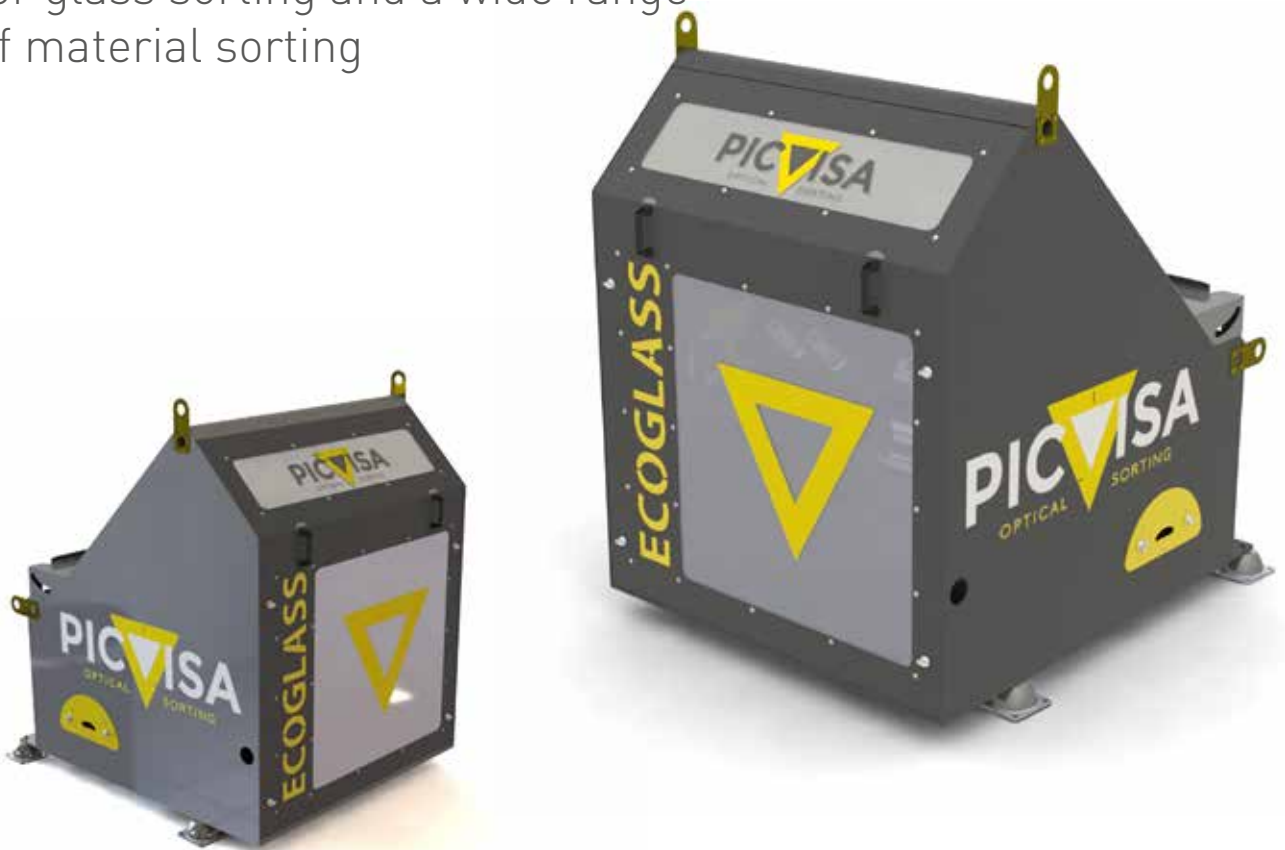


# PICVISA

OPTICAL SORTING

## ECOGLASS

**Optical sorting equipment**  
for glass sorting and a wide range  
of material sorting



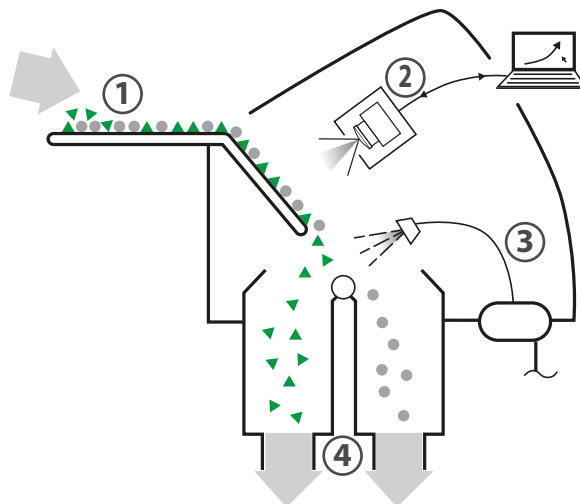
Wide spectrum **machine-vision**.

