Industrial Technology

Agricultural Technology

Mixing & Cleaning

GEBR. RUBERG
MASCHINENFABRIK
ORIGINAL – SINCE 1848

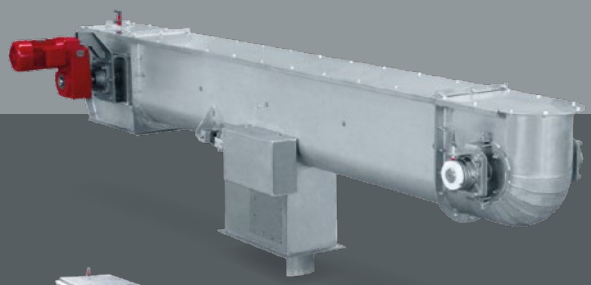
RUBERG
Conveyor elements

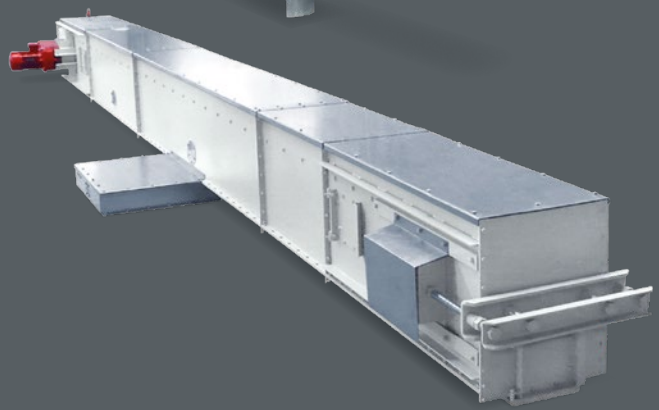
- Bucket elevator conveyor | BWF series
- Trough chain conveyor | TKF series
- Conveyor belts | FBA series
- Screw conveyor | SFA series
- Conveyor systems

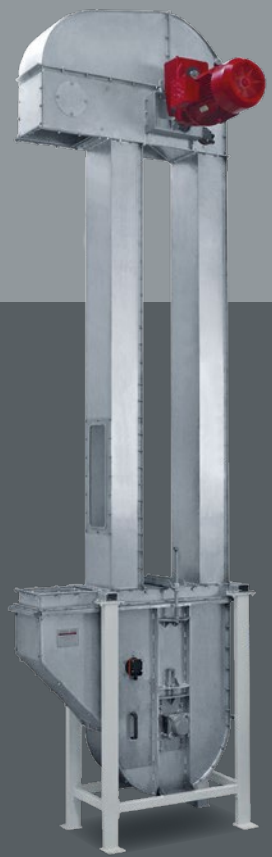
Technical data sheet and product overview

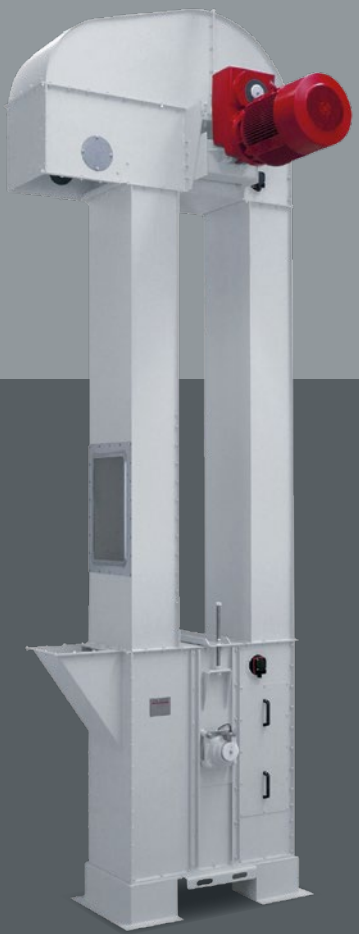
Areas of application:

