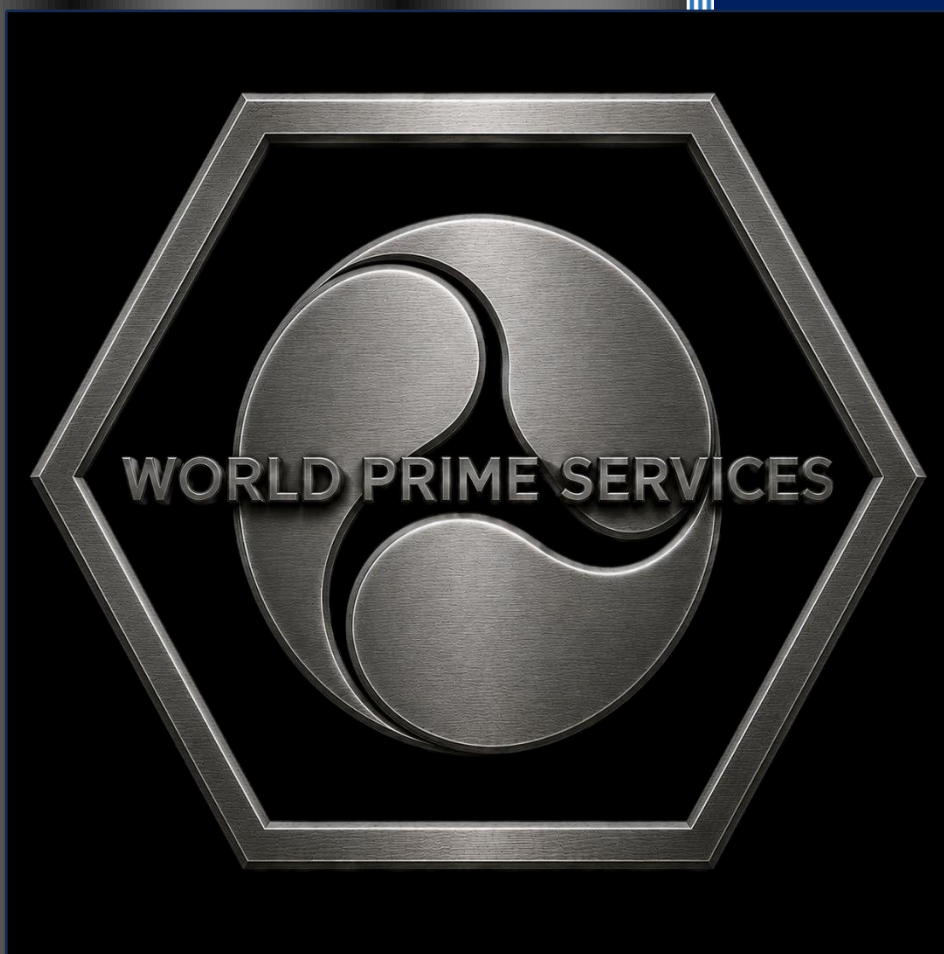


2026

WORLD PRIME SERVICES



CHIP CONVEYOR SYSTEMS



ABOUT WORLD PRIME SERVICES

World Prime Services supplies industrial solutions for machine tool accessories, chip conveyor systems, coolant filtration equipment and customized automation products for CNC machining, metalworking and heavy industry. Our portfolio is designed to provide high reliability, robust construction and long service life, supporting customers with engineering expertise, technical consulting and global sourcing.

Our product range includes hinged belt chip conveyors, scraper conveyors, magnetic chip conveyors, screw conveyors, vibrating conveyors, paper band filters, coolant management equipment and related accessories. Each solution can be customized to meet machine dimensions, chip characteristics and production requirements.

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1. Chip Conveyor Series
2. Scraper Chip Conveyor
3. Hinged Belt Chip Conveyor
4. Magnetic Chip Conveyor
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6. Vibrating Chip Conveyor
7. Paper Band Filter
8. Accessories

SCRAPS-EXCLUDING CHAIN SERIES

Hinged steel chain assemblies for chip handling and machine-tool conveyor systems

A modular range of steel hinged chains designed for continuous transport of metal chips, swarf, scrap and small components. Chain geometry, plate material, perforation pattern, side wings and belt width can be configured to match the chip type, coolant content and conveyor duty.



Standard Pitch Range

Pitch	Typical Shaft Ø	Typical Roller Ø	Plate Thickness	Recommended Duty
31.75 mm	Ø8 mm	Ø19.05 mm	1.0 / 1.5 / 2.0 mm	Compact machine tools
38.10 mm	Ø8 mm	Ø22.23 mm	1.0 / 1.5 / 2.0 mm	Light to medium duty
50.80 mm	Ø10 mm	Ø28.58 mm	1.0 / 1.5 / 2.0 / 3.0 mm	General industrial duty
63.50 mm	Ø10 mm	Ø40 mm	1.5 / 2.0 / 3.0 mm	Medium-heavy chips
76.20 mm	Ø14 mm	Ø44.45 mm	1.5 / 2.0 / 2.5 mm	Heavy-duty conveying
101.60 mm	Ø14 mm	Ø57.15 mm	2.5 / 3.0 / 4.0 mm	Large chips and parts

