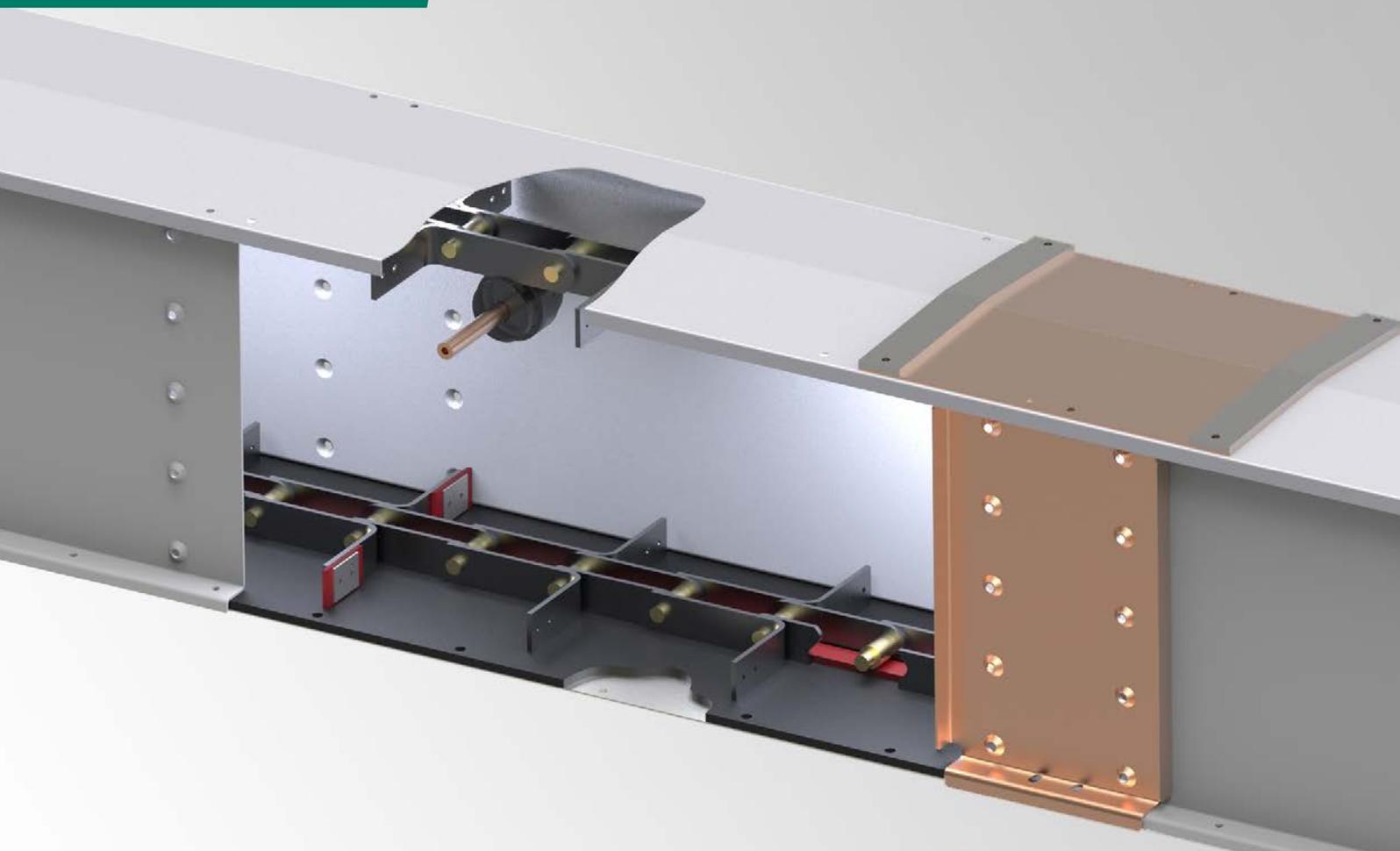


ZUTHER-ONLINE.DE



## ***QUALITY THAT STEMS FROM TRADITION***

Your specialist for grain management. For nearly 100 years.

