# HINGE BELT CONVEYOR



### AREA OF APPLICATION

• Transportation of metal shavings and from machine tools.

 Suitable for long steel shavings, snarl chips, wool chips, dry processing and wet processing.

• Installation possible as individual or interlinked system.

### **FUNCTIONS**

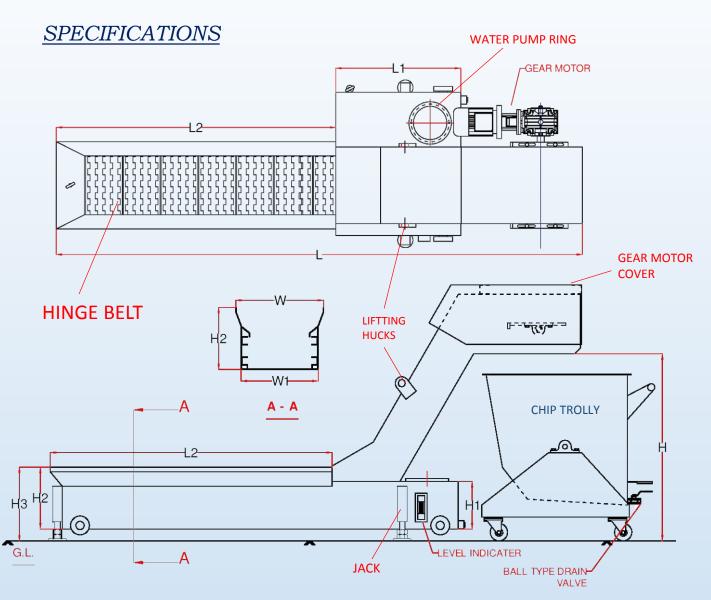
• Two chain stands (roller chains) which have been connected to make up a hinge band by means of steel plates with side boards, continuously convey the material to be conveyed, situated on the conveyor belt, to the discharge station.

• The hinge band drive occurs via a three phase geared motor with overload protection. Optional limit switch or control of conveyor belt run.

VIP CONVEYORS PVT. LTD.

SR.NO. 275, PLOT NO.9, GALAXY INDUSTRIAL AREA, B/H GRAVITY CAST, SHAPAR (VERAVAL), RAJKOT- 360 024

Tel: (02827) 252007 Mo: +91 98252 91937



CODES	NAMES
L	Total Length
L1	Length of water tank
L2	Charge length
W	Total width
W1	Shell width
н	Lifting height
H1	Height of water tank
H2	Height of rear side
H3	Total Height from ground level

PITCH OF CHAIN ( MM )	PITCH OF CHAIN ( INCH )	MIN. HEIGHT OF SHELL WITH WATER TANK / WITHOUT WATER TANK ( MM )
31.75	1.25	180/120
38.10	1.50	180/180
63.50	2.50	260/260
101.60	4.00	260/260

### NOTES:

- 1) The water tank can be made in different appearances according to the user's requirement.
- 2) The conveyor can be designed and made according to various requirements.
- 3) The minimum of shell height (H2) is determined by the pitch of the chain plate.
- 4) Motor power is determined by effective width, length, and height of conveyor.

# SCRAPER BELT / DREG CHAIN CONVEYOR





### AREA OF APPLICATION

• Transportation of short broken metal shavings and small pieces from machine tools.

• Suitable for short steel shavings, needle chips (e.g. brass), cast-iron splinters and rubbed-off cast iron, dry processing and wet processing.

• Installation possible as individual or interlinked system.