- Chemistry
- Building materials
- Plastics
- Animal feed
- Coffee & tea









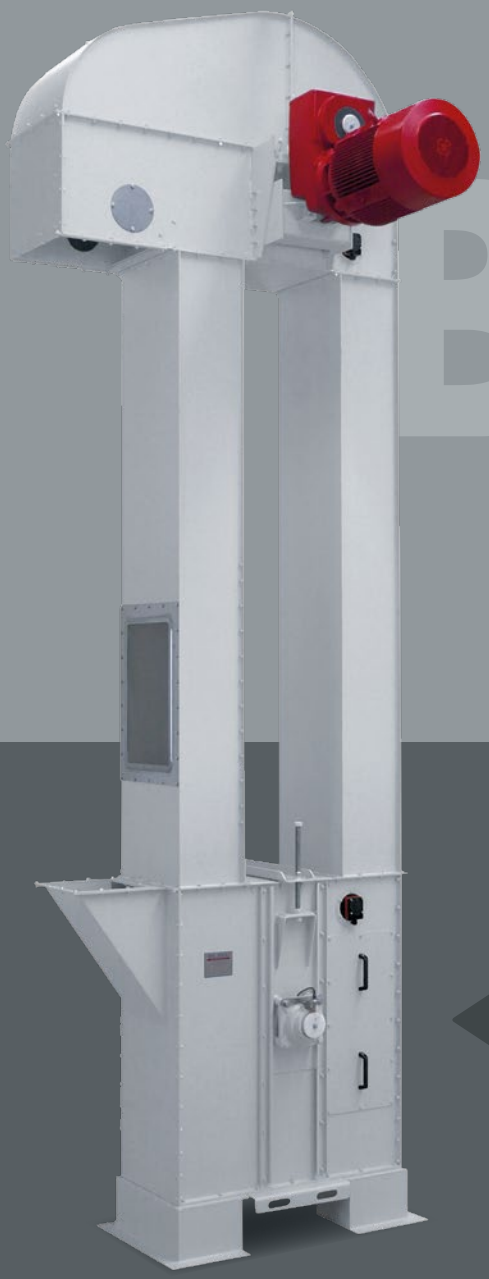
RESEARCH | DEVELOPMENT | DESIGN | ENGINEERING | SERVICE

CONTENTS

PLANTS &

ELEMENTS

Bucket elevator conveyor | BWF series



BWF

RUBERG

The ideal solution for vertical transport

- For the vertical transport of bulk materials
- Delivery rate 5 - 1 000 m^3/h
- Belt pulley diameter 300 - 1 000 mm

Performance, materiality & use

RUBERG bucket elevator conveyors in single or double design, as belt or chain bucket elevator with a capacity from 5 to 1 000 m³/h, in normal, stainless or special steel design, special designs also in wood.

- The ideal solution for vertical transport! Coarse- and fine-grained or powdered bulk materials are moved gently coarse and fine-grained or powdery bulk materials are moved.
- Due to the flexible modular design, special building conditions or locations are our particular challenge.
- The output and the product type determine the design and the types of buckets and belts. The buckets are available in normal, stainless steel or plastic versions. Rubber elevator belts in normal or oil/grease resistant versions.

Type BWF 500/280
Stainless steel
Material: 1.4301.
For animal feed

Design variants

Three-piece bucket elevator head, with built-in belt pulley or sprockets with solid ball bearings. Head lining made of wear-resistant material. Driven by a hollow shaft slip-on gear motor. With safety devices such as backstop and skew monitoring.

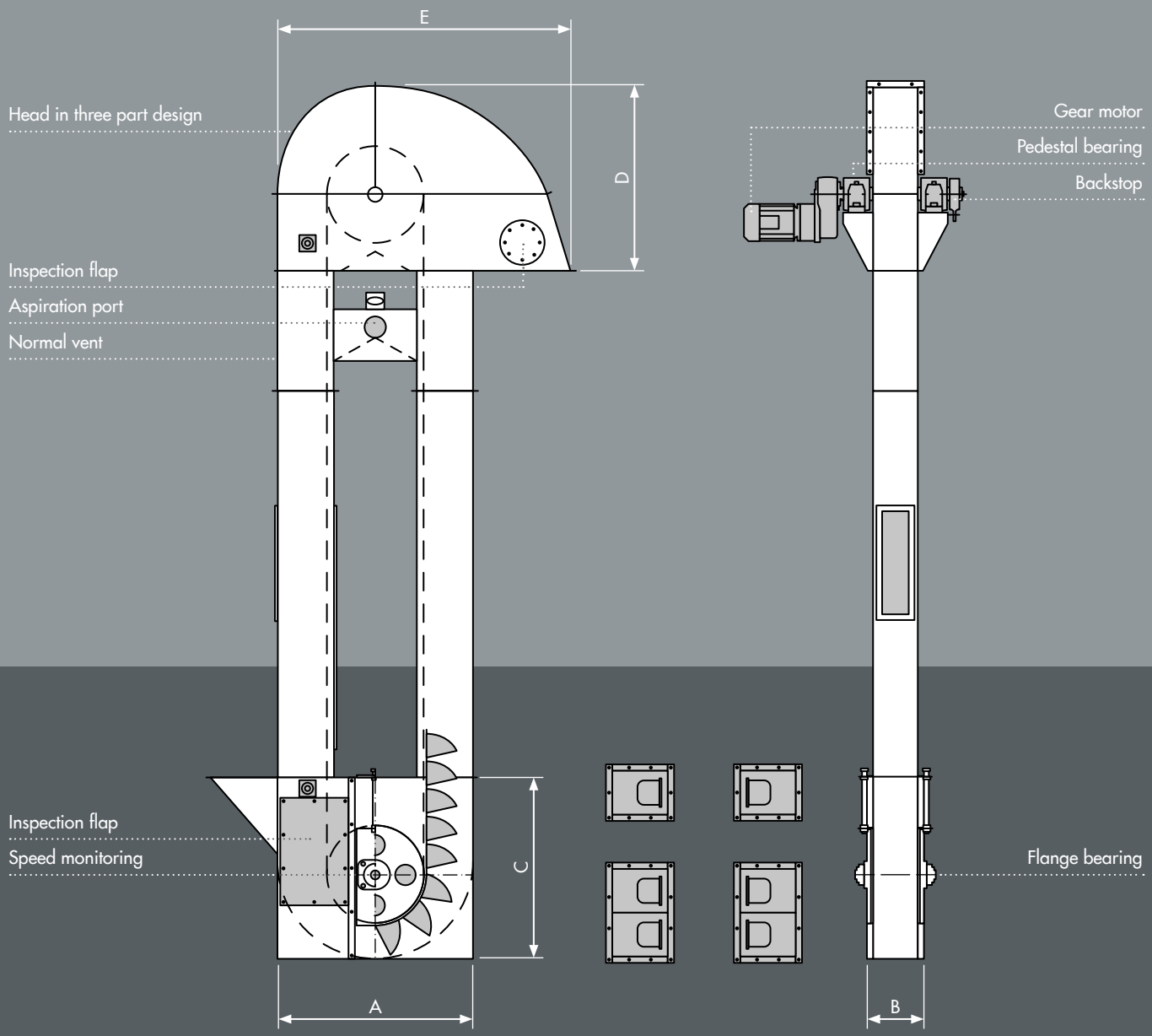
Bucket elevator vents in square or round design in staggered lengths. One vent pipe each with built-in mounting flap and inspection window.

