ANSIR SYSTEMS

Transport Conveyor

Tech Specs

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Function

The transport conveyor is designed to transport baggage throughout the terminal smoothly and efficiently. It is designed to handle product horizontally and at any degree of incline / decline up to a maximum 18° angle where elevation changes are required. General transport conveyor is made up of several different modules bolted together to form a single conveyor. Whilst the design of the conveyor modules has been standardised, it allows for many different configurations of length, top of belt height and incline / decline angle. Low side panel height sections are also available to suit loading and unloading conveyor as well as collector conveyor configuration.

Features

- End rollers with profiled finger guards to eliminate trap points for personnel and product.
- Internal bearings are fitted to head, tail and take-up rollers for ease of maintenance and quick changeover.
- Final drive between the gearbox and drive pulley is via a direct shaft mounted gearmotor.
- Cut outs are provided in the conveyor frame to allow for rollers to be removed from the side.
- Screw type belt take-up design to allow adjustment from one side.
- Can be floor mounted to as low as 300 mm top of belt.

Head / Tail Module

- Is used at both ends of the conveyor and houses the end rollers.

Drive Unit

- Accommodates the motor gearbox and provides the drive and take-up of the conveyor belt.

Intermediate Section

- Standard sections are 2200 mm and 1100 mm long however, special length sections are made to suit the required conveyor length.

Breakover or Decline

- Used when a change to an incline is required and provides a smooth transition due to the large 3000 m radius.

Technical Specifications

Intermediate Side Frames

The conveyor frame is typically 495 mm H x 40 mm W channel construction formed from 3 mm thick powder coated mild steel. 185 mm H frames are used for collector, loading and unloading conveyors and areas of merging with another conveyor.

Slider Beds

The slider bed is constructed from 3 mm galvabond mild steel set between the channel frames and rigidly braced with galvabond mild steel cross braces.

Side Guides (used on drive and 185mm high intermediate sections)

Constructed from 3 mm powder coated mild steel to form a side guide of a height of 300 mm from top of belt. Side guides may be installed to one or both sides of the conveyor as required. They are rigidly fastened to the conveyor and reinforced at no more than 1.2 metre nominal centres. Guides are installed in such a manner as to eliminate any interference with baggage flow and to prevent damage to the baggage.

Drive Frame

5 mm thick mild steel formed channel 290 mm deep with 40 mm flanges.

Drive Shaft

50 mm bright steel machined to suit the required gearbox size. The complete drive roller and shaft assembly is mounted to the conveyor frame utilising UC 210 precision bearings and 4 bolt housing.

Drive Pulley

Constructed from 168 mm diameter, 7 mm nominal wall thickness mild steel tubing. 5 mm thick polyurethane lagging provides an overall diameter of 178 mm. 10 mm thick end plates with WH20 taper lock housing and 2012-50 taper lock bushes connect it to the drive shaft.

Take-up Roller

Machined crowned 90 mm diameter 6 mm nominal wall thickness mild steel tubing with UCS208 press fit, internally mounted, grease packed, sealed for life, precision bearings that mount to a non rotating 40 mm bright steel shaft.

Take-up

Belt take up is screw type with up to 300 mm of adjustment (minimum to maximum}, a cross chain connection between the 16 mm threaded rod take up bolt allows adjustment to be performed from either side.

End / Snub Rollers

Machined crowned 90 mm diameter 6 mm nominal wall thickness mild steel tubing with UCS208 press fit, internally mounted, grease packed, sealed for life, precision bearings that mount to a non rotating 40 mm bright steel shaft.

Return Rollers

Return rollers are 60 mm in diameter with 1.6 mm thick wall galvanized steel tubing equipped with precision, 250 series ball bearings mounted on 11 mm hexagonal non rotating shafts. They are spaced at no more than 2.2 metre nominal centres.

Breakover

Construction is the same as per standard intermediate side frames and slider beds. A heavy duty return roller is used at the change of belt direction that is 60 mm in diameter with 5 mm nominal wall thickness mild steel tubing utilising UCS205 press fit, internally mounted, greased packed, sealed for life, precision bearings that mount to a non rotating 25 mm bright steel shaft.