### **FUNCTIONS**

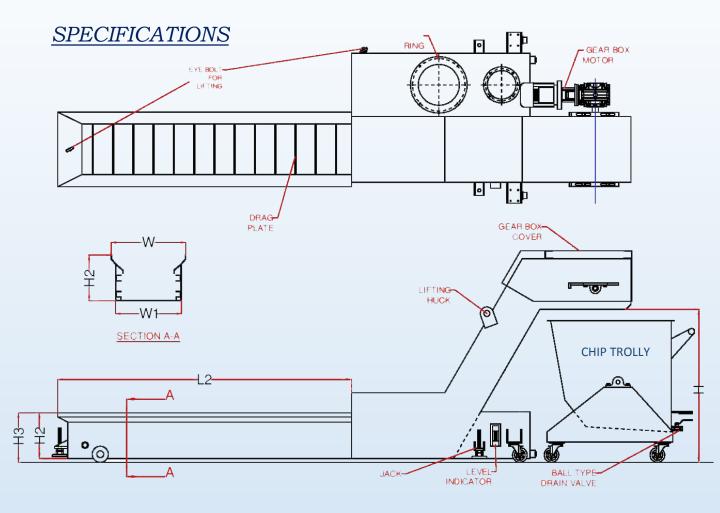
continuous scraper Α conveyor, consisting of two chain strands which are by means of connected conveying strips, continuously convey the material to be conveyed on the container bottom to the discharge station.

• The scraper conveyor drive occurs via a three phase geared motor with overload protection. Optional limit switch or control of conveyor belt run. Pre cleaning of the coolant lubricant possible with wet processing.

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- 4) Motor power is determined by effective width, length, and height of conveyor.

# SCRAPER DRUM FILTER CONVEYOR



### AREA OF APPLICATION

• Transportation of short broken metal shavings and small pieces from machine tools.

• Suitable for short steel shavings, needle chips (e.g. brass), cast-iron splinters and rubbed-off cast iron, dry processing and wet processing.

• Installation possible as individual or interlinked system.

### **FUNCTIONS**

continuous scraper Α conveyor, consisting of two chain strands which are by means of connected conveying strips, continuously convey the material to be conveyed on the container bottom to the discharge station.

• The scraper conveyor drive occurs via a three phase geared motor with overload protection. Optional limit switch or control of conveyor belt run. Pre cleaning of the coolant lubricant possible with wet processing.

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# **APPLICATION & BENEFITS**

• Drum filtration system effectively combines chip removal and coolant filtration. System efficiently removes a wide range of chips and small fines of steel, aluminum, brass and many other materials, to 100 microns nominal.

• Self-cleaning drum system for maintenance free operation.

• Minimal sump maintenance allows for extended coolant life and less downtime.

# MEGNETIC CHIP CONVEYOR



The **magnetic chip conveyor** is a metal conveyor designed around a concept based on many years of experience of design and manufacturing and service of hinged belt conveyors. Our aim has been to design a magnetic conveyor with maximal lifetime and minimal service requirement. The conveyor is based on a modular designed and can be tailor-made to fit almost any machine tool.

The magnetic conveyor is suitable for fine ferrous swarf and particles, such as short steel and iron cast chips. The conveyor may also be used as a coarse coolant filter. A number of strong permanent magnets are carried by two endless chains against the underside of this stainless skin and the swarf or parts are conveyed by the magnetic fields

- Modular design allows for best fit to application and space requirements

- Rigid belt design for maximum life-time

- Easily replaceable wear parts in the form of cast and bolted bends and tail ends

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# YOUTUBE LINKS

<b>Conveyor types</b>	Links
Hinge Belt	https://youtu.be/yw DJB6TRmQ
Scraper Belt	http://youtu.be/q6sHZHTB-Wg
Drum filter	http://youtu.be/q6sHZHTB-Wg
Magnetic	http://youtu.be/SvazoC 5rfY
Centralized conveyor	https://youtu.be/zpO_FFDExYU
SPM Hinge Belt For Nut-Bolt and same Material	http://youtu.be/snE6-gYEN5o

# CHIP TROLLYS



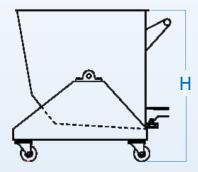
Chip Collecting Trolley is used for collecting the chips conveyed by conveyers. It is equipped with wheels on its bottom, which enables sending the chips out of the working area. Chip Collecting Trolley has two types: the dry type trolley can be tilted to dump the chips; the wet type trolley is based on the dry type but equipped with filtering plate and liquid releasing valve to separate the cutting liquid from the chips for recycling and environmental protection. Chip Collecting Trolley can be customized for various volumes and functions. Chip Collecting is equipped with extra-heavy wear-resisting and grease-proof wheels of long service life. Each Trolley is equipped with directional wheels and universal wheels, making it easy to operate.

