



POSIORTER



Positive sorting
High capacity
Suitable for a wide range of products
Careful product handling



Parcel & Postal

POISISORTER

The Principle

The POISISORTER is a horizontal, high speed sorting conveyor with full width, extruded aluminium carriers, which can carry a wide range of products.

The carriers are connected to the conveyor drive chains. Moulded divert shoes are mounted on the carriers. At the sort destination the shoes are diverted through 20 or 30 degrees, causing them to slide across the carriers and gently push the product positively into the output spurs. The number of shoes diverted depends on the length of each product. Available for single sided sorting and dual sided sorting. The dual sided sorting model has a pre-sort to direct the shoes to the side of the sorter corresponding with the output spur.

The POISISORTER requires no product aligning. Typical applications: Parcel & Postal sorting systems; receiving and shipping systems of Distribution; Cross-docking systems.

Product characteristics

The POISISORTER is suitable for a wide range of products and does not require a flat, stable product base like other sorters.

Product dimensions:	Min	Max
Length (mm)	150	1 500
Width (mm)	100	900
Height (mm)	20	700
Weight (kg)	0.5	50

Model range

Two basic models:	single/dual sided sorting
Max. product width (mm)	400 - 500 - 600 - up to 900
Frame width (mm)	1056 - 1156 - 1256 - to 1556

Speed

max 132 m/min with 30 degree divert,
max 180 m/min with 20 degree divert.

Sorter length

Max 170 meters.

Capacity

Depends on average product length, sorter speed, type of induct and the width of the products. For an average product length of 500 mm the maximum capacity will be:

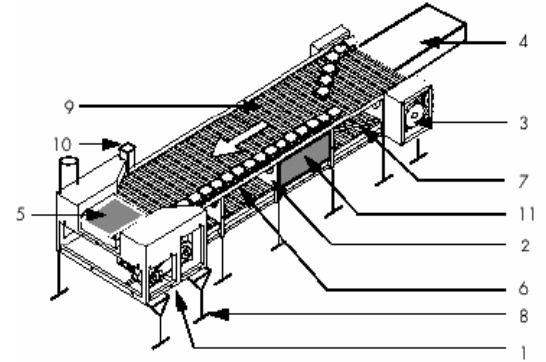
product width	
< 750 mm	8 000 products per hour
> 750 mm	7 150 products per hour

Sorter control

The sorting system will be controlled by a PLC or FSC (the PC based Flow System Controller developed by Vanderlande Industries). Each POISISORTER has a number of local control units:

- a drive control panel with motor control and a frequency inverter
- connection boxes at the drive end and at the take up end
- a Switch Control Unit in each divert switch frame

Safety devices of the POISISORTER; missing pin detection - broken shoe detection - slack chain detection – control unit healthy.



End drive with tension unit (1)

Shaft mounted motor reducer. Mechanical tension unit.

Typical driving power 7.5 - 22 kW

Bed frames (2)

Length (mm) 2 250 - 2 700 and 3 000

End take-up (3)

The end take-up contains a power take off for the charge belt.

Charge belt (4)

The charge belt conveyor has a special knife edge end-cap and is driven by the sorter end take up with a power take off.

Discharge unit (5)

Two types. For sorter systems with re-circulation a telescopic discharge belt conveyor is applied to compensate for the length change of the sorter when tensioning. The unit is driven by the sorter drive with a power take off. In systems without re-circulation a discharge gravity wheel conveyor is sufficient.

Divert switch frames (6)

Mounted inside the bed frames and contain the divert unit and the shoe guiding profiles.

Pre-sort assembly (7)

Only for dual sided sorting applications.

Supports (8)

Height adjustable supports are applied. For sorters above H = 2 000 mm a steel structure and platform is recommended.

Carrier mats (9)

The carrier mats include chain, wheels, carrier profiles and shoes.

Finish

Frames, drive, supports are epoxy coated in RAL 7001, silver grey.

Standard accessories

Oil lubrication unit (10), bottom and side covers (11).

Safety

This equipment design allows CE accreditation when installed within a system.

Operational conditions

Temperature range 0 - 40 degrees Celsius
Humidity Not condensing