Bucket elevator foot with smooth belt pulley, grid pulley or sprockets. Inlet nose on one or both sides. Feed metering by rack and pinion or manual slide valve. With cleaning slides on both sides. Mechanical device for tensioning the belts or chains. With backstop, skew and speed monitoring for a high level of safety.

The foot is optionally available in a round-bottom design without carry-over, or alternatively with a large discharge gate below the foot for complete emptying.

Bucket elevator conveyor in pressure shock resistant design, with bursting disc and pressure relief channel. All bearings are available with temperature monitoring as optional equipment.

Bucket elevator conveyor | BWF series

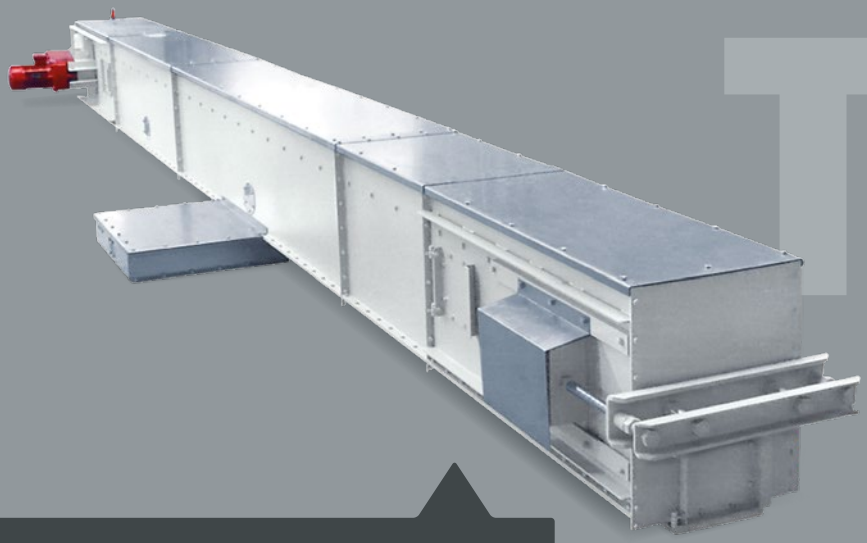


BWF

Performance data & dimensions – at bulk density of 0.75 kg/l

Type	Outputs up to t/h	Belt disc Ø in mm	Belt disc width in mm	Belt width in mm	Bucket width in mm	Approx. dimensions				
						A in mm	B in mm	C in mm	D in mm	E in mm
BWF 400/140	25	400	140	120	100	700	220	950	830	1100
BWF 400/170	40	400	170	150	130	710	220	950	830	1100
BWF 500/170	40	500	170	150	130	920	220	960	920	1420
BWF 500/220	100	500	220	200	180	920	280	960	990	1420
BWF 500/280	150	500	280	250	230	1010	395	960	990	1510
BWF 630/330	200	630	330	300	280	1400	500	1440	1235	1920
BWF 630/380	300	630	380	350	330	1500	550	1440	1240	1950

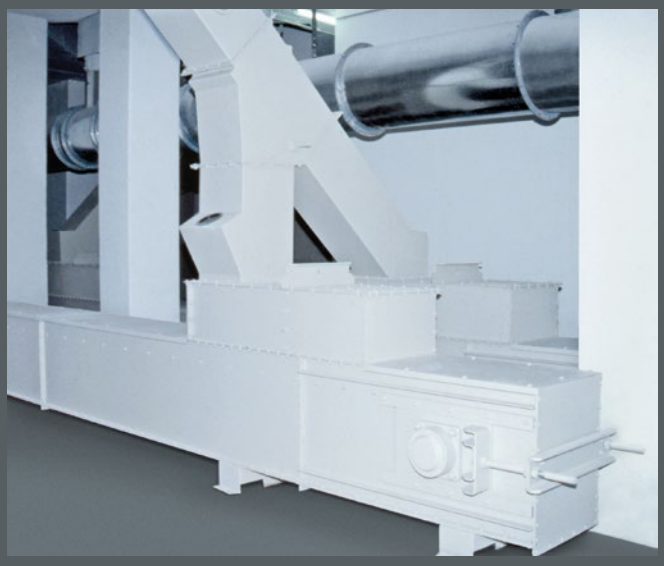
Trough chain conveyor | TKF series



TKF

RUBERG

Optimal for horizontal,
inclined or vertical transport



- For horizontal and vertical transport of bulk materials
- Delivery rate 5 - 1 000 m³/h
- Closed modular system

Performance, materiality & use

RUBERG trough chain conveyors in flexible design in capacity sizes 5 to 1 000 m³/h. Conveyor link chains pull the bulk material completely dust-free in a closed sheet steel housing.

- The low chain speed results in particular protection of the conveyed material.
- A closed housing prevents dust emissions and contamination.
- Inlets and outlets can be flexibly positioned.
- Clean emptying is ensured by the curved round bottom. Plastic driver for quiet operation.
- To minimize drive power and noise emission, plastic liners are optionally available for this purpose.