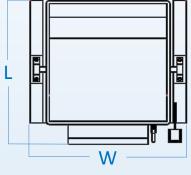
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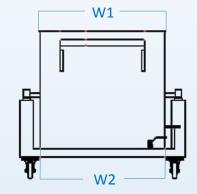
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# Outline dimensional drawing of Chip Collecting Trolley

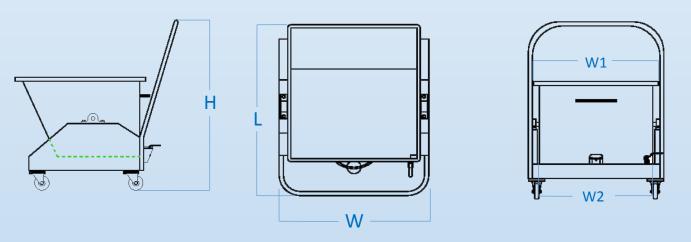






UNITS IN MM

Code (Standards)	Н	L	W	W1	W2
BT+F1	700	780	790	625	595
BT+F2	1225	1070	1250	1040	1000



Code (Standards)	Н	L	W	W1	W2
ST+F1	870	835	700	615	560

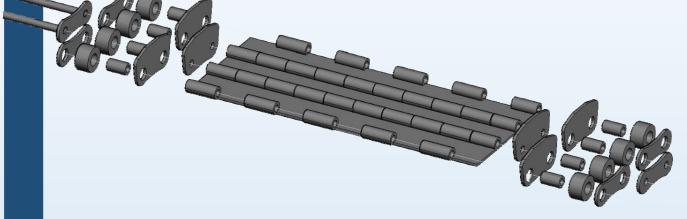
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Tel: (02827) 252007 Mo: +91 98252 91937 Internet : www.chipconveyors.in Mail ID : <u>vipconveyor@gmail.com</u>

info@chipconveyors.in

### HINGE BELT



# Suitable for conveying turnings, swarf, metal chips and scrap metal

The **hinged steel belt conveyors** are designed for maximal lifetime and minimal service requirements. The steel belt conveyors are suited for conveying of large quantities of long and bushy metal swarf, metal chip and turnings as well as metal scrap. The belt conveyor has a flexible design to meet the most diverse installation layouts.

### Common type of belt conveyor

Hinged steel belt conveyors are the most commonly applied type of conveyor. It may be used to transport chips and metal scrap out of the machine as well as for longer haul

### Advantages of a hinged steel belt conveyor

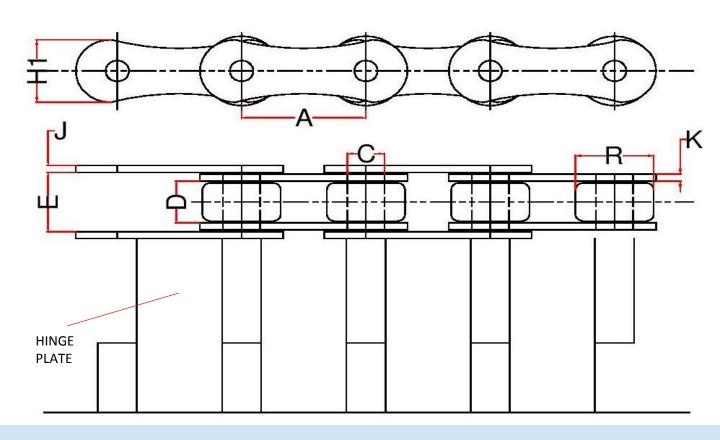
The advantage of the steel belt conveyor is its wide application span. However, it is not suitable to use when there is a high percentage of fines or sludge in the material to be transported. In this case a drag chain conveyor or screw conveyor is more suitable.