Construction Options

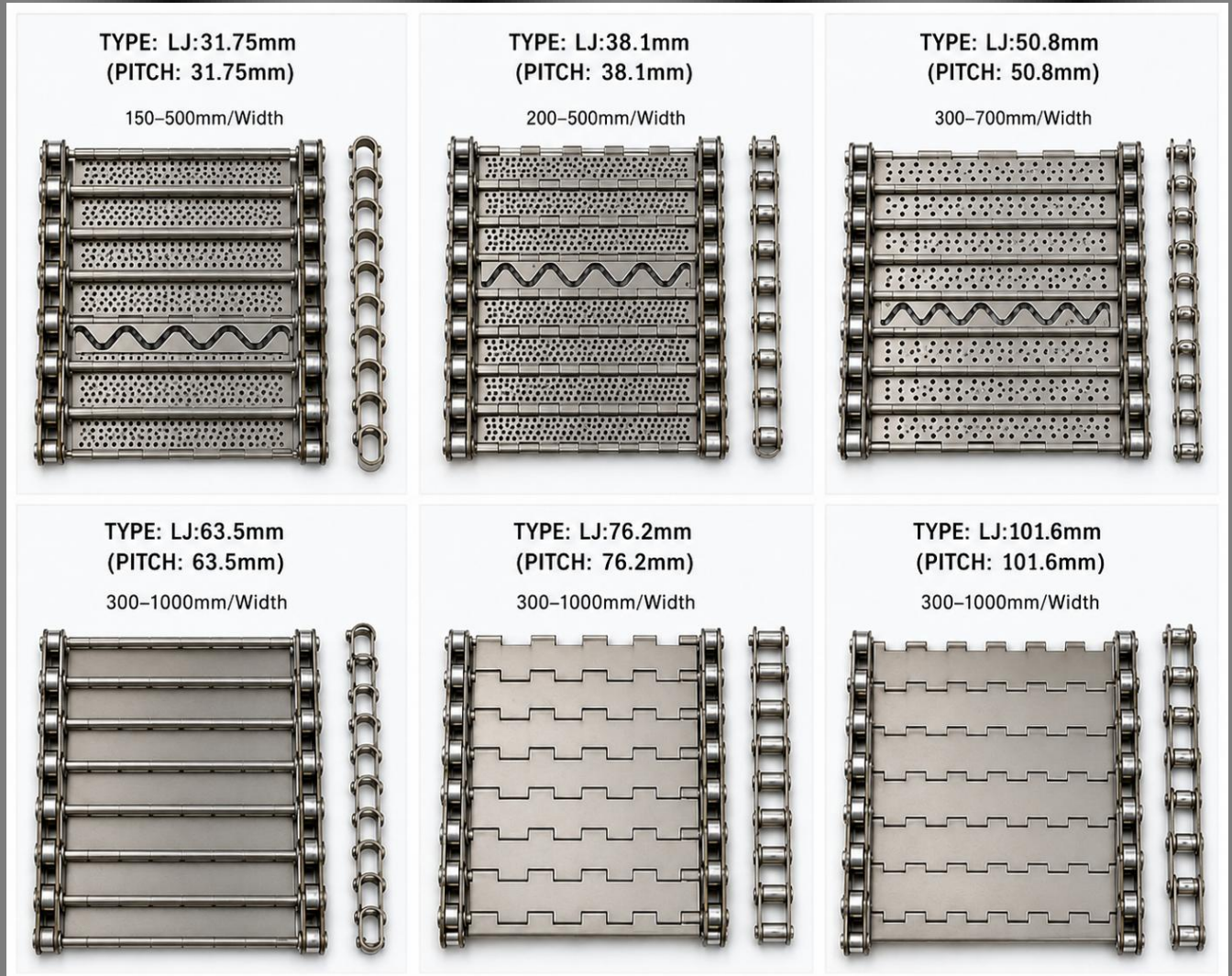
- Carbon steel, galvanized steel, stainless steel 201/304/316L or application-specific material.
- Solid plate, perforated plate, dimpled plate and reinforced designs for different coolant and chip conditions.
- Custom belt width, side-wing height, scraper profile, sprocket interface and discharge geometry.



HINGED CHAIN TECHNICAL DRAWINGS

Reference geometries for standard conveyor-chain pitches

The following drawings illustrate representative chain and plate geometries. Final dimensions, belt width, plate profile and side-wing construction are confirmed for each conveyor application.



Selection Notes

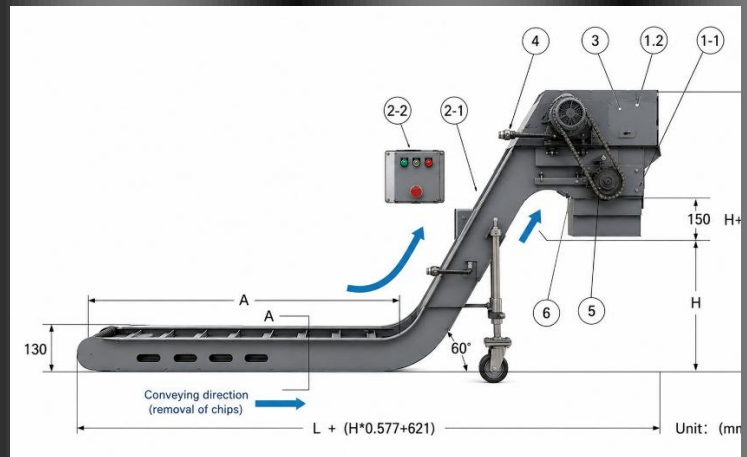
- Select pitch and plate thickness according to chip size, impact load, conveyor width and required service life.
- Perforation and drainage patterns are selected according to coolant flow and the required separation efficiency.
- Final sprocket, shaft, guide-rail and chain-tensioning details are engineered as part of the complete conveyor assembly.