Design variants

Drive station in reinforced steel plate design with hardened sprocket, industrial ball bearing. Drive via hollow shaft slip-on gear motor with damped torque support.

Tensioning station with tension or pressure spindles for tensioning the conveyor chain, with built-in deflection sprocket and industrial ball bearing.

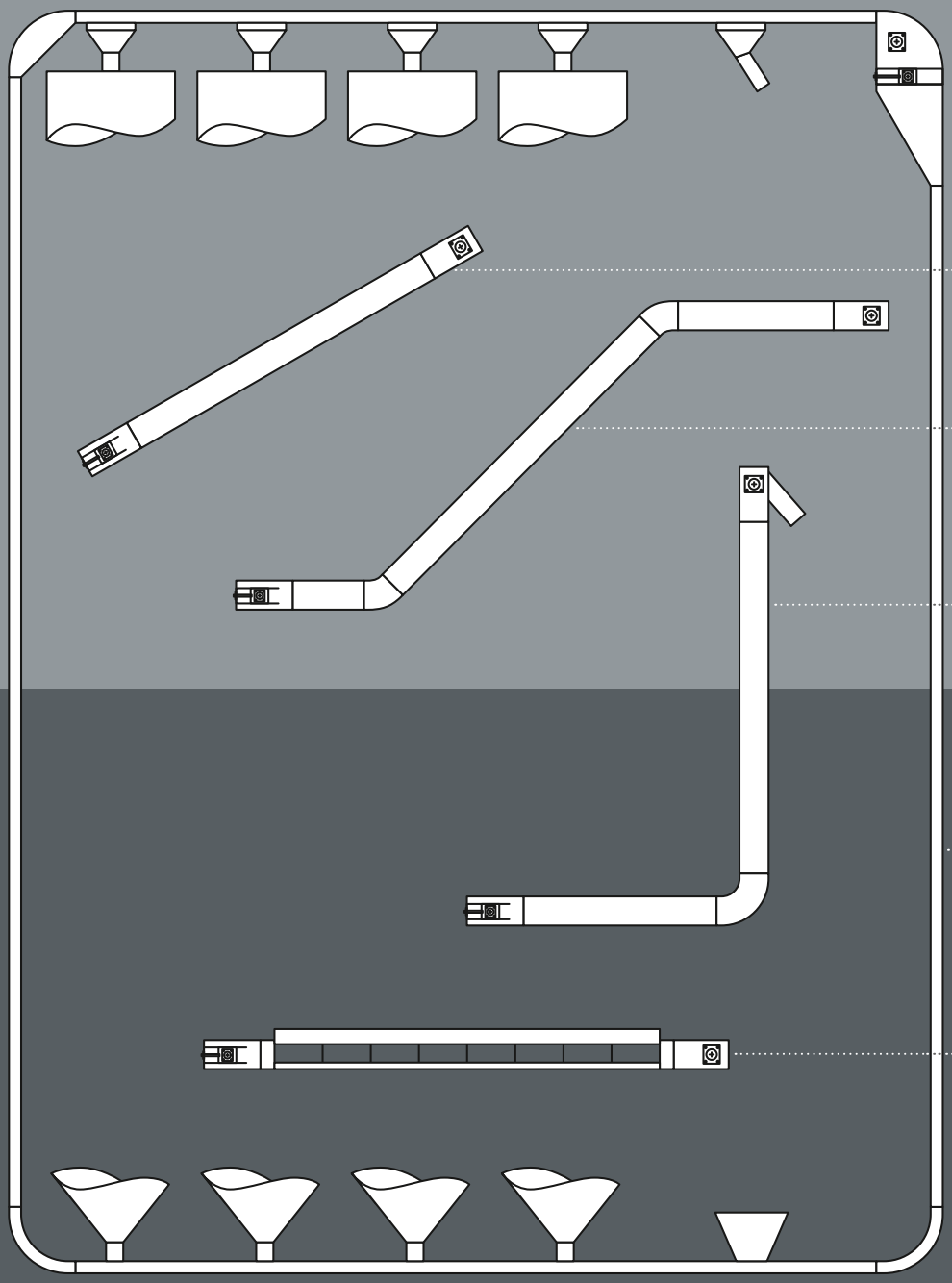
Trough joints available in staggered lengths. Trough chain conveyor with single bottom plate and screwed guide rail, with ball bearing rollers for return of the conveyor chain. In the case of intermediate floor design, ledges enable the return of the conveyor chain. The trough parts are flanged for connection.

Trough conveyor chain as single strand or multiple strand design with bent, welded or bolted flights. Bearing bushes, pins and chain plates made of high quality hardened steel.

In mild steel version primed for indoor use. In moisture-proof, galvanized design for outdoor use. For special applications also in stainless steel, pickled and passivated or ground or glass bead blasted.

Bulk detector, speed monitor and trough shocks with inspection window as accessories.

