

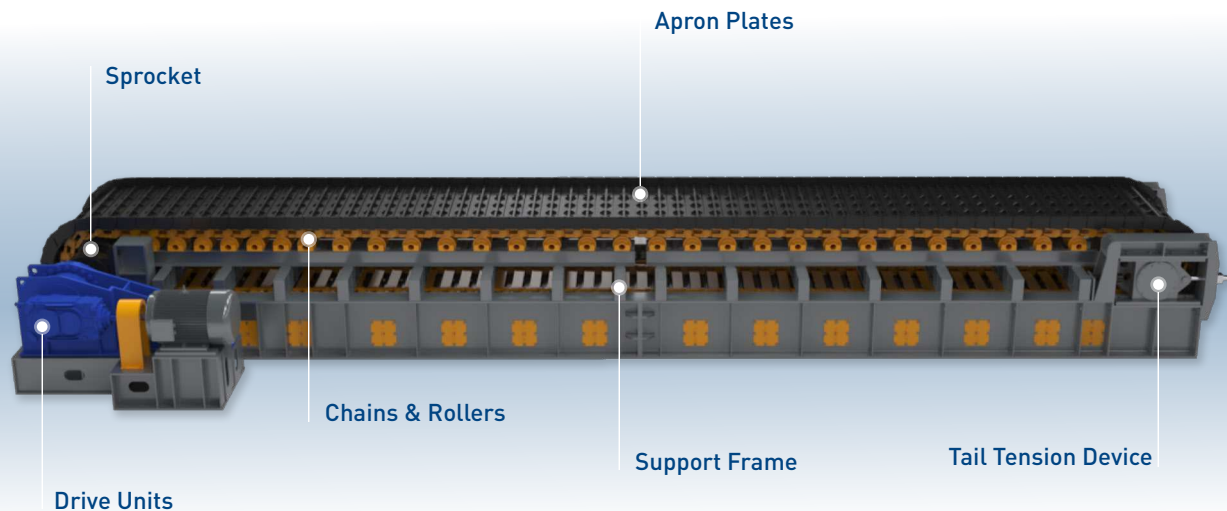
# APRON FEEDER BROCHURE

# APRON FEEDER INTRODUCTION

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Apron Feeders are a reliable feeding method used to feed a wide variety of applications. It is suitable for heavy loads and high impact loads from large coarse materials directly dumped. Apron feeders adopt variable frequency speed adjustment and enable intelligent interlocking with downstream equipment, significantly improving production efficiency and reducing operational costs for customers.

Apron Feeders mainly consist of drive units, sprockets, chains & rollers, apron plates, support frame, tail tension device etc.



When the head sprocket is driven, the traction chain in the apron plate chain device meshes with the sprocket to drive the entire apron plates to move along the longitudinal center-line and the roller travels along the track fixed on the frame, thereby completing work.



## Drive Units

Drive Units utilize an AC variable frequency drive system that integrates software with electronic and mechanical systems to provide precise conveyor speed control and overload protection. The main components of drive units can choose SIEMENS, ABB, SEW, FLENDER and other well-known domestic and foreign brands of motor and gearbox, to provide stable and continuous kinetic energy output, with high efficiency, low noise and vibration etc.

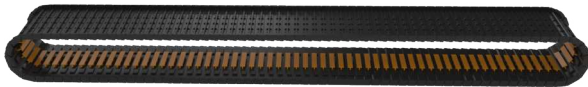
## Sprocket

Cast manganese sprockets bolted to heavy steel hubs keyed to oversized front drive shaft. The segmental sprockets can be replaced in a very short time without needing to dismantle or remove other parts of the apron feeder.



## Apron Plates

The apron plates bolted to the chain with high strength bolts and nuts, which can be replaced individually in situ without disturbing the rest of apron feeder. According to different working conditions, apron feeder can choose heavy duty cast manganese steel or welded construction with ribbed reinforcements, which is suited for materials with high load and high impact conditions.



## Chains & Rollers

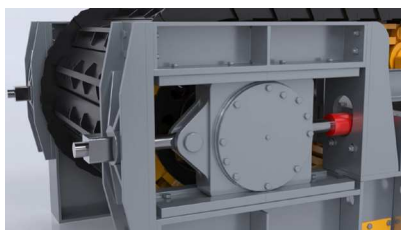
The chain uses an off the shelf dozers chain(track chain), which is characterized by small pitch error, smooth movement, high strength, large pulling force, and the chain has a self-lubricating device and a sealing device. The rollers are designed as a standard tractor rollers with sealed and lifetime lubricated bearings, mounted on the main feeder frame. The rollers has suitably spaced to provide adequate support for the chain assembly.

The chains & rollers can use world famous brands according to customer needs, such as Caterpillar,-Komatsu, and Shantui.



## Tail Tension Device

The tension device is used to tighten and adjust the horizontal position of the chain to ensure that the chain tightness is moderate and make it run smoothly. When the apron plates are suddenly impacted by the material, the composite spring can play a buffer role to protect the apron plates and other components from damage.