SCRAPER CHIP CONVEYOR

Efficient handling of fine chips, short swarf and sediment-bearing coolant

The scraper conveyor uses crossbars or scraper paddles attached to a driven chain to collect and drag chips along the conveyor floor toward the discharge point. It is particularly suitable for fine metallic chips, small fragments and applications where coolant recovery is required.



Performance Features

- Compact construction with high conveying efficiency for brass, aluminum, cast-iron and mixed machining chips.
- Multiple scraper widths provide flexible integration with CNC lathes, machining centers, grinding equipment and transfer lines.
- Rigid scraper assembly supports stable, quiet operation and accurate chain tracking.
- Torque limiting and overload protection reduce damage caused by chip jams or improper operation.
- Scraper paddles may be supplied with polyurethane or elastomer wipers for improved fine-particle removal.

Specification & Options

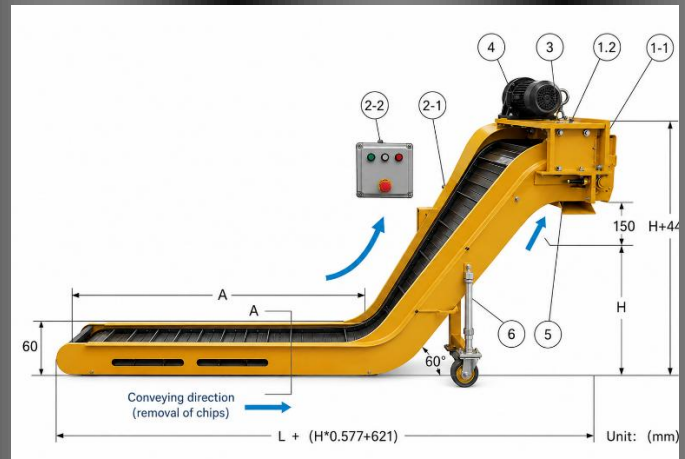
Parameter	Standard Configuration	Available Options
Drive motor	0.20 kW geared motor, 220/380 V	Alternative voltage, power and ratio
Chain pitch	31.75 mm reference configuration	Other pitches for custom duty
Scraper width	150-600 mm, typically in 50 mm increments	Special width to suit machine interface
Scraper arrangement	One scraper per six chain pitches	Custom spacing and wiper profile
Conveyor speed	1.2-1.4 m/min, 50/60 Hz	Fixed or variable speed
Incline angle	60° reference configuration	Custom angle and discharge height
Safety	Torque limiter / overload protection	Emergency stop, CE-style guarding, jam sensor



D BELT CHIP CONVEYOR

Automatic transport of long, curled, bundled and high-volume machining chips

The hinged belt conveyor is a proven solution for collecting and discharging ferrous and non-ferrous chips generated by CNC lathes, machining centers, milling machines and automated production equipment. The articulated steel belt provides positive conveying and may be configured with solid, perforated or embossed plates.



Performance Features

- Wide belt selection for machine-tool installations and centralized chip-handling systems.
- Suitable for long, curly, bundled, block-shaped and mixed chips, including aluminum, copper and stainless steel.
- High-strength one-piece plate and chain assembly for stable motion and long operating life.
- Compact plate-joint geometry helps prevent small chips from adhering or entering hinge gaps.
- Optional coolant tank, perforated belt and filtration interfaces support coolant separation and return.

Specification & Options

Parameter	Standard Configuration	Available Options
Belt pitch	31.75 / 38.10 / 50.80 / 63.50 / 76.20 / 101.60 mm	Selected according to chip load and belt width
Belt width	150-2,000 mm available by design	Custom width and side-wing height
Drive	Geared motor, 220/380 V	Alternative voltage, speed and power
Conveyor speed	Typical 1.6-2.2 m/min	Variable-frequency control
Incline angle	45° or 60° typical	Custom geometry and discharge height
Belt material	Carbon steel or stainless steel	Galvanized, perforated or reinforced plate
Protection	Torque limiter or current sensor	Jam detection, emergency stop, full guarding
Installation	Floor-mounted or machine-integrated	Pit-mounted, tank-mounted or mobile version



MAGNETIC CHIP CONVEYOR

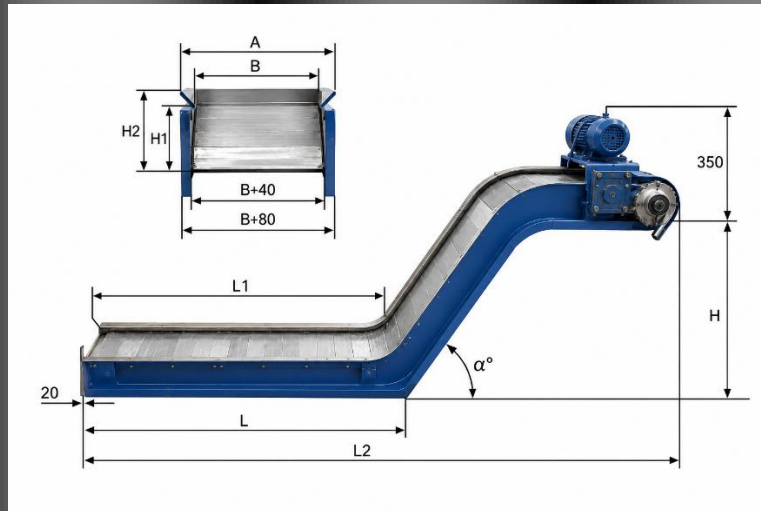
Contact-free conveying of small ferrous chips, fines and short swarf

The magnetic chip conveyor is intended for ferrous-material applications that generate small chips and fines. Powerful magnets travel beneath a sealed, stationary stainless-steel surface, moving the collected material toward the discharge point without an exposed moving belt on the conveying face.



