

Conveyor systems

Reliability and experience based on tradition



Hinged belt conveyors

page 448

Proven for a wide range of disposal tasks



Scraper conveyors

page 456

For disposal of small materials



Modular conveyors

page 460

Hinged belt conveyors with modular construction



Belt conveyors

page 462

The all-rounders – also for parts with sharp edges

Conveyor systems

Reliability and experience based on tradition

Our scraper belt, hinged belt and belt conveyors embody more than 30 years of experience. Systematic further development of our products and adaptation of their functions for use with the latest generation of machines guarantees you the utmost level of reliability.

Every production machine requires a disposal system

In the metalworking industry, tonnes of metal chips are created every day at cutting machine tools. We offer the right chip removal system and the suitable conveyor for your specific application.

- For disposal of chips at machine tools
- For transporting metal scrap and chips away from saws
- For disposal at stamping presses and laser cutting systems
- For disposal of edge scrap at trimming shears in coil cutting systems
- For transporting away casting waste in foundry lines



■ Standard hinged belt conveyor at a CNC boring machine

From standard to customized – we have a solution

- Everything from a single source – planning, design and manufacturing
- Standard conveyors available within a short time
- For an individual solution we will work together with you to design a suitable conveyor
- The optimal solution for whatever material is to be conveyed: hinged belt conveyor, scraper conveyor or belt conveyor
- Can be supplied with coolant processing if required
- Quality and long service life are our strong points
- Spare parts supplies are of course ensured for years to come
- Great price-performance ratio



■ Hinged belt conveyor developed for the Trumpf TUBEMATIC laser cutting machine. Special hinged belt plates prevent jamming of the material to be conveyed.

kabelschlepp.de

Fon: +49 2762 4003-0

Enquiry forms – page 509

Designs and areas of application

Conveyors are an aspect of mechanical engineering, and are used especially on cutting machine tools. For **many applications** it is possible to use our **standard models**. The material to be conveyed, volume to be conveyed, and space limitations often already determine the type of conveyor.

In most cases, the variable dimensions such as the belt width, feed length, discharge height and incline are sufficient to take the requirements of the specific application into account.



■ Hinged belt conveyors



■ Scraper conveyors



■ Belt conveyors

We also plan and manufacture special conveyors for very specific requirements, even complete chip disposal systems with machine cleaning, crushing, workshop cleaning and hopper storage.



■ Hinged belt conveyor for loading of a hopper system



■ Special model at a trimming shear with a belt width of 900 mm



■ Scraper conveyor for distribution of various chip materials



■ Scraper conveyor under a hopper system for aluminium chips

Hinged belt conveyors

Proven for a wide range of disposal tasks

Transportation of the material takes place on the upper trough of a revolving hinged belt. Drivers ensure transport of the material up the inclined section.

For wet machining the cooling lubrications are collected in the conveyor housing and can be fed back into the machine circuit via an optionally available coolant container or a pump station.

Our hinged belt conveyors can be used either as stand-alone conveyors at machine tools, or as linked conveyor systems. Depending on the design, the material to be conveyed is brought to the required height at a defined incline and then discharged.

kabelschlepp.de



This way we can solve your disposal tasks in over 80 % of all cases:

- Wet or dry chips
- Workpieces and waste
- Hot forgings
- Stampings and punching scrap
- And much more

■ Hinged belt conveyors

Enquiry forms – page 510

Structure

- Stable metal plate construction
- Standardized housing cross-section with variable width
- Robust worm gear motor with torque switching
- Customized discharge height
- Customized incline standards = 30°, 45° and 60°
- Floor mounting or as a push-in version into the machine base

Accessory examples

- Motor monitoring systems with current-monitoring relay
- Other overload safety devices (on request)
- Coolant container with pump station
- Direct electrical connection to your machine controller
- Other special solutions are available. Please do get in touch with us, we will be happy to advise you.



