

*South
East*
CONVEYORS
& ENGINEERING



Agent For



"Over 10,000 Installed with less the 1% failure rate"

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www.seconveyors.com.au

Conveyor belt life is very much dependant on the condition of the conveyor rollers. The more roller failures, the higher probability of damage to conveyor belting, resulting in premature replacement costs of overall rolling stock.

EU-Roller has been uniquely developed to improve on the lifespan of conventional rollers by eliminating negative characteristics. The roller range, manufactured from the best materials using the latest technology, outperforms similar products resulting in the most cost effective performance available in today's market.

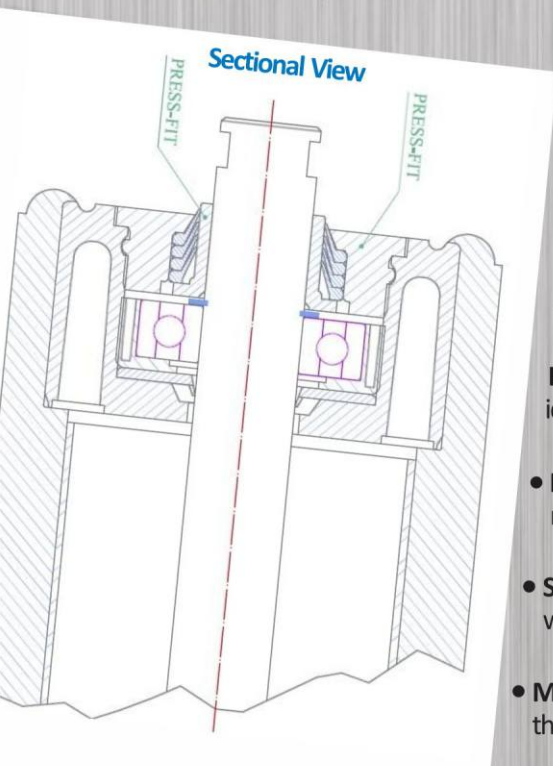
“Maximizes bearing life and extends roller performance”

- By coupling our proven, patented bearing cap assembly with a selection of proven high quality bearings chosen to meet requirements of any load application
- Currently the only roller design worldwide that encompasses four contact lip seals rotating on a plastic fitted bush. This combination is so effective that tests have shown there is no ingress of foreign material when tested under both talc and water.

Eu-Roller Mass Table						
Face Length mm	Mass Kg/Roller					
	127mm 25 Series	152mm 25 Series	133mm Impact 25 Series	152mm Impact 25 Series	152mm 30 Series	194mm 40 Series
300	4.1	4.9	4.9	6.1	5.7	11.5
400	5.3	6.3	6.5	7.6	7.6	13.2
500	6.5	7.7	8.6	9.9	9.4	16.8
600	7.8	9.3	10.3	11.8	11.3	21.1
700	9.1	10.8	11.6	12.9	13.3	24
800	10.1	12			15.2	26.7
900	11.5	13.6			17.5	29.7
1000	12.8	15.1			18.8	33.1
1100	13.8	16.4			20.9	36
1200	15.3	18.2			22.6	39.6
1300	16.4	19.4			24.6	42.2
1400	17.4	20.8			25.7	48.1
1600	19.6	23.3			29.8	56

Features that guarantee superior performance in adverse conditions

The outer shell is made from crack resistant High Density Polyethylene (HDPE) ensuring it can be used in a wide range of environments and is finished between centres to ensure superior outer shell concentricity to the roller shaft, eliminating vibration and enabling Standard idlers to meet weigh roller quality standards.



Thickness: 25 series- 14mm/ 19mm (+ 3mm Steel Inner)
30 series- 19mm
40 series- 27mm

Heat resistant: maintains constant operation at 110 deg C without failure and higher temperatures at shorter intervals.

Acid resistant: constant exposure to reagent causes no damage

Low Friction Co-efficient: The non-stick nature of HDPE lessens opportunity for build-up on idler.

- **ROLLER MASS:** The roller is approximately 60% of the weight of conventional steel rollers, making for safer installation and saving on start up costs.
- **STEEL INNER LINER:** increases rigidity of the roller shell enabling use in a wider range of belt widths, and reducing shaft deflection.
- **MINIMAL SOUND EMISSION:** operating at 57dBa (at 6.5 M/S belt speed), which is well within the industry standard of 84dBa.

