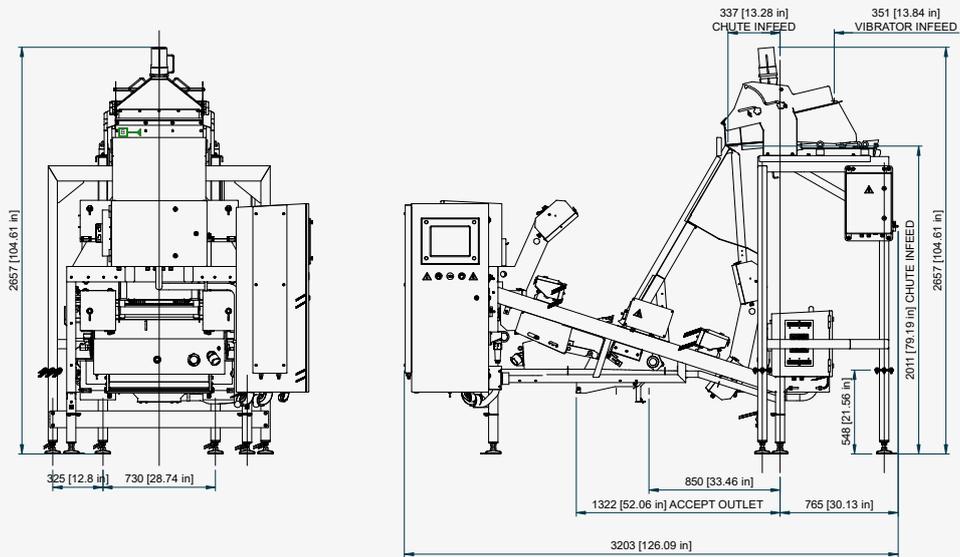
* Figures will vary based on throughput and input contamination levels.

** Figures will vary based on machine specifications.

SORTEX® F



SORTEX® E



7 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.

TotalCare™

Performance protection.

Bühler customers have access to a network of over 140 Sales and Service offices worldwide, offering customisable service packages, stock on spares and upgrade kits, to ensure your optical sorters perform at maximum possible efficiency. Training courses and Competence Centres offering application and product trials are also available at regional sites and from local offices around the world.

TotalCare™

Create a customised service package, composed of individual service features from the list below.

From maintenance visits, downtime cover to refurbishments and preventative - basic to fully comprehensive. Designed to ensure your optical sorters perform at its maximum performance.

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.

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.

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.

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.

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 smart phone.

All contract options are available for variable durations.

SORTEX® Spare Parts Promise

Customer satisfaction is our priority. This is why we strive to deliver both spare and wear parts within 48 hours - maximising your profitability.

SORTEX® Upgrade Kits

Bühler have designed various upgrade kits, for existing customers who are seeking to upgrade sorters with an additional module, new technology features or processing software.

SORTEX® Spare Parts

Various kits to suit different optical sorters are available for customers who wish to have spare parts available on site.

Optical Sorting Training Courses

Available from various regional Bühler locations. From operator to management, basic to advance, speak to your local representative for course selection and availability.



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