



CONVEYOR COLLECTION
TODAY'S PRODUCTS,
TOMORROW'S ENGINEERING

Pallet Handling Conveyors & Conveyor Systems

**Including:
Standard Range
Customised Range**



PALLET HANDLING—STANDARD RANGE

TANGENTIAL CHAIN DRIVEN POWERED ROLLER



The Riverbank Straight Pallet Roller Conveyor is designed for the transportation of Euro-pallet sizes as well as the popular Chep type 1200 x 1000mm pallet with unit loads of up to 1500kg. These heavy duty conveyors are of modular construction and can be combined with a wide range of pallet handling equipment (shown over the page) forming a complete pallet handling system. The sides are constructed of 'C' section allowing for cabling to be concealed behind a fascia and chains are also fully enclosed giving maximum safety. Rollers are driven tangentially by $\frac{3}{8}$ chain in a fully enclosed side channel. The system offers minimal backlash and easy tensioning without having to remove guards.

Standard Specification

Inside Frame:	1152mm
Rollers:	80mm diameter Zinc plated at 150mm pitch
Sides:	4mm mild steel folded
Guards:	3mm mild steel folded
Minimum height:	400mm Top of roller
Speeds available:	12m/min and 18m/min
Loads:	1500kg per Pallet, 4500kg per Drive
Finish:	Powder coated to RAL 9006 silver/grey

Our conveyors are despatched in modular assembled form, assuring minimum installation time on site.

Function of Operation—This conveyor may be used in transportation mode, for an indexing accumulator or single units for Zero Pressure Accumulation.

Transportation—Modules are linked together with one drive unit powering up to 12m. The conveyor would normally be continually running, only stopping if the discharge end is full or the system is stopped. The control of the system will limit the total load on any such run to a maximum load of 5000kg.

Indexing Accumulation—Pallet will feed up to a photoelectric cell and stop. When the next pallet is input the two move forward together stopping when the second pallet breaks the photoelectric cell again. In this way pallets can be accumulated.

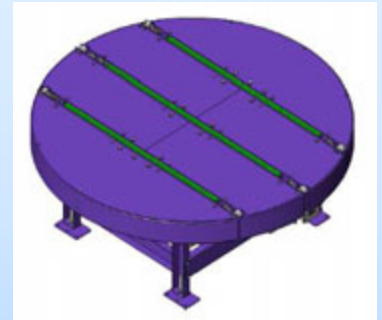
Zero Pressure Accumulation—Pallets feed down conveyors up to a photoelectric cell on last position, the drive stops on this station. The next pallet feeds down conveyors to position 2, this drive then stops until position 1 pallet is removed. The drive then starts and conveys the pallet to last position.

STANDARD PALLET HANDLING RANGE



Turntables: These modules are designed to change the direction of pallet from and angle of 90 to 180 degrees in the same orientation.

- Rotation angle of 90 to 180 degrees
- 147 pallets per hour rotating 90 degrees
- 2 rotation speeds of 2rpm and 4rpm
- Conveyor speeds of 12m/min and 18m/min
- Pallet dimensions 800/1000 L/R
- 900mm Chain centres (Chain Turntable only)



Transfers: These transfers offer exceptional support for pallets during the transfer operation. The following modules combine the features and benefits of the roller systems and chain conveyor in one unit.

Chain Transfer

- ◆ 150mm roller pitch
- ◆ 3mm thick steel rollers with steel sprockets
- ◆ 3/4" pitch flat sided chain
- ◆ Types:

- Single handed transfer to transfer unit
- Single handed extended transfer to transfer unit



Double Transfer

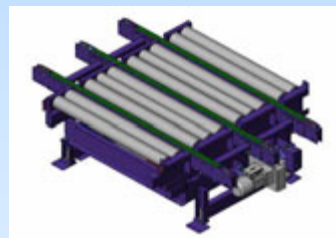
These modules are available to suit the standard pallet conveyor widths.

- ◆ 150mm roller pitch
- ◆ Bi-directional control available
- ◆ Conveyor speeds of 12m/min and 18m/min
- ◆ Maximum pallet weight 15000kg



Centre Transfer

All the benefits as above with the additional benefit that pallets can be received and transferred in either direction



Roller Transfer

Roller Transfers are a self contained unit, which can be fitted to a new or existing chain conveyor straight. The pop-up roller is powered by 2 motorised rollers.

- ◆ Tangential chain drive
- ◆ 4mm thick side channels
- ◆ 3 and 5mm thick roller options
- ◆ 150 roller pitch



Chain Conveyor Straight

These modules are available in two and three chain versions. Chain tensioning is quick and easy with no requirement to remove any guards.

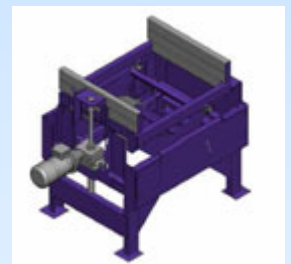
- ◆ 1500kg pallet load capacity
- ◆ 4mm thick side channels
- ◆ 3/4" pitch flat sided linked chain running on low friction, hard wearing polymer guide strips
- ◆ Ability to run cables and pneumatics in side channels
- ◆ Chain in same lateral position on each module giving a smooth clean appearance and aiding cable runs
- ◆ Hollow crossties to enable cables to run from one side of the conveyor to the other



Beam Lift Assembly

The beam lift assembly is designed to lift pallets 200mm above the chain conveyor. There are 2 standard types, low and high. Low types range from 650mm to 800mm top of chain, the high type beam lifts range from 850mm to 1000mm top of chain height.

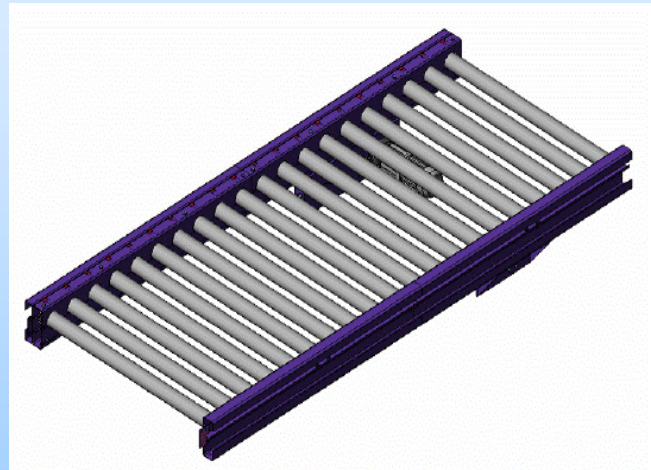
- ◆ Low and high type available
- ◆ To suit 2 strand chain conveyor
- ◆ 200mm Pallet lift
- ◆ Maximum pallet weight 15000kg



ROLLER CONVEYOR STRAIGHT

A robust pallet roller conveyor system. Rollers are driven tangentially by 5/8" chain in a fully enclosed side channel. The systems offers minimal backlash, easy tensioning and a 150mm roller pitch. With a load capacity of 1500kg per pallet the straight modules are available to handle up to 4500kg total conveyor load.

- ◆ Tangential chain drive
- ◆ Option of steel or polymer sprockets on rollers
- ◆ 4 mm thick side channels.
- ◆ 3 and 5 mm thick roller options.
- ◆ Chain tensioning done quickly without removing guards.
- ◆ 150mm roller pitch.
- ◆ Ability to run cables in non-drive channel. Fascia to close section of.
- ◆ Ability to fit photocells anywhere along length via clamp brackets.
- ◆ Soft start and inverter motor options available.