EU Rollers Patent No: 225 861 Hungary

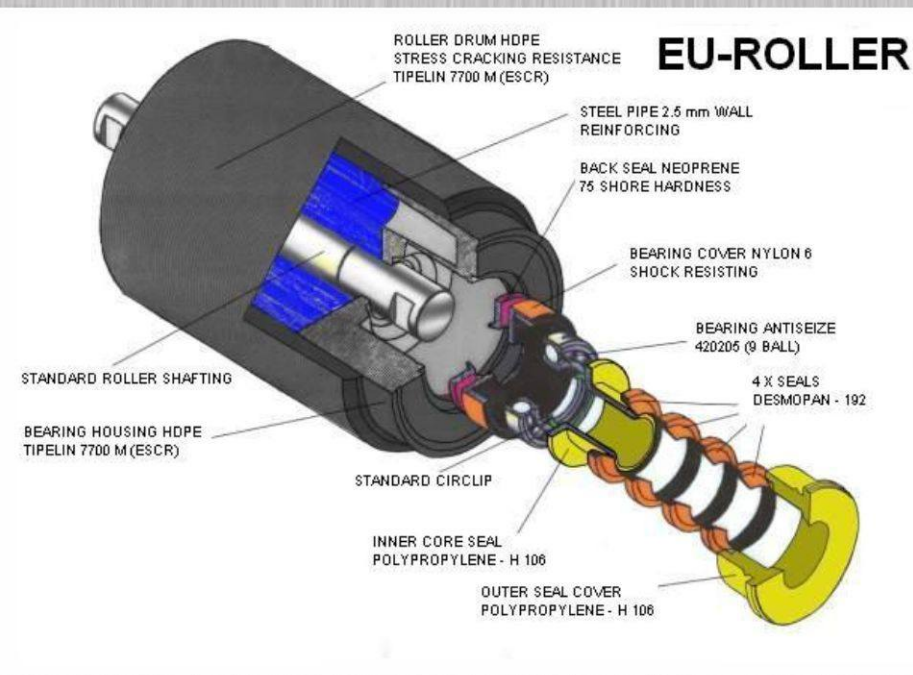


Every roller is made to client specification ranging from 25mm, 30mm and 40mm shafts.

Idlers • 127mm ϕ • 152mm ϕ • 194mm ϕ **Impacts** • 133mm ϕ • 159mm ϕ • 178mm ϕ
 Lengths from 180mm - 2050mm See attached product enquiry sheet for factory requirements

Combine all these features with our full 12 month Mechanical Warranty and it is obvious that EU Roller should be the first choice for all conveyor applications.

“EU Roller has the ability to retrofit to any existing frame.”



Roller Size	Polyshell Thickness	Bearing Load	Rating	Mass @550mm
127mm 25mm Shaft	14.5mm	420205 19Kn	5m/s 4500TPH	6.5 Kg
152mm 25mm Shaft	20.5mm	420205 19Kn	5m/s 4500TPH	7.7 Kg
152mm 30mm Shaft	20.5mm	6306 29Kn	6.5m/s 8000TPH	9.3 Kg
194mm 40mm Shaft	27mm	6308 40.5Kn	6.5m/s 8000TPH	16.2 Kg
Breakaway Mass 250kN 250g @ 4.1Kg				

“Over 10,000 Installed with less the 1% failure rate”



Standard Idler

EU-Roller is a superior designed H.D.P.E conveyor idler roller, manufactured from the best materials using the latest technology.

Advantages include:

- Increased bearing life
- Reduced roller mass
- Reduced start-up costs
- Very low noise factor (57dba)
- Shock resistant bearing cover
- Eco-friendly
- Increased resistance to wear
- Reduced damage to belt
- Non-corrosive roller body
- Very low friction

Available standard sizes:

- 127mm diameter 25 series
- 152mm diameter 25 & 30 series
- 194mm diameter 40 series
- Length: 180mm to 1650mm
(Longer available on request)

*European Standard Gauges available

Impact

EU-Roller Impact is a superior design Impact conveyor roller, manufactured from 6mm and 10mm Marine Grade Aluminum tube, Rubber Impact absorption rings and incorporating the patented bearing cap assembly.