Performance Features

- Designed for ferrous chips, broken particles, grinding fines and short swarf generally below approximately 50 mm.
- Sealed conveying surface supports coolant containment and reduces direct wear from abrasive particles.
- Magnetic spacing and conveying speed can be selected according to chip volume and required transport rate.
- May be combined with coolant tanks, paper-band filters, strainers and other chip-treatment equipment.
- External casing, inlet length, incline angle, discharge height and return section can be engineered to suit the machine layout.



Engineering Data Required for Selection

Selection Item	Required Information
Chip material / geometry	Ferrous composition; fine, short, needle-like, powder or mixed chips
Capacity / coolant	Average and peak chip volume; coolant type, flow and return requirement
Machine interface	Inlet length, chute width, mounting position and available envelope
Discharge geometry	Height, incline angle and collection-bin position
Electrical / finish	Voltage, control, safety, paint color and stainless-steel grade

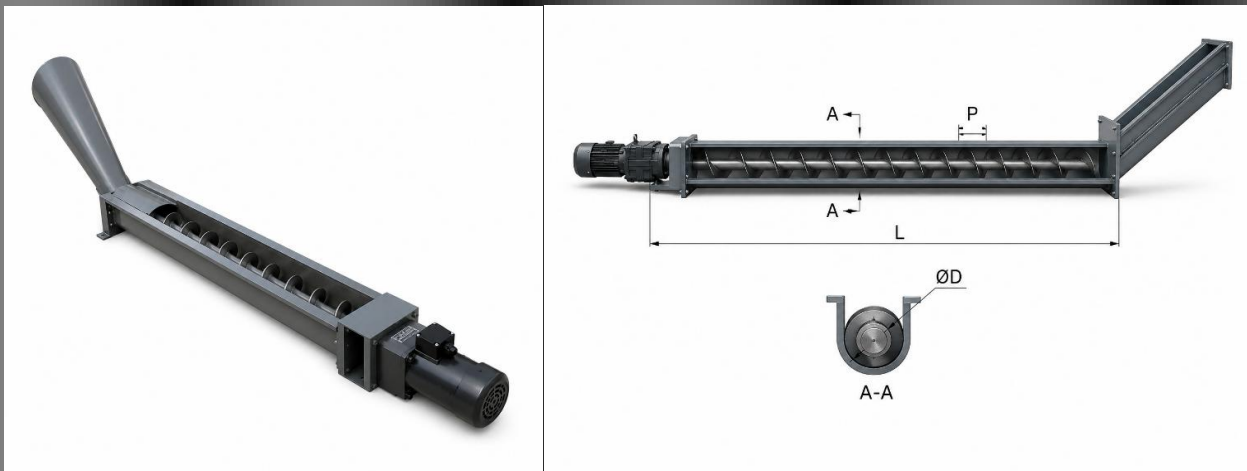


HRLX SERIES SCREW CHIP CONVEYOR

Compact auger-type chip removal for confined machine-tool installations

The HRLX series uses a rotating screw flight inside a steel trough to transport short chips and granular machining residue from the collection point to the discharge outlet. The compact construction is suitable for installation beneath CNC machine tools where available space is limited.

- Continuous and stable conveying of short steel, cast-iron, aluminum and non-metallic chips.
- Low-profile structure for direct installation inside machine bases, coolant tanks or narrow chip channels.
- Can operate horizontally or with a customized inclined discharge section.
- Protective torque limitation and motor overload control can be incorporated to reduce damage during a jam.
- Trough, screw geometry, inlet position and discharge arrangement can be engineered to suit the machine layout.



Model	Screw Diameter (mm)	Outer Trough Width (mm)	Recommended Chip Size	Typical Application
HRLX-80	80	72	Fine to short	Compact CNC lathes and machining centers
HRLX-100	100	100	Short / granular	General machine-tool chip discharge
HRLX-120	120	122	Medium chip volume	Higher-capacity machine bases



YSLX SERIES SCREW CHIP CONVEYOR

Modular screw conveyor configurations for chip and scrap handling

The YSLX series provides a modular screw conveyor platform with multiple trough and screw-flight configurations. It is designed for conveying short chips, powder, small granules and fragmented scrap generated during machining and industrial processing.

- Available with or without a central shaft, according to chip shape, operating length and maintenance requirements.
- Open, covered, U-shaped or customized trough designs can be supplied.
- Multiple conveyors can be combined to create centralized chip-removal networks.
- Direct-drive or geared-motor arrangements are available for different torque and speed requirements.
- Stainless-steel contact surfaces and wear-resistant liners can be specified for coolant-rich or abrasive service.



Model: YSLX70, YSLX80, YSLX100, YSLX150, YSLX200

Product Description: It can handle the chips and granules cut from ferrous metals, non-ferrous metals, or non-metallic materials, as well as short chips or fragmented chips, depending on your specific requirements when selecting Type A: with core, with brush.



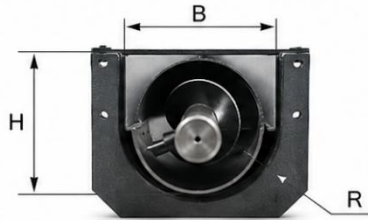
Trough type: B type: with core and without collecting trough; C type: without core and with collecting trough; D type: without core and without collecting trough.

Can be used in combination with other chip removal devices to form different chip removal systems.