Trough chain conveyor | TKF series



Inclined trough chain conveyor

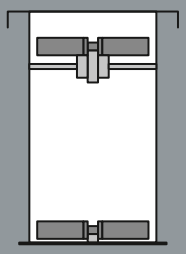
Inclined trough chain conveyor
with horizontal inlet and outlet

Vertical trough chain conveyor
with horizontal inlet

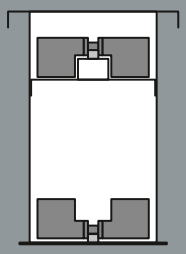
Circular chain conveyor

Pit trough chain conveyor
(bunker discharge conveyor)

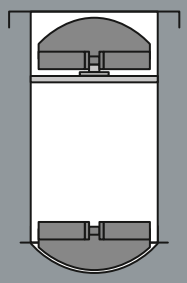
Trough chain conveyor
for horizontal conveying



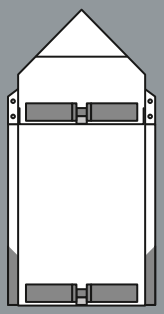
Trough chain conveyor
for inclined conveying



Trough chain conveyor
for residual emptying



Pit trough chain conveyor
(bunker discharge conveyor)



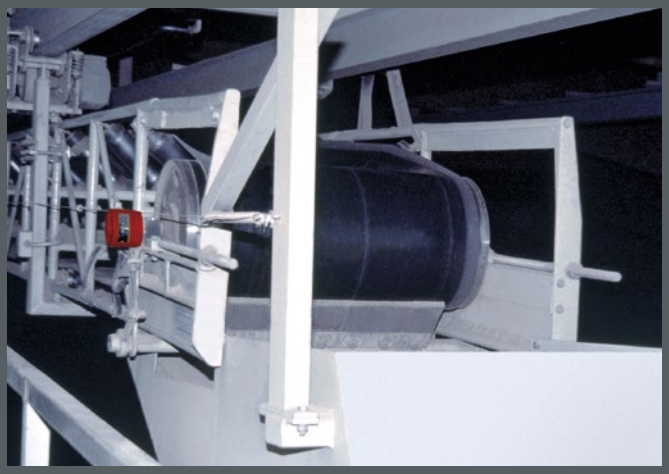
TKF

Performance data & dimensions – for heavy grain from 0.75 kg/l

Type	Outputs up to t/h	Total chain width in mm	Chain pitch in mm	Trough width in mm	Trough height in mm	Length of drive station in mm	Length of clamping station in mm
TKF 190	25	170	125	190	400	946	946
TKF 220	40	200	125	220	440	946	946
TKF 255	70	235	125	255	440	946	946
TKF 315	120	300	150	315	440	946	946
TKF 400	150	380	150	400	460	946	946
TKF 500	300	480	160	500	690	1430	1430

FBA
RUBERG

Powerful
horizontal transport



- For the horizontal transport of bulk materials
- Delivery rate 5 - 1 000 m³/h
- Open or closed modular system
- For hall loading and unloading
- With scraper for optimum bulk material levelling in flat stores

Design variants

RUBERG conveyor belts as high-performance continuous conveyors for all types of grain, oilseeds, feed, fertilizer and other bulk materials.

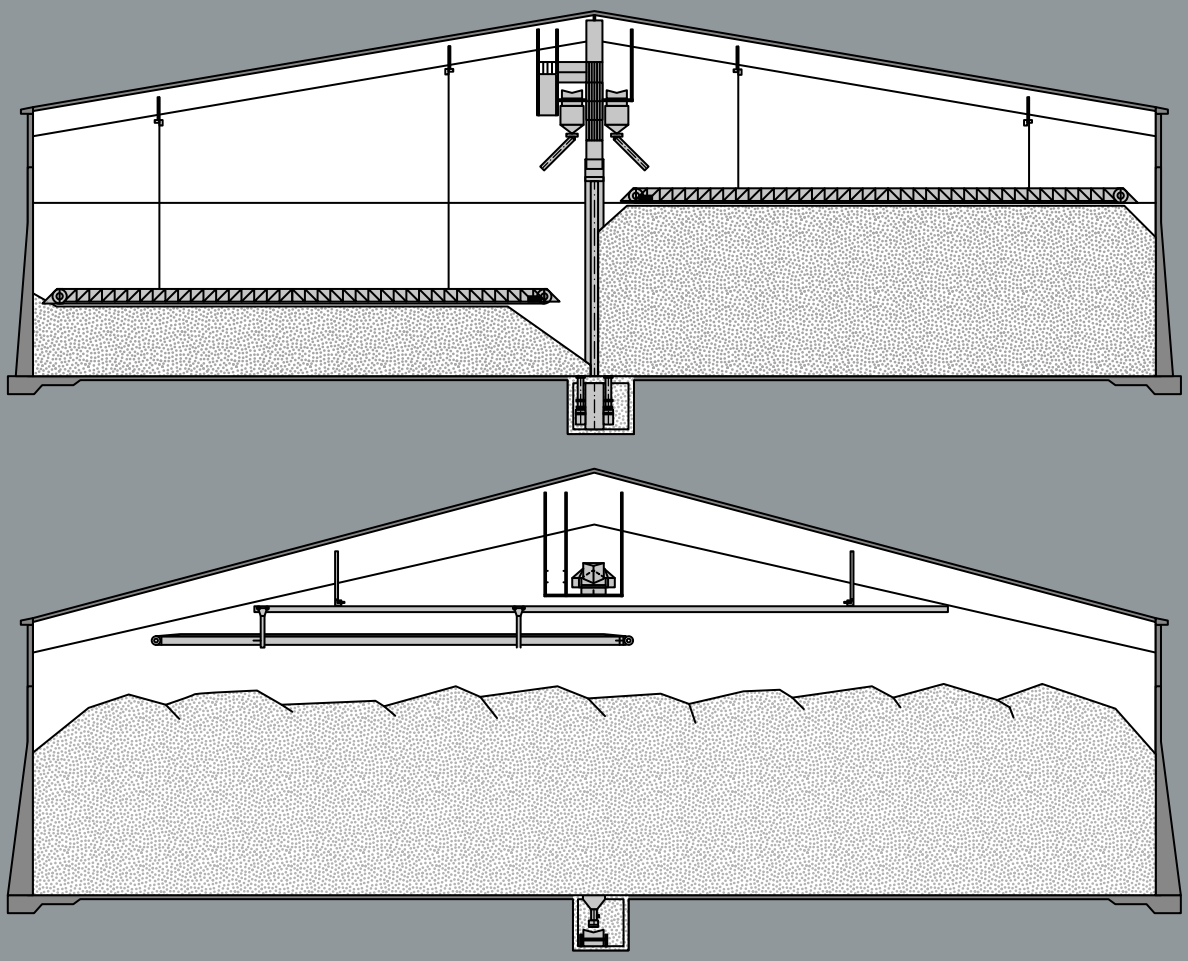
The intermediate joints with support rollers in two- or three-part trough design and belt return rollers. Carrying rollers with maintenance-free ball bearings.