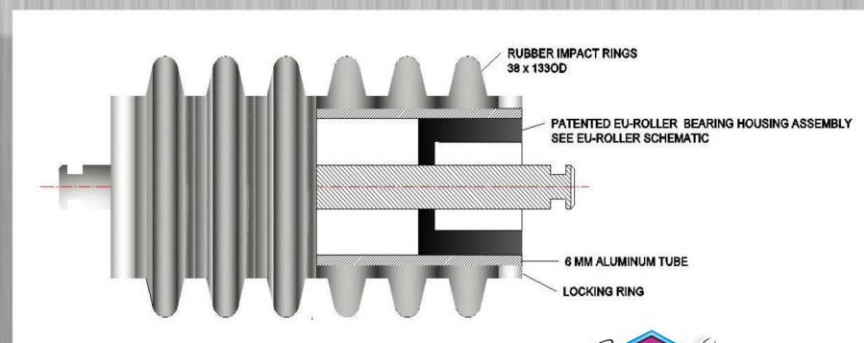


Advantages of the impact range:

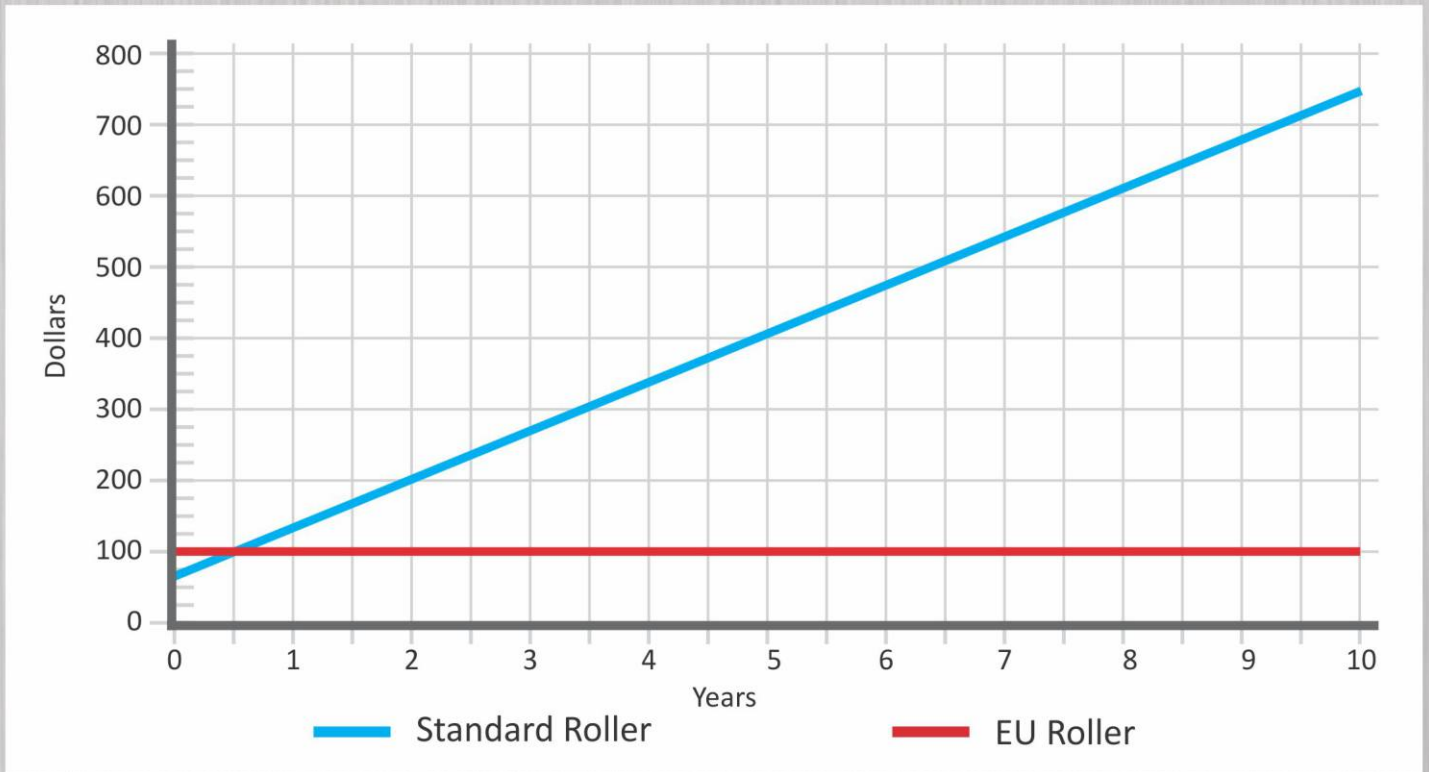
- Flexible
- High resistance to wear
- Corrosive Resistant roller body
- Increased bearing life
- Reduced roller mass
- Shock resistant bearing cover

Available sizes:

