



Rollers

from the UK's largest roller manufacturer



Quality • Performance • Reliability

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Focus on Conveyor Rollers

Established in 1963, Conveyor Units Limited is now the largest conveyor and conveyor roller manufacturer in the UK, producing in excess of half a million rollers and 15km of conveyors every year. Over a third of these orders being shipped overseas.

During this period, we have gained a reputation for supplying high quality, competitively priced conveyor rollers, to all aspects of the materials handling industry, as well as many other industry sectors, from air-cargo and pharmaceutical to specialist machinery manufacturers.

We operate from a 150,000 sq. ft. manufacturing facility, on a 7 acre site in Stourport-on-Severn, Worcestershire. Sourcing and purchasing only the best raw materials, and in vast quantities (in excess of 200km of 50mm dia. steel tubing annually), enables us to not only meet order commitments but to pass on considerable cost savings to our customers.



We have the capacity to produce over 10,000 rollers per week and all our manufacturing processes are controlled and undertaken in-house in strict accordance to our BS EN ISO 9001: 2008 quality system.





A comprehensive range for specific industry sectors

By offering a comprehensive roller range you will find that we can meet the requirements of most industries. Today we supply hundreds of companies in numerous industry sectors throughout Europe and the UK.

- Air Cargo & Airport
- Pharmaceutical
- Agricultural
- Food Handling
- Conveyor Manufacturers / Materials Handling
- Post & Parcel
- Special Purpose Machinery





Gravity Rollers

Light to Medium Duty - suitable for loads of up to 160kg per roller.



Gravity rollers offer the most economical and simplest form of transporting loads from one point to another. Minimal effort is required in the movement of goods whether it is manual assistance or gravitational force.

Specification

Tube Size	Spindle Option	Capacity*
40mm x 1.5mm	ø8mm, ø10mm, ø7/16", ø12mm, ø15mm, 8mm & 11mm Hex	160kg
50mm x 1.5mm	ø8mm, ø10mm, ø7/16", ø12mm, ø15mm, 8mm & 11mm Hex	160kg
50mm x 2mm	ø8mm, ø10mm, ø7/16", ø12mm, ø15mm, 8mm & 11mm Hex	160kg
60mm x 2mm	ø8mm, ø10mm, ø7/16", ø12mm, ø15mm, 8mm & 11mm Hex	160kg
1" x 18 SWG	ø1/4", ø8mm & 8mm Hex	30kg
1 3/8" x 18 SWG	ø8mm & 8mm Hex	70kg
1 1/2" x 16 SWG	ø8mm, ø10mm, ø7/16", ø12mm, ø15mm, 8mm & 11mm Hex	100kg

*These maximum potential capacities are for guidance only and assume an evenly distributed static load.

Rollers are supplied either bright zinc plated or standard self colour finish.





Gravity Rollers

Heavy Duty - suitable for loads of up to 400kg per roller.

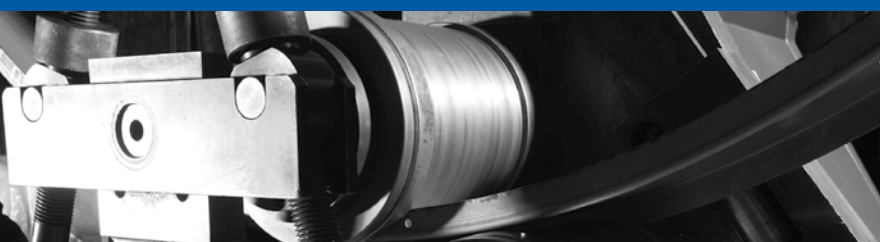


Designed to make light work of heavy loads, this product range includes larger diameter rollers supplied with thicker wall tubes and larger diameter spindles.