Product Performance, Features: Easy to install, reliable operation, wide speed range, and can be selected according to user requirements;

Application: Suitable for various machine tools and machine tool installation spaces with relatively high chip removal efficiency.

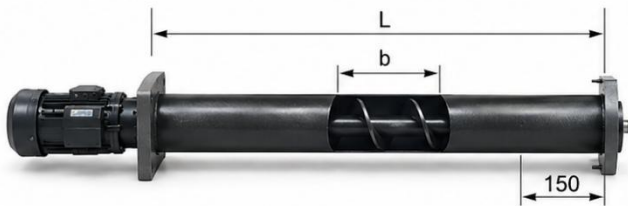
Ordering Instructions: Please provide the model number and length of the chip conveyor.



A type The flange dimensions and mounting hole position height are user-defined.



B type



C type

Configuration	Construction	Best Suited For	Engineering Notes
Type A	Shafted screw / open trough	Short chips and dry scrap	Simple maintenance and direct discharge
Type B	Shafted screw / covered trough	Coolant-rich machining chips	Improved containment and operator protection
Type C	Shaftless screw	Irregular or entangling residue	Reduced obstruction around a center shaft
Type D	Custom multi-inlet system	Central collection networks	Engineered inlet spacing and drive torque

SKIRT BELT CONVEYOR

Flexible sidewall belt conveyor for continuous material transfer

The skirt belt conveyor combines a durable belt with flexible corrugated sidewalls and transverse cleats to retain material during horizontal and inclined transport. It is suitable for chips, components, granules and bulk materials where product containment and clean transfer are required.

- Corrugated sidewalls minimize material loss along both edges of the belt.
- Transverse cleats improve lifting capacity on inclined conveyor sections.
- Available in straight, inclined, Z-type and customized machine-integration layouts.
- Belt and frame materials can be selected for oil resistance, abrasion resistance, food handling or general industrial duty.
- Optional hoppers, covers, discharge chutes, speed controls and mobile frames can be incorporated.



Selection Parameter	Available Engineering Range
Conveyor arrangement	Horizontal, inclined, L-type, Z-type or custom
Belt construction	PVC, PU, rubber or application-specific belt
Sidewall / cleat design	Selected according to particle size, incline and capacity
Frame construction	Carbon steel, coated steel or stainless steel
Drive control	Fixed speed, variable frequency drive or machine interlock
Accessories	Hopper, cover, chute, guards, casters and sensors

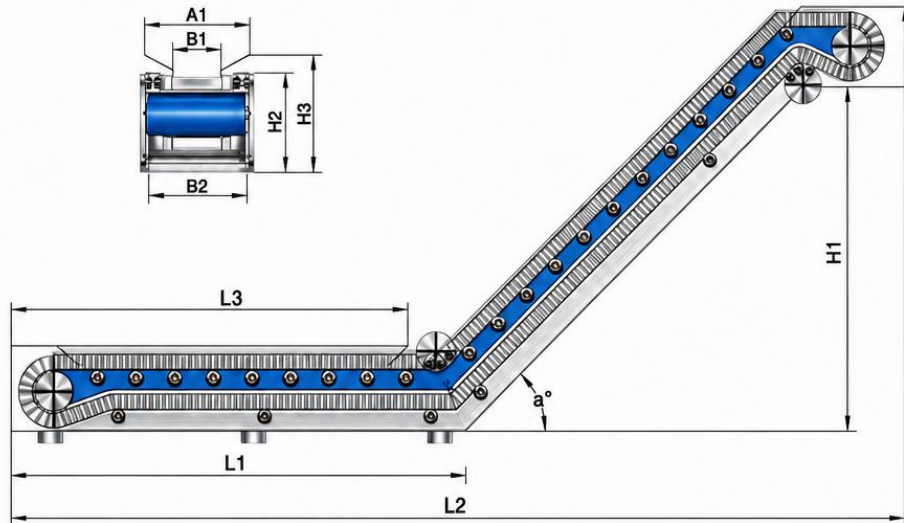


SKIRT BELT CONVEYOR - DIMENSIONAL CONFIGURATION

Engineering dimensions and application selection

Skirt belt conveyor

Overall Dimensions Drawing of Skirt belt conveyor



Datasheet for choosing size

Type	Dimensions	L1	L2	L3	A1	B1	B2	H1	H2	H3	α
BZDBSSJ-100	$\leq 5M$	$\leq L$		$\leq 7M$	$\geq L$	180-550	300-1000		140	≥ 140	0-90°
BZDBSSJ-130	$\leq 8M$			$\leq 10M$					190	≥ 190	
BZDBSSJ-170	$\leq 15M$			$\leq 18M$					240	≥ 240	
BZDBSSJ-210	$\leq 25M$			$\leq 28M$					290	≥ 290	
BZDBSSJ-X											



T type



C type



TC type

Dimensional values are confirmed according to the machine interface, transfer height, belt width, chip or product characteristics and required throughput. The final structure should be reviewed together with the discharge hopper, receiving container and service-access clearances.

Application Condition	Recommended Design Consideration
Fine or granular material	Reduced side gaps and closely spaced cleats
Wet machining chips	Oil-resistant belt and drainage / coolant-return provisions
High incline angle	Higher cleats and corrugated sidewalls selected for load retention
Heavy components or scrap	Reinforced belt, impact zone and heavy-duty frame
Frequent washdown	Stainless-steel construction and sealed electrical components
Mobile operation	Locking casters, flexible power connection and guarded drive



ZDP-A/B PLANE VIBRATING CHIP CONVEYOR

Low-profile vibratory conveying for chips, fines and small parts

The ZDP-A/B plane vibrating chip conveyor transfers material through controlled linear vibration generated by an eccentric or vibration drive. With no circulating belt or chain in the conveying channel, the system provides a simple, low-profile solution for applications where chips must be moved over a straight path.