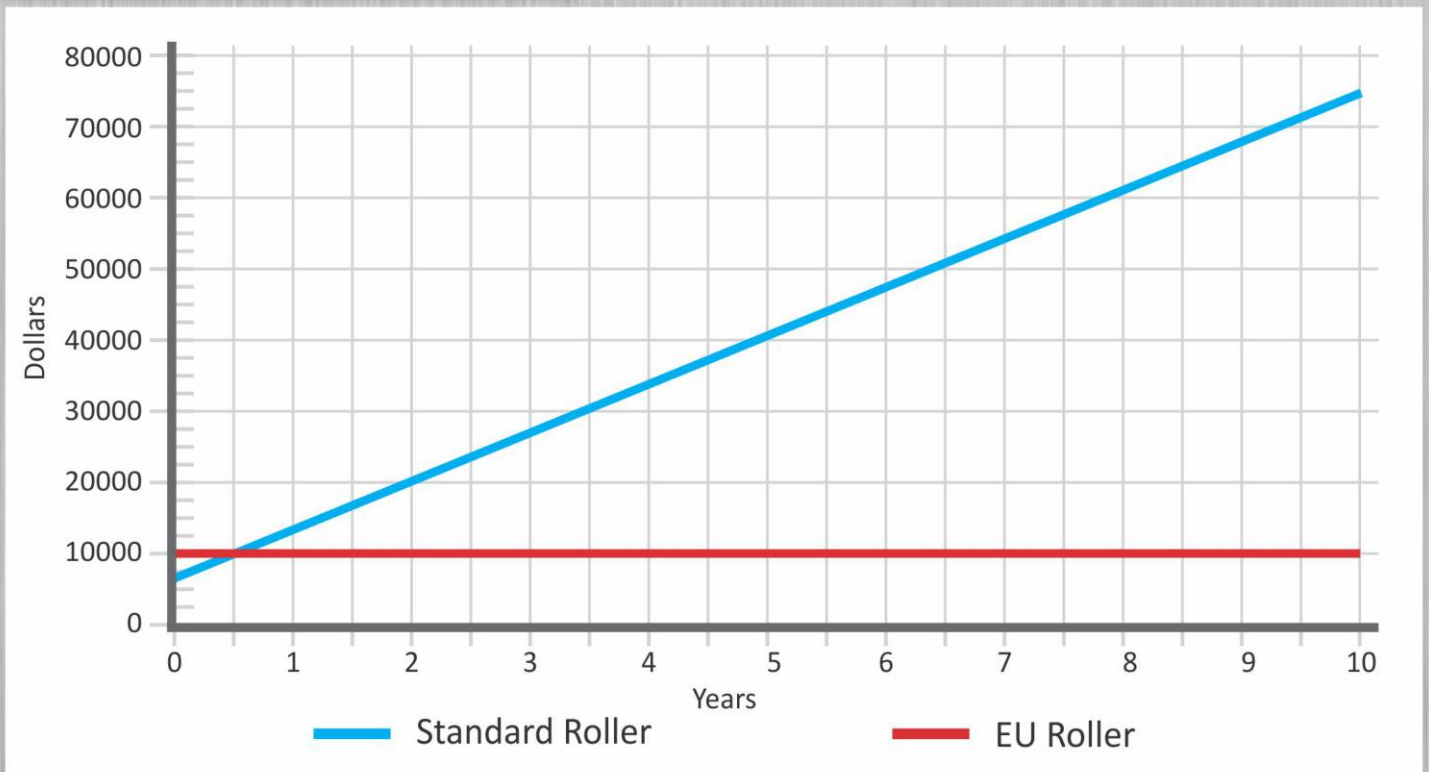
- 25 series -133mm & 159mm Ø
- 30 series -159mm & 178mm Ø



Expenditure per roller



Expenditure over 100 rollers



*Approximate estimates

1. QSL - Queensland Sugar Limited (Bulk Sugar terminals)

Cairns- Mourilyan- Townsville Mackay- Bundaberg-Lucinda

2395 Idlers supplied

Original installation Oct 2009

Failures to date: Nil



Dennis

The photos of the Euro Rollers attached have now been in place for the last 12 months without any problems associated. Approximately 50 rollers were fitted to our C3 shipping conveyor after failures were experienced with the previous rollers.

The Eu-Rollers fitted have now proven to be very satisfactory & have good noise reductions compared to steel rollers.

