

**BUHLER**



**SORTEX E**  
*PolyVision*



SORTEX E  
PolyVision™.  
**A new force in  
PET recycling.**

# SORTEX E PolyVision™.

## A new force in PET recycling.



Designed with only PET processors in mind - the SORTEX E PolyVision™ is Bühler's all-new optical sorter for polymer contaminant removal, complementing the existing PET flake sorting portfolio.

Equipped with ground-breaking SORTEX PolyVision™ detection technology, patent-pending lighting and high precision ejectors to remove same-in-colour polymer contaminants such as PVC, PP and PE and to reduce other polymers such as PS, PA (Nylon), POM flakes and silicone with unrivalled accept quality and yield for your cleanest and purest PET flake yet.

- The ultimate polymer contaminant removal
- Delivering higher grade PET flakes, consistently
- Greater flexibility, recovery and profitability

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# SORTEX E PolyVision™.

## Applications.



### Clear PET

Breakthrough SORTEX PolyVision™ technology detects and removes clear polymers from clear PET to achieve the highest grade PET flake for bottle-to-bottle applications. Typical defects include PVC, PP, PE, PS, PA (Nylon), POM, Silicon and PETG as well as off-colour PET and foreign materials such as aluminium, steel, bronze, paper, wood, glass and adhesives.



### Blue PET

Typical applications include removing unwanted colours, off-colour flakes, polymers and foreign materials from blue PET applications for recyclate that can be used in high end applications. The SORTEX E PolyVision™ uses new high precision ejectors to fire precisely at the smallest PET flakes without losing an important fraction of good flakes.



### Green PET

The SORTEX E PolyVision™ removes polymers including PVC, PP and PE from green PET flakes whilst reducing other polymer contaminants such as PA, POM, Silicon and PETG for high quality accept product. Typical applications include removing defects for high grade flakes used for the strips industry. SORTEX sorters can also colour group green flakes for example in green, blue and brown colour groups.



## Jazz PET

Jazz or mixed colour PET applications are typically used for the fibre industry or for black plastic applications. The SORTEX E PolyVision™ can remove any unwanted polymers and foreign materials including metals and wood in line with recommended contamination levels. The SORTEX E PolyVision™ can also recover high value PET flakes such as clear and blue PET flakes from Jazz applications.



# SORTEX E PolyVision™.

## At a glance.

### 1 SORTEX PolyVision™ Detection System

SORTEX PolyVision™ technology uses trans-reflective sorting to detect polymer contaminants in transmissive and opaque form by their unique chemical signature.

### 2 High definition colour cameras

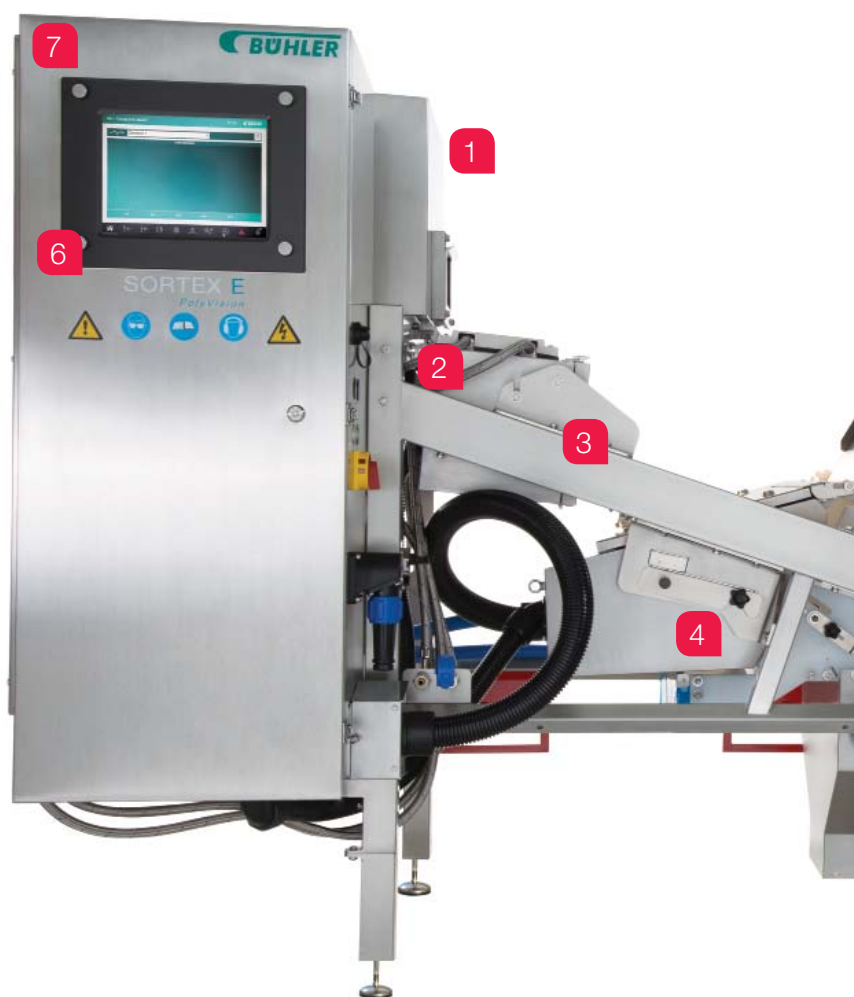
Custom built colour cameras remove unwanted colour defects from clear, blue, green and Jazz PET applications.

