

CENTRO DUAL SORTER

Sorting- and Distribution
Technology for plastic
Crates and Cartons



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General introduction

The **CENTRO DUAL SORTER** was especially conceived for sorting and distribution of plastic crates and cartons with a power of max. 8.000 packs per hour.

A major advantage of the dual sorter technology is due to a constant transfer width for containers with different weights.

At the beginning of every transfer process, the weight is defining the required transfer energy. By adaptation of the transfer energy to the container weight, linked with a movement in conveying direction while transferring, the Centro Dual Sorter produces a constant and accurate transfer width for filled and empty packs.

The **Centro Dual Sorter** works lateral to the conveyor section. The transfer can be carried out on available slat- or driven roller conveyors.

Because of its compact design, the required space of the Centro Dual Sorter is very small and a retro fitting in available lines is accomplishable without any efforts.

Mode of operation

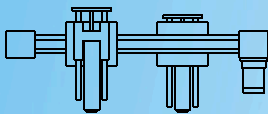
The system consists of two counter rotating, on one transport bar mounted transfer segments. The power transmission of the segments occurs from a servo drive. Both of the two transfer segments consist of a pneumatic cylinder with a roadbed and a transfer plate which is in contact with the packs during the sorting operation.

For every sorting operation one of the transfer plates will be deployed pneumatically and conducts the container during the operation with angular synchronism with the production speed.

At the same time the second segment (passive) will be set back in basic position, to reject the next container. This happens for every rejection operation.

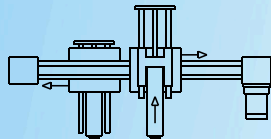
During the starting phase of the transfer movement, the weight of the pack is determined. Afterwards a dead weight depending, progressive acceleration of the crate is calculated by considering as performance data. This progress brings out the same transfer width between not filled and filled packs.

Graphical description of the rejection process



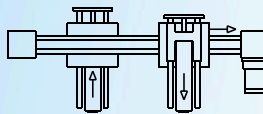
Starting phase

After the start signal, the left upper segment is driven in conveyor speed to the right side, at the same time the pneumatic controlled transfer movement occurs.



Transfer phase

After the container and weight calculation is finished, the calculated acceleration occurs. At the same time the passive segment, which is below, moves to the left side.



Ending phase

Shortly after the rejection process is finished, the next rejection can follow with the following segment below.

Main features

- Gentle weight compensated transfer
- Mass independent constant transfer width (adjustable)
- Out-of-position collision between the containers is possible
- Adjustable to different detection systems
- Automatic teach in of the transfer parameter (Teach In)
- Menu driven operation processor
- Adjustable distribution rate controlled also by jam switch
- Multi-distribution in a small space possible
- Left/right constructions change over on site

* smaller containers on request

Technical Data

Permanent operation capacity in units per hour	up to 7.000
Short time top performance in units per hour	up to 8.000
Maximum conveyor capability in meter per second	0,9
Maximum container weight in kg	25
Minimum height of the containers in mm	140*
Compressed air connection in bar	max. 14 min. 6
Rejection system (WxHxD) in mm	1030x625 x450
Control cabinet (WxHxD) in mm	500x250 x210
Weight incl. tabular frame in kg	approx. 120
Power supply voltage in V/AC/Herz	230/50 Hz



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