**Versatility, speed and precision** when identifying and separating materials according to their chemical composition, shapes and colours.

**Industry 4.0:** self-monitoring and connectivity data management and computer control.

## Machine vision technology and fast data processing.

- ① Vibratory feeder
- ② Machine-vision and sensors
- ③ Separation with compressed air
- ④ Separation chamber



### High resolution for:

- Machine vision and/or sensor identification.
- Ejection separation with compressed air.

**Wide variety of equipment configurations** depending on separation objectives and materials to be processed.

Applications and materials		Technologies*			
		VIS	NIR	EM	UV
Glass	Removal of impurities (CSP) and sorting of glass by colour	✓			✓
Municipal solid waste (MSW)	Glass recovery from compost or the rejects of compost refining	✓			
Slags. incineration bottom-ash	Glass and metals recovery	✓		✓	✓
Refuse-derived fuel (RDF)	Glass, plastics and metals recovery	✓	✓	✓	
Construction and Demolition waste (C&D)	Withdrawal of PVC and other impurities	✓	✓		
Minerals, ores, mining by-products	Recovery of glass, metals, aggregates, etc.	✓	✓	✓	
Minerals, ores, mining by-products	Purification and colour separation	✓		✓	✓
Metal recycling	Removal of impurities	✓	✓		
Other applications	Please check with PICVISA	✓	✓	✓	✓

\* Technologies applied individually or in combination: NIR = Near-Infrared spectrometry ; VIS = Visual light and colours ; EM = Electromagnetic sensors / induction: UV = Ultraviolet Light.

- High production capacity and availability under demanding industrial conditions.
- High recovery (efficiency) and purity rates of targeted materials.
- Short payback period.
- Versatility and flexibility when separating different materials with the same optical sorter.
  - Easy programming and reprogramming.
- Computer-aided calibration for high reliability and production stability.
- Easy maintenance and cheap spare parts.
- Direct online customer support service with remote connection.
- Real-time access to sorted material statistics (dedicated interface. online accessibility).
- Testing capacity with Customer materials at PICVISA's own test centre.\*\*

(\*\*) PICVISA provides its Customers. in Calaf (Barcelona. Spain). with 800 sqm test centre. fully equipped with mechanical and machine vision means. for a wide range of material sorting.

### Industry 4.0:

- Computer-aided calibration and control.
- Local and remote connectivity.

## High-resolution dvalve-block for pneumatic ejection: Standard (EG /SG) and Fines (SGF)

ECOGLOSS (EG and SG) product range	Model	Width	Amount of air jets	Air jet pitch
<b>STANDARD</b>	EG600	600 mm	118	5.2 mm
	EG1000	1000 mm	192	5.2 mm
	SG1500	1500 mm	240	6.2 mm
<b>FINES</b>	SGF600	600 mm	144	4.2 mm
	SGF1000	1000 mm	240	4.2 mm
	SGF1500	1500 mm	360	4.2 mm

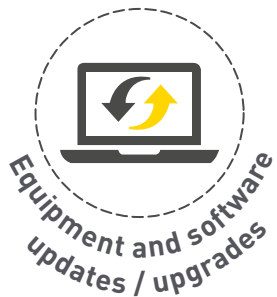
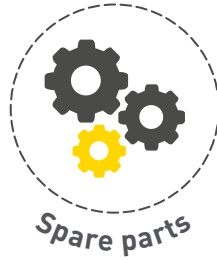
### Examples of air consumption and power of equipment

ECOGLOSS Glass sorting: hollow and container glass, cullet, flat glass, MSW glass, etc.

