



FJS Roller

Largest Composite Roller Designer
& Manufacturer in China

UHMW-PE/HDPE/NYLON/STEEL&PLASTIC

 Henan North China Industrial Plastic Co.,Ltd

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Specialist in design and manufacturing of composite rollers/idlers for bulk material handling.

FJS roller carries out complete roller series which applied in various industries such as:

- Power Station
- Aggregates & Cement
- Mining
- Ports
- Steel
- Chemical
- Fertiliser
- Food Processing

SAFE

LOW NOISE

BELT FRIENDLY

TEMPERATURE RESISTANCE

LONG SERVICE LIFE



Our Company

Engineering, research & development

- First to make non-metal conveyor roller
- Revolutionary roller sealing system & structure
- 30 patents
- Professional R&D team
- ODM & OEM
- First class roller test room



Manufacturing

- 24 years experience
- 16,000m²
- ISO 9001, 2008
- 30 production lines, 70 sets equipments
- 1,200,000 sets roller production capacity every year
- more than 100 employees



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Partner



HEIDELBERGCEMENT



why FJS Roller

Belt Friendly

- 1.Highly Wear-resistance, 5-7 times stronger than steel or stainless steel;
- 2.Don't absorb water, thus it will not freeze with belt under low temperature.

Zero Build-ups, thus no belt mis-tracking, less down time.

Light Weight

- 1.Easy to change and delivery;
- 2.Less power consumption, smaller motor power required;
- 3.Lower motor torque needed when conveyor starts.

No Vibration under High Speed Conveying

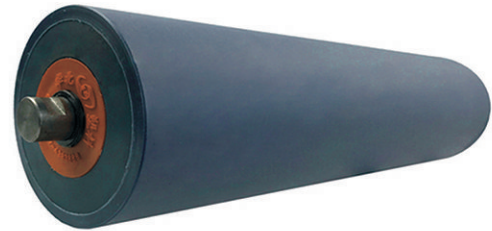
The roller material is more flexible to shape, with precise machining, it can significantly lower the TIR rate to 0.1mm or even less.

Prolong Bearing's Service Life

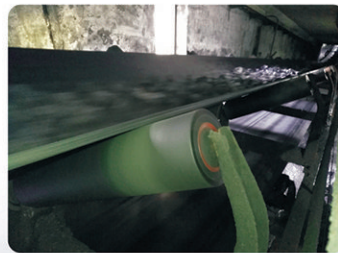
- 1.Dust and water proof roller sealing system (Patented);
- 2.Unlike steel roller, it will not get condensation inside the body to make the bearing rust or sometimes even corrosive.

Low Rolling Resistance

- 1.Unique low rolling resistance sealing system (FJS Patented);
- 2.Less belt wear.



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Steel Roller VS FJS Roller

Steel Roller

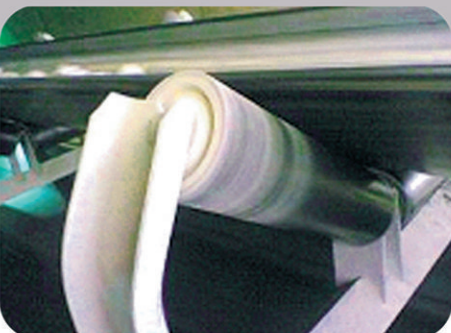
- Material Build Up: Main cause of belt miss-tracking & material spillage;
- Belt Damage: More down time, expensive belt maintenance;
- Easy to break and freeze with belt in low temperature environment;
- Tend to rust and corrosive in aggressive environment;
- Grease leaking, cause breaking of bearing.



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FJS roller

- No Material Build Up;
- No Belt Damage, highly wear resistance;
- Working well in low temperature environment;
- Anti Corrosive & No Rust;
- No grease leaking, prolong bearing's service life.

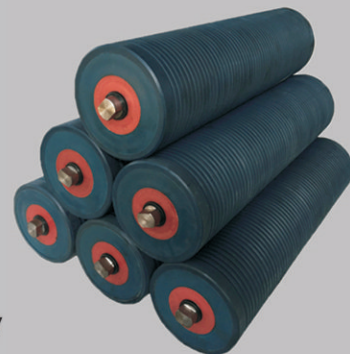


FJS-JY Super Low Noise Roller

-Perfect Solution to Low Noise

How we lower the noise

- FJS patented noise reducing lip sealing system, combined with sealing parts which made of excellent noise damping material.
- Using low noise deep groove ball bearing.
- UHMW-PE roller pipe is more flexible to shape, with precise machining, it can significantly lower the TIR rate to 0.1mm or even less,dynamically balance to ISO1940-G16.
- Lower noise produced by the vibration of roller frame
- FJS patented U type Ventilating grooved roller pipe structure which will lower the friction between roller and belt, reduce the noise produced by wind.