- Suitable for metal chips, fragmented scrap, powder, small parts and non-metallic residue.
- Open conveying surface provides easy inspection and cleaning.
- Low overall height supports installation beneath machines and production lines.
- Conveyor length, width, inlet zone and discharge interface can be customized.
- Wear liners, covers, collection trays and isolated mounting systems can be added for demanding service.



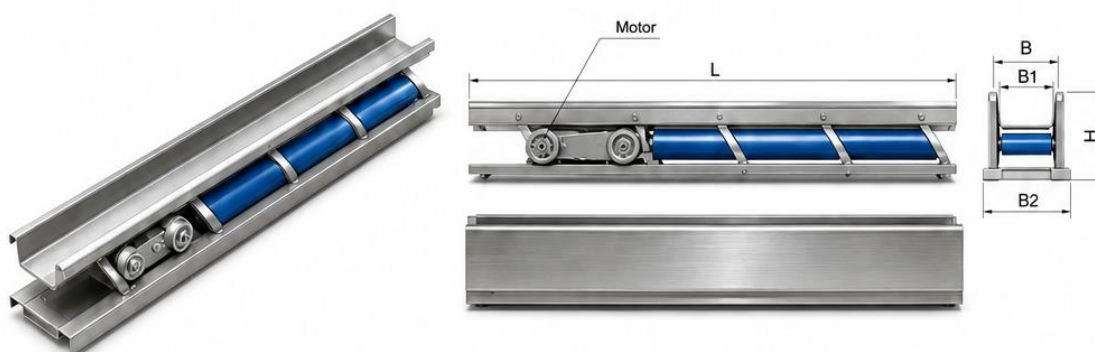
Model Family	Drive Principle	Typical Installation	Main Advantage
ZDP-A	Eccentric vibration drive	Machine base or central channel	Simple construction and stable linear transfer
ZDP-B	Vibration motor drive	Stand-alone or integrated line	Flexible arrangement and compact installation



PLANE VIBRATING CHIP CONVEYOR - TECHNICAL CONFIGURATION

Dimensional reference and engineering parameters

Overall Dimensions Drawing of ZDP-A type plane vibrating debris removal unit



Technical parameters

Main Technical Parameters									
Code	L	B	B1	B2	H	Motor power KW	Debris discharge amount Kg/h	Name of materials to be transmitted	Shell Color
Name	Total length	Shell width	Effective width of debris removal	Width of the baseplate	Total height				
Dimensions									

Overall Dimensions Drawing of ZDP-B type plane vibrating debris removal unit



Technical parameters

unit:mm

Main Technical Parameters											
Code	L	B	B1	H	B2	B3	H1	Motor power KW	Operating speed m/min	Name of materials to be transmitted	Shell Color
Name	Total length	Shell width	Effective width of debris removal	Horizontal height	Distance between motor and case	Width of the fixed baseplate	Total height				
Dimensions											



Engineering Item	Specification Basis
Conveyor width	Selected from chip volume, part size and machine opening
Conveyor length	Customized to machine footprint and discharge point
Inclination	Normally low-angle; engineered according to conveying test
Drive selection	Eccentric unit or vibration motor according to load and length
Material contact surface	Painted carbon steel, stainless steel or wear-resistant liner
Control	Independent panel, machine interlock, timer or variable control
Mounting	Isolated support, machine-mounted or floor-mounted structure

Final capacity depends on material density, chip geometry, coolant content, vibration amplitude, frequency and conveying inclination. Application testing is recommended for unusual chip forms, sticky residue or mixed materials.