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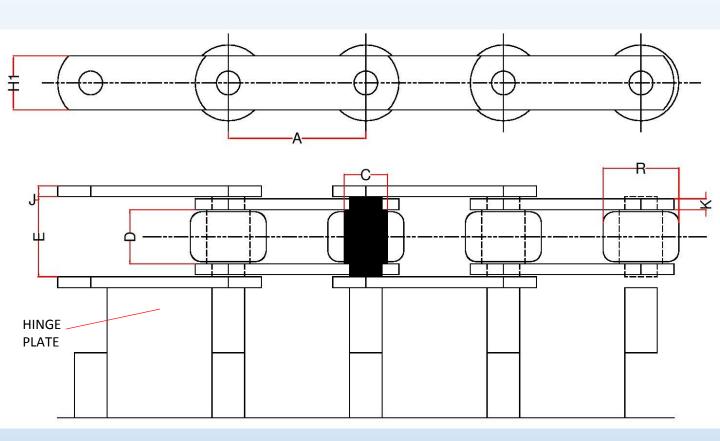
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# CHAIN DETAIL Pitch 1.25" & 1.5"



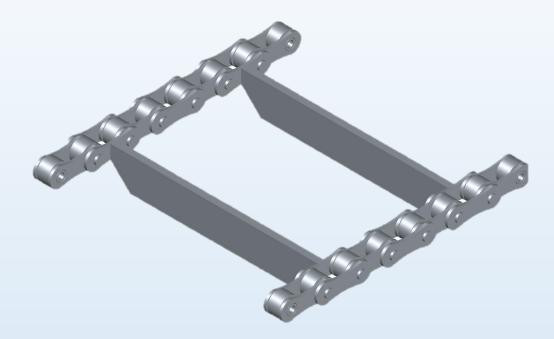
PIT	СН	ROLLER	BUSHING	INSIDE WIDTH	WIDTH	PLATE	THI.	THI.	HINGE
INCH	MM	DIA	DIA	INNER	OUTER	HEIGHT	OUTER	INNER	PLATE WIDTH (STANDARD)
А	А	R	С	D	E	H1	J	K	Р
1.25	31.75	20	9.5	12	17	18	2	2	201 MM & 251 MM
1.5	38.1	25	14	14	20	22	2.5	2.5	OR AS YOUR REQUIR- EMENT

# CHAIN DETAIL Pitch 2.5" to 6.0"



PIT	СН		DUCUINC	INSIDE			TIU	TIU	HINGE
INCH	MM	ROLLER DIA	BUSHING DIA	WIDTH INNER	WIDTH OUTER	PLATE HEIGHT	THI. OUTER	THI. INNER	PLATE WIDTH
А	А	R	С	D	E	H1	J	K	Р
2.5	63.5	35	20	25	37	25	5	5	AS REQUIR- EMENT
4	101.6	50	25	42	53	40	5	5	AS REQUIR- EMENT
6	152.4	50	25	42	53	40	5	5	AS REQUIR- EMENT

### SCRAPER BELT / DRAG CHAIN



# Capable of conveying on a steep incline and suited for elevation and transportation of short swarf

The **drag chain** is suited for elevation and transportation of short swarf, less than 5 cm long (2 in) and grinding sludge. Finely divided materials, such as short swarf, metal chips and grinding sludge, with or without coolant flow in either direction. The drag chain conveyor is also capable of conveying on a steep incline.

The drag chain conveyor may also be used when multiple discharge points are needed, for example when chips should be discharged in several different bins. Since the carry-run is on the bottom side, discharge gates are easily incorporated in the design. The return portion of the chain runs back over the top of the carrying area. Thus, any material that clings to the chain or flights is automatically recirculated and given another chance to discharge. All components are visible when the cover plate is removed which ensures easy maintenance.

