

HENAN EXCELLENT MACHINERY CO., LTD

BULK MATERIAL HANDLING

CORRUGATED SIDEWALL BELT CONVEYOR

Technical Description

The central chain bucket elevator is a conveying device that drives the chain, the hopper and the material by friction. Unlike other chain bucket elevator, the chain and other components are driven by a sprocket fits the chain. The problem of too fast wear of sprocket and chain and too short service life are overcomed by frication transmission. Greatly improve the service life of chain and sprocket. At the same time, because the chain speed of central chain bucket elevator is much higher than that of the plate chain, the capacity is also higher than the plate chain, which is more suitable for material lifting field with large tonnage and harsh environment.

The central chain bucket elevator is also better than plate chain bucket elevator in terms of energy consumption. With the further deepening of the requirements of energy saving and environmental protection, the central chain bucket elevator has high speed and dense hopper, and the lifting efficiency is obviously higher than other types bucket elevator, the fact proved that the central chain bucket elevator than the plate chain bucket elevator energy saving 10%-15%.

Die forging technology on the central chain plate, more highlights the mechanical properties of the material, greatly improving the chain of fatigue resistance and wear resistance, the structure design of science, advanced heat treatment process, the choice of high performance material, special processing equipment and scientific processing technology, ensure the chain's service life and the comprehensive mechanical properties.





Technical Feature

2.1 Wide application range, suitable for lifting large materials

The general central chain and plate chain bucket elevator has corresponding requirements for the material type, characteristics and lump size. Henan Excellent Machinery Co., Ltd (EXCT) through technical innovation, independent reasearch and development of central chain bucket elevator not only can lift the powdery and granular materials, also can lift big block material, grinding cut materials, temperature of 300° C.

2.2 Bucket elevator do not material reverting, reduce energy consumption.

The chain speed of the central chain bucket elevator with large lifting capacity is much higher than that of the high-speed plate chain, and there are still hidden dangers of materials reverting. EXCT through the advanced design of the whole machine, compeltely solve the return material phenomenon of the bucket elevator, to ensure the safety and smooth operation of the equipemnt, and reduce the energy consumption.



2.3 long service life

(1) chain

The precision forging of the chain plate and the advanced heat treatment process ensure the high comprehensive mechanical properties of the chain plate; the appropriate interference between the pin shaft, the sleeve and the chain plate creates beneficial stress on the mating surface and increases the fatigue of the chain lifetime; The labyrinth seal between the inner and outer chain plates minimizes the abrasive damage of the sleeve to the pin and the pin, reduces the grinding between the pin and the sleeve, and prolongs the life of the chain. Generally, in the case of continuous operation of the equipment, the service life of the chain developed by our company can reach more than 4 years.



(2) Driving wheel and driven wheel ring

Wheel rings of driving wheel and driven wheel are toothless, detachable and divided. Between sprocket and chain transfer torque on three friction between chain and sprocket, the maximum ensure under the action of static friction drive chain operation, and this kind of structure without gear drive, as a result of the sprocket and chain diameter pitch with the teeth, the chain and sprocket each time of the contact position is not on the same point, guarantees the rim around wear evenly and greatly increase the service life of the chain wheel.



2.4 High reliability

Advanced design principle, ensure the equipemnt reliable operation, low failure rate, simple maintenance.

The toothless design of driving wheel and driven sprocket overcomes the alternating load when the chain meshes. Compared with the toothed sprocket, it is lighter, more stable, with lower noise, and can achieve higher productivity.

Wear-resisting sleeve and limit sleeve are used instead of bearing. They are sealed inside the tail shell, which can not only reduce the economic loss caused by frequent replacement of bearing due to ash, but also make the environment clean and tidy due to no dust leakage point.



2.5 Middle casing double-channel

The bucket elevator adopts the self-supporting design and relies on itself to support the whole equipemnt. A single channel will cause a huge section of the casing and the support stability will decline. The double channel design increases the support stability.





Technical Feature

	Chain of central chain bucket elevator	
Model	Pitch(mm)	Rupture strength
ZYL01	152.35	900
ZYL03	152.35	1250
ZYL05	177.8	1200
ZYL07	177.8	1600
ZYL09	180	3000

Outline Dimensional Drawing



Life guarantee and service description

EXCT's chain of central chain bucket elevator adopts advanced structure design, scientific processing technology and perfect quality control system to ensure the service life of the chain. The processing technology adopts double shaft boring processing to ensure the consistency of pitch and scientific heat treatment technology to ensure the comprehensive mechanical properties of chain accessories and super wear resistance. Perfect quality control system, to ensure that the product quality 0 defects, the adoption of 100% magnetic powder inspection process, all the chain parts assembly parts through magnetic powder inspection on the production line, to ensure that unqualified products will not flow into the next process.

In the process of replacing and using the central chain, we provide a full range of technical services, including on-site detection of the wear of the chain, detection of the sprocket engagement, and identification of the service life and wear degree of the chain. For customers to create a full worry-free service.



EXCT committed to be the best supplier in the world



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