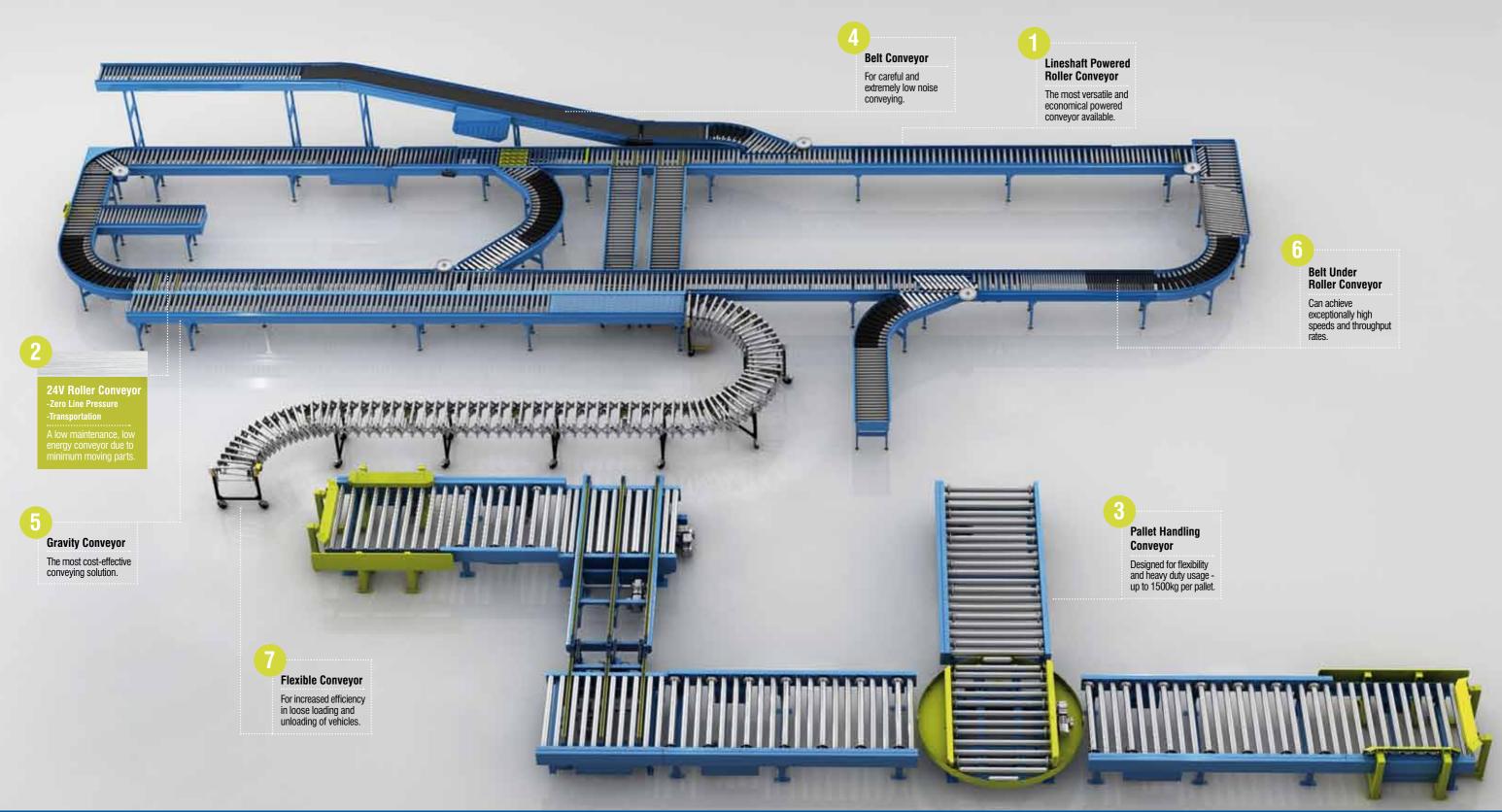


# 24V Roller Conveyor -Zero Line Pressure -Transportation

A low maintenance, low energy conveyor due to minimum moving parts

No.2 of 7







## Introduction

The uni-xu® range of conveyors has been integral to thousands of turnkey solutions for some of the most demanding and successful companies across Europe. It is renowned for the robustness of its design, with quality being reflected in a distinct durability in the field. Furthermore, the modularity of the uni-xu® design offers extreme flexibility and simplicity for totally integrated systems. It has been engineered and manufactured in Britain since 1963, resulting in five decades of engineering development and excellence, which today, makes it one of the best known trademarks in conveyor manufacture. Facts

- Over a third of conveyor orders shipped overseas.