Super Low Noise Emission, lower the noise by 15-30dB



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FJS-JY low noise roller are recommended in where high speed conveying and low noise is required.

On site noise level test

Belt Width.mm	Speed.m/s	Capacity.t/h	Noise level.dB	
			1 meter	30 meters
B800	2.5	500-600	< 60	< 46
B1000	3.8	900-1000	< 60	< 48
B1200	4.2	1500	< 65	< 50
B1200	4.5	2200	< 70	< 52
B1400	4.95	2500	< 70	< 54

FJS-MA mining roller

-Fire Resistance & Anti Static



In 2012, after years of researching and product testing in coal mine industry, our company launched a new generation of mining rollers, #FJS-MA



Features

- FJS patented water and dust proof sealing system, working well under constant spraying of water.
- Low noise emission, lower the noise by 15-20dB, improve safety of working environment.
- Light weight, easy to carry and replace.
- No sparkle produced by rollers accidentally striking with other conveyor parts or hitting the ground
- Corrosion-resistant.
- Wear level is much less than steel roller

FJS-MA mining roller are ideal for underground working environment where are humid, corrosive, have high level of dust and noise.

Safety Certificates



Technical Parameters

FJS-MA Mining roller			
No.	Item	Unit	Spec.
1	TIR	mm	≤0.2
2	Axial displacement	mm	≤0.4
3	Axial displacement after falling	mm	<1.2
4	Axial load	KN	>15
5	Rolling resistance	N	≤2.5
6	Water spray running test	g	0
7	Underwater running test	g	5
8	Noise level test	dB	≤45
9	Friction Coefficient	-	≤0.1
10	Resistance on roller's surface	Ω	≤5x10 ⁸



FJS-SG High temperature composite roller

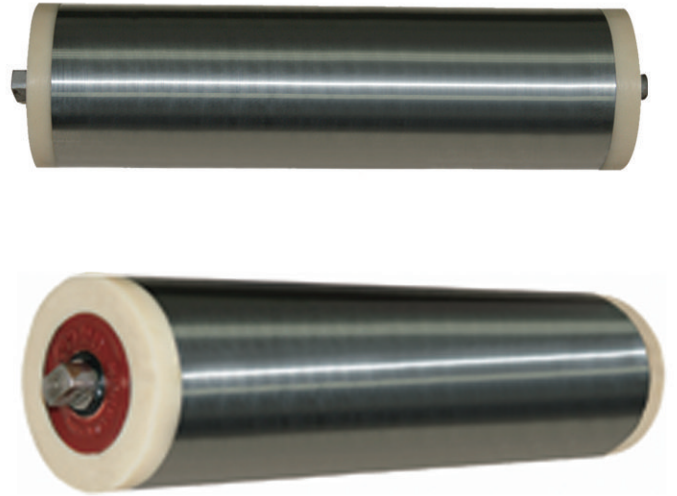
-an upgrade on steel roller, high temperature resistance, but more.

In 2013, our company launched the steel-plastic composite roller, #FJS-SG, which greatly increases the roller's stability in running and prolong the rollers service life.

It solves many problems caused by welding like:

- Poor concentricity.
- Small welded interface between the bearing seat and the roller sleeve are easy to break and cut the belt.

At the mean time, solve the problem of plastic sealing parts expansion under high temperature.



Features

- Weld-free: Excellent concentricity, significantly prolong the roller's service life
- Changing the way how bearing seat and roller sleeve connect, from a 90° angle to 180°, which significantly improve the load capacity and prevent the bearing seat and the roller sleeve from separating and cutting the belt.
- The bearing seat is made of high quality industrial plastic, no grease leaking and volatilizing.
- Embedded sealing parts with good toughness and can withstand forces from different angle.
- High temperature resistance: The bearing seat is made by special material, does not conduct heat.