Heights

Range of heights available from 400 - 900mm
(Top of Roller)

Motor Type

0.37, 0.55, 1.1 and 1.5 kW available .

Motor Options

No Brake - No Inverter
Braked - No Inverter

Chain

5/8" pitch simplex chain

Lengths Available

1050 to 6000mm in 150mm increments

Pallet Size

1000mm L-R

Speeds Available

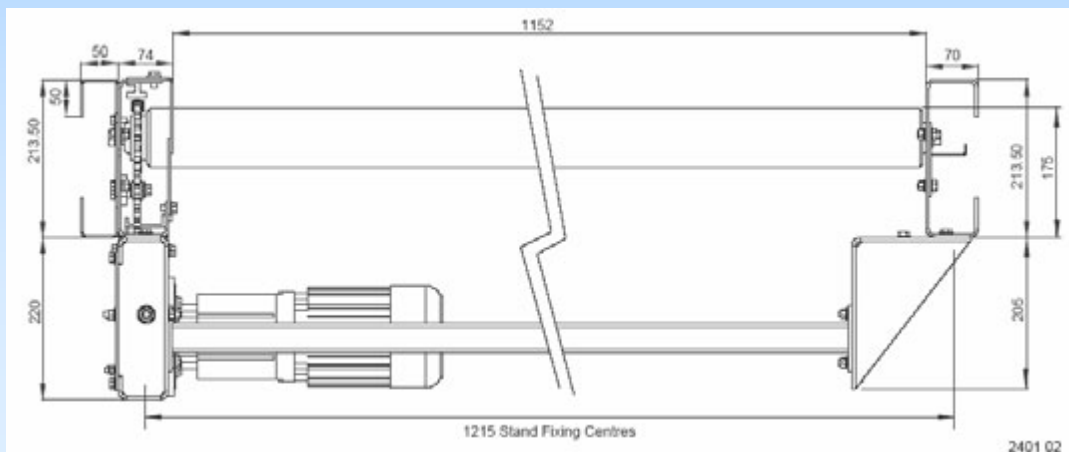
12m/min and 18m/min available

Electrical Power

Motors should be connected to 415V 3-phase, 50Hz supply.

Load Capacity	12m/min Motor Power (kW)	Full Load Current (A)
1500kg	0.37	0.95
3000kg	0.55	1.4
4500kg	1.1	2.8

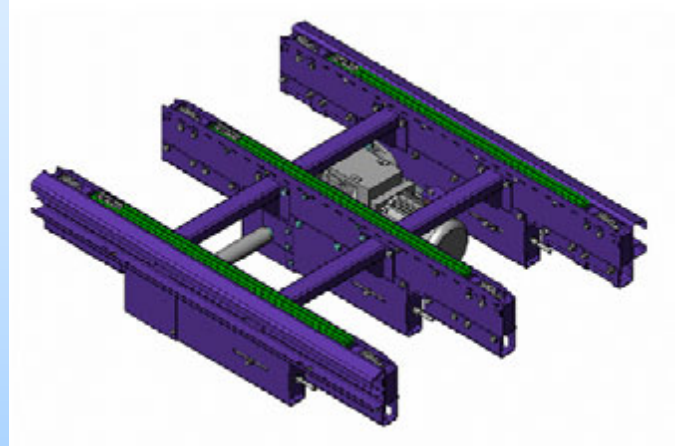
Load Capacity	18m/min (kW)	Full Load Current
1500kg	0.55	1.4
3000kg	1.1	2.8
4500kg	1.5	3.6



CHAIN CONVEYOR STRAIGHT

3/4" pitch flat sided linked chain provides a strong supporting surface to convey pallets up to 1500kg. These modules are available in two and three chain versions. Chain tensioning is quick and easy with no requirement to remove any guards.

- ◆ 1500kg pallet load capacity
- ◆ 4-mm thick side channels.
- ◆ 3/4"pitch flat sided chain running on low friction, hard wearing polymer guide strips.
- ◆ Ability to run cables and pneumatics in side channel.
- ◆ Chain in same lateral position on each module. Giving a smooth clean appearance and aiding cable runs.
- ◆ Hollow crossties to enable cables to run from one side of the conveyor to the other.



Heights

Range of heights available from 375 - 925mm (Top of Chain)

Motor Type

0.75, 1.1, 1.5, 2.2, 3.0 kW available .

Motor Options

No Brake - No Inverter
Braked - No Inverter

Chain

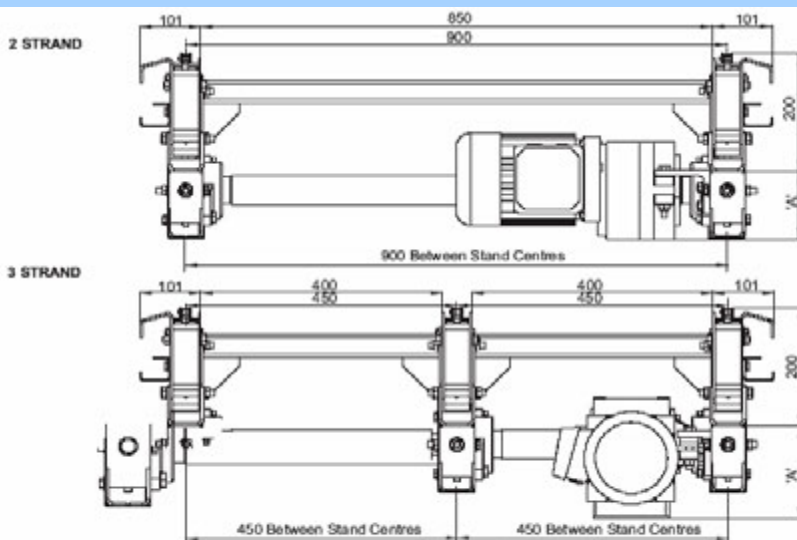
3/4" pitch simplex chain

Lengths Available

1300 to 3600mm in 50mm increments

Load Capacity	12m/min Motor Power (kW)	Full Load Current (A)
1500kg	0.75	2.0
3000kg	1.5	4.2
4500kg	2.2	5.9

Load Capacity	18m/min (kW)	Full Load Current
1500kg	1.1	3.2
3000kg	2.2	3.9
4500kg	3.0	7.2



Load Capacity (kg)	Dimension 'A' (mm)	
	2 Strand	3 Strand
1500	113.5	156
3000	134	181
4500	159	221

Pallet Size

1200mm L-R

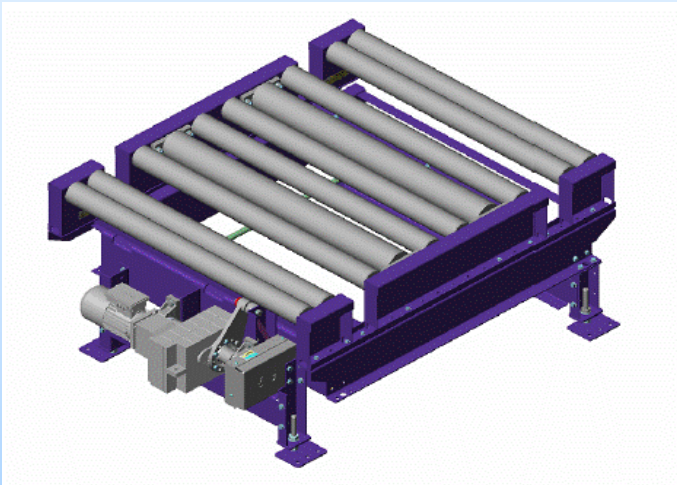
Speeds Available

12m/min and 18m/min available

Electrical Power

Motors should be connected to 415V 3-phase, 50Hz supply.