• UK's largest conveyor manufacturer. • 150,000 sq. ft. manufacturing plant on a 7 acre site. • In excess of half a million rollers manufactured every year. • Over 15 km of conveyor produced each year.

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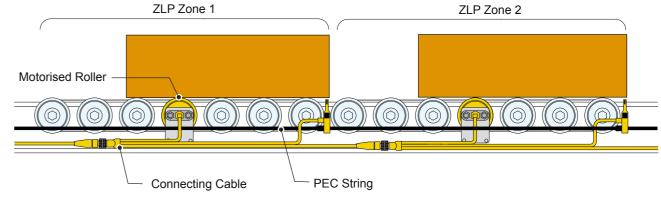
# Focus on **24V Roller Conveyor** -Zero Line Pressure -Transportation

### Description

Conveyor Units 24V DC roller conveyor offers both Transportation and Zero Line Pressure accumulation with integral photocells, without the need for external controls. This type of conveyor with decentralised drives is highly modular, creating the possibility to add / remove zones from conveyor schemes with ease. Transport zones can be made more cost efficient using less motors with poly V belt transmission as an

alternative to traditional round belt drives. The principal benefits being the ability to slave more rollers from each motor drive with minimal losses in speed / torque.





### • A low maintenance conveyor, due to minimum moving parts.

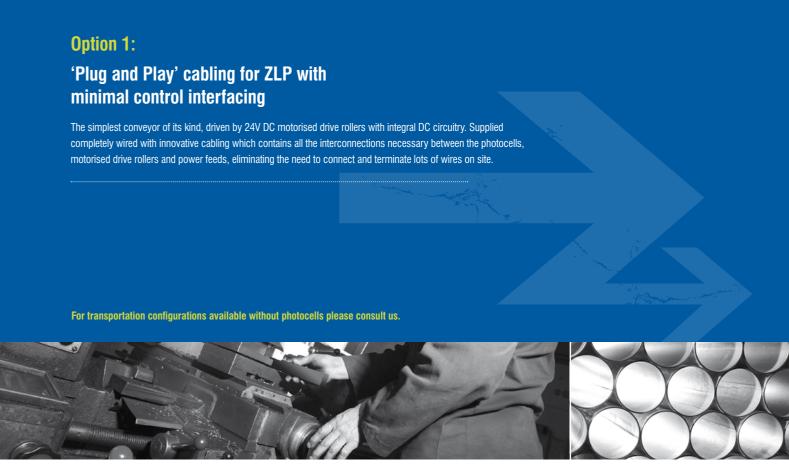
• Offers extreme versatility in the transportation of various totes / cartons, whilst providing ultra-efficient accumulation.

Key Features	Benefits
Modular design.	Proven product, highly configurable, easy and reduced installation time with low maintenance. Allows for a variety of configurations to be made from standard components.
Low voltage 24V DC brushless motors.	Low energy consumption providing energy efficient conveying. Low noise.
Run on demand.	Energy conservation. Increases component life.
Zero line pressure accumulation.	No contact between loads. Eliminates product damage from pressured accumulation alternatives.
Plug and play options / photocells.	Pre-mounted and pre-wired electrical components, resulting in reduced electrical installation times and costs.
Complete or partial integration of accumulation modules.	Allows for transportation or accumulation as required.

Available in: Powder coated as standard Aluminium Stainless steel

Alternative drive transmissions available.