Specification		
Tube Size	Spindle Option	Capacity*
50mm x 1.5mm	ø8mm, ø10mm, ø7/16", ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	200kg
50mm x 2mm	ø8mm, ø10mm, ø7/16", ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	200kg
60mm x 2mm	ø8mm, ø10mm, ø7/16", ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	200kg
80mm x 2mm	ø5/8", ø3/4", ø20mm, 11mm & 9/16" Hex	400kg
88.9mm x 2.9mm	ø5/8", ø3/4", ø20mm, 11mm & 9/16" Hex	400kg
2" x 10 SWG	ø8mm, ø10mm, ø7/16", ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	200kg
2 1/2" x 10 SWG	ø5/8", ø3/4", 11mm, 9/16", & 17mm Hex	300kg
3" x 10 SWG	ø5/8", ø3/4", ø20mm, 11mm & 9/16" Hex	400kg

*These maximum potential capacities are for guidance only and assume an evenly distributed static load.

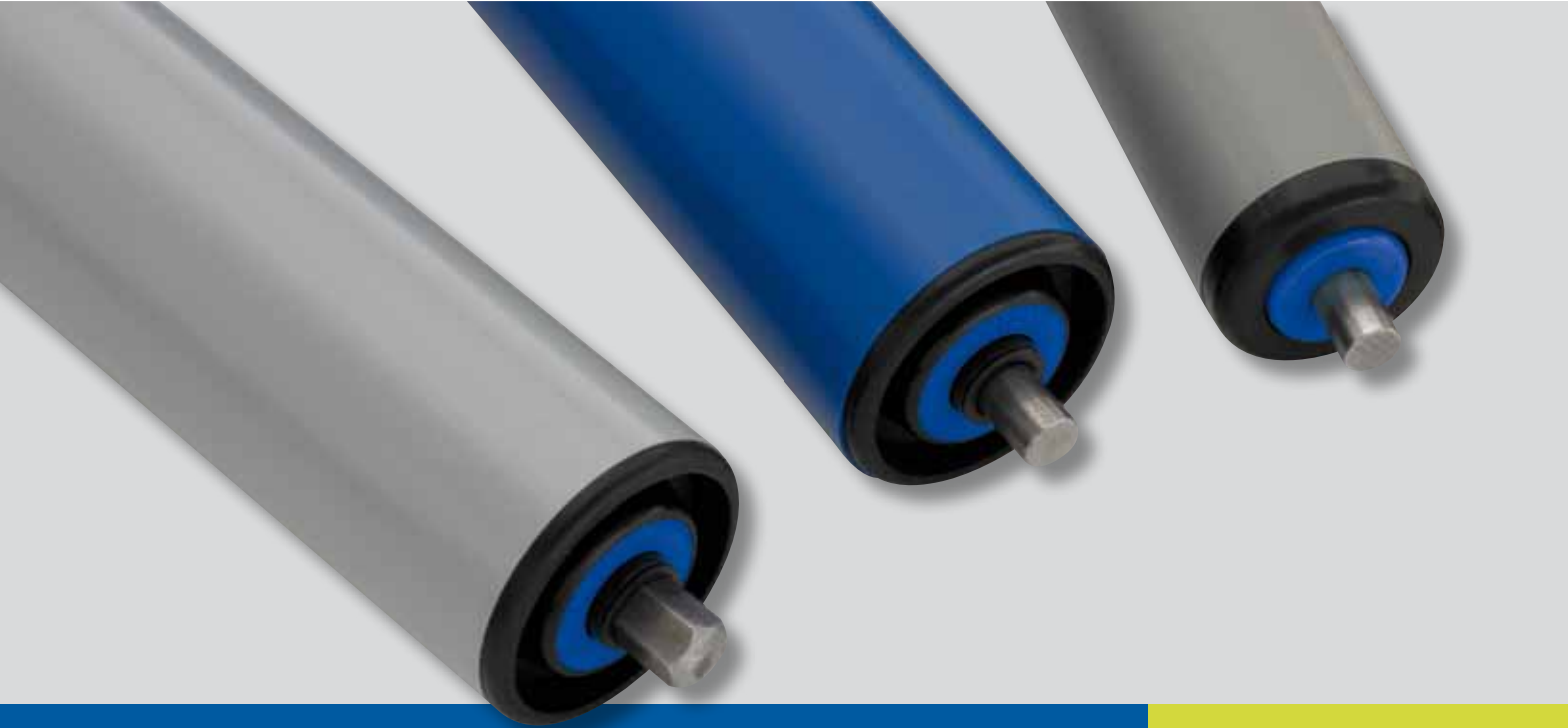
Rollers are supplied either bright zinc plated or standard self colour finish.