ROLLER TRANSFER



Roller transfers are a self contained unit, which can be fitted to a new or existing chain conveyor straight. The pop-up roller is powered by two motorised rollers. With a nominal roller pitch of 150 mm for all pallet types, these transfers offer exceptional support for pallets during the transfer operation.

- ◆ Tangential chain drive
- ◆ 4 mm thick side channels.
- ◆ 3 and 5 mm thick roller options.
- ◆ 150mm roller pitch.

Heights

Range of heights available from 500 - 1100mm (Top of Roller)

Motor Type

0.18 kW available .

Pallet Size

800/1000mm L-R

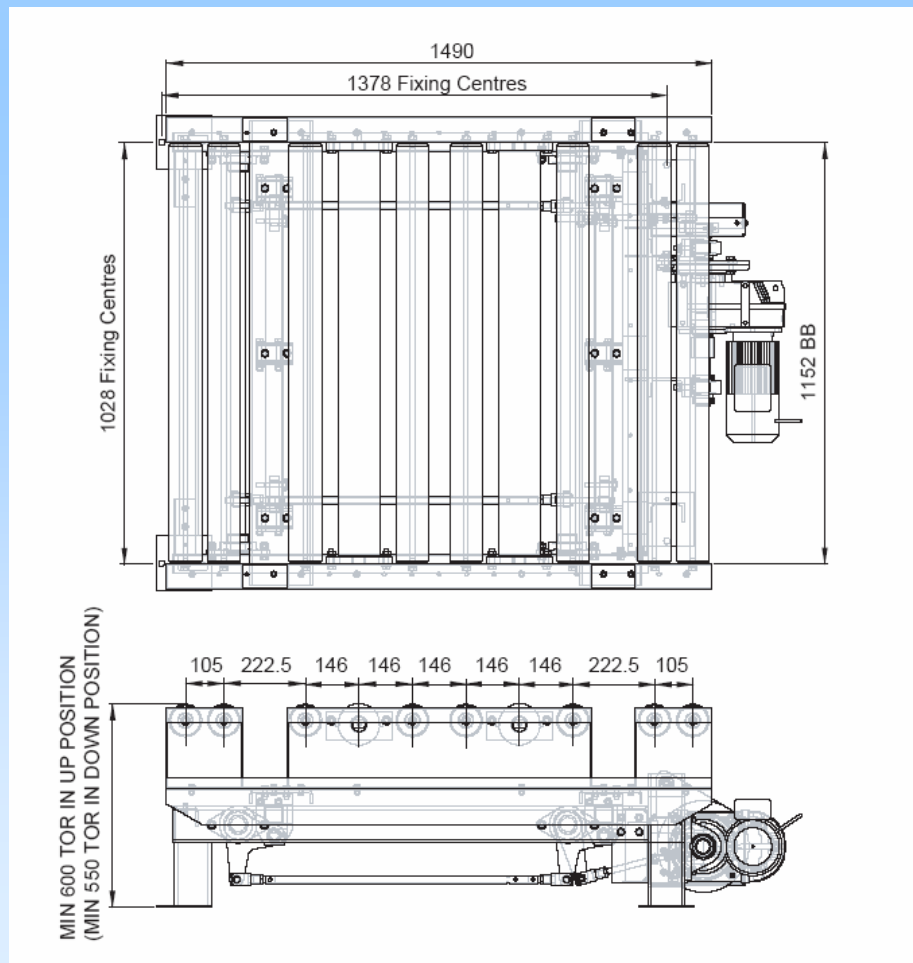
Speeds Available

12m/min and 18m/min available

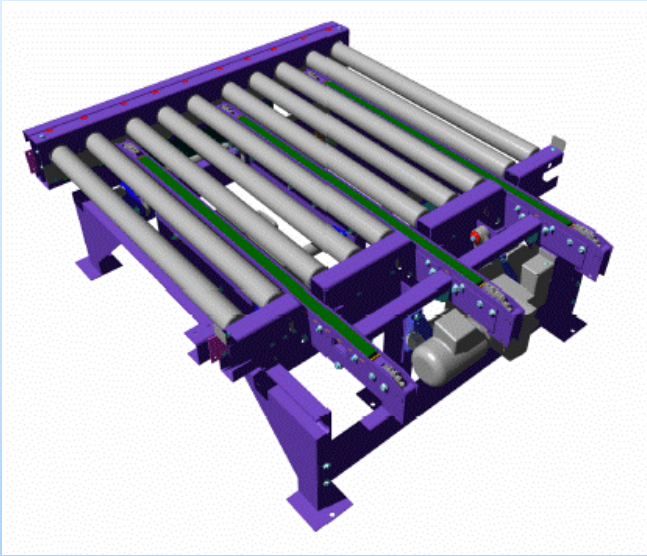
Electrical Power

Motors should be connected to 415V 3-phase, 50Hz supply.

Motor Power (kW)	Full Load Current (A)
0.18	0.58



CHAIN TRANSFER



Transfer modules combine the features and benefits of the roller systems and chain conveyor in one module. With a nominal roller pitch of 150 mm for all pallet types these transfers offer exceptional support for pallets during the transfer operation.

- ◆ 150 mm roller pitch
- ◆ 3mm thick steel rollers with steel sprockets
- ◆ 3/4 " pitch flat sided chain
- ◆ Types: Single Handed Transfer to Transfer Unit
Single Handed Extended Transfer to Transfer Unit

Heights

Range of heights available from 400 - 1000mm (Top of Roller)

