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SORTEX E  
*PolyVision*



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

Innovations for a **better world.**



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# 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 silicon 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 transparent and opaque form by their unique chemical signature.

### 2 High definition colour cameras

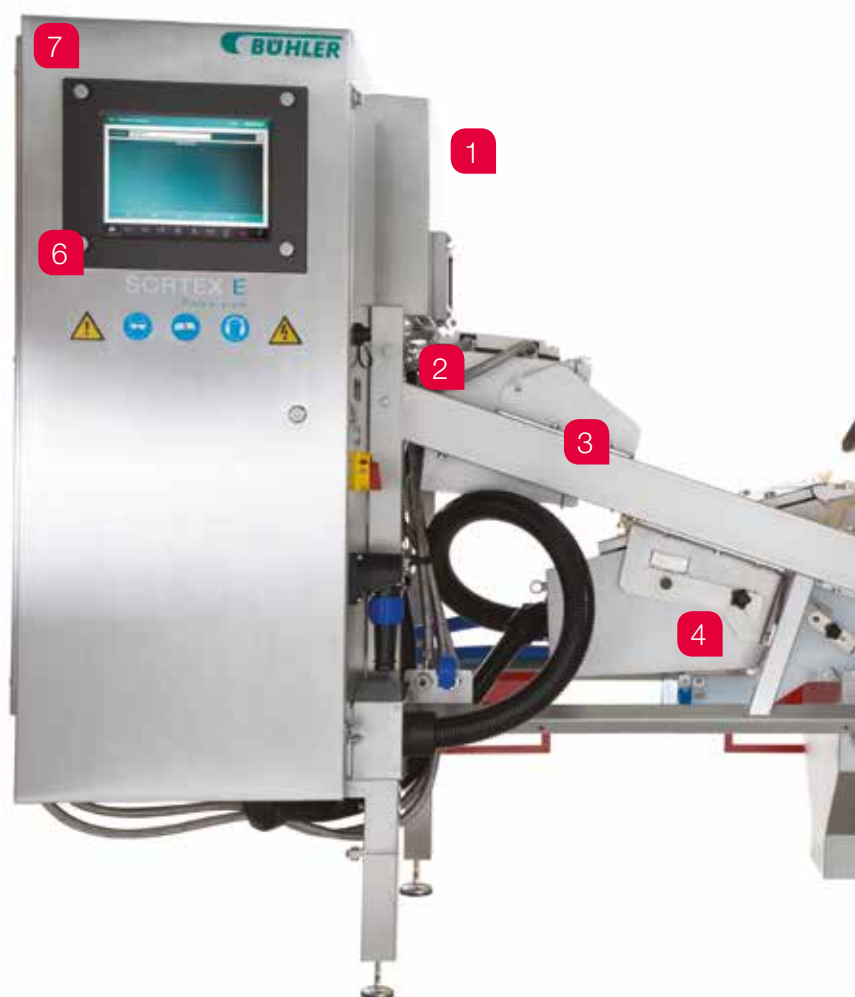
Custom built colour cameras remove unwanted colour defects from clear, blue, green and Jazz PET applications.