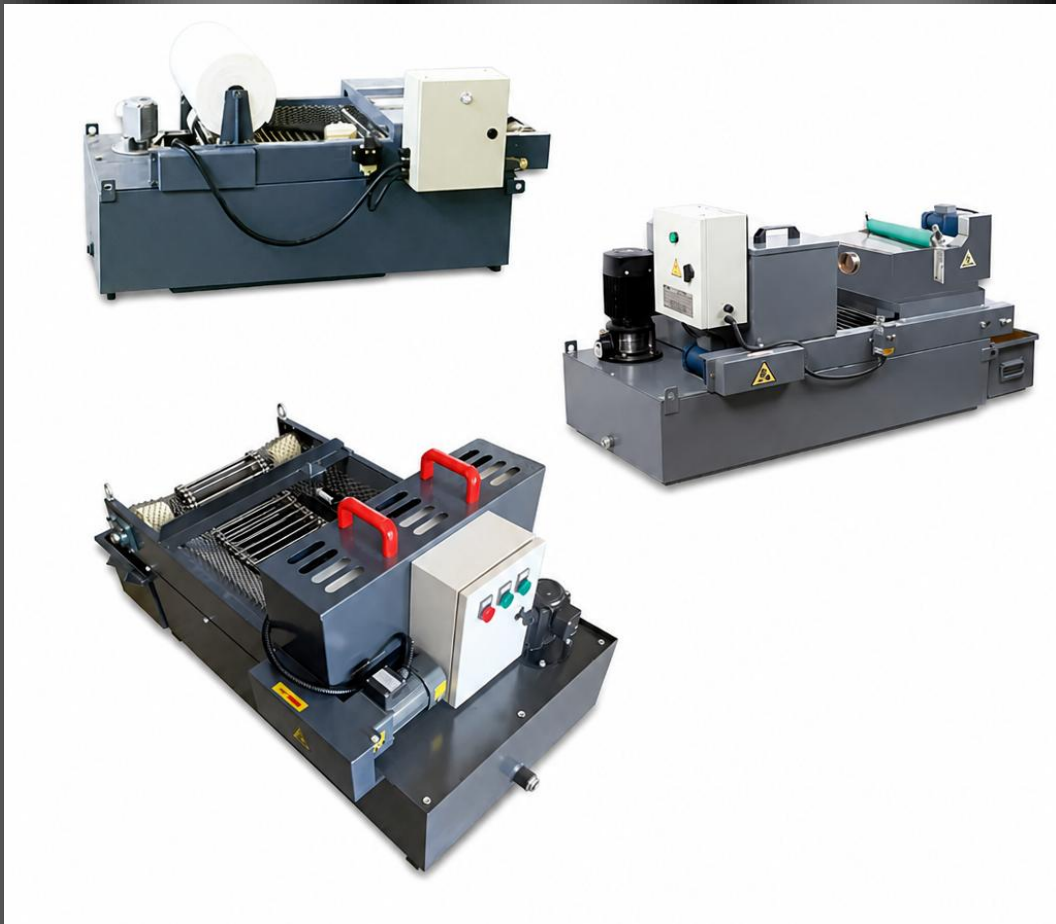
ZGA PAPER TAPE FILTER

Automatic gravity filtration for machine-tool coolant systems

The ZGA paper tape filter removes suspended solids from water-based or oil-based machine-tool coolant. Contaminated liquid passes through disposable filter media supported by a conveyor screen. As solids accumulate and flow resistance increases, the control system advances clean paper and discharges the contaminated media into a collection container.

- Continuous automatic filtration with minimal operator intervention.
- Filter media grade can be selected according to coolant type and required cleanliness.
- Suitable for grinding, machining, honing and general metalworking coolant systems.
- Can be installed as an independent filter or integrated with coolant tanks, pumps and chip conveyors.
- Optional magnetic pre-separation, level control, alarms and customized tank arrangements are available.

This filter consists of several parts, including a paper/paper tape, a speed reducer, a transmission mechanism, a signaling mechanism, and a liquid pump. It utilizes the filtration effect of the paper tape to remove metallic and other non-metallic impurities from the coolant. This ensures the cleanliness of the cutting fluid, extending its service life by 10-20 times and improving the surface quality of machined parts. The paper tape filter achieves a filtration efficiency of 98%, can be automatically controlled, and is an ideal accessory for various types of grinding machines, honing machines, and other precision machining tools.



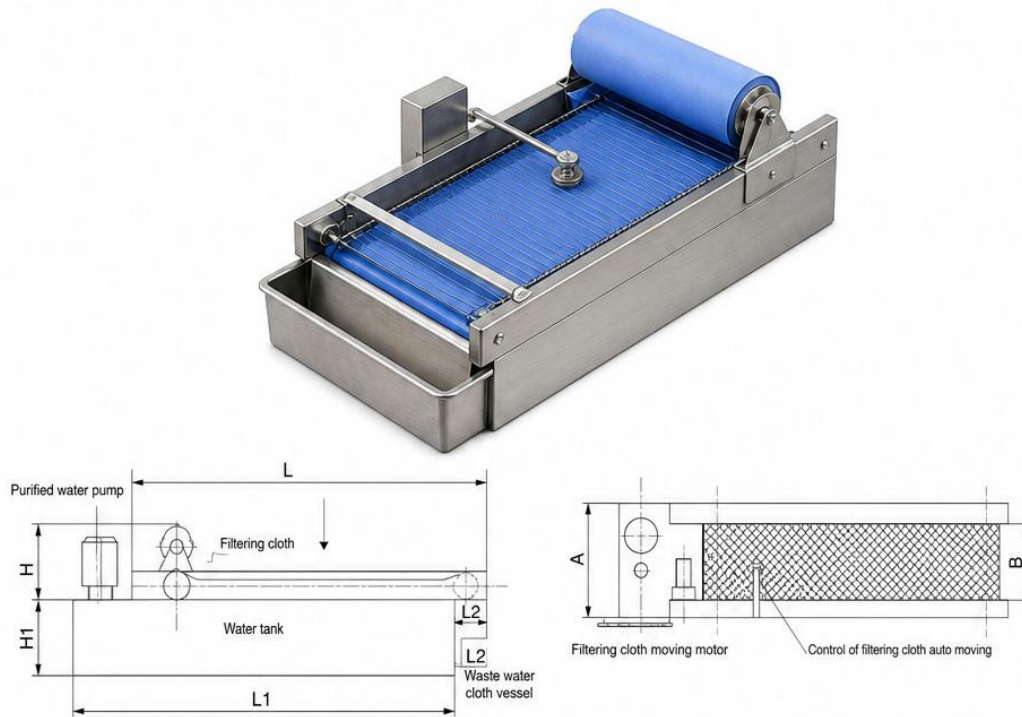
Process Stage	Function
Coolant inlet	Distributes contaminated coolant across the filter area
Disposable filter paper	Captures fines and suspended machining residue
Support conveyor	Carries the filter media and accumulated sludge
Level control	Starts media advance when flow resistance raises coolant level
Clean tank outlet	Returns filtered coolant to the machine-tool system
Sludge discharge	Transfers used filter paper to the collection container