Technical Parameters

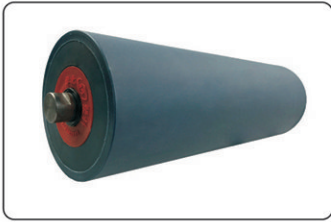
FJS-SG high temperature resistance roller			
No.	Item	unit	Spec.
1	TIR	mm	≤0.3
2	Axial displacement	mm	≤0.4
3	Axial displacement after falling	mm	<1.2
4	Axial load	KN	>15
5	Rolling resistance	N	≤2.5
6	Water spray running test	g	0
7	Underwater running test	g	5



Complete Roller Series for All Your Bulk Handling Solution



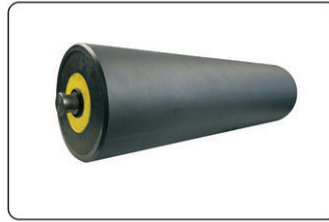
UHMW-PE Rollers



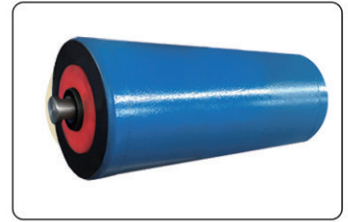
FJS Standard Roller



Low Noise Roller



Mining Roller



Steel & Plastic Roller



Impact Roller



Disc Roller



Spiral Roller



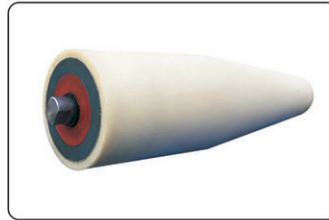
Low Temperature Roller



Self-aligning Roller



Tapered Roller



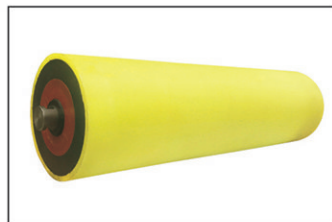
Crowned Roller



Guide Roller



HDPE Roller



Nylon Roller

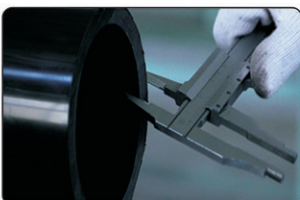
FJS Roller Diameters (or Customized)

76	89	108	133	159	178	194	219
63.5	102	114	127	140	152	165	191

HDPE Roller: Ideal for light material conveying like food and grain industries etc.