kabelschlepp.de

Order

Fon: +49 2762 4003-0

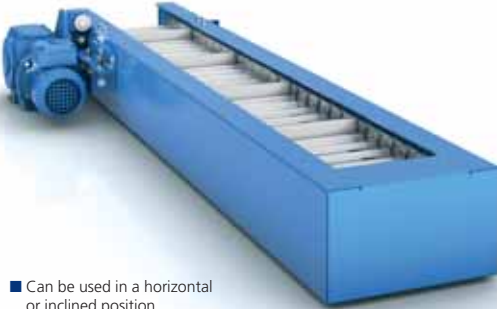
Cables for Motion
TOTALTRAX Complete Systems

Conveyor Systems

Enquiry forms – page 510

Typical designs

Straight design



- Can be used in a horizontal or inclined position.
Max incline 45°

Straight/rising design



- Max. incline 45°

Straight/rising/straight design



- Max. incline 60°



Hinged belt conveyors

Proven for a wide range of disposal tasks

Types and main areas of application

SRF 040.00 – the elegant “small one”, and particularly compact

Pitch of the hinged belt $t = 40$ mm

With its small pitch (40 mm) and extremely compact design, this conveyor is suitable for even the smallest machine tools.



SRF 063.00 – the “classic”, and our best seller

Pitch of the hinged belt $t = 63$ mm

The conveyor type for most mechanical engineering applications.

SRF 100.00 – the “big one” and especially robust

Pitch of the hinged belt $t = 100$ mm

With a pitch of 100 mm, this conveyor is particularly useful when large quantities of chips are present.



SRF 150.00 – the “strongest” one we build

Pitch of the hinged belt $t = 150$ mm

Special solutions with 150 mm pitch for transporting away of large outputs or large parts.



Hinged belt designs

Various hinged belt designs are available for different operating conditions:



■ **Hinged belt (standard)**
for dry materials and chips with a low proportion of coolant

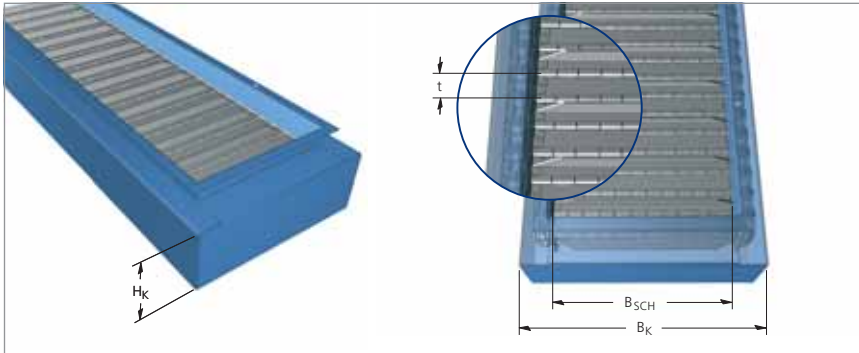


■ **Hinged belt with perforations**
for pre-separation of coolant for materials with a high proportion of coolant



■ **Hinged belt conveyor with corrugations**
for transporting "sticky" parts

Standard dimensions



Type	Pitch t	Box height H _K	Hinged belt width B _{SCH}	Box width B _K
SRF 040.00	40	140	150, 200, 250, 300, 450, 600	B _{SCH} + 75 mm
SRF 063.00	63	216	150, 300, 450, 600, 750, 900	B _{SCH} + 120 mm
SRF 100.00	100	360	150, 300, 450, 600, 750, 900	B _{SCH} + 150 mm
SRF 150.00	150	540	300, 450, 600, 750, 900	B _{SCH} + 190 mm

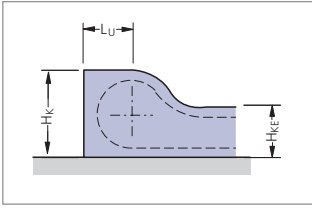
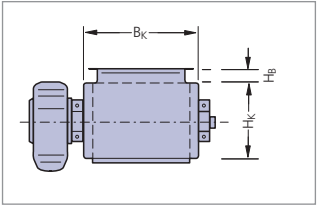
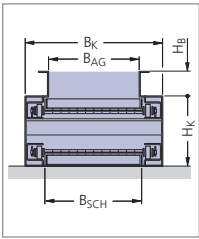
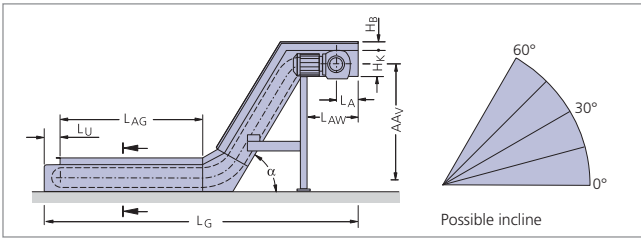
Special widths on request.