### 3 Patent-pending lighting system

Designed for PET applications, the unique patent pending lighting system uses optimum wavelengths to effortlessly target challenging polymer contaminants.

### 4 High precision ejectors

New high precision ejectors fire precisely at PET flakes ensuring maximum yield.





### 5 **Climate Control System**

Specifically designed Climate Control System ensures the sorter operates at optimum temperature under changing ambient conditions (up to 50° C) - maximising stability.

### 6 **Intelligent individual defect adjustment**

Graphical User Interface allows individual defect adjustment to achieve the desired flake purity.

### 7 **Intelligent sorting modes**

Streamline sorting configurations with pre-installed and user defined sorting modes for quick and easy product changeover for clear, blue, green and Jazz PET flakes.

### 8 **The most open design construction**

Allows for easy access and cleaning in dusty recycling environments, ensuring maximum uptime.

# SORTEX E PolyVision™ technology. Innovation and leadership.



## For the ultimate trans-reflective sort

New SORTEX PolyVision™ technology is able to perform transmissive and reflective sorting simultaneously. It features innovative single sided double detection and unique patent pending lighting system for the ultimate polymer contaminants reduction with maximum yield.

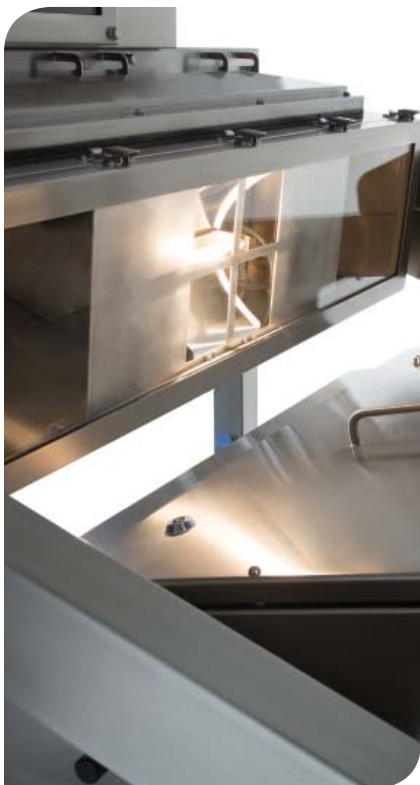
## Analysing unique chemical signatures

Exclusively designed to analyse the unique chemical signature of polymeric contaminants, SORTEX PolyVision™ detection technology empowers processors to remove even the most difficult to detect polymer flakes such as clear PVC from clear PET flakes. It does this reliably, accurately and at much higher speed with minimum possible loss of good flakes – a revolution in the PET recycling industry.

## Leading the way through innovation

SORTEX PolyVision™ is just the latest technological breakthrough in the leading range of SORTEX optical sorters. With a commitment to substantial investment in research and development, Bühler continues to develop state-of-the-art technology that empowers PET recyclers to maximise their capacities, recovery and profitability – consistently.





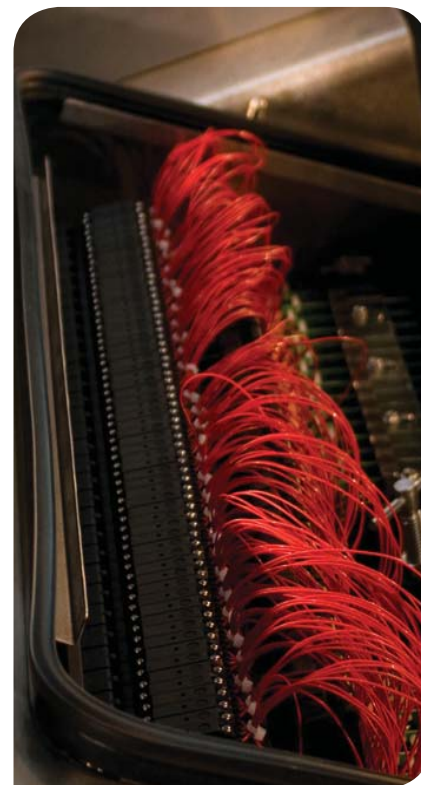
### **Patent pending unique lighting system**

Designed with only PET recyclers in mind, the unique lighting system enhances detection by highlighting the different chemical signatures between PET flakes and other polymers to deliver the purest PET flakes for food and non-food applications.



