



RIGHT ANGLE DECKS

Function and Configuration:

The function of the right angle deck is to transfer ULDs in longitudinal and lateral direction and vice versa. Depending on the conveyance direction, the hoist mechanism raises the roller deck as the wheel deck is lowered keeping the ULD at the same conveyance level in order to transfer the ULDs in the lateral direction and vice versa for a longitudinal transfer.

10ft Right Angle Transfer Deck Technical Data

Dead weight: Approximately 3,680kg

Capacity: 6,800kg

System Height: + 508mm

Length: 3,450mm

Width Overall: 2,700mm

Distance Between Rollers: 295.3mm

Roller Diameter: 133mm

Pitch of Roller Chain: 19.05mm

Distance of Wheels: 293.7mm / 309.5mm

Diameter of Wheels: 150mm

Pitch of Chain: 5/8"

Number of Rollers: 9

Number of Wheel Rows: 8

Transfer Speed: 18m / minute

Deck Drive: 1.1kW

Hoist Drive: 0.55kW

The right angle deck consists of three frames as follows:

Wheel Deck Frame

The wheel deck frame consists of a steel structure with eight special shaped U-channels. The U-channels are cross connected by steel members to provide a rigid frame. The transfer wheels are 150mm in diameter and are installed in the U-channel between the full width rollers. Centre to centre distance at the wheels is 309.5mm maximum. Each second row of wheels is linked by means of chains 5/8" and double spurred sprockets, which are an integral form polyurethane. Treadplates are installed around the wheels. The treadplates have non-skid surfaces to minimise the risk of slipping. The wheel

frame is supported on four lifting units and is stabilised by tie rods. The deck is driven by a high efficiency shaft gear motor with disc brake. The motor is used to drive the roller and the wheels. A manual clutch is installed at the gear output shaft to enable a manual transfer of ULDs by disconnecting the roller deck gear motor.

Base Frame

The base frame consists of a steel structure that is bolted (by means of anchor bolts) to the floor and carries the deck drive and lifting unit.

Roller Frame

The roller frame consists of a steel structure with channels on each longitudinal side. The channels are cross connected by steel members to provide a rigid frame. The roller frame rests on four lifting units and is stabilised by tie rods. The roller deck is equipped with nine full width rollers, which run in heavy duty ball bearing flanged housings. The rollers are linked by means of chains (5/8" heavy duty roller chain) and double simplex sprockets, placed in the channel in order to apply the drive to each roller. The sprockets and chain are engaged at 180 degrees.