Regards

Ian Azzopardi

Supervisor Cairns Terminal

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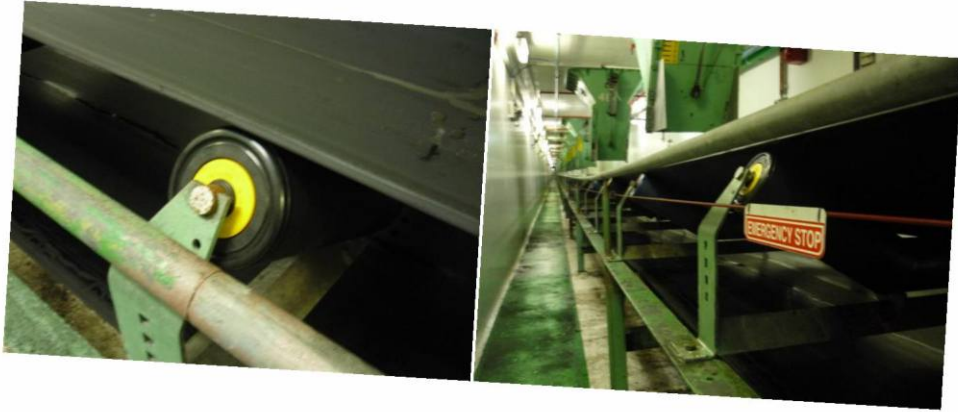
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Dennis

We will continue to place money in the budget to change existing steel rollers out to the new style poly Eu- rollers which we purchased off you last year. So far these rollers have proven to be quieter (excellent for employees working in tunnels) and we have had no failures even though we quite often perform high pressure cleaning around these rollers. Further to these good points your pricing is always very competitive (something I always encourage my supervisors to investigate)

Thanks for your service and advice when we were investigating poly rollers.

Dean

Regards

Dean O'Brien

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2. Newcrest's Telfer Gold/CopperW.A

1500 Idlers supplied - Now stock item

Original installation Oct 2009

Failures to date: Nil



Andrew,

Here are some photos of the 152mm dia rollers installed last November. As you can see one of the returns has a slight wear on one end, but is a housekeeping issue. It will still go for a while yet. Also a short movie, it's a bit noisy but I walked away from the Mill and there was no noise from the rollers until I got to the steel ones. You can see what happens to the steel rollers (other Train) and there is a EU-Roller ready to go first chance if the Mill goes down.

I hope you do not mind, I also forwarded the roller info to _____ at Rio Tinto, for their perusal, and another planner in the office sent it to his former workplace at Alcoa.

Cheers,

Scott Edman

Maintenance Planner

Telfer Gold Mine

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Independent Assessment:

Colleagues far and wide

From: Reliability Engineer, Gordon Tattershall

Date: 15/4/11

Re: Conveyor idler sealing assessment – EU-Roller A.P.I

Locating products and practices that add benefits to life cycle costs, or sustain or increase production uptime is necessary for viability in this decade, and on this occasion I am writing to share some of my latest findings on a product that may be worthwhile your consideration. Any feedback would be welcome.

In my experience, replacement conveyor idlers contribute to a significant amount of the cost of conveyor maintenance, and even more so where product carry back or water accumulates along the trough idler. The predominant failures occur from contamination affecting the bearing functionality, idlers becoming jammed by product being caught between the frame and idler, and the rolling surface becoming preferentially worn whether from abrasion or corrosion.

I have seen several different conveyor idler constructions and was impressed by the one manufactured in Europe and distributed by EU-Roller A.P.I.

I have partly disassembled an idler to form an opinion on the potential of contamination entry to the bearing when in service. The outer running surface or thick HDPE has a number of advantages over a thin steel shell.

The shaft sealing arrangement consists of a wiper seal and pre lubricated multiple chevron rings that rub on a sleeve. The sealing arrangement is located in a bore by a moulded feature that positively locates it. The manufacturer has undertaken laboratory test work to verify the functionality and repeatability of the sealing arrangement.

The bearing is inboard of the sealing arrangement mounted in a stiff moulded section of the idler. The torque to rotate the idler measure with a spring gauge and string was so low it wasn't clearly determined due to the discrimination of the spring scale used.

The running surface is HDPE on a steel substrate. The surface finish has a manufacturing profile may assist in the dispersement of water.

After disassembling the sealing arrangement I believe it could be reasonably expected to increase the Mean Time between Failure of idler bearings, whilst the idler perimeter also will be less subject to the effects of surface wear and corrosion.

The idler is available in Australia from EU-Roller A.P.I who supplied a sample for my personal assessment. The contact for further enquiry is Mr Andrew Stevens. astevens@eu-rollerapi.com or for further information (includes a sizing template for retrofitting) is a website <http://eu-rollerapi.com/>

I trust this may be of use for background knowledge as we all strive for knowledge and opportunities for continuous improvement.

Kind regards
Gordon Tattershall
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