ZGA PAPER TAPE FILTER - TECHNICAL SELECTION

Dimensional arrangement and filtration-system configuration

Overall Dimensions Drawing of ZGA type paper tape filter



Technical parameters

Unit:mm

Type	Main Technical Parameters					Auxiliary Technical Parameters			
	Flowrate	Width	Width of the filtering cloth	Length of the filter	Height of the filter	Height of water tank H1	Length of water tank L1	Extended length of the filter L2	Accuracy of filtration
	L/min	Width							
ZGA-25	25	400	320	800	350	≥ 200	≤ 1000	100	3.5-5
ZGA-50	50	600	520	800	350		≤ 1000	100	
ZGA-75	75	600	520	1000	350		≤ 1300	100	
ZGA-100	100	800	720	1200	350		≤ 1500	100	
ZGA-150	150	800	720	1500	350		≤ 1800	100	
ZGA-200	200	1100	1000	1500	400			150	
ZGA-250	250	1100	1000	1800	400			150	
ZGA-300	300	1100	1000	2200	400			150	
ZGA-400	400	1100	1000	2500	400			150	
ZGA-500	500	1400	1200	2800	550			150	
ZGA-600	600	1400	1200	4000	550			150	
ZGA-800	800	1600	1500	3600	550			200	
ZGA-1000	1000	1600	1500	4500	550			200	
ZGA-1200	1200	2000	1800	4500	600			200	
ZGA-1500	1500	2000	1800	5500	600			200	

Note: The water tank shape and size shall be determined according to the site conditions. If there is any requirement for the cooling liquid temperature, a temperature control device can be installed on the top of the water tank.

This filter machine is automatically operated, without manual operation.



Selection Data Required	Customer / Project Information
Coolant type	Water-based emulsion, synthetic coolant or oil
Required flow rate	L/min or m ³ /h at normal and peak machine demand
Contaminant material	Steel, cast iron, aluminum, abrasive or mixed material
Particle loading	Estimated solids concentration and chip/sludge volume
Required filtration	Nominal filter-paper grade or target cleanliness
Tank arrangement	Integrated reservoir, external tank or machine connection
Pump requirement	Supply pressure, return pressure and redundancy
Electrical standard	Voltage, frequency, control interface and safety requirement



ZCB MAGNETIC ROLLER PAPER TAPE FILTER

Two-stage filtration for ferrous particles and fine coolant contamination

The ZCB magnetic roller paper tape filter combines magnetic pre-separation with disposable paper filtration. Ferrous particles are captured by the magnetic separator before the coolant reaches the filter media, reducing paper consumption and improving filtration stability.

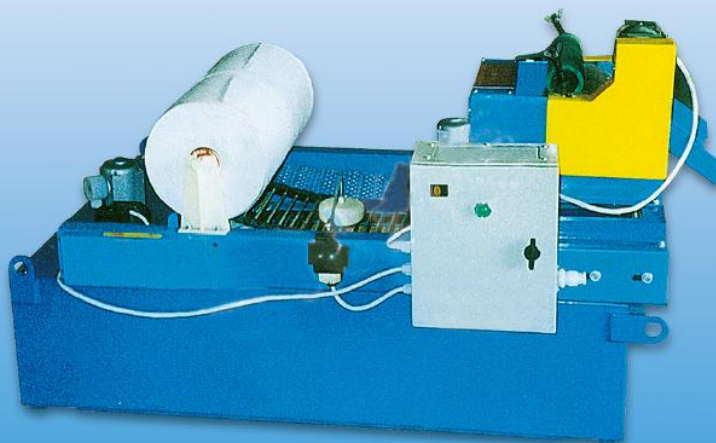
Remaining fines are retained by the paper tape before the clean coolant returns to the machine system.

- Optimized for steel and cast-iron machining, grinding and finishing operations.
- Magnetic pre-separation removes a significant portion of ferrous contamination before paper filtration.
- Reduced filter-paper consumption compared with paper filtration alone in high-ferrous-load applications.
- Automatic media advance and sludge discharge support continuous production.
- Can be supplied with integrated tank, pumps, liquid-level controls, alarms and machine interlocks.



滤无纺布/纸带、磁辊分离装置、减速机、传动机构、发讯机构、液泵等几部分组成。这种过滤机是在ZGA型纸带过滤机的基础上增加了磁性分离器，使切削液实现了二级过滤，使一部分磁性屑被磁性分离器过滤掉，与纸带过滤机相比使用性能更佳，并减少了纸带的消耗。该过滤机造型美观，结构紧凑使用它可降低环境污染，提高工效，是各种型号磨床、珩磨机等精加工机床配套的理想附件。

collector, dirt accumulator, filtering non-woven cloth/paper tape, magnetic roller separating device, reduction gear, transmission gear, message releasing device and liquid pump etc. Based on ZGA type paper tape filter, this unit is equipped with additional magnetic separator, which realizes two stage filtration. Compared with paper tape filter, this unit functions better and reduces the consumption of paper tape. This filter has nice looking and is in a compact structure. In this way, it will improve the environmental protection and raise the working efficiency. So, it is an ideal component for all types of grinding machines and honing machines.



System Module	Technical Function
Magnetic separator	Removes ferrous chips and particles from incoming coolant
Paper tape filter	Captures remaining fine and non-magnetic contamination
Drive and media control	Advances clean filter media according to liquid level or pressure condition
Coolant reservoir	Collects filtered liquid for recirculation
Pump group	Returns coolant to the machine at the specified flow and pressure
Electrical controls	Provides automatic operation, protection, alarms and interface signals



System sizing must be based on coolant flow, contaminant loading, ferrous content, required cleanliness, available installation space and machine operating cycle.



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