Motor Type

Chain Conveyor 0.75 kW
Lift Transfer 0.55 kW
Roller Conveyor 0.37, 0.55 kW

Motor Power (kW)	Full Load Current (A)
0.37	0.95
0.55	1.4
0.75	1.9

Motor Options

No Brake - No Inverter
Braked - No Inverter

Chain

3/4" pitch simplex chain

Pallet Size

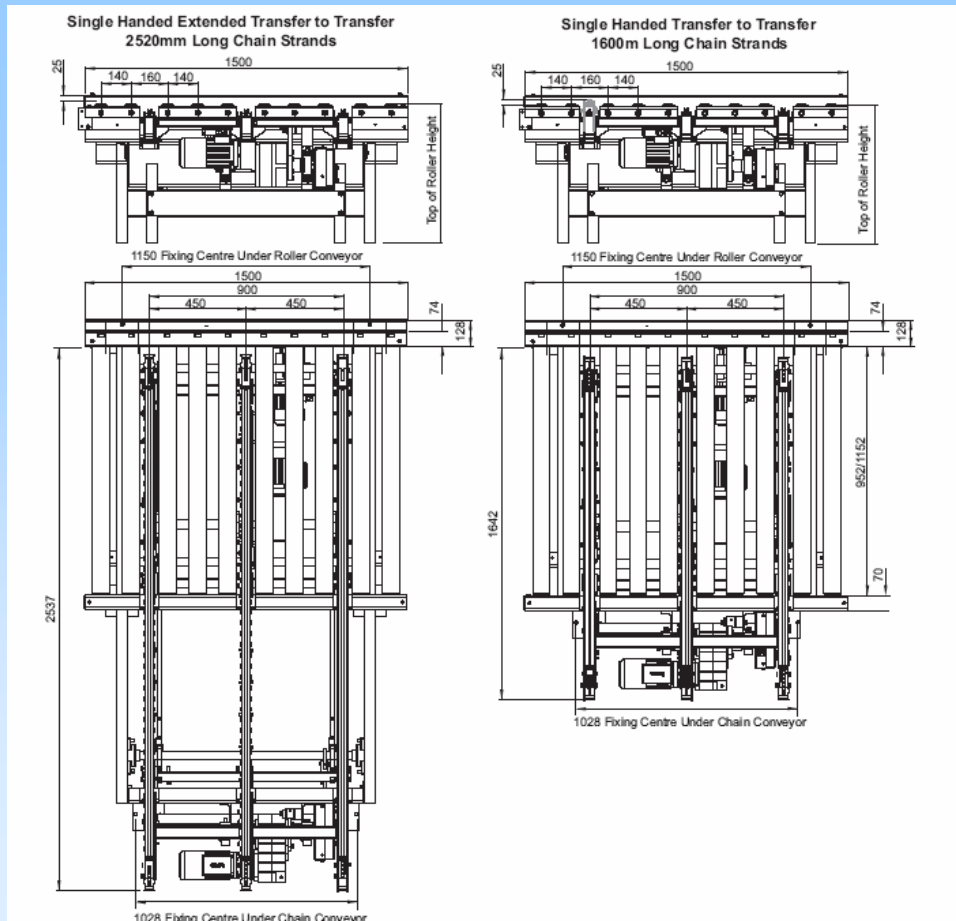
800/1000mm L-R

Speeds Available

Roller Conveyor - 12m/min and 18m/min
Chain Transfer - 12m/min and 18m/min
Up to 213 pallet transfers per hour

Electrical Power

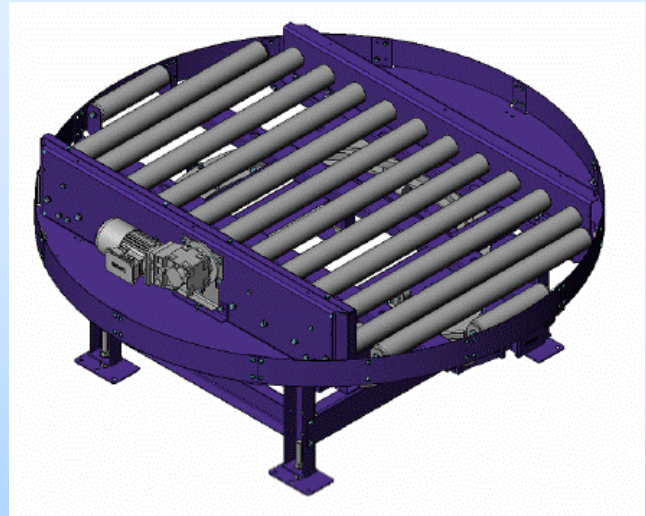
Motors should be connected to 415V 3-phase, 50Hz supply.



ROLLER TURNTABLE

The turntable module is designed to change the direction of pallet travel by rotation of the pallet through any angle from 90° to 180°, whilst keeping the relationship of the pallet runners to roller conveyor the same.

- ◆ Rotation angle of 90 to 180 degrees.
- ◆ 174 pallets per hour rotating 90 degrees.
- ◆ Two rotation speeds of 2rpm and 4rpm
- ◆ Conveyor speeds of 12 m/min and 18m/min
- ◆ Pallet dimensions 800/1000mm L/R



Heights

Range of heights available from 400 - 1000mm (Top of Roller)

Motor Type

Roller Conveyor 0.37, 0.55 kW

Rotation Drive 0.18, 0.37 kW

Pallet Size

800/1000mm L-R

Motor Power (kW)	Full Load Current (A)
0.37	0.95
0.55	1.4
0.75	1.9

Speeds Available

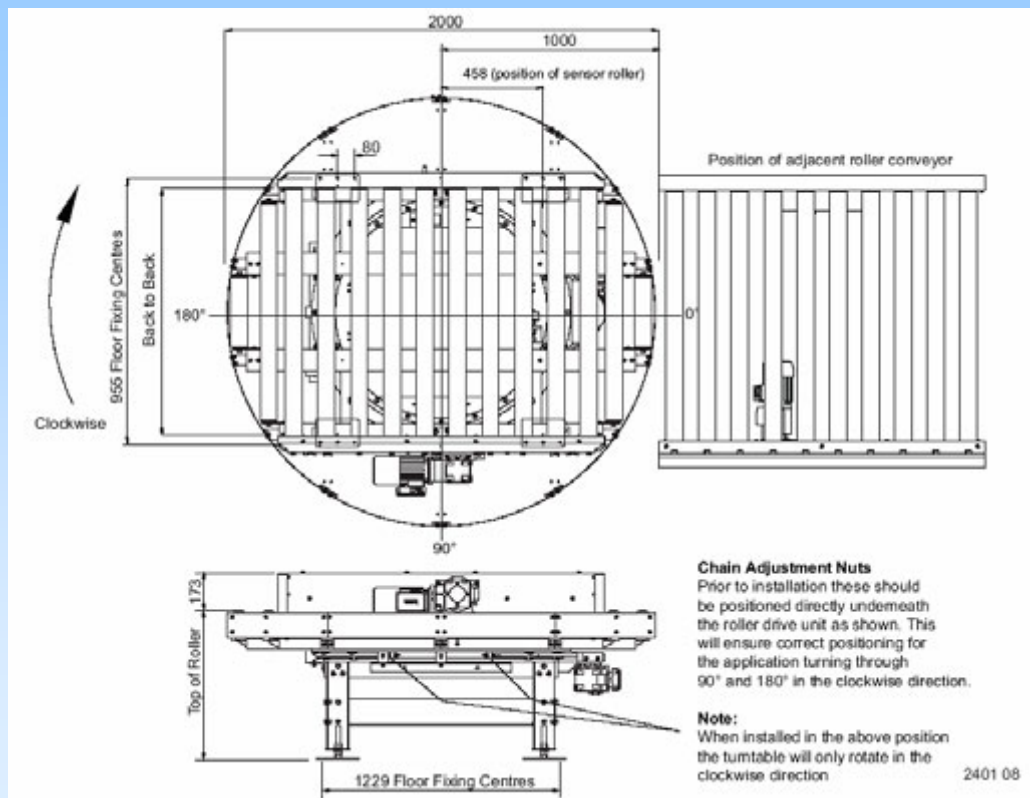
Roller Conveyor -12m/min and 18m/min

Chain Transfer -12m/min and 18m/min

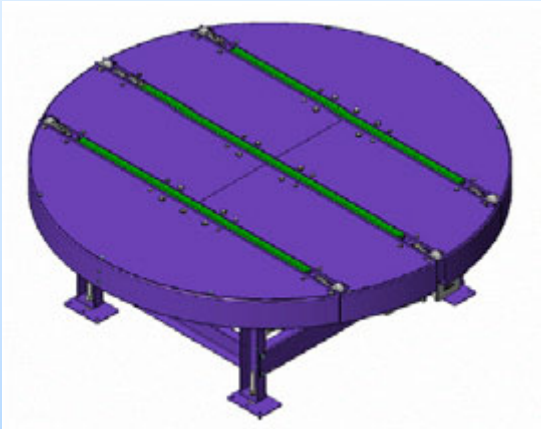
Up to 213 pallet transfers per hour

Electrical Power

Motors should be connected to 415V 3-phase, 50Hz supply.



CHAIN TURNTABLE



The chain turntable module is designed to change the direction of pallet travel by rotation of the pallet through any angle from 90° to 180°, whilst keeping the relationship of the pallet runners to roller conveyor the same.