Plastic Rollers

For light duty gravity applications.



Our plastic roller range uses high impact rigid PVC tubing and is a low cost alternative to stainless steel rollers.

Specification

Tube Size	Spindle Option	Capacity*
40mm x 2.3mm	ø8mm & ø10mm	14kg
50mm x 2.8mm	ø10mm, ø12mm, 11mm Hex	20kg

*These maximum potential capacities are for guidance only and assume an evenly distributed static load.

Rollers are supplied with rigid PVC tubing and self colour, bright zinc plated or grade 303 or 316 stainless steel spindles. Suitable for wash down applications.





Stainless Steel Rollers

Ideal for wash down applications or for use in areas of high humidity.



Used predominantly in the food industry and suitable for either powered or gravity applications. Internal stainless steel springs and washers are available on request.

Specification

Tube Size	Spindle Option	Capacity*
50mm x 1.5mm	ø10mm, ø12mm, ø15mm, 8mm & 11mm Hex	100kg

*These maximum potential capacities are for guidance only and assume an evenly distributed static load.

Rollers are supplied with grade 304 or 316 stainless tubes and grade 303 or 316 stainless steel spindles.





Grooved Rollers

For use in either Lineshaft or 24V DC Motorised Roller conveyors.



Rollers can be single or multi grooved to suit varying diameters of round drive belts.

Specification		
Tube Size	Spindle Option	Static Capacity*
40mm x 1.5mm	ø8mm, ø10mm, ø7/16", ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	100kg
50mm x 1.5mm	ø8mm, ø10mm, ø7/16", ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	100kg
50mm x 2mm	ø8mm, ø10mm, ø7/16", ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	200kg
60mm x 2mm	ø8mm, ø10mm, ø7/16", ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	200kg
80mm x 2mm	ø5/8", ø3/4", ø20mm, 11mm & 9/16" Hex	400kg
1 1/2" x 16 SWG	ø8mm, ø10mm, ø7/16", ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	100kg
2 1/2" x 10 SWG	ø5/8", ø3/4", 11mm, 9/16" & 17mm Hex	300kg
3" x 10 SWG	ø5/8", ø3/4", ø20mm, 11mm & 9/16" Hex	400kg

* Please note that static capacities are quoted, dynamic capacities will be greatly reduced due to the nature of the drive method. Driving capacities will depend upon factors such as belt diameter, material and tension, roller to roller lineshaft centres and ambient conditions.

Note: Grooves in plastic rollers could wear through. If in doubt steel rollers should be used.

Rollers are supplied in plastic, mild steel and stainless steel finish.





Tapered Rollers

For conveyor bends.



Tapered rollers have a black plastic tapered sleeving to ensure the correct product orientation on either powered or gravity conveyors. Used on bends with an inside radius of 800mm to 1000mm. Available with either 38mm or 50mm base rollers.

Specification		
Tube Size	Spindle Option	Capacity*
50mm x 1.5mm	ø10mm, ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	35kg
1 1/2" x 16 SWG	ø10mm, ø12mm, ø14mm, ø15mm 8mm & 11mm Hex	35kg

*These maximum potential capacities are for guidance only and assume an evenly distributed static load.

Rollers tubes and spindles are supplied self colour, bright zinc plated, or stainless steel finish.





Sprocketed Rollers

For pallet or heavy duty conveyors.



Rollers can be supplied with single sprockets for tangential drives or double sprockets for roller to roller drives. Sprockets can be welded to the outside of the tubes or fitted outboard via a turned steel welded insert.

Specification		
Tube Size	Spindle Option	Capacity*
50mm x 2mm	ø10mm, ø12mm, ø14mm, ø15mm 8mm & 11mm Hex	200kg
60mm x 2mm	ø10mm, ø12mm, ø14mm, ø15mm 8mm & 11mm Hex	200kg
80mm x 2mm	ø5/8", ø20mm, 11mm & 9/16" Hex	400kg
88.9mm x 2.9mm	ø5/8", ø20mm, 11mm & 9/16" Hex	400kg
2" x 10 SWG	ø8mm, ø10mm, ø7/16", ø12mm, ø14mm, ø15mm, 8mm & 11mm Hex	200kg
2 1/2" x 10 SWG	ø5/8", ø3/4", 11mm, 9/16" & 17mm Hex	300kg
3" x 10 SWG	ø5/8", ø3/4", ø20mm, 11mm & 9/16" Hex	400kg

*These maximum potential capacities are for guidance only and assume an evenly distributed static load.

