

Transport Conveyors



Function

General transport conveyor is designed to transport both inbound and outbound baggage throughout the terminal smoothly and efficiently. It is typically installed horizontally but is also designed to handle product at any degree of incline up to a maximum angle of 18° where elevation changes are required.

General transport conveyor is made up of several different modules bolted together to form a single conveyor:

Head / Tail module:	Used at both ends of the conveyor housing 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 2200mm and 1100mm long however special length sections are made to suit the required conveyor length.
Break over:	Used when a change to and incline or decline is required and provides a smooth transition due to the



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 conveyors as well as collector conveyor configuration.

Features

Certain good practices have been established, these include:

- 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 roller to be removed from the side.
- Screw type belt take-up designed to allow adjustment from one side.
- Can be floor mounted to as low as 300mm top of belt.
- Modular components for flexibility in design.

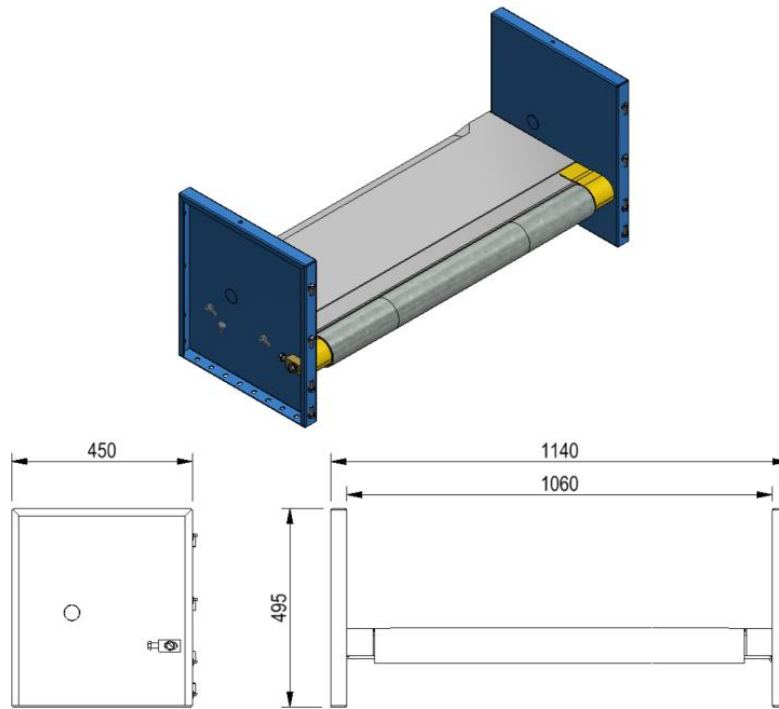
Specifications

Equipment	Description
Intermediate Side Frame	The conveyor frame is typically 495mm H x 40mm W channel construction formed from 3.0 mm thick powder coated mild steel. 185mm H frames are used for collector, loading and unloading conveyors and areas of merging with another conveyor.
Slider Bed	The slider bed is constructed from 3mm 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 3.0 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 not 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	5mm thick mild steel formed channel 290mm deep with 40mm flanges.
Drive Shaft	50mm 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.

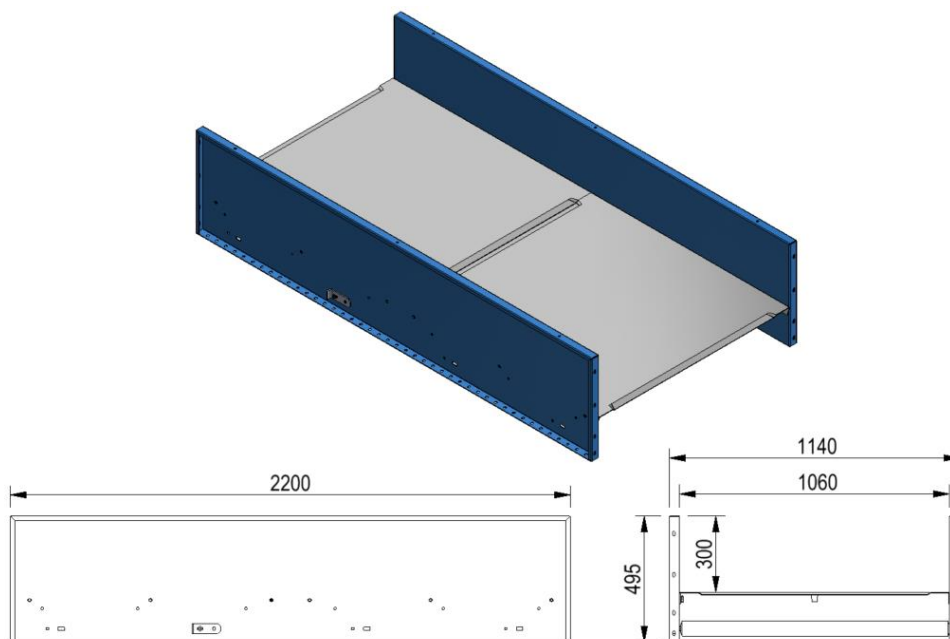


Equipment	Description
Drive Pulley	Constructed from 168mm diameter, 7mm nominal wall thickness mild steel tubing. 5mm thick polyurethane lagging provides an overall diameter of 178mm. 10mm thick end plates with WH20 taper lock housing and 2012-50 taper lock bushes connect it to the drive shaft.
Take Up Roller	Machined crowned 90mm diameter 6mm 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 40mm bright steel shaft.
Take-up	Belt take up is screw type with up to 300mm of adjustment (minimum to maximum), a cross chain connection between the 16mm threaded rod take up bolt allows adjustment to be performed from one side only.
End / Snub Rollers	Machined crowned 90mm diameter 6mm 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 40mm 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.
Break Over	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 60mm in diameter with 5mm 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 25mm 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 horizontal conveyors and Long Groove pattern (LG) for incline and declines over 5 degrees.

