Carrying Idler Roller

Hubei Xin Aneng's Carrying Idler Roller guarantee 30,000hrs in normal working conditions. By using better raw materials, bearings, and seals in production, we can meet your higher quality requirements on Carrying Idler Roller. Our quality control is not only reflected in the design, but also in the procurement of raw materials, the skills and quality training of workers, the accuracy of production equipment, etc.

Send Inquiry

Product Description

The carrying idler set is a crucial component in belt conveyors, responsible for supporting the conveyor belt and the material transported on it. These idler sets typically consist of several rollers composed of components such as shafts, bearings, seals, end caps, and tubes. The primary function of the carrying idler set is to support the load-carrying branch of the conveyor belt, ensuring stable operation by bearing the weight of the conveyor belt and the material.

Structurally, the surface of the carrying idler set's rollers needs to be smooth with minimal radial runout to reduce conveyor belt resistance and limit belt sagging. The bearing seats and dust covers of the rollers are typically made of stamped parts, with the outer shell made of seamed steel pipe, making them lightweight and low-resistance. Additionally, to maintain the stable operation of the rollers, the idler set utilizes specialized bearings and lithium-based grease, with internal and external sealing to prevent contamination and grease loss.

belt width (mm)	Carrying Idler Roller	Carrying Idler Roller										
	belt speed(m/s)	0.8	1	1.25	1.6	2	2.5	3.15	4	4.5	5	5.6	6.3
500	maximum conveying capacity	69	87	108	139	174	217						
650		127	159	198	254	318	397						
800		198	248	310	397	496	620	781					
1000		324	405	507	649	811	1014	1278	1622				
1200			593	742	951	1188	1486	1872	2377	2674	2971		
1400			825	1032	1321	1652	2065	2603	3304	3718	4130		
1600						2168	2733	3440	4373	4920	5466	6122	
1800						2795	3494	4403	5591	6291	6989	7829	9083
2000						3470	4338	5466	6941	7808	8676	9717	11277
2200								6843	8690	9776	10863	12166	14120
2400								8289	10526	11842	13158	14737	17014
2600													

Introduction of Carrying Idler roller

1.Reduced Wear and Tear: Carrying Idler roller help to distribute the weight of the material evenly across the conveyor belt, reducing wear and tear on the belt.
2.Improved Material Handling: By providing support and guidance to the conveyor belt, Carrying Idler roller help to ensure smooth and efficient material handling.
3.Increased Conveyor Belt Life: The reduced friction and wear resulting from the use of Carrying Idler roller can lead to a longer conveyor belt life, reducing maintenance costs.

Carrying Idler roller play a crucial role in the efficiency and performance of conveyor systems. By providing support and guidance to the conveyor belt, Carrying Idler roller help to ensure smooth material handling and reduce wear and tear on the belt. Trusting the right Carrying Idler roller for your conveyor system can lead to increased efficiency, reduced maintenance costs, and a longer conveyor belt life.

Carrying Idlers include the following sub-categories: standard trough idlers, flat return idlers, impact idlers, self-aligning idlers, V shape idlers etc

Belt Speed (m/s)	Length /mm	
	< 550	≥550
	Radial runout tolerance of diameter	
≥3.15	0.5	0.7
< 3.15	0.6	0.9

Shaft Dia/mm	AapplyAxialForce/N
≤20	10000
≥25	15000

Roller Diameter/mm		≤108	≥133
RotationalResistance/N	Dust-proof roller	2.5	3.0
	Dust-proof roller	3.6	4.35

FAQ

1.What are Carrying Idler roller?
Carrying Idler roller are roller that support the conveyor belt and the material being conveyed. They are typically located on the underside of the conveyor belt and help to carry the load, reducing friction and ensuring smooth movement along the conveyor.

2.What is the difference between carrying idler and impact idler?
Carrying Idlers: Support the loaded side of the belt and are usually arranged in a trough shape. Return Idlers: Support the return side of the belt as it loops back to the beginning of the conveyor system. Impact Idlers: Located at points where material drop onto the belt to absorb the forces and protect the belt

3.What is the function of carrying idlers
Carrying idlers provide support for the belt while it carries the material. They are available in flat or troughed designs. The flat design usually consists of a single horizontal roll for use on flat belts, such as belt feeders.

Our Factory:

Our factory has a comprehensive quality assurance system. Before production begins, we will submit a comprehensive quality assurance plan for this project. This plan includes quality assurance procedures, organizational methods, qualifications of involved personnel, and controls for all activities affecting project quality such as design, procurement, manufacturing, transportation, installation, commissioning, and maintenance. We have dedicated personnel responsible for quality assurance activities.

Our quality assurance plan primarily defines the following points:

1.Inspection and control of equipment;
2.Control of purchased equipment or materials;
3.Control of materials;
4.Control of special processes;
5.On-site construction supervision;
6.Quality witness points and schedules.