Hinged belt conveyors

Proven for a wide range of disposal tasks

Dimensions of conveyor housing



Variable dimensions:

- B_{Sch} = Hinged belt width
- B_K = Box width
- B_{AG} = Feed width
- H_B = Panel height
- AA_V = Distance between axles, vertical
- L_{AG} = Feed length
- L_{AW} = Discharge length
- L_G = Total length of the conveyor
- α = Incline

Design-dependent dimensions:

- H_K = Box height
 - H_{KE} = Retracted box height
 - L_A = Length of the tail (discharge, incl. tensioning distance)
 - L_U = Length of the tail (feed)
- The tensioning station is located at the discharge.

Type	B _{Sch}	H _B	B _K	H _K	H _{KE}	L _{AW min}	L _A	L _U
SRF 040.00	40	60	–	140	110	500	180	73
SRF 063.00	40	80	150	216	153	620	240	111
SRF 100.00	150	250	–	360	260	1000	600	185
SRF 150.00	150	250	350	540	390	1000	600	275

Dimensions in mm

Dimensions of hinged belt

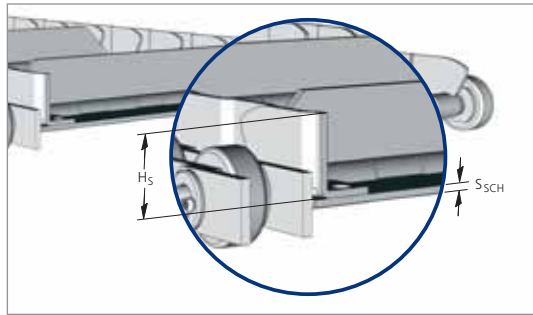
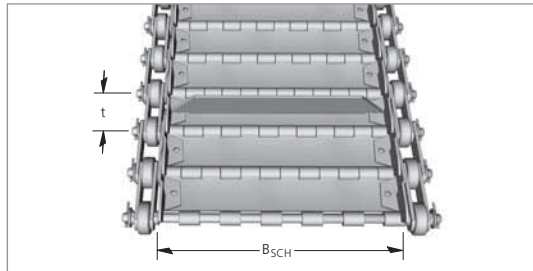
Manufactured of strip steel, the hinged belt plates have roller-formed hinge eyes, and are connected by means of axles to the side chains (which are designed as hollow pin chains), thus forming a hinged belt assembly.

Type	t	S _{SCH}	H _S
SRF 040.00	40	1.5	20
SRF 063.00	63	3.0	35
SRF 100.00	100	3.5	60
SRF 150.00	150	5.0	100

Dimensions in mm

Definitions:

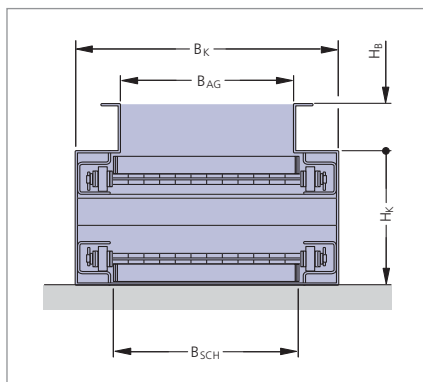
- t = Pitch
- B_{Sch} = Hinged belt width
- S_{SCH} = Plate thickness of the conveyor
- H_S = Height of the side rim



Dimensions as a function of the hinged belt width

Type	B _{SCH}	B _K	B _{AG}
SRF 040.00	150	225	130
	200	275	180
	250	325	230
	300	375	280
	450	525	430
	600	675	580
SRF 063.00	150	270	130
	300	420	280
	450	570	430
	600	720	580
	750	870	730
	900	1020	880
SRF 100.00	150	300	120
	300	450	270
	450	600	420
	600	750	570
	750	900	720
	900	1050	870
SRF 150.00	300	490	250
	450	640	400
	600	790	550
	750	940	700
	900	1090	850

Dimensions in mm



Definitions:

- B_{SCH} = Hinged belt width
- B_K = Box width
- B_{AG} = Feed width



Hinged belt conveyor with WAVE-BELT System

No hinge – low wear

Chips and dirt can accumulate in the hinges with conventional hinge belt conveyors.