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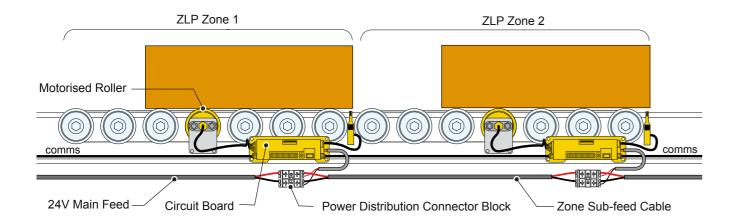
# **UNI-XU® MDR Conveyor**

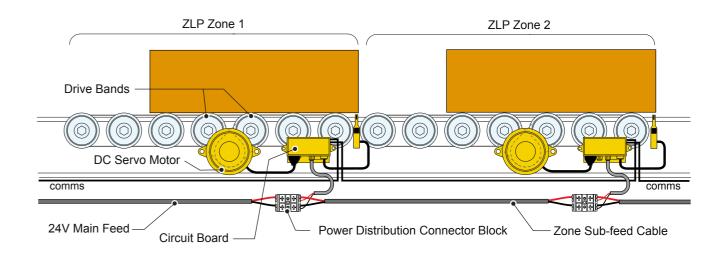


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# **UNI-XU® MDR Conveyor**







## Option 2:

## Intelligent control for ZLP with PLC interfacing

This solution offers a greater degree of upper level control interface to a plc / master control with several additional control features:-

- Motorised drive roller speed.
- Load jam detection signal.
- Sensor status output to master control.
- Self correcting load spacing.
- Error signal to master control in case of overload activation.

For transportation configurations available without photocells please consult us.

This solution uses a compact gearless 24V DC brushless servo motor and offers further benefits beyond that of the UNI-XU® MDR Conveyor, making it suitable for higher specification applications due to the benefits of:-

- Higher torque and shock loading.
- Almost silent operation.

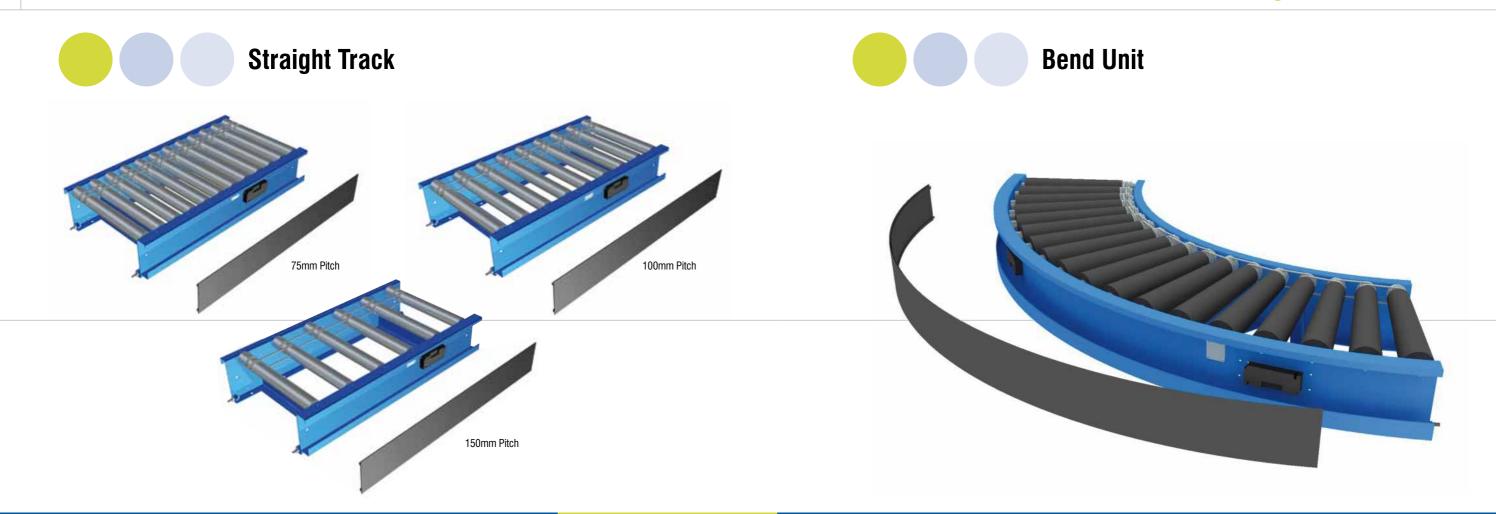
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- Higher speed possibility as there are no fixed gear ratios.
- Availability one drive unit for all widths and speeds creating commonality of spares.
- Space saving narrow / bespoke conveyor sizes.
- Fewer motors required for transport conveyor.

For transportation configurations available without photocells please consult us.