Rollers are supplied either bright zinc plated or standard self colour finish.





Drum Rollers

These large diameter thick walled drum rollers are designed for use on Belt Conveyors as either drive or idler drums.



A wide range of machined shaft ends are available.
 Special diameters are available on request.
 The outside diameter can be machined parallel or crowned to aid belt tracking.
 Supplied with either fully sealed cartridge bearings or with seam welded end plates and shafts.

Specification

Tube Size	Spindle Option
114.3mm x 6.3mm	ø25mm, ø30mm, ø1 1/4", ø35mm, ø38mm & ø40mm
168.3mm x 8mm	ø25mm, ø30mm, ø1 1/4", ø35mm, ø38mm & ø40mm
219.1mm x 8.8mm	ø25mm, ø30mm, ø1 1/4", ø35mm, ø38mm & ø40mm

Rollers are supplied self colour as standard.





Spindle Conditions



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1 Round

Un-machined round spindles are suitable for double spring loaded rollers. In some cases the side frames could be drilled as opposed to punched.

2 Hexagonal

Extruded hexagonal spindles are suitable for punched conveyor side frames. In most cases the spindle would be spring loaded. The hexagonal shape prevents the spindle from rotating in the side frame, it also prevents the bearing inner race from rotating on the spindle.

3 Drilled and Tapped

Both round and hexagonal spindles can be drilled and tapped at each end to enable the roller to be bolted between the conveyor side frames, thus increasing the rigidity of the conveyor.

4 Milled Flats

Round spindles with 2 milled flats are used in conveyors with slotted side frames where rollers are lowered into position. In most cases the spindle is supplied fixed within the roller.

5 Threaded

Round spindles can be threaded at either end to suit a metric or imperial nut. In most cases the spindle is supplied loose.

6 Circlipped

External circlips can be used to captivate a spindle within a roller. This method of retention is usually found on heavy duty rollers and drums.

7 Drilled Spindle End

'Cross drilled' spindles are supplied loose and allow several rollers to be wired together in a side frame to prevent spindle rotation and to retain the roller.





Specialised Rollers

With over 50 years experience, we have supplied rollers for just about every application imaginable.



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4

1 Rubber Covered

All steel rollers are offered with the option of rubber or polyurethane coating. 50mm rollers can be PVC sleeved.

2 'Poly V'

50mm and 60mm rollers fitted with a plastic 'Poly V' drive insert. The rollers are driven by a 'Multi V' drive band.

3 Motorised

50mm 24V DC brushless motorised rollers are used in zero line pressure conveyor applications. Rollers can be supplied with additional control cards.