RUBERG conveyor belts are very suitable for hall loading and unloading.

Built in modular design, consisting of the drive and discharge station, intermediate joints and tensioning station.

The drive is provided by drum motor or directly coupled gear motor. The tensioning station is equipped with threaded spindles or counterweights for belt tensioning.

High functional reliability is ensured by electronic skew and speed monitoring systems as well as by optional discharge detectors in the infeed and discharge hoppers.



Economical storage and removal of grain and oilseeds in horizontal silos (halls).

Mode of operation

For hall loading, the product moves to the centre of the hall via a stationary conveyor belt. A cross conveyor belt distributes the product laterally and axially over the entire hall area.

In the case of divided halls, all parts of the hall can be reached by the product through swivel tubes at the outlets on the longitudinal conveyor belt.

Bulk material is levelled by means of a scraper, belt or screw system.

For hall discharge, scrapers are suspended from longitudinal hoists and can be lowered for product discharge.

Performance, sizes & materiality

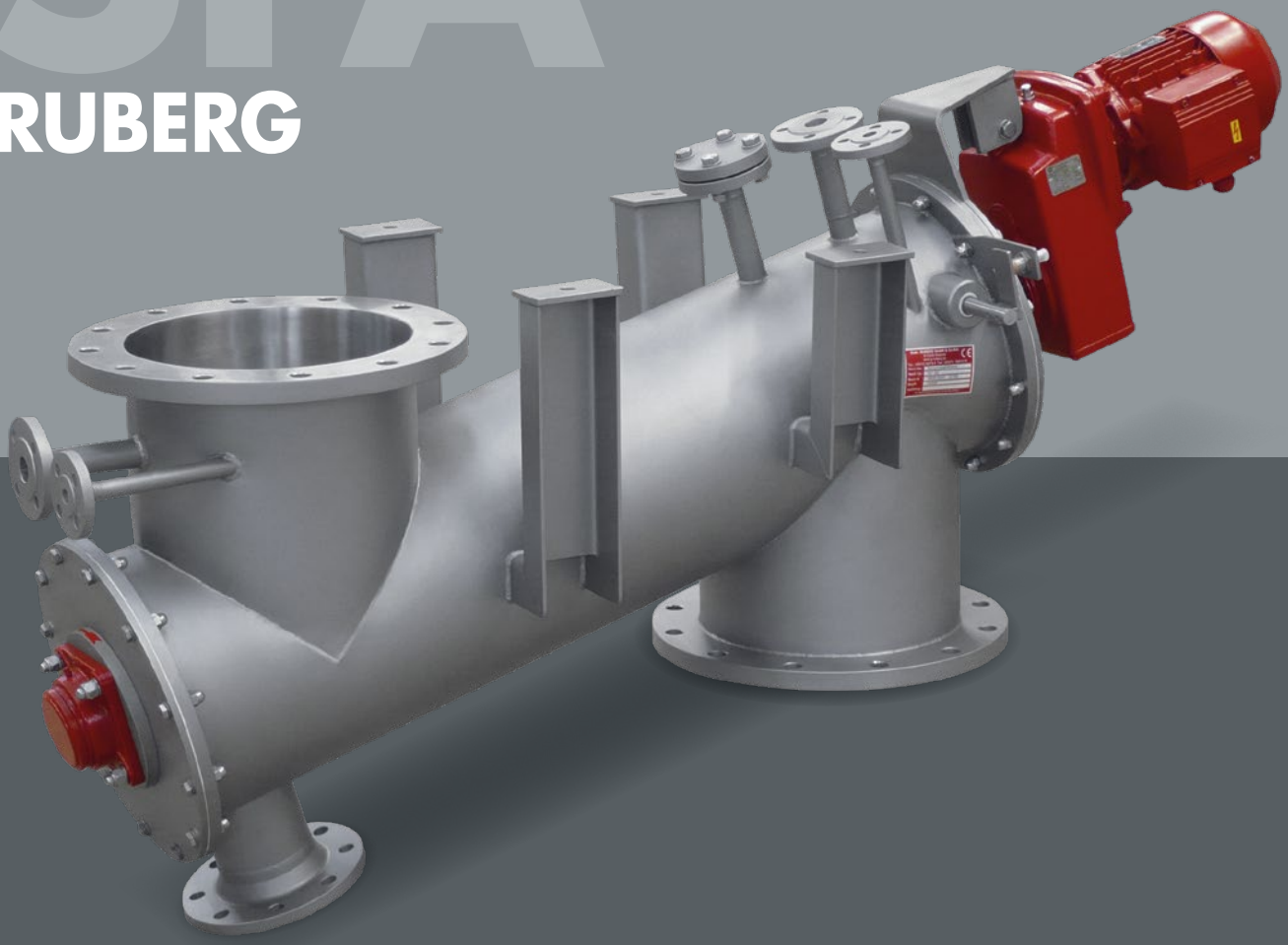
Various belt widths for the conveyor belts enable the highest possible outputs of 5 to 1 000 m^3/h with the lowest energy requirements.