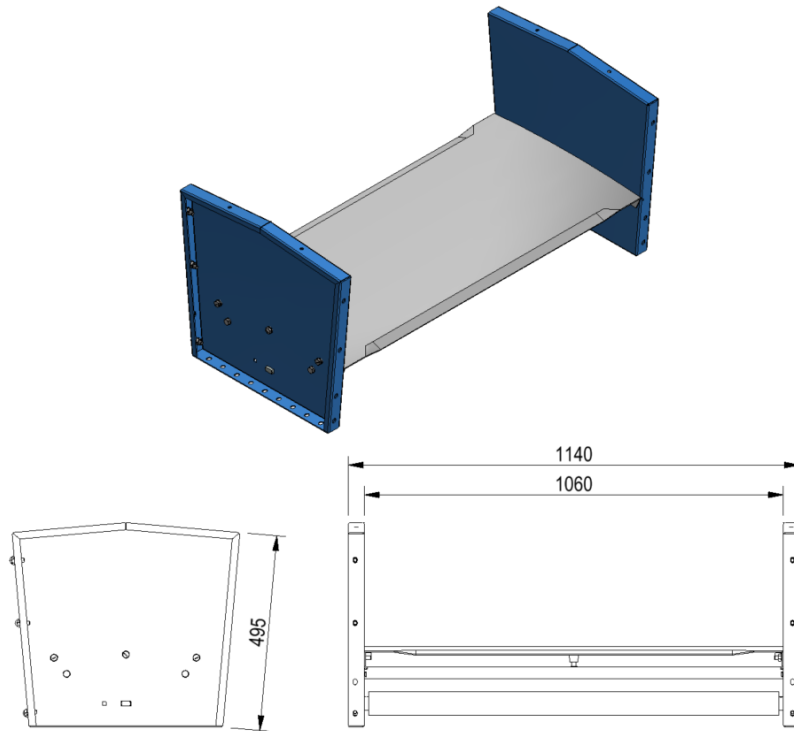
General Dimensions



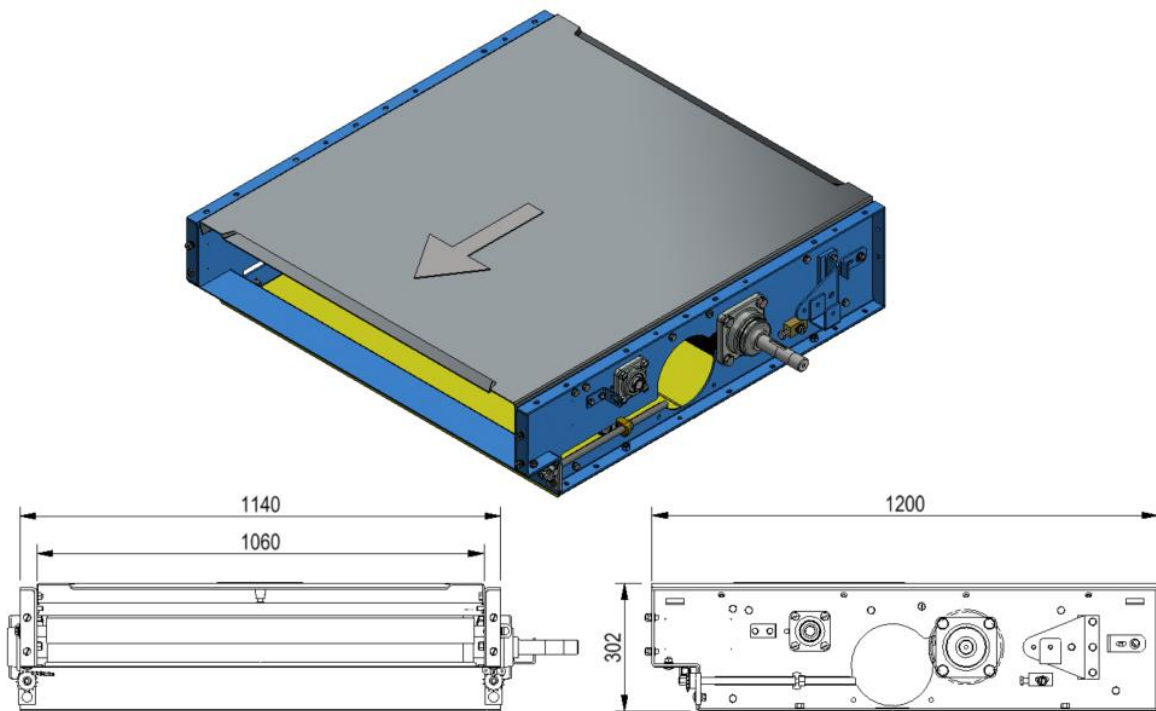
Head / Tail Module



Intermediate Module



Breakover Module
(10° shown)



Drive Unit Module