The WAVE-BELT System has no hinges on the top side of the belt and is smooth in this area. Chips and dirt cannot get trapped. Due to the "WAVE-FORM" of the belt plates, there is hardly any gap between the plates. **This makes the hinge belts tighter, have a longer service life and require less maintenance.**

The side rims have also been further developed so that almost no conveyed material can get trapped in this area. **In this way, wear and the risk of failure are reduced.**

Hinged belt conveyor with WAVE-BELT System

- Longer service life due to optimized belt design
- Tighter than conventional belts, as there are no hinges
- Extremely stable due to special shaping of the individual belt plates
- Easy to maintain due to bolted and thus very easily replaceable belt plates



- Due to the special form of the plates, the complete belt is extremely flexurally rigid and highly stressable.



With this sign the use of the latest generation of KABELSCHLEPP hinged belts in conveyors can be recognized.



kabelschlepp.de

Fon: +49 2762 4003-0

Enquiry forms – page 510

455

Easy replacement of individual hinge belt plates

The belt plates are bolted and can be easily replaced if needed without having to dismantle the complete conveyor belt.



■ Replacement of individual hinge belt plates at the discharge.

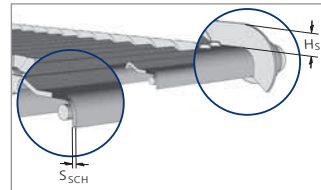
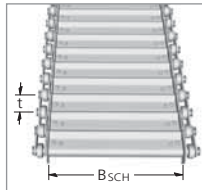
Dimensions of hinge belt conveyor WBC 063

Hinge belt

Type	t	S _{SCH}	H _S
WBC 063.00	63	2.5	22.5

Dimensions in mm

- t = Pitch
- B_{SCH} = Hinged belt width
- S_{SCH} = Plate thickness of the conveyor
- H_S = Height of the side rim



Scraper conveyors

For disposal of small materials

Transport of the material takes place via drivers which push the material along the floor of the housing towards the discharge.

Cooling lubricants are collected in the conveyor housing and can be fed back into the machine circuit via an added-on container or a pumping unit. Our scraper conveyors can be used as stand-alone conveyors at machine tools or as linked conveyor systems.

Depending on the design, the material to be conveyed is brought to the required height at a defined incline and then discharged.



The solution for small and short chips:

- Frequently used for machining of non-ferrous metals
- Can also be used for very hard, short chips
- Casting chips, milling chips and sawing chips

■ Scraper belt conveyors

Structure

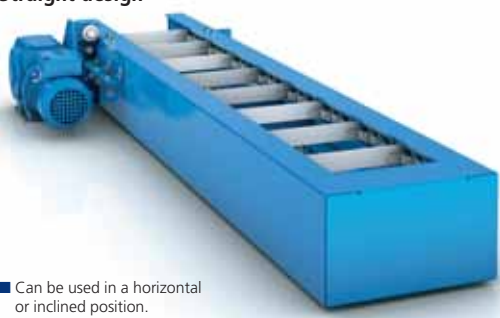
- Stable metal plate construction
- Standardized housing cross-section with variable width
- Robust worm gear motor with torque switching
- Customized discharge height
- Customized incline standards = 30°, 45° and 60°
- Floor mounting or as a push-in version into the machine base

Accessory examples

- Motor monitoring systems with current monitoring relay
- Other overload safety devices (on request)
- Coolant container with pump station
- Direct electrical connection to your machine controller
- Other special solutions are available. Please do get in touch with us, we will be happy to advise you.