Supports

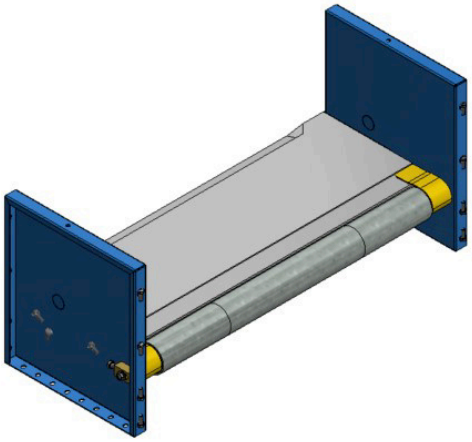
Conveyors are equipped with floor mounted supports spaced at no more than 2.2 metre centres with adjustable feet for accurate levelling.

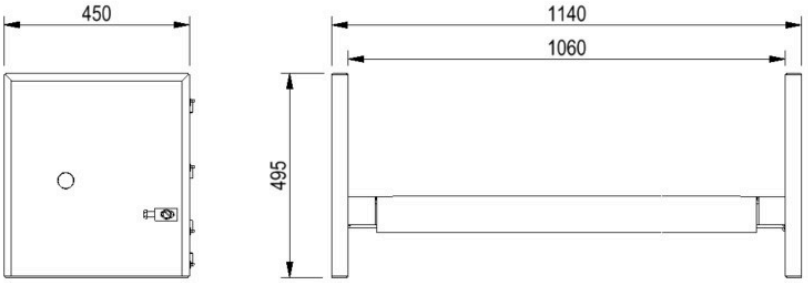
Belting

To suit individual projects. Typically smooth top belting is used on collector conveyors.

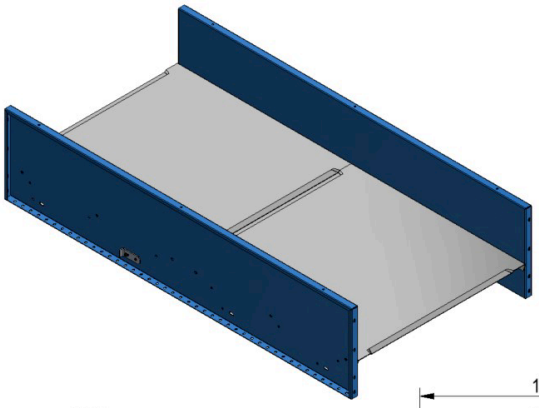
General Dimensions

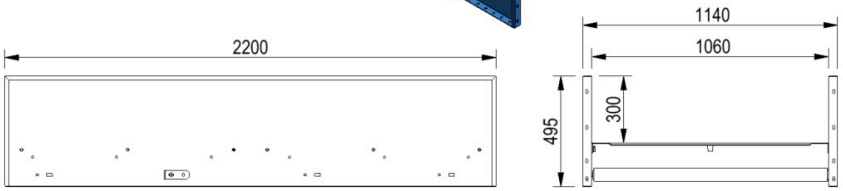
Intermediate Module





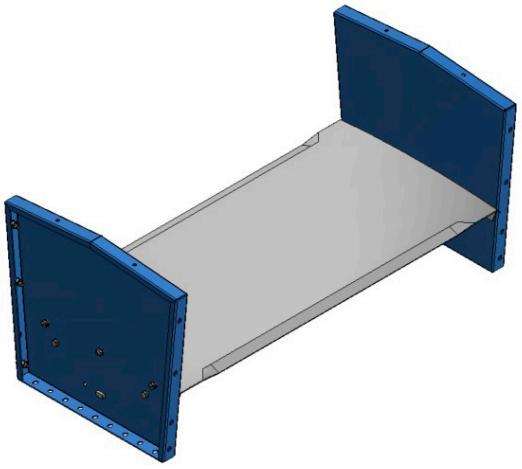
Drive Unit Module

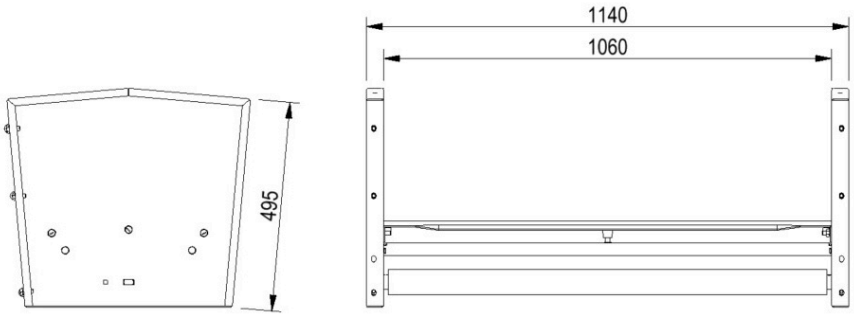




General Dimensions

Breakover Module (10° shown)





Drive Unit Module