

THE NEW GENERATION

ECOPACK

Optical sorting equipment
for a wide range of material sorting

PICVISA



We can sort it out.

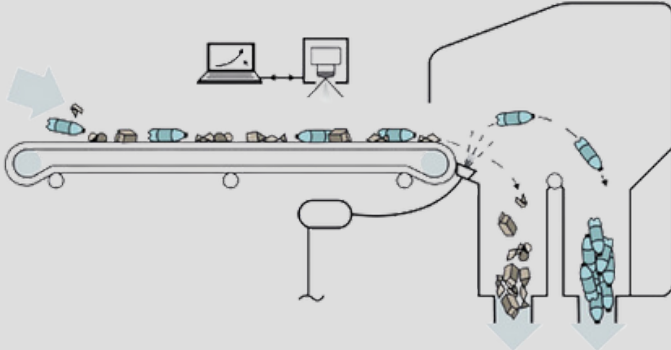
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Hyperspectral machine vision technology and fast data processing.

High resolution for:

Machine vision and/or sensor identification.

Ejection separation with compressed air.



- ① Feeding conveyor
- ② Machine-vision camera and sensors
- ③ Separation with compressed air
- ④ Separation chamber

Sorting of:

Plastic packaging



Plastic film (PEBD, PP,...)



PET/PE recycling



Wood recycling



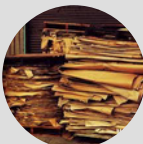
Textile



Construction and Demolition waste (C&D)



Paper & Cardboard (P&C)



Metal recycling



Refuse-Derived Fuel (RDF)



Other applications



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

APLICATIONS		Technologies			
		NIR	VIS	EM	AI
Plastic packaging	Polymer separation (PET, HDPE, LDPE, PP, PS, PVC, EPS, ABS) and beverage cartons	X	X		X
PET/PE recycling	Colour sorting	X	X		X
Plastic film (PEBD, PP,...)	Sorting by material type & color	X	X		X
Paper & Cardboard (P&C)	P&C recovery from a mixed stream	X	X		X
Refuse-Derived Fuel (RDF)	PVC and other impurities removal	X			
Construction and Demolition waste (C&D)	Recovery of wood and polymers	X	X	X	X
Wood recycling	Removal of impurities (polymers, P&C)	X		X	X
Metal recycling	Removal of impurities & sorting by color	X	X	X	X
Textile	Sorting by composition &/or color, removal of empurities	X	X		X

(*)Technologies applied individually or in combination: NIR = Near-Infrared spectrometry ; VIS = Visual light and colours ; EM = Electromagnetic sensors / Induction; AI = Artificial Intelligence.

For other applications please get in contact at info@picvisa.com

Features of ECOPACK include:



Brain "add on": artificial intelligence based on deep learning algorithms



High production capacity and availability under demanding industrial conditions.



High recovery (efficiency) and purity rates of targeted materials.



Versatility and flexibility when separating different materials with the same optical sorter.



Computer-aided calibration for high reliability and production stability.



Easy maintenance and standard off the shelf 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.**

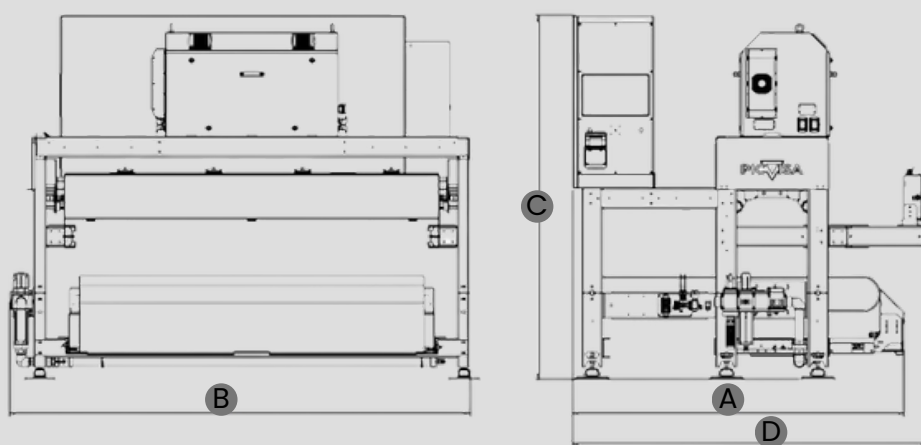


Short payback period.

(**) 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 5.0:

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



Aprox dimensions and total weight of equipment

Optical sorter	Width	A	B	C	D	Approx. weight
EP 1000	1.000 mm	1.923 mm	1.660 mm	2.110 mm	2.055 mm	1.000 Kg
EP 1500	1.500 mm	1.923 mm	2.175 mm	2.110 mm	2.055 mm	1.080 Kg
EP 2000	2.000 mm	1.923 mm	2.660 mm	2.110 mm	2.055 mm	1.166 Kg
EP 2500	2.500 mm	1.923 mm	3.175 mm	2.380 mm	2.055 mm	1.260 Kg
EP 3000	3.000 mm	1.923 mm	3.660 mm	2.540 mm	2.055mm	1.360 Kg

High-resolution valve-block for pneumatic ejection

Table of possible valve-block solutions

Valve-block resolution	Air jet pitch	Electro-valves / Air jets
Low Resolution - 1:2	16.7 mm	1 electro-valve for 2 air jets
High resolution - 1:1	8.3 mm	1 electro-valve for 1 air jet

Options

One or more NIR, VIS machine vision cameras or artificial intelligence.

High-resolution camera for small-sized elements.

Inductive sensors for metals.

High or very high blowing resolution valve-block.

Multi-channel: double or triple-track for simultaneous sorting of two or three material streams on a same optical sorter.

Design and manufacture of sensor-based sorting equipment
incorporating vision and artificial intelligence technologies.



On-site and remote
technical support



Spare parts



Training



Equipment and software
updates / upgrades



Second-hand
equipment



Renting / leasing
service



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