Typical designs

Straight design



- Can be used in a horizontal or inclined position.
Max incline 45°

Straight/rising design



- Max. incline 45°

Straight/rising/straight design



- Max. incline 60°

Subject to change.



Scraper conveyors

For disposal of small materials

Types and main areas of application

KRF 040 – the “classic” scraper conveyor

Pitch of the scraper belt $t = 40$ mm

Our standard scraper conveyor for smaller machine tools and small quantities of chips.



KRF 063 – for somewhat “bigger” tasks

Pitch of the scraper belt $t = 63$ mm

For larger machines and larger quantities of chips.

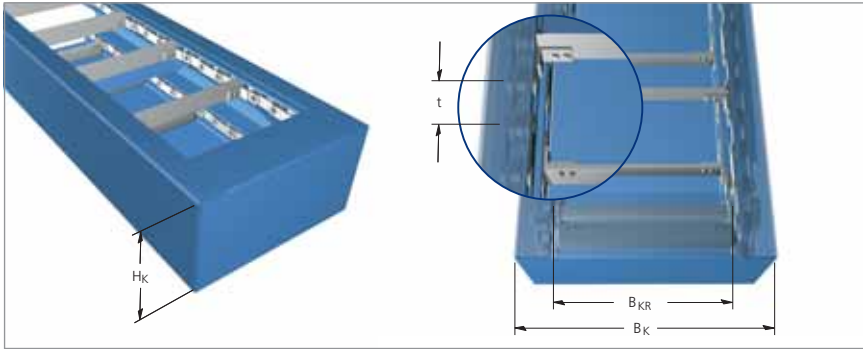


KRF 100 – the “Jumbo” for highest demands

Pitch of the scraper belt $t = 100$ mm

Special solution for very large quantities of chips.

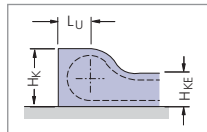
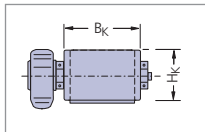
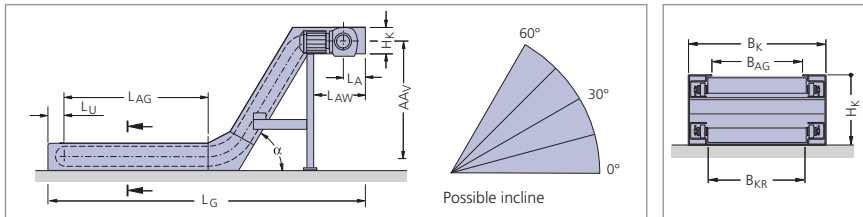
Standard dimensions



Type	Pitch t	Box height H _K	Scraper belt width B _{KR}	Box width B _K
KRF 040.00	40	140	150, 200, 250, 300, 450, 600	B _{KR} + 90 mm
KRF 063.00	63	216	150, 300, 450, 600, 750, 900	B _{KR} + 120 mm
KRF 100.00	100	420	150, 300, 450, 600, 750, 900	B _{KR} + 150 mm

Special dimensions on request.

Dimensions of conveyor housing



Type	H _K	H _{KE}	L _{AW}	L _A	L _U min
KRF 040.00	140	110	500	180	73
KRF 063.00	216	153	620	240	106
KRF 100.00	360	260	1000	600	215

Dimensions in mm

Variable dimensions:

B_{KR} = Scraper width
B_K = Box width
B_{AG} = Feed width

AA_V = Distance between axles, vertical
L_{AG} = Feed length
L_{AW} = Discharge length
L_G = Total length of the conveyor
α = Incline

Design-dependent dimensions:

H_K = Box height
H_{KE} = Retracted box height
L_A = Length of the tail (discharge, incl. tensioning distance)
L_U = Length of the tail (feed)