# APRON FEEDER FEATURES

High Impact Resistance

Flexible Layout

With Self-lubricating System

With Intelligent Control System

Easy Installation

Widely Applications

Uniform Feeding

Convenient Maintenance

Large Capacity

Heavy-load Starting Capability

Low Operation Cost

Long Service Life

## KEY BENEFITS



Rugged steel support frame with impact rails to limit apron plates deflection, thus eliminating permanent bending of the apron feeders. And it can withstand all loading conditions during starting and operation.



Apron feeders can be installed in both horizontal and inclined applications. The high inclination also allows to build compact installations and reduce the length of apron feeder and height of civil foundation, thus keeping the equipment and construction costs low.



Apron feeder with frequency converter, and it can change the speed of main motor, thereby changing the chain speed, which can achieve the purpose of adjusting the handling capacity of apron feeder.



The core components of apron feeder have a long service life and minimal maintenance, which reduces downtime and increases productivity, thereby increasing profitability for customers.

# APRON FEEDER MAIN APPLICATIONS



## Crusher Feeding

Apron feeder covers full range of materials, such as limestone, coal, iron ore, copper ore, bauxite ore etc. Unloading of material of any size range, size up to 1,500mm, suitable for a wide variety of abrasive materials, each unit is tailor-made to suit crusher.

## Wagon Unloading

Receive mine material directly from wagons and dump trucks, unloading of multiple trucks at once, suitable for unloading in combination with other transportation equipment, high impact load resistance.



## Hopper Discharge

Apron plate of width up to 3,000mm suitable for large block materials, vertical or even negative angle walls for extremely sticky materials, reasonable apron plate shape design for better cleaning.

## Stockpile Discharge

Several short apron feeders in series, unlimited on the height of material stockpile, heavy duty design ensures reliable material extraction.



## HANDLING MATERIALS

➤ Cement  
➤ Coal  
➤ Clay  
➤ Clinker  
➤ Copper  
➤ Coke

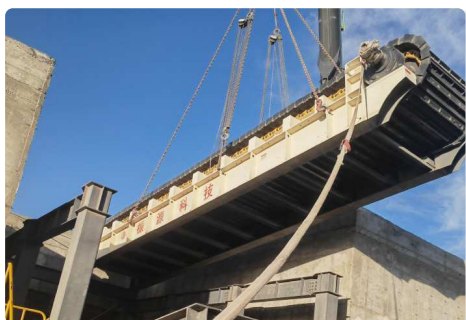
➤ Sand  
➤ Silver  
➤ Aggregate  
➤ Nickel  
➤ Overburden  
➤ Oil Shale

➤ Kimberlite  
➤ Bauxite  
➤ Potash  
➤ Iron Ore  
➤ Lignite  
➤ Limestone

➤ Gold  
➤ Gravel  
➤ Gypsum  
➤ Gangue  
➤ Quartzite  
➤ Uranium Ore



# APRON FEEDER **SUCCESSFUL CASE**



# APRON FEEDER

# TECHNICAL

# SPECIFICATIONS

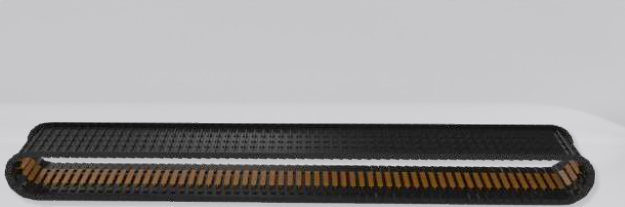
Model	Plate Width (mm)	Plate Length (m)	Feeding Speed (m/s)	Feeding Size (mm)	Feeding Capacity (m³/h)
ZBWJ1200	1200	3-50	0.02-0.19	≤600	100-600
ZBWJ1400	1400	3-50	0.02-0.19	≤800	100-800
ZBWJ1600	1600	3-50	0.02-0.19	≤1000	200-1000
ZBWJ1800	1800	3-50	0.02-0.25	≤1000	400-1500
ZBWJ2000	2000	3-50	0.02-0.25	≤1200	600-2000
ZBWJ2400	2400	3-50	0.02-0.25	≤1400	800-3000
ZBWJ2800	2800	3-50	0.03-0.36	≤1800	1300-4000



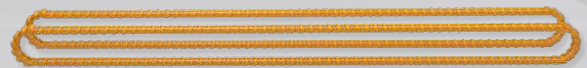


# APRON FEEDER **SPARE PART**

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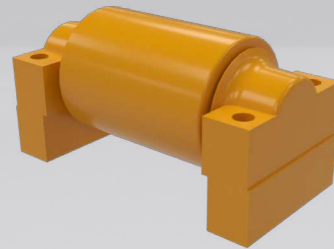
Apron Plates



Chains



Support Rollers



Return Roller

## ADEQUATE SPARE PARTS

We have a perfect warehouse management system and spare parts reserve, which can quickly provide spare parts when customers need them, reduce equipment downtime and save operating costs.







## CONTACT US

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