- ◆ Rotation angle of 90 to 180 degrees.
- ◆ 174 pallets per hour rotating 90 degrees.
- ◆ Two rotation speeds of 2rpm and 4rpm
- ◆ Conveyor speeds of 12 m/min and 18m/min
- ◆ 900mm Chain centres
- ◆ Pallet dimensions 1200mm L/R

Heights

Range of heights available from 425 - 1025mm (Top of Chain)

Motor Type

Chain Conveyor 0.75, 1.1 kW
 Rotation Drive 0.18, 0.37 kW

Pallet Size

1200mm L-R

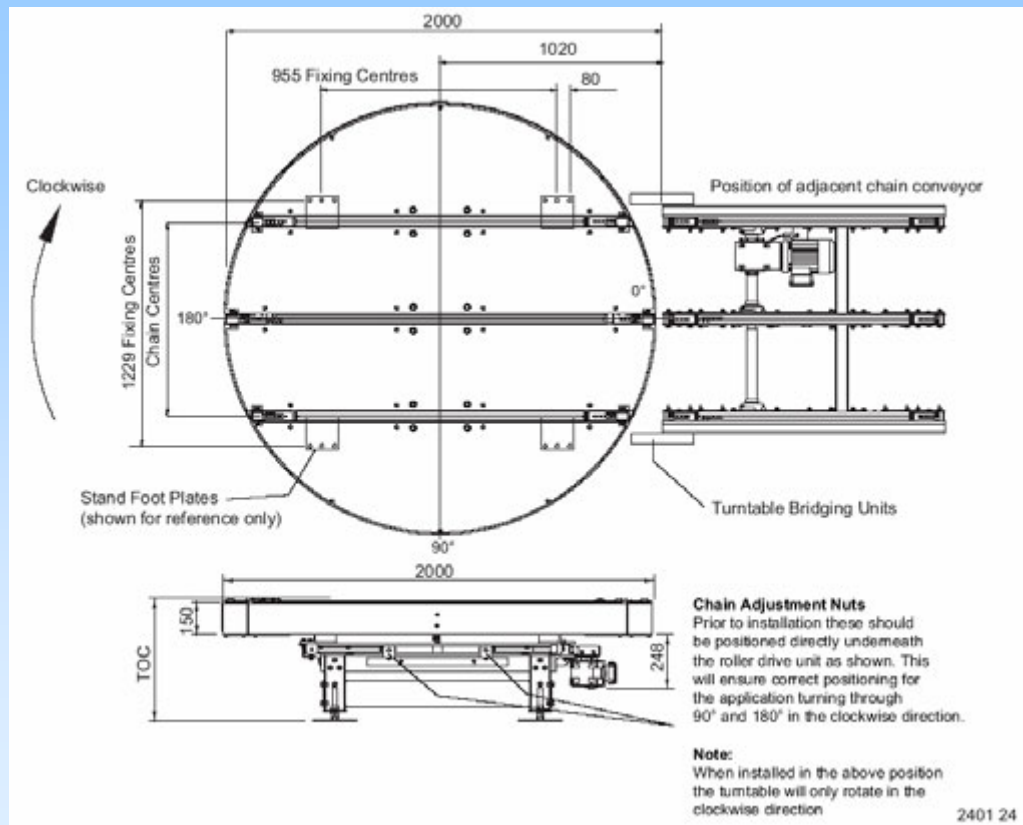
Speeds Available

Roller Conveyor -12m/min and 18m/min
 Chain Transfer -12m/min and 18m/min
 Up to 213 pallet transfers per hour

Electrical Power

Motors should be connected to 415V 3-phase, 50Hz supply.

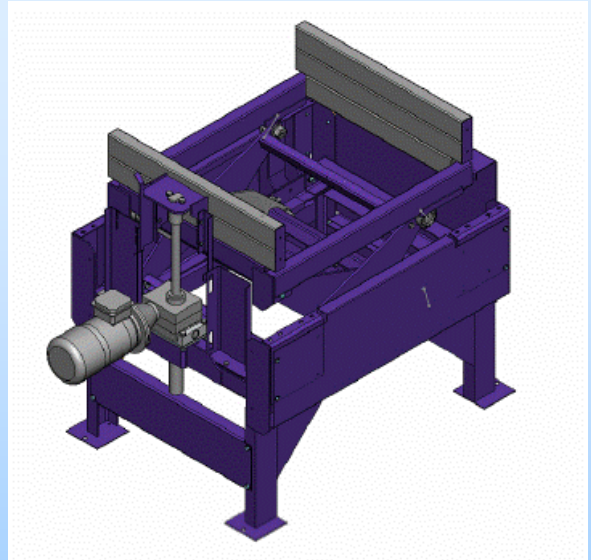
Motor Power (kW)	Full Load Current A)
0.18	0.58
0.37	0.95
0.75	1.9
1.1	2.8



BEAM LIFT ASSEMBLY

The beam lift assembly is designed to lift pallets 200mm above the chain conveyor. The beam assembly has two standard types, low and high. Low types range from 650mm to 800mm top of chain heights. High type beam lifts range from 850mm to 1000mm top of chain height.

- ◆ Low and high type available.
- ◆ To suit 2 strand chain conveyor.
- ◆ 200mm Pallet Lift
- ◆ Maximum pallet weight 1500kg



Heights

Range of heights available
 Low height 650 - 800mm (Top of Chain)
 High height 850 - 1000mm (Top of Chain)