## ■ Requirements for conveyor technology?

Conveyor technology is an elementary part of every plant. Whether used in agriculture, in cement and asphalt plants, in mining or in the chemical industry, nothing works without conveyors that meet the requirements. What is most important here is to conceive conveyors that are as easy as possible to maintain and suffer the least wear and tear.

As automation increases, conveyors are being equipped with electronic monitoring systems and incorporated directly into the control system. Thanks to warnings in due time, this reduces or even prevents plant downtimes.

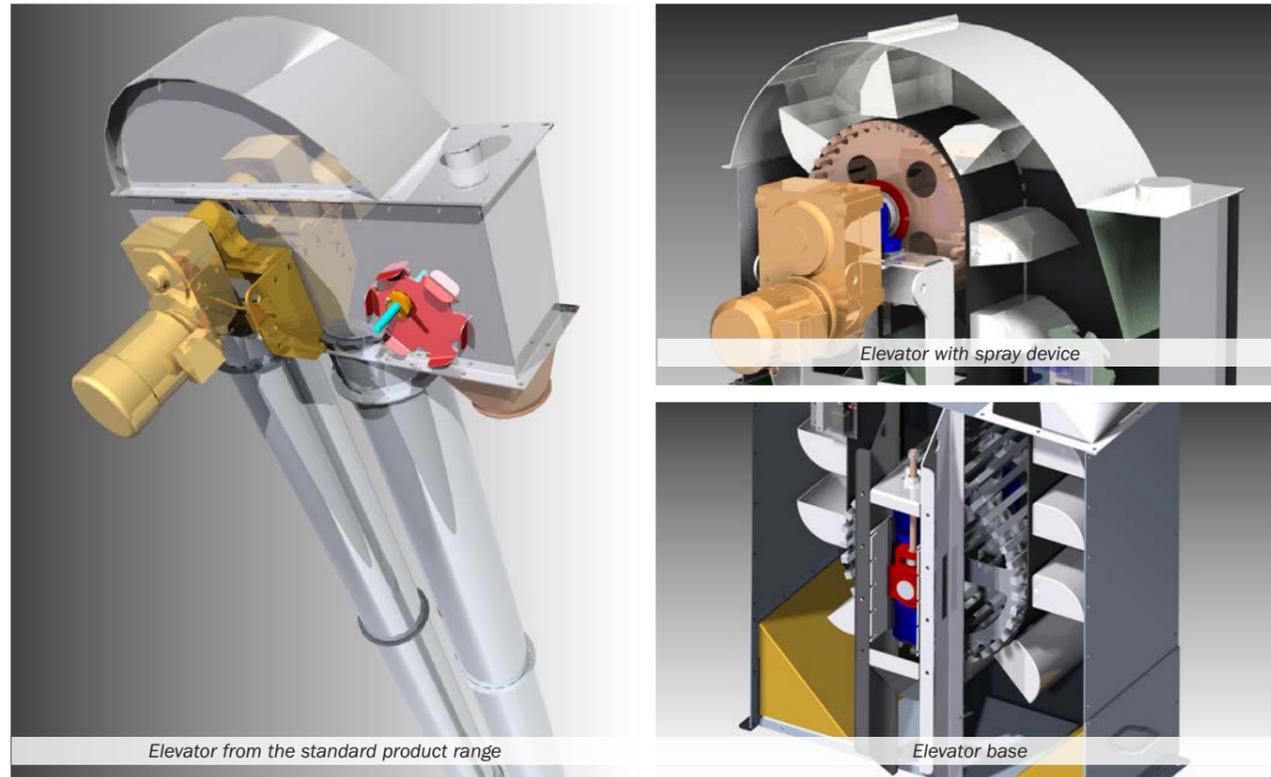
## ■ Content

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# BUCKET CONVEYORS & ELEVATORS

TYP E00-E10

- reliable due to a mature technical design
- standardized modular system
- capacity up to 800 t/h
- high-performance bucket systems – elevator belt resistant to oil and grease
- planning and manufacturing that meets your requirements – material: steel, galvanized, V2A (1.4301)



Silo filling elevators and pipe distributor 250 t/h

## EXECUTION DESIGN

All elevators are equipped with high quality drive components, elevator belts and elevator buckets and together with a solid sheet steel construction ensure high operational performance and thus ensure your investment. Our bucket elevators prove themselves daily under the most difficult conditions, worldwide. Thanks to large-sized maintenance hatches in the elevator head, elevator base and shaft, maintenance tasks can be easily executed.