Nylon Roller: Ideal for Pellet, Coking, Steel slag conveying

Quality Control & Packaging

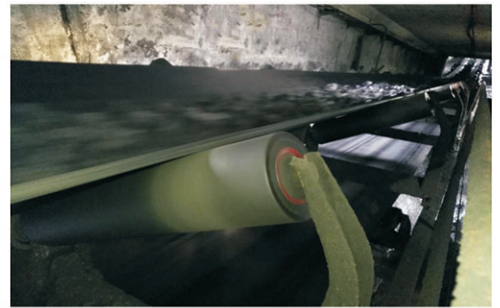


FJS Roller On Sites

Overland



Underground



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Aggressive



High Speed - 9m/s



Low Noise Roller Projects



Huaneng Group Power Station project

Belt Width: 1300mm Belt Speed: 3.5m/s Capacity: 700t/h



**The Yubei Project-Huadian Heavy Industries
The World' s Longest Pipe Conveyor system.**

Pipe Diameter:400mm Belt Speed: 4.5m/s
Belt width: 1500mm Capacity: 1000t/h



**Southwest Cement project.
China National Building Material Group.Co.Ltd.**

Belt Conveyor Model: B1200*9.7km
Belt Speed: 4.2m/s
Capacity: 2000t/h



LafargeHolcim Cement

Belt Conveyor Model: B1200*5.5km
Belt Speed: 3.8m/s
Capacity: 1800t/h



**CR Cement Project, 48km double line conveyor
- designed by RBLREI France**

Belt Conveyor Model: B1400*48km*2
Belt Speed: 4.95m/s
Capacity: 2500t/h



UHMW-PE PIPE & PIPE FITTINGS

UHMW-PE PIPE

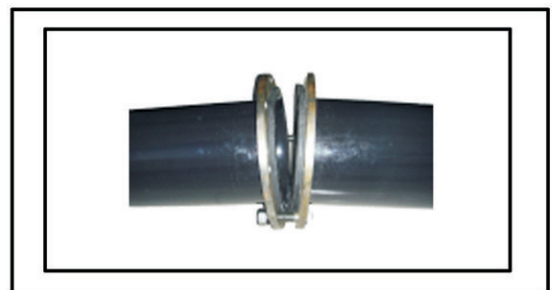
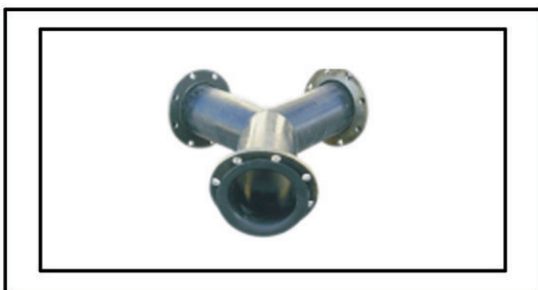
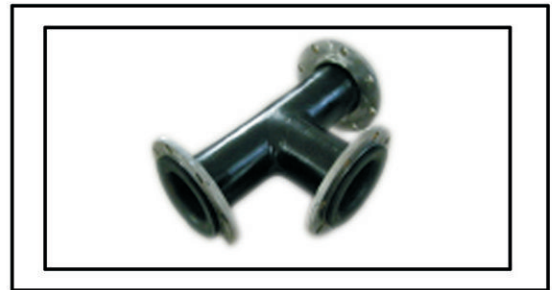
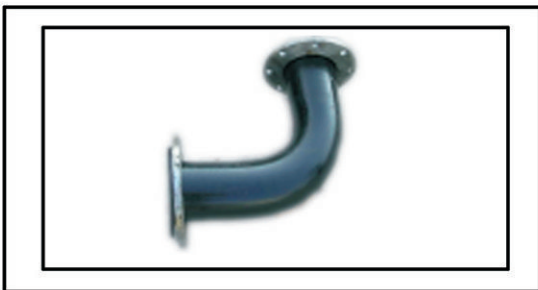


EXCELLENT FEATURES

- ◆ Extreme Wear Resistance
- ◆ Extremely Low Surface Roughness
- ◆ Self Lubricating
- ◆ Improves Pumping Efficiency
- ◆ Reduces Required Energy Inputs
- ◆ Greatly Reduces "Total Pumping Cost"
- ◆ Corrosion Resistant
- ◆ Aids in Delivering Emissions Targets

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UHMW-PE PIPE FITTINGS



Main Application Areas

Power Systems: Fire power plant fly ash emissions, chemical water circulation system, sulfur removal system.

Coal Industry: Coal, coal slurry transport, mine air supply, exhaust, drainage system.

Chemical Industry: Strong acid, alkali and other high corrosive media delivery, salt chemical brine, salt pulp, salt transport.

Oil Exploitation: Crude oil transportation, natural gas gathering and transportation, sewage recharge.

Metallurgical Industry: Coke powder, slag, pulp and smelting residue.

Mine Industry: Slurry pipeline, coal mine high pressure water supply, gas pipeline.

Dredging Works: Rivers, lakes, ports, docks and other dredging works to transport sediment.

Ocean Works: Seawater desalination in the transport of water, fresh water.

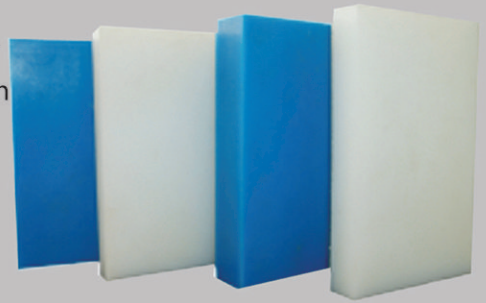
Municipal Works: Sewage treatment, domestic water supply and gas transportation.



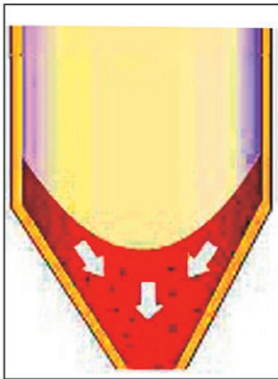
UHMW-PE LINER, ROD & OEM PARTS

Features

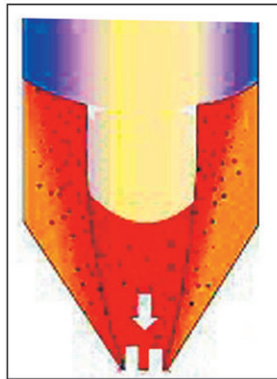
- Highly Self-lubricating, don't absorb water: Destroy the molecular chain formed due to water absorption, thus no build up material on the liner.
- Free of Maintenance
- Highly Wear Resistance, Impact Resistance.
- Long Service Life.