	Optical sorter	Material's features			Nominal throughput	Air consumption per valve-bloc		Power				
		Width (mm)	Infeed glass	Target material		Density (kg/m <sup>3</sup> )	Standard (EG/SG) (lpm/bloq.)	Fines (SGF) (lpm/bloq.)	EG: 1 v.-block	EG: 2 v.-blocks	SGF: 1 v.-block	Vibratory feeder
									(kW)	(kW)	(kW)	(kW)
<b>EG 600 (118 air-jets) / SGF 600 (144 air-jets)</b>	<b>600</b>	Container	CSP	1000	5,0	1000	1200	1.1	1.4	2.3	0.9	
	<b>600</b>	Container	Colour (<30 %)	1000	4,0	2000	2300	1.1	1.4	2.3	0.9	
	<b>600</b>	Flat glass	CSP	1500	5,0	1000	1200	1.1	1.4	2.3	0.9	
	<b>600</b>	MSW: 1st	Glass	750	2,0	2000	2300	1.1	1.4	4.5	0.9	
	<b>600</b>	MSW: 2nd	CSP	900	3,0	1000	1200	1.1	1.4	4.5	0.9	
	<b>600</b>	Fine glass	CSP	500	1,5	N/A	1200	N/A	N/A	2.3	0.9	
<b>EG 1000 (192 air-jets) / SGF 1000 (240 air-jets)</b>	<b>1000</b>	Container	CSP	1000	10,0	1500	1900	1.2	2.1	3.8	4.2	
	<b>1000</b>	Container	Colour (<30 %)	1000	8,0	3000	3800	1.2	2.1	3.8	4.2	
	<b>1000</b>	Flat glass	CSP	1500	10,0	1500	1900	1.2	2.1	3.8	4.2	
	<b>1000</b>	MSW: 1st	Glass	750	4,0	3000	3800	1.2	2.1	7.5	4.2	
	<b>1000</b>	MSW: 2nd	CSP	900	6,0	1500	1900	1.2	2.1	7.5	4.2	
	<b>1000</b>	Fine glass	CSP	500	3,0	N/A	1900	N/A	N/A	3.8	4.2	
<b>SG 1500 (240 air-jets) / SGF 1500 (360 air-jets)</b>	<b>1500</b>	Container	CSP	1000	15,0	2300	2800	1.6	3.1	5.7	3.8	
	<b>1500</b>	Container	Colour (<30 %)	1000	12,0	4600	5800	1.6	3.1	5.7	3.8	
	<b>1500</b>	Flat glass	CSP	1500	15,0	2300	2800	1.6	3.1	5.7	3.8	
	<b>1500</b>	MSW: 1st	Glass	750	6,0	4600	5800	1.6	3.1	11.3	3.8	
	<b>1500</b>	MSW: 2nd	CSP	900	9,0	2300	2800	1.6	3.1	11.3	3.8	
	<b>1500</b>	Fine glass	CSP	500	5,0	N/A	2800	N/A	N/A	5.7	3.8	

- Moisture is limited to 1% of the infeed material.
- Container glass or hollow glass includes bottles & jars, flaconnage and tableware.
- Flat glass may be issued from building & demolition waste, as well as car manufacturing & end-of-life vehicles (ELV) wastes.
- Glass issued from MSW may be treated by two optical sorters: 1st sorter ejects glass and 2nd sorter ejects CSP.
- CSP impurities: ceramics, stones and porcelain.
- Colour sorting considers 30% maximum content of the target colour.
- The "EG" model includes 1 electro-valve for every 2 air-jets (air-jet pitch of 5.2 mm) and the "SG" model includes 1 electro-valve per air-jet (air-jet pitch of 4.2 mm or 6.2mm).

# Design and manufacturing of machine vision and sensor-based sorting equipment



**PICVISA**  
OPTICAL SORTING

## Headquarters

C/Isaac Newton, 2 - 08280 Calaf  
Barcelona, Spain

Tel. +34 93 801 76 10

[info@picvisa.com](mailto:info@picvisa.com)

[WWW.PICVISA.COM](http://WWW.PICVISA.COM)