Motor Type

1.5 kW

Pallet Size

1200mm L-R

Pallet Lift

200mm

Speeds Available

25mm/s

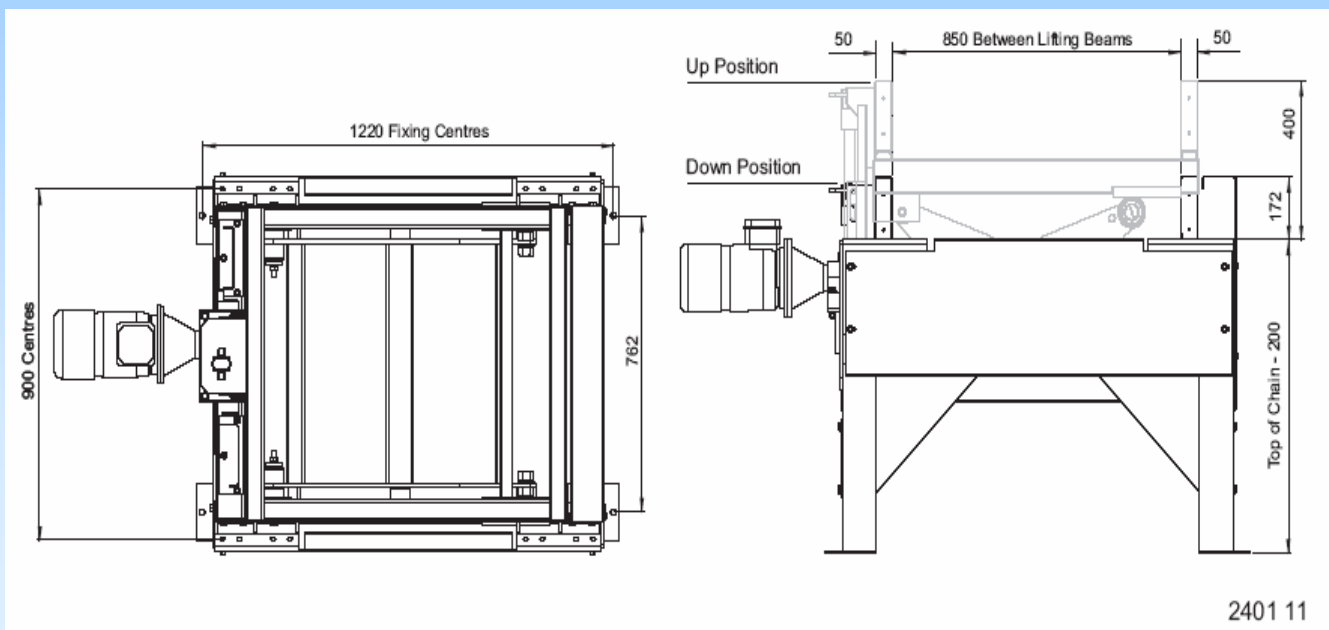
Cycle of Operation

Up stroke - 10 secs
 Down stroke - 10 secs

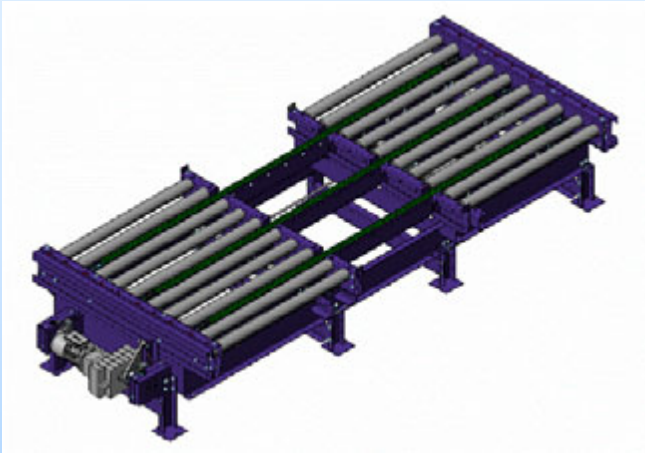
Electrical Power

Motors should be connected to 415V 3-phase, 50Hz supply.

Motor Power (kW)	Full Load Current (A)
1.5	3.6



DOUBLE TRANSFERS



Double transfer modules combine the features and benefits of the roller systems and chain conveyor in one module. With a nominal roller pitch of 150 mm for all pallet types these transfers offer exceptional support for pallets during the transfer operation. The modules are available to suit the standard pallet conveyor widths.

- ◆ 150mm roller pitch.
- ◆ Bi-directional control available.
- ◆ Conveyor speeds of 12m/min and 18m/min
- ◆ Maximum pallet weight 1500kg

Heights

Range of heights available from 400 - 1000mm (Top of Roller)

Motor Type

Chain Conveyor 0.75, 1.1 kW

Lift Transfer 0.75 kW

Roller Conveyor 0.37, 0.55 kW

Motor Options

No Brake - No Inverter

Braked - No Inverter

Motor Power (kW)	Full Load Current (A)
0.37	0.95
0.55	1.4
0.75	1.9
1.1	2.8

Pallet Size

800/1000mm L-R

Speeds Available

Roller Conveyor -

12m/min and 18m/min

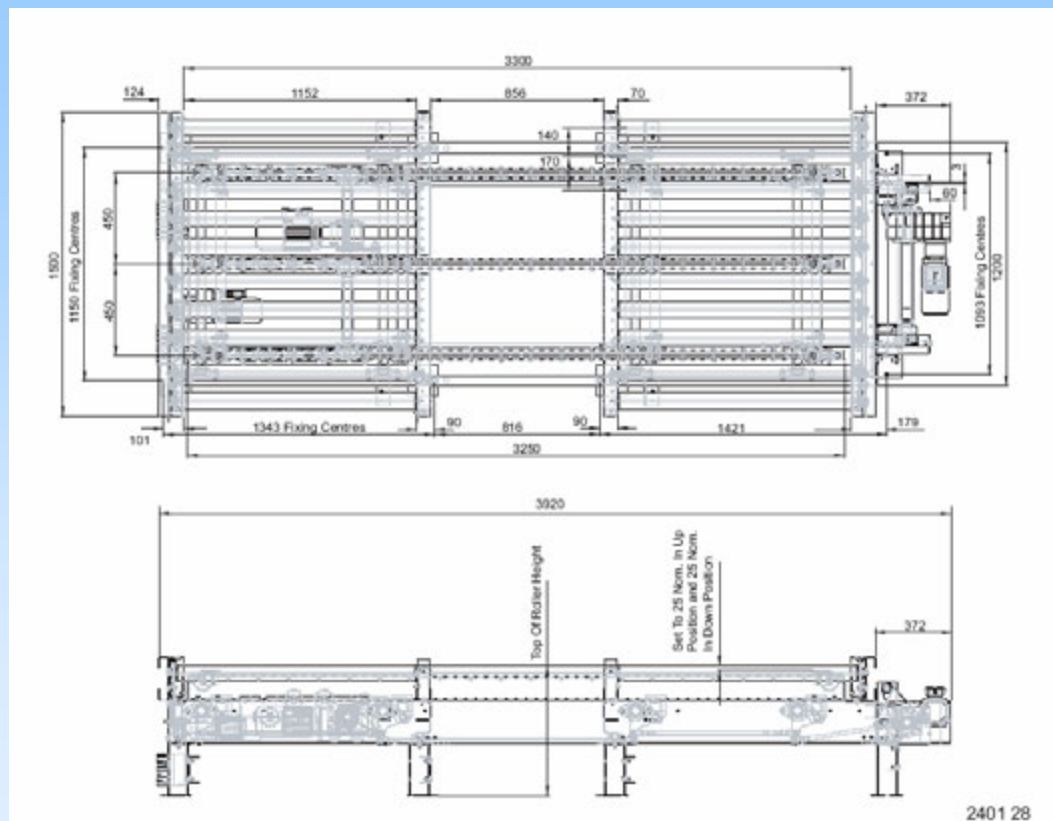
Chain Transfer -

12m/min and 18m/min

Up to 184 pallet transfers per hour

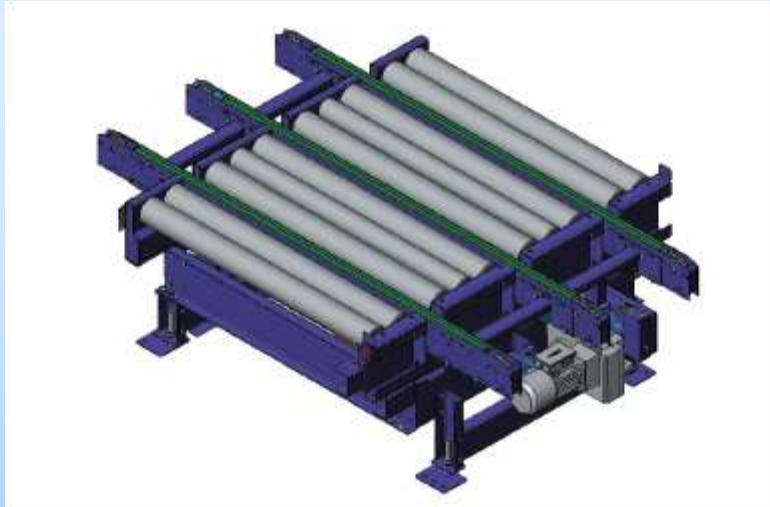
Electrical Power

Motors should be connected to 415V 3-phase, 50Hz supply.



CENTRE TRANSFERS

Centre transfer modules combine the features and benefits of the roller systems and chain conveyor in one module. With a nominal roller pitch of 150 mm for all pallet types these transfers offer exceptional support for pallets during the transfer operation. Pallets can be received and transferred in either direction.



