

SAFETY

Pallet separator and sliding end stop:

A fully automatic pallet separator is fitted at the picking side, which controls:

1. The separation of the pallet to be picked from the other pallets avoiding line pressure and assuring safety of the picking operation.
2. The stopping of the other pallets until the forklift operator has completely removed the unloaded pallet from the channel.
3. A sliding deceleration in front of the end stop ensuring, that the next pallet is gently stopped.

The end stop protects the rollers from being damaged by the forks of the fork lift.

Pallet Separation:

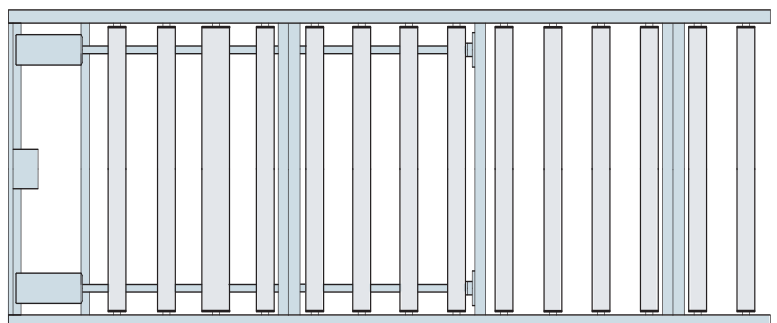
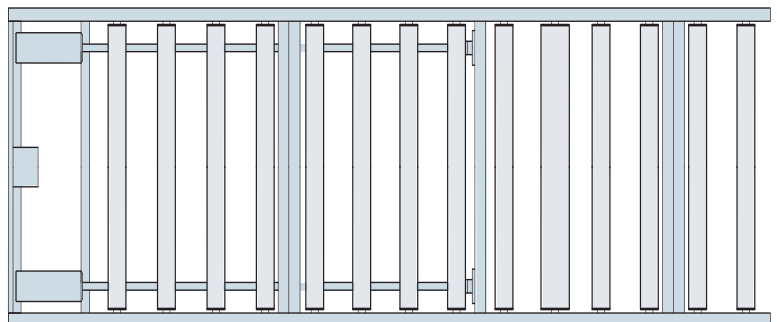
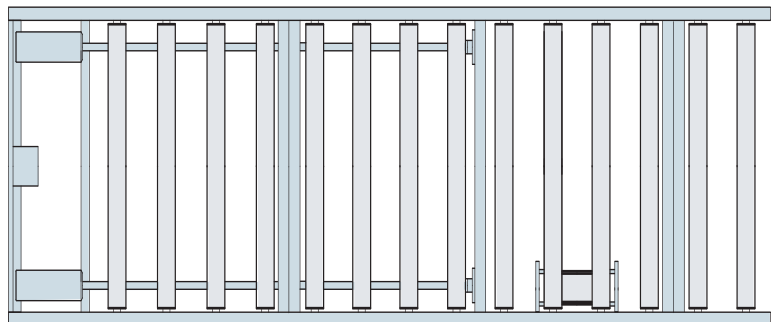
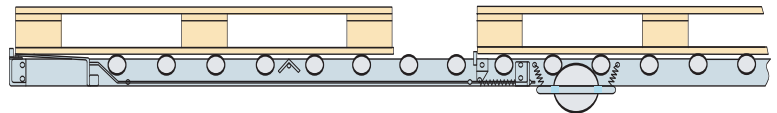
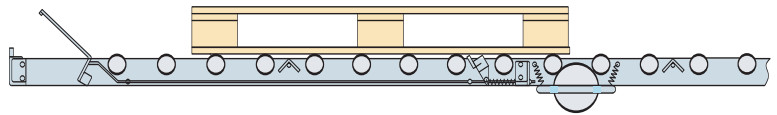
The separation of the first two pallets is carried out by means of accelerating the first pallet for a short time over a defined distance, i.e. getting the pallet out from the speed control of the Brake Rollers. This acceleration energy has to be nullified again, which can be achieved by means of the below-mentioned methods:

Separator with normal braking:

This method is used in connection with a sliding end stop (usually when fork lift picking is used).

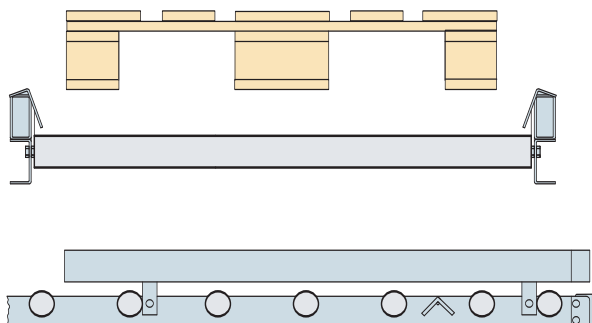
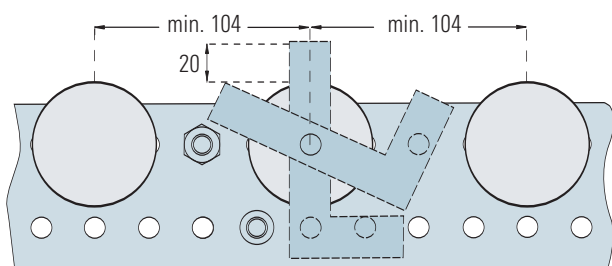
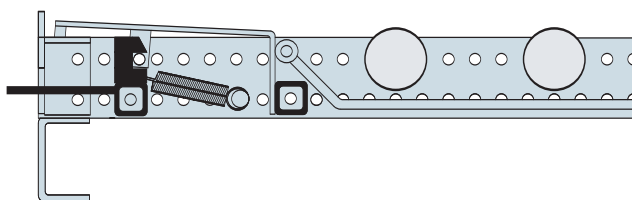
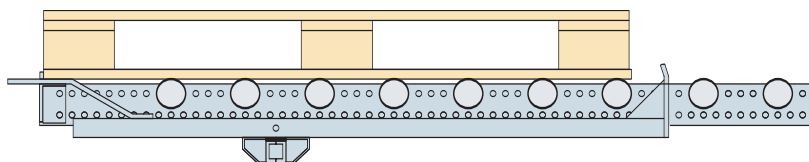
Separator with dynamic braking:

With dynamic braking a brake roller is just in front of the end stop. This ensures, that the pallet reaches an exact defined end position, which is required in an automated warehouse.



EUROROLL-PALLET ROLLER CONVEYORS

Safety Devices



Balance Separator:

Especially for Roller Tracks with only 2, 3 or 4 pallets a Balance Separator can be fitted instead of a conventional automatic Pallet Separator. When this method is used the length of the roller conveyor is only 50 mm longer than the number of pallets x pallet length. One or more brake rollers are necessary at a roller track length of 3 pallets and more. The Balance Separator is operated either by hand or foot pedal.

Locking of the Separator with a catch:

This arrangement is useful when a pallet is picked empty. After the empty pallet is removed the separator is unlocked by operating the catch, the next pallet rolls forward to the first pallet spot. When the first pallet stops at the end stop the catch is locked again.

Push-back Stop:

The push-back stop **SKR** avoids, that the pallet is pushed back again against moving direction.

Entry Guides and Roller Protection Profile:

At the loading side a heavy duty angle profile is fitted to avoid a damaging of the rollers by fork lifts, while the entry guides ensure a central positioning of the pallets. These are not useful, when the installation is fully automated. However, then a heavy duty roller is recommended.