# **UNI-XU® UNIDrive Conveyor**



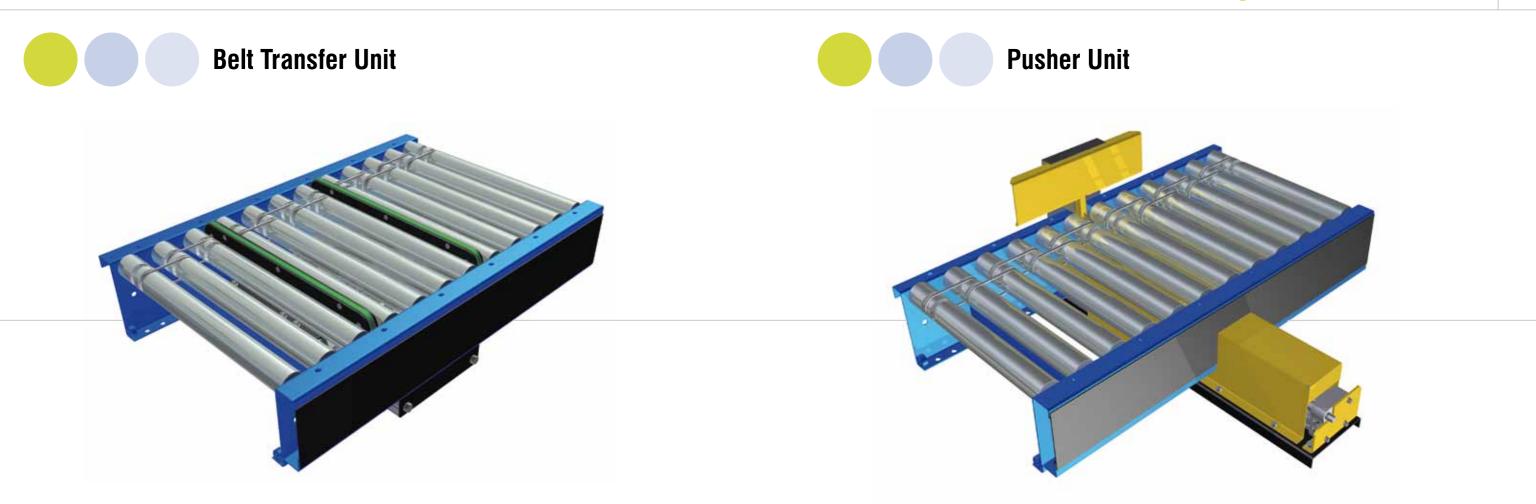
- Incorporates 50mm diameter rollers.
- Rollers fitted at 75mm, 100mm or 150mm pitch.
- Adjustable speeds upto 55 metres per minute.
- Drive capacity 8Kg per roller. For increased drive capacity please contact the Sales Office as alternative drive transmissions are available.
- Zero line pressure accumulation or simple transportation.
- Supplied in 3 metre fully assembled lengths as standard. Other lengths available on request.
- Suitable for conveying products with a minimum product length of 225mm (75mm pitch), 300mm (100mm pitch) and 450mm (150mm pitch).
- Individual zones can be supplied with 'Plug and Play' connections or external control boards and photo electric cells.
- Full product testing available in our showroom.
- Also available in stainless steel and aluminium.
- 178mm x 32mm x 2.5mm fully jig welded 'Z' section framework as standard.
- Standard widths available: 412mm, 462mm, 512mm, 612mm, 762mm and 912mm. Other widths available on request.

- All bends have true taper plastic sleeved rollers to ensure correct load orientation.
- 50mm diameter zinc plated rollers are double grooved at the drive belt positions.
- For smaller products intermediate rollers are available and supplied loose for on site fitting.
- All bends have an inside radius of 859mm.
- 90° bends are fitted with two motorised rollers, all others are fitted with one.
- Angles available: 30°, 45°, 60° and 90°.
- 75mm pitch on inner rail.
- Zero line pressure accumulation or simple transportation.
- Full product testing available in our showroom.
- For increased drive capacity please contact the Sales Office as alternative drive transmissions are possible.
- Standard widths available: 412mm, 462mm, 512mm, 612mm, 762mm and 912mm. Other widths available on request.



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e transmissions are possible 12mm.