### 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.

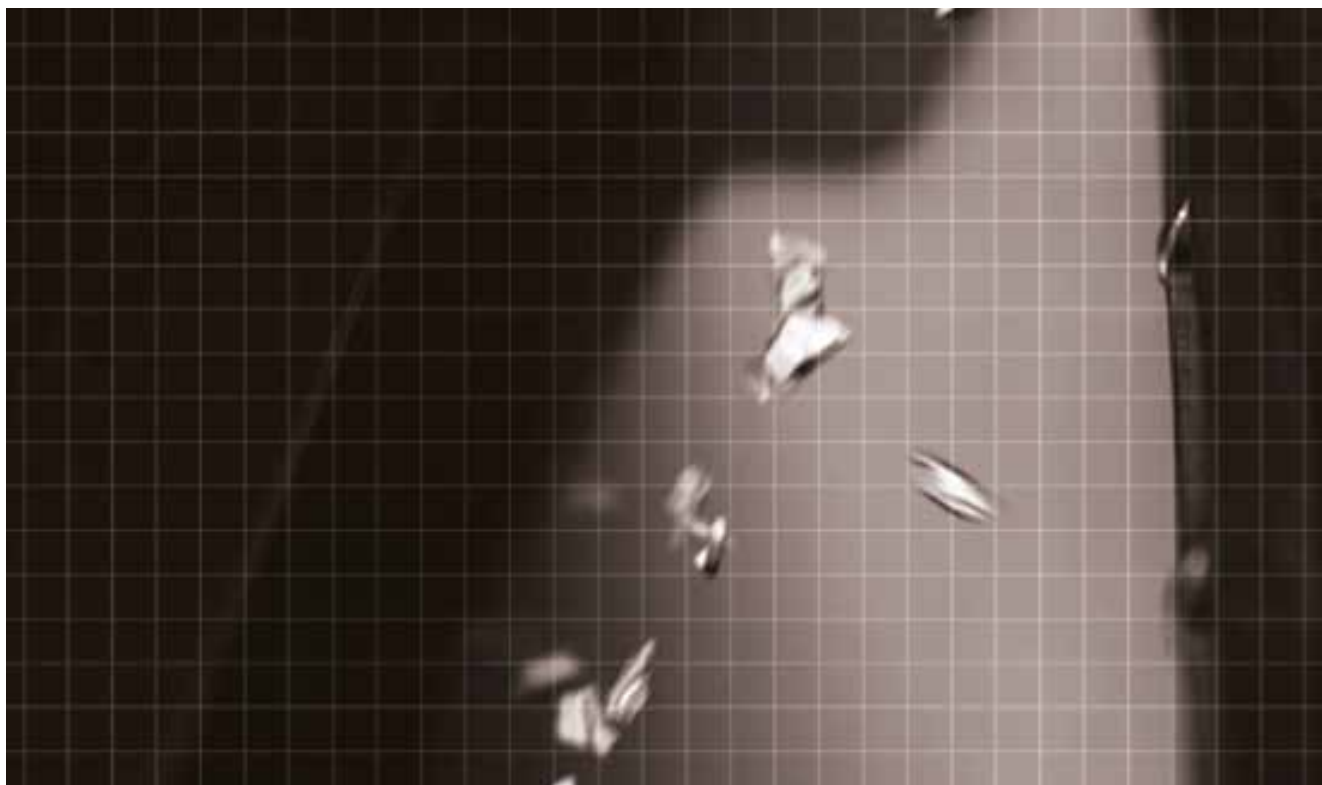
### 7 **Intelligent sorting modes**

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 transparent 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.





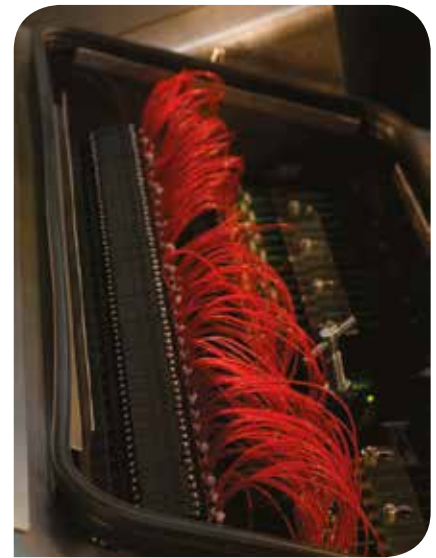
### **Patent pending unique lighting system**

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, polypropylene (including bottle caps) and foreign materials such as sticks and stones.



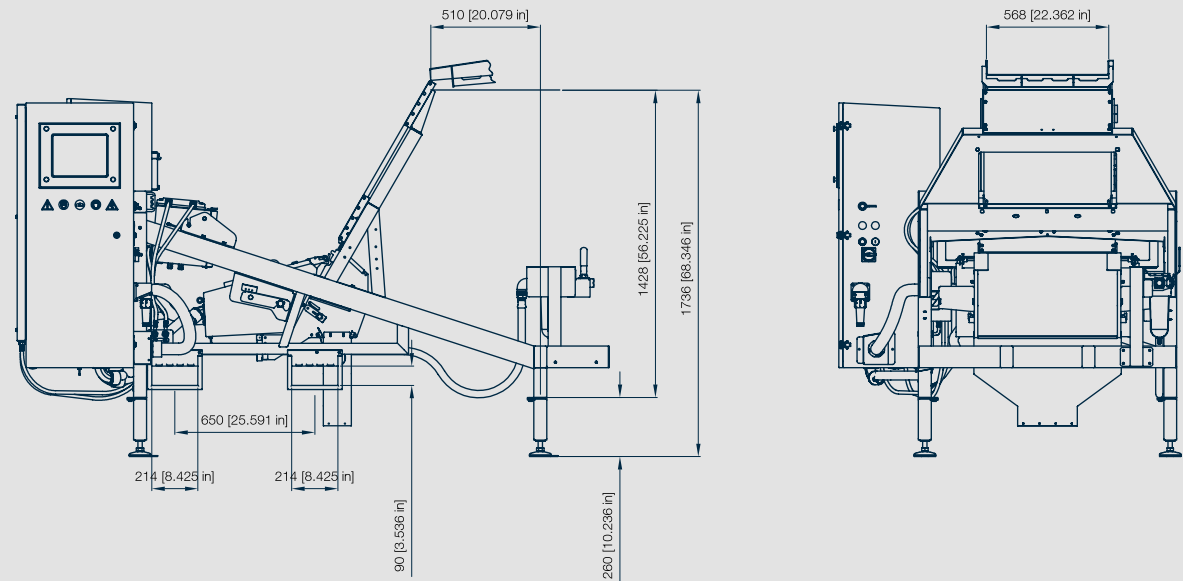
### **High resolution ejectors**

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 mm, in	Depth mm, in	Height mm, in	Weight 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.



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 plan - to cover those areas of primary concern, or select 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.

### **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.

### **AnywhereCare - Anywhere Health Check and Alerts**

The Anywhere 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

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