Modular conveyors

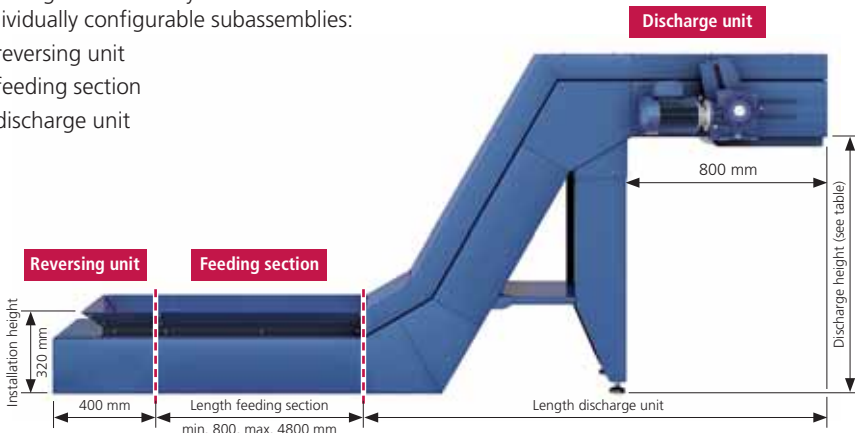
Hinged belt conveyors with modular construction

Our hinged belt conveyors are also available with modular design construction. Thanks to the use of standard subassemblies, you can benefit from significantly shorter delivery times than with conventionally constructed conveyors.

The conveyors are delivered ready for operation.

The hinged-belt conveyors feature three individually configurable subassemblies:

- reversing unit
- feeding section
- discharge unit



Dimensions of standard modules

On the basis of conveyor type SRF 063 (belt width 300 mm), the standard modules can be assembled and delivered on short notice. Fixed discharge heights cover the most common container sizes. With length sections of 400 mm, the feed length can be adapted to various machines.

Should you require a conveyor system with different dimensions, please contact us – we are constantly expanding our range of standard modules.

Modular hinged belt conveyors with modular system design

- short delivery times
- cost-efficient
- configurable with standard subassemblies
- delivered ready for operation (no on-site assembly necessary)
- stable conveyor housing (welded modular connections)

Standard subassembly	Discharge height H _F	Belt width B _{SCH}	Box width B _K	Panel height H _B	Length L	Installation height H _E
Discharge unit 800	1115	300	420	80	1845	–
Discharge unit 1200	1460	300	420	80	2045	–
Discharge unit 1600	1810	300	420	80	2245	–
Feeding section 800	–	300	420	80	800	320
Feeding section 1200	–	300	420	80	1200	320
Feeding section 1600	–	300	420	80	1600	320
Reversing unit	–	300	420	80	400	320

all dimensions in mm

Belt conveyors

The all-rounders – also for parts with sharp edges

Our belt conveyors are predominantly used on punch-nibbling machines, for transporting punching scrap and punching trimmings.

However, other parts can also be transported, such as waste parts from plastic injection machines. The transport belt of the conveyor is resistant to oil and grease.



■ Belt conveyors

Structure

- Housing made of steel plate
- Oil-resistant belt
- Protective motor switch
- Convex return shafts
- Shafts with ball bearings
- Adjustable belt tension

The universal transport solution, for applications where no cooling lubricant is present.

- Also suitable for parts with sharp edges
- Not suitable for transporting hot chips

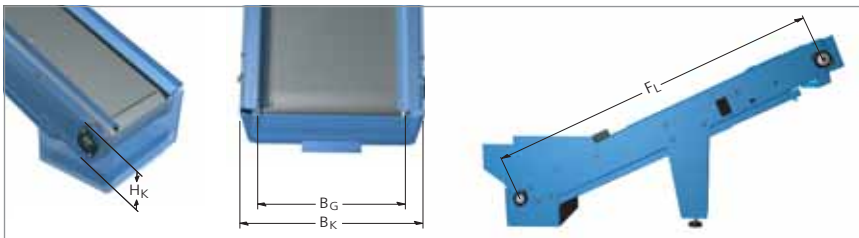


Standard design



- Standard design**
 Can be used in a horizontal or inclined position. Max incline 30°

Standard dimensions



Type	Box height H_K	Belt width B_G	Box width B_K	Maximum conveying length F_L
GBF	104	150, 200, 250, 300, 450, 600	$B_G + 50$	5000

Special widths on request.

Dimensions in mm