Possible belt widths are 300 mm, 400 mm, 500 mm, 600 mm, 800 mm, 1 000 mm, 1 200 mm, 1 500 mm and 2 000 mm. The tape is suitably vulcanized to length endless.

RUBERG conveyor belts can be supplied in steel design primed, galvanized or in stainless steel. For outdoor installation with galvanized rain hood. Complete with belt feeding station. Discharge hopper or also with belt discharge carriage.

SFA

RUBERG



- For horizontal and vertical transport of bulk materials
- Delivery rate 1 - 250 m^3/h
- Screw diameter 100 - 800 mm
- in modular design, as tube or trough screw conveyor

Mode of operation

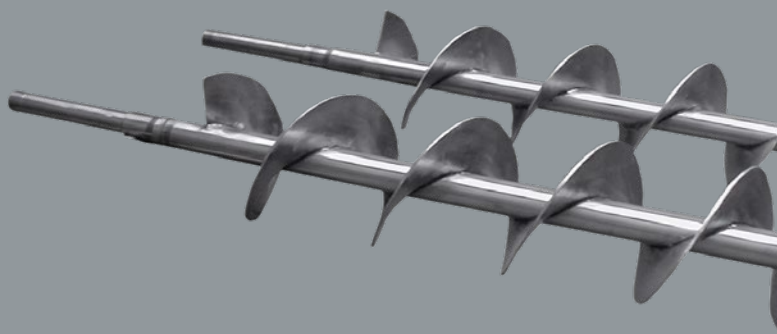
The RUBERG screw conveyor is a versatile conveying element that is suitable for all types of bulk materials thanks to its wide range of designs. Minimum space requirement due to very compact design. Dust-free environment due to low screw speed and closed housing. Screws in standard and stainless steel or special steel, in all diameters and lengths.

Depending on the application, RUBERG screw conveyors are used for vertical and horizontal transport. Other applications include metering screws, discharge screws, collecting screws and other designs with normal, conical or progressive threads.

Material thicknesses depend on the application and field of use.

Design for food and chemical applications in stainless steel, for abrasive bulk materials in wear-resistant materials. For caking products with non-stick coating.

Short screws are supported free-floating on one side, while longer lengths are designed with intermediate bearings.



Design variants

RUBERG screw conveyors as welded sheet steel construction. Headpieces with integrated or mounted bearing. Drive and bearing journals are sealed by mechanical seals, shaft seals or stuffing box packings.

Drive types such as hollow shaft slip-on gearmotor, electric motor with flexible coupling, hydraulic motor, V-belt or chain drive.

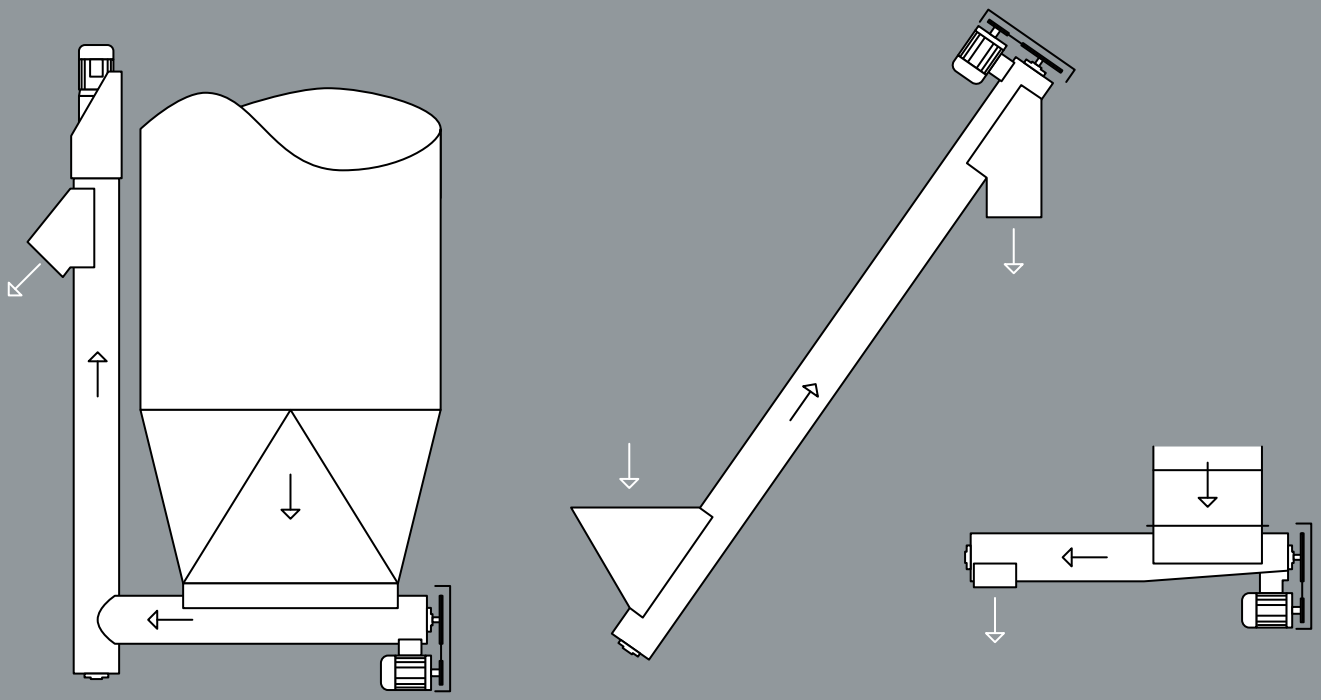
Screw trough or pipe in modular construction flanged or welded in one piece. Strong-walled core tube with spirals welded on both sides.