- The minimum belt centres are 150mm.
- Maximum of 25 operations per minute.
- Maximum lift 70Kg.
- Independently driven from a geared motor unit via pulleys on a separate shaft.
- The rise and fall of belts is actuated by a double acting pneumatic cylinder(s).
- Available in twin or triple belt transfers as standard.
- Polyurethane truly endless belt with co-extruded backing.
- One cylinder is required for twin and triple transfers.
- Total air consumption per operation 1.04 litres per cylinder(s).
- Standard widths available: 412mm, 462mm, 512mm, 612mm, 762mm and 912mm. Other widths available on request.

- Comprises a rodless cylinder which has an arm attached to its saddle.
- When the cylinder is energised the arm traverses across the track width and pushes products onto a conveyor at 90°.
- Incorporates a double acting pneumatic air cylinder, 32mm bore.
- Total air consumption for double stroke 7.76 litres per cylinder based on 700mm stroke.
- Suitable for moving a maximum load of 25kg.
- Maximum operations 20 per minute. Please contact us for off set loads and higher throughputs.





- The sorter wheels are independently driven from a 0.37kW SEW motor, to give either 60 or 110 metres per minute.
- We recommend that an inverter is fitted to the gearbox to enable fine tuning of the speed to suit your application.
- Can be supplied right handed, left handed or bi-directional.
- Minimum product size 200mm x 200mm.
- Available at 45° switching angle.
- Normally used in conjunction with a 45° mitre section, although other options are available.
- Accumulation is not advisable on these units.
- Maximum operations 3000 products per hour.
- Incorporates double acting pneumatic cylinders.
- Standard widths available: 462mm, 612mm, 762mm and 912mm.

- Used where one conveyor feeds into or diverts from another.
- Angles available: 30° and 45°.
- Standard widths available: 412mm, 462mm, 512mm, 612mm, 762mm and 912mm. Other widths available on request.







## **Optimise Your Operating Efficiency with our Rollers and Parts Service Guarantee**

We have also gained a reputation for supplying high quality competitively priced rollers and spares to all aspects of the material handling industry. Our products are used by blue-chip companies in the UK and throughout Europe.

We have a high degree of standardisation in our systems which means we can guarantee a particularly rapid and reliable spare parts service to meet the end-users' needs with speed and ease.

Furthermore, by buying replacement parts from the original equipment manufacturer you are helping to ensure that the equipment stays in prime condition, optimizing the operating efficiency of your system.

### Rollers

We are not only the largest conveyor manufacturer in the UK, but also the largest roller manufacturer, producing in excess of half a million rollers every year.

We source and purchase only the best raw materials directly from the mills, and in vast quantities - in excess of 200km of 50mm diameter steel tubing every year. This means that not only does it allow us to constantly meet order commitments, but it also makes our pricing extremely competitive.

Our range of rollers includes: Gravity Rollers, Plastic Rollers, Stainless Steel Rollers, Grooved Rollers, Tapered Rollers, Sprocketed Rollers, Belt Conveyor Rollers, as well as an extensive range of specialised rollers.

## **Spares**

We also produce an extensive range of stock components, again competitively priced, for Powered Roller Conveyors, Pallet Conveyors, Gravity Conveyors and Belt Conveyors, with all plastic conveyor components injection moulded here on site.

Please give us the opportunity to quote all your roller and spares requirements. We can guarantee: -

- Competitive prices.
- Fast turnaround.
- Extensive product range.
- Excellent customer service.





## **STOURPORT SITE**

- 1 Goods Inwards
- 2 Made To Order Roller Department
- 3 Injection Moulding
- 4 Heavy Duty Drum / Roller Assembly
- 5 Press / Laser Processing Department
- 6 Aluminium Conveyor Assembly
- 7 Heathfield Road
- 8 Sandy Lane
- 9 Product Development
- **10** Tapered Roller Assembly
- **11** Pallet Conveyor Assembly
- 12 Belt Conveyor Assembly
- **13** General Assembly
- 14 Powder Coating Plant / Curing Oven
- 15 Production Welding
- 16 Main Reception
- 17 Despatch
- **18** Ancillary Assembly
- **19** Bend Fabrication
- 20 Press Brake

### 21 Stourport Showroom and Demonstration Area





## conveyor solutions