- Carry-over problems are minimized
- Easy maintenance
- Multiple discharge points are possible

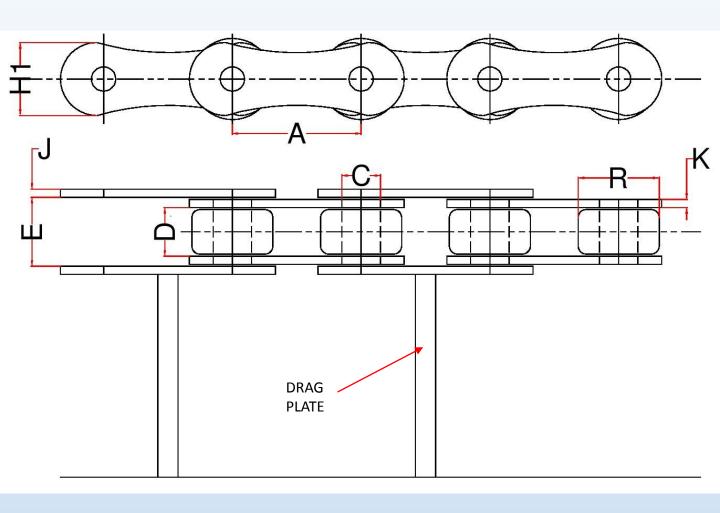
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### CHAIN DETAIL

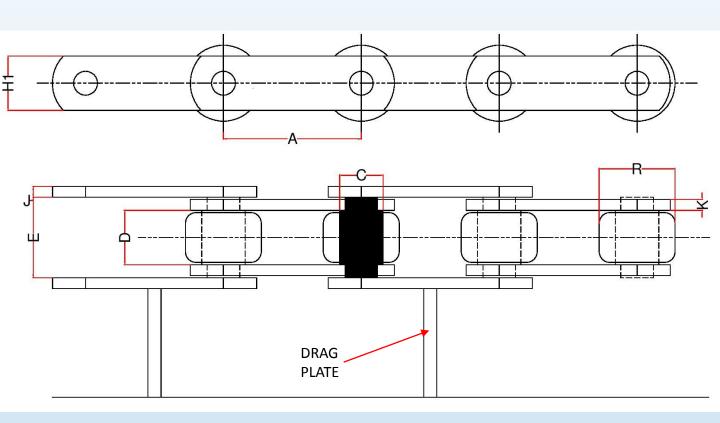
Pitch 1.25" & 1.5"



PIT	СН	ROLLER	BUSHING	INSIDE WIDTH	WIDTH	PLATE	THI.	THI.	DRAG
INCH	MM	DIA	DIA	INNER	OUTER	HEIGHT	OUTER	INNER	PLATE WIDTH (STANDARD)
А	А	R	С	D	E	H1	J	K	Р
1.25	31.75	20	9.5	12	17	18	2.5	2.5	201 MM & 251 MM
1.5	38.1	25	14	14	20	22	2.5	2.5	OR AS YOUR REQUIR- EMENT

# CHAIN DETAIL

Pitch 2.5" to 6.0"



PIT	СН		RUSUING				TU	TU	DRAG
INCH	MM	ROLLER DIA	BUSHING DIA	WIDTH INNER	WIDTH OUTER	PLATE HEIGHT	THI. OUTER	THI. INNER	PLATE WIDTH
А	А	R	С	D	E	H1	J	K	Р
2.5	63.5	35	20	25	37	25	5	5	AS REQUIR- EMENT
4	101.6	50	25	42	53	40	5	5	AS REQUIR- EMENT
6	152.4	50	25	42	53	40	5	5	AS REQUIR- EMENT

Part Drawing	Part name
	Hinge Plate
	Scraper Drag Plate
000	Side Bar (Inner big hole & outer small hole)
	Side Wing (Inner big hole & outer small hole)
¢	Belt Axle / Belt Connecting Bar
	Roller
	Bushing