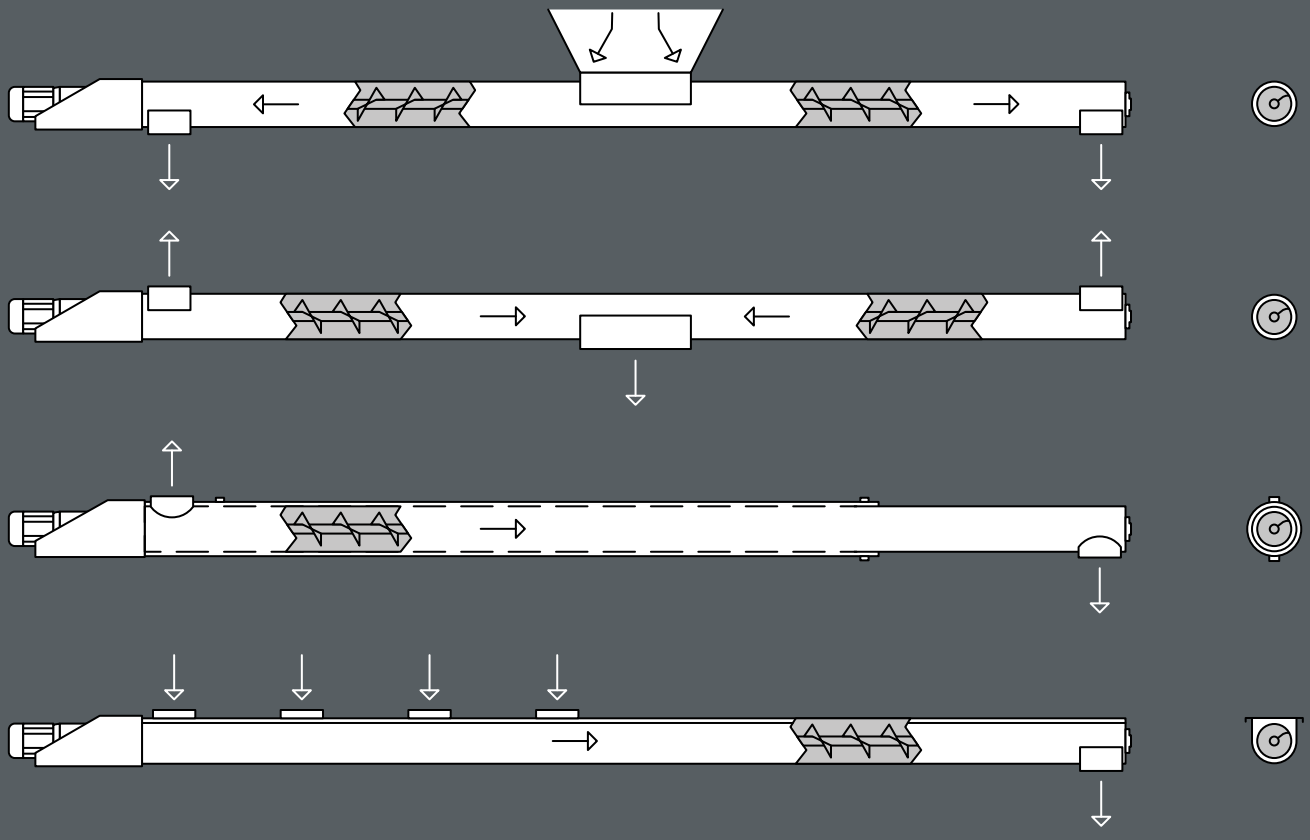
For long screws, maintenance-free and automatically lubricated or self-lubricating bearing materials are available.

For process application with heating or cooling jacket, heated or cooled screw spirals. As a mixing tool in special shapes, e.g. paddle screws.

In mild steel version primed for indoor use. In moisture-proof galvanized design for outdoor use. For special applications also in stainless steel, pickled and passivated or ground or glass bead blasted.

Screw conveyor | SFA series





SCREW CONVEYOR

Conveyor systems

CONVEYO

RUBERG

Exterior view – Silo plant with bucket elevators and trough chain conveyors, conveyor belts and screw conveyors.

R SYSTEMS

Interior views – The plant components are made of standard steel or stainless steel for every capacity and application.

RUBERG Technology Centre

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Would you like more information about these RUBERG machine types? – Contact us, we will be happy to advise you!

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