- ◆ 150mm roller pitch.
- ◆ Conveyor speeds of 12m/min and 18m/min
- ◆ Maximum pallet weight 1500kg

Heights

Range of heights available from 500 - 1000mm (Top of Roller)

Motor Type

Chain Conveyor 0.75, 1.1 kW
 Lift Transfer 0.75 kW
 Roller Conveyor 0.37, 0.55 kW

Motor Power (kW)	Full Load Current (A)
0.37	0.95
0.55	1.4
0.75	1.9
1.1	2.8

Motor Options

No Brake - No Inverter
 Braked - No Inverter

Pallet Size

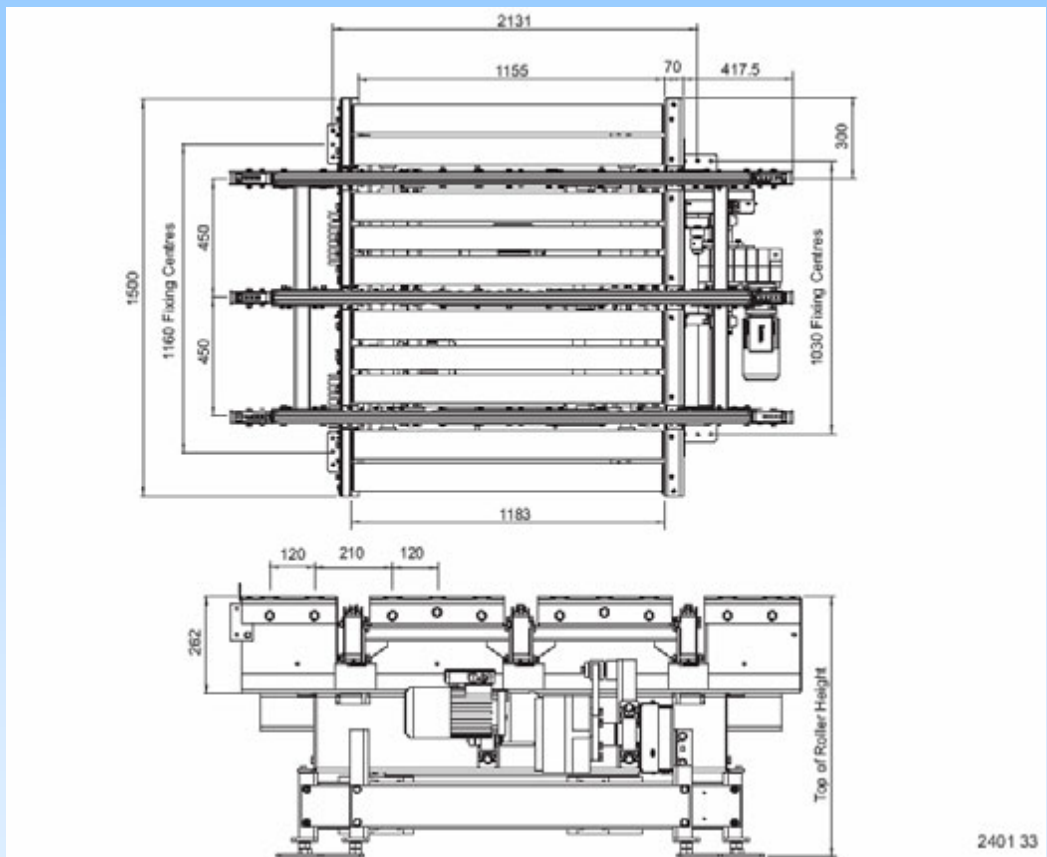
800/1000mm L-R

Speeds Available

Roller Conveyor -
 12m/min and 18m/min
 Chain Transfer -
 12m/min and 18m/min
 Up to 184 pallet
 transfers per hour

Electrical Power

Motors should be
 connected to 415V
 3-phase, 50Hz supply.



MOTORISED ROLLER STRAIGHT

Drive rollers are mounted in flexible brackets such that they are higher than the gravity conveyor rollers. In this way the item being conveyed is constantly in contact with the pallet drives. The pallet presses the motorised rollers own to the level of the adjacent gravity rollers, so that the weight of the pallet is evenly distributed during transport.

- ◆ 150mm roller pitch (125mm available on request)
- ◆ Conveyor speeds of 13m/min and 16m/min - can be used with inverter
- ◆ Maximum pallet weight 600kg - optional 1000kg available on request
- ◆ No need for geared motors, chains and sprockets
- ◆ Compact and space saving design, can be installed on the floor
- ◆ Maintenance free, ease of installation and modular design



Heights

Range of heights available from 400 - 1000mm (Top of Roller)

Electrical Power

Motors should be connected to 415V 3-phase, 50Hz supply.

Motor Type

Chain Conveyor 0.75, 1.1 kW
 Lift Transfer 0.75 kW
 Roller Conveyor 0.37, 0.55 kW

Motor Options

No Brake - No Inverter
 Braked - No Inverter

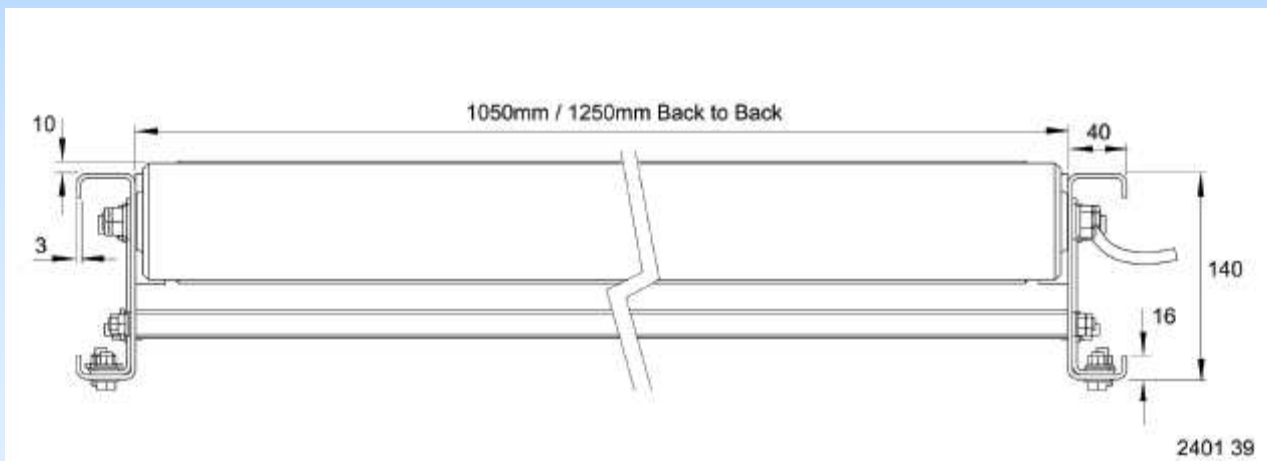
Load Capacity	Motor Power (kW)	Stall Current (A)	Full Load Current (A)
600kg	0.085	1.07	0.32