### **Custom-built visible cameras**

Bühler's high definition colour cameras which are designed and custom-built in house remove unwanted colour defects such as unwanted coloured PET flakes, polyethylene (including bottle caps) and foreign materials such as sticks and stones.



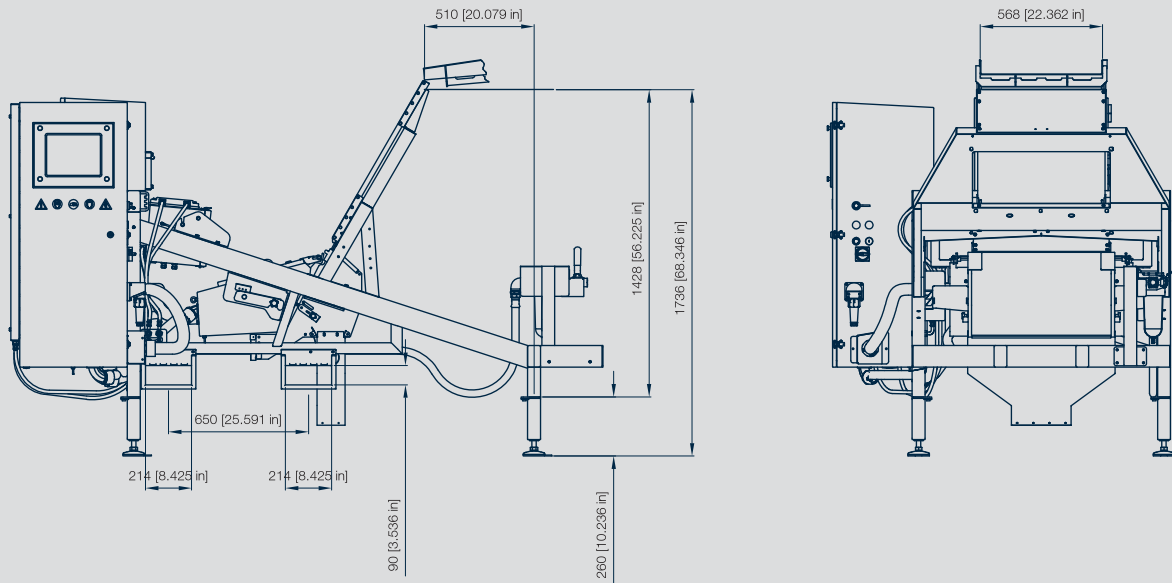
### **High-resolution ejectors**

New high precision ejectors fire precisely at defects to ensure overall yield and recovery is maximised.

# SORTEX E PolyVision™.

## Specifications.

### SORTEX E PolyVision™.



### Air and power consumption

Model	Air Requirements	Typical Power Consumption
SORTEX E PolyVision™	72-102 psi (5-7bar)	200-240V; 50/60 Hz single phase
	L/s*	kW**
	32	1.15

### Dimensions and Weight

Model	Width	Depth	Height	Weight
	mm, in	mm, in	mm, in	kg, lbs#
SORTEX E PolyVision™	1514, 60	1514, 60	2190, 60	680, 1500

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

\*\* Figures will vary based on machine specifications.

# Unpacked weight. Figures will vary based on machine specifications.

# SORTEX® Customer Care.

## Secure tomorrow's profits today.

Bühler's worldwide Customer Care organisation delivers the highest quality local support, ensuring your optical sorters perform at maximum possible efficiency. Bühler ensures optimum productivity to make the best return on investment and with 150 years of history, 70 years of optical sorting excellence and presence in every region, it is no wonder, Bühler remains the partner of choice for many processors.

### TotalCare™ Programme

Create your own service package, composed of individual features that best suit your needs and fully protect your investments. Contract options vary from basic to fully comprehensive cover. All contracts are available for variable durations. Tailor your individual package from the following options:

#### TotalCare Protect

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

#### TotalCare Perform

Aspiring to keep downtime to under 24 hours, sorter will be safeguarded against any failed components. Bühler will ensure first-rate performance once the repair is carried out.

#### TotalCare PerformPLUS

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

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

#### TotalCare AnywarePRO

Sorter performance can be viewed remotely by customer and Bühler engineers. Faults can be diagnosed and performance optimised in any location using a laptop, tablet or smart-phone for ultimate control.

### SORTEX Spare Parts Promise

Customer satisfaction is our priority. That is why we strive to deliver spare and wear parts with 48 hours, doing our best to limit your downtime and maximise profitability. For customers who require spare parts available on site, we have created appropriate spare kits for the different machinery available.

### SORTEX Upgrade Kits

Suitable for those seeking to upgrade sorters with an additional module, new features or software updates. New technologies and innovations are continuously in development. Upgrade kits allows customers with existing machinery to enhance their production line with the very latest proprietary optical sorting technology.

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