Material Flowing

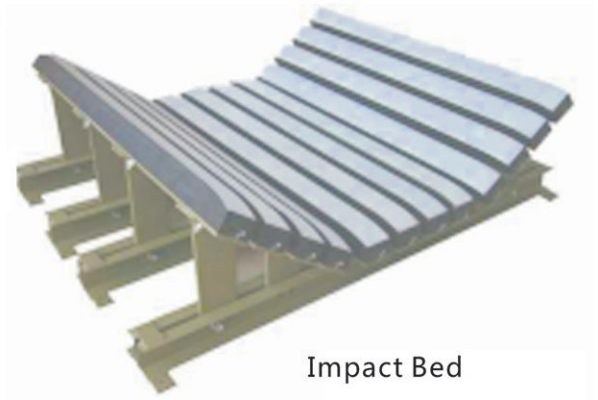
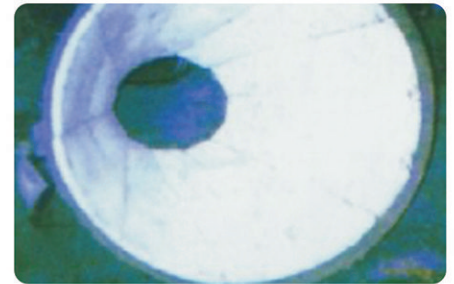


With UHMW-PE liner



Without UHMW-PE liner

APPLICATIONS



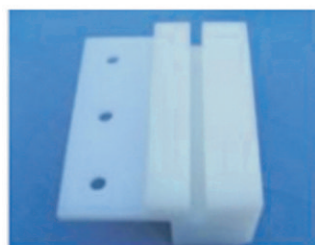
Impact Bed

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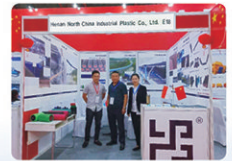
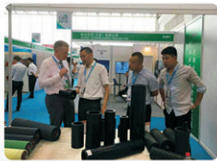
UHMW-PE ROD



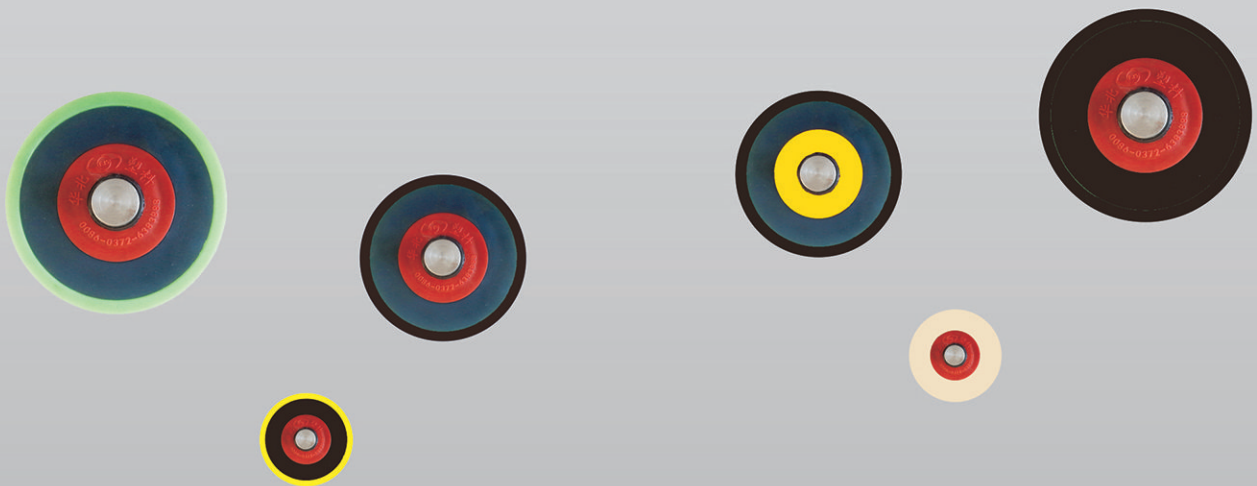
UHMW-PE OEM PARTS



FJS Roller All Over The World



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