Pallet Size

800/1000mm L-R

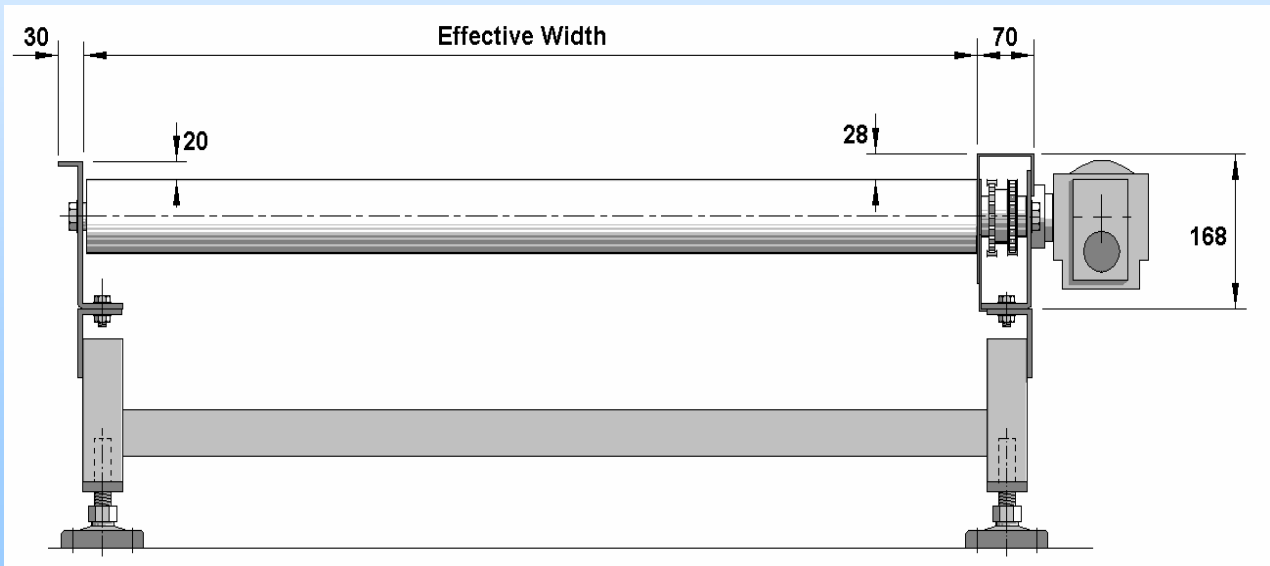
Speeds Available

Roller Conveyor - 12m/min and 18m/min
 Chain Transfer - 12m/min and 18m/min
 Up to 184 pallet transfers per hour



PALLET HANDLING—CUSTOMISED

CHAIN DRIVEN POWERED ROLLER



The Nuwave Chain Driven Powered Roller Conveyor is designed for the transportation of a variety of pallets with unit loads of up to 2000kg. They are of modular construction and can be combined with a wide range of accessories forming a complete pallet handling system. These conveyors are driven from roller to roller using heavy duty chain and are fully guarded giving maximum safety.

Standard Specification

Nominal widths:-	900mm, 1100mm, 1300mm	Rollers:-	80 or 89 mm diameter Zinc plated
Sides:-	5mm mild steel folded	Available pitches:-	103mm, 150mm, 198mm
Guards:-	3mm mild steel folded	Minimum height:-	150mm Top of roller
Supports:-	50mm sq. HS	Electric's:-	To suit requirements
Loads:-	2000kg per Pallet, 5000kg per Drive	Finish:-	Powder coated to RAL 5010

Alternatively these conveyors can be fabricated in stainless steel. Our conveyors are despatched in modular assembled form, assuring minimum installation time on site.

Function of Operation—This conveyor may be used in transportation mode, for an indexing accumulator or single units for Zero Pressure Accumulation.

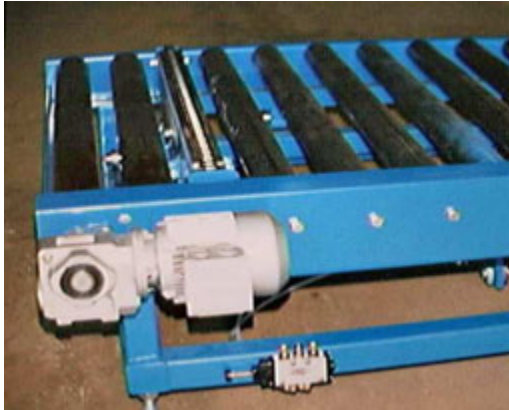
Transportation—Modules are linked together with one drive unit powering up to 12m. The conveyor would normally be continually running, only stopping if the discharge end is full or the system is stopped. The control of the system will limit the total load on any such run to a maximum load of 5000kg.

Indexing Accumulation—Pallet will feed up to a photoelectric cell and stop. When the next pallet is input the two move forward together stopping when the second pallet breaks the photoelectric cell again. In this way pallets can be accumulated.

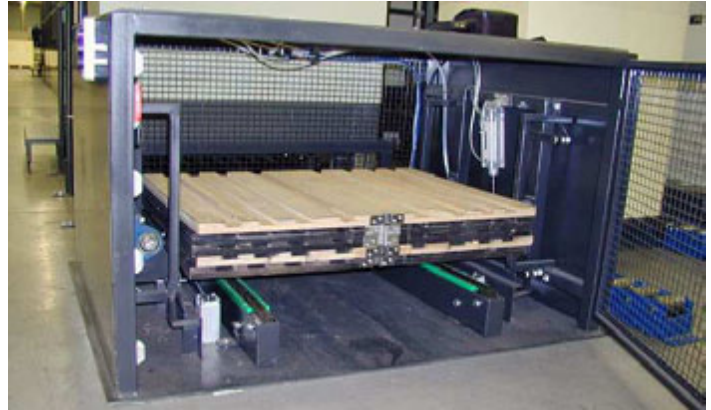
Zero Pressure Accumulation—Pallets feed down conveyors up to a photoelectric cell on last position, the drive stops on this station. The next pallet feeds down conveyors to position 2, this drive then stops until position 1 pallet is removed. The drive then starts and conveys the pallet to last position.

See reverse for Accessories

PALLET HANDLING ACCESSORIES



Chain Transfer Unit—either twin or triple chain is used according to pallet sizes and pitch.



Pallet Board Stacker —This is used in the printing industry to accommodate the flat board type pallets which carry large stacks of paper and card.

Chain Transfer Units—Lifted pneumatically between rollers, to take pallets across at right angles to and from Powered Roller Conveyors. Can be used anywhere down the length of the conveyor.

Turn Tables—A length of Powered Roller Conveyor fitted onto a motorised slewing ring, giving a minimum height of 350mm top of roller. Can be used to turn the pallets through 90° in the same orientation, it can also be used as a multiple junction.

Shuttle Cars—A Mobile Roller Conveyor on heavy duty castors that can be run along floor rails across to various Powered Roller lines or Gravity Roller storage. The rollers and shuttle cars can be powered. Minimum height is 350mm.

De-palletiser—To remove boxes from the pallet so that they can be transported individually to other operations.

Pallet Stacker or Dispenser—Working in similar ways one would be used in the packaging area, dispensing pallets when required. The pallet stacker can be used in conjunction with a De-palletiser making the process more efficient.



Safety first—all chains and sprockets are fully guarded with no snag or catch points.

We can also incorporate heavy duty Gravity Roller Conveyors where needed. Riverbank Engineering can supply anything from basic Powered Roller Conveyor to a fully automated pallet handling system.

As well as the standard specification given on the previous page we can design and manufacture to your own requirements.

All our conveyors are guarded to comply with the Health & Safety at Work Act and CE Regulations.

PALLET HANDLING from

Riverbank
Engineering
Ltd

Unit 38 Riverbank Enterprise Centre

Scout Hill

Dewsbury

WF13 3RQ

Tel:- 01924 461212

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