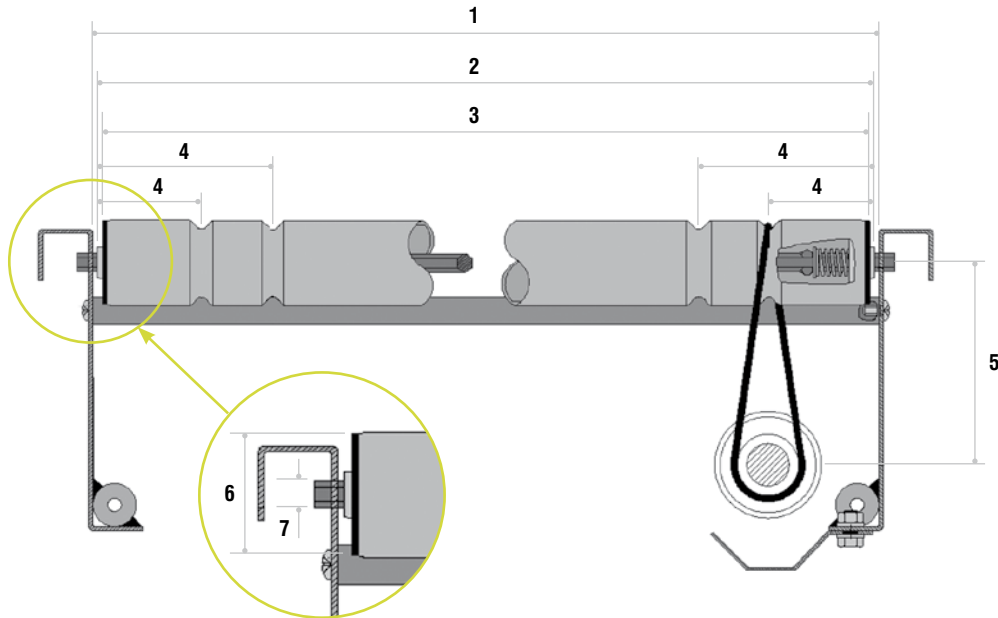
4 Lagged

Drive drums can be supplied rubber lagged to provide additional grip.





Commonly Used Terms

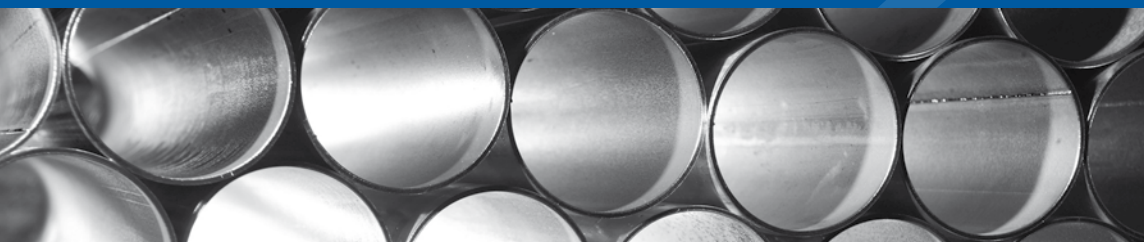


General Notes

- Over bearing projection (2) is typically 4mm less than the inside frame width (1).
- Grooves in plastic rollers will eventually wear through, if in doubt steel rollers should be fitted.
- The majority of steel rollers are supplied with zinc plated tubes.
- Greased precision bearings are used for powered applications and oiled precision or semi-precision bearings are used for gravity applications.
- 20mm is the closest groove position achievable on 40mm / 50mm diameter rollers (dimension taken from over bearing projection or from groove centre to centre).

Key

- 1 Inside Frame Width
- 2 Over Bearing Projection
- 3 Face Width
- 4 Groove Position
- 5 Lineshaft to Roller Centre
- 6 Tube Ø
- 7 Spindle Ø or A/F



Spares



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.**

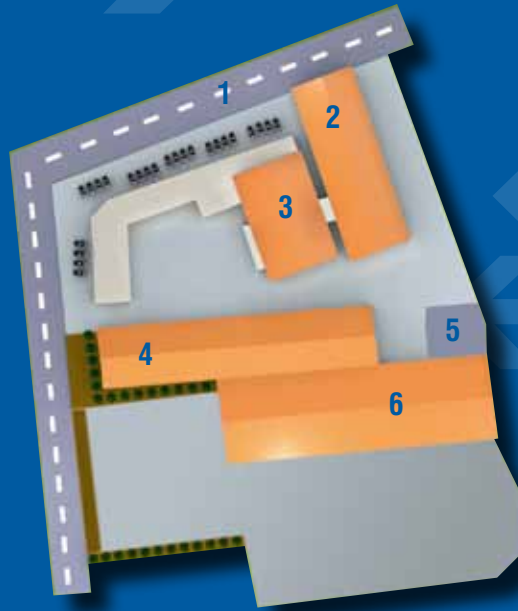


STOURPORT SITE

- 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



LYE SITE

- 1 Stour Vale Road
- 2 Stores
- 3 Bearing Assembly
- 4 Press Department / Component Manufacture
- 5 Despatch
- 6 Flexible Conveyor Assembly



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CONVEYOR UNITS

QUALITY • PERFORMANCE • RELIABILITY