## TECHNICAL OPTIONS

On request we equip the bucket elevators with off-track monitoring, electronic speed monitoring, full motor winding protection and full detectors. Pressure relief patches on the head and on the shaft as well as Q-pipe and point filter for the elevator shaft are available as an option. In addition a version in accordance with the ATEX Directive is possible.

## WE WOULD BE PLEASED TO ADVISE YOU.

Describe your conveyance problem and we will prepare a detailed and technically mature solution for you.

## ELEVATORS FROM ZUTHER

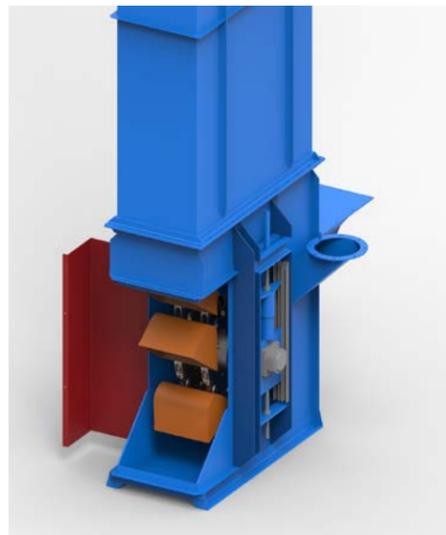
Our **ELEVATORS** cover a huge performance spectrum. Their ejection heights can be tailored to customers' wishes, and so can their geometry and the positioning of fasteners and maintenance platforms.

There is also a wide choice of materials, such as those which are sure to be suitable for use with food.

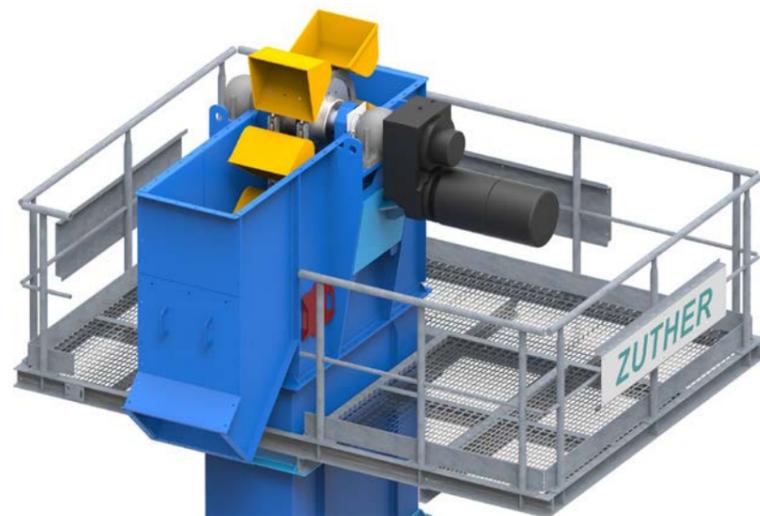
# Chain bucket and belt bucket conveyors

## TYP BWX

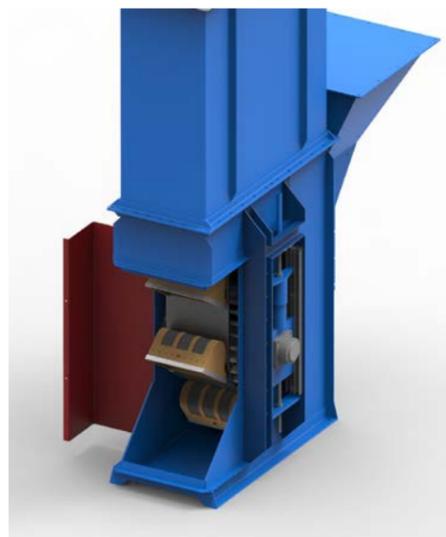
- capacity to 1.000 t/h or more, according to customers' requirements
- virtually no limits in ejection height and conveyor capacity
- resistance at product temperatures to 400°C
- available with two-strand Zuther chain
- extremely robust and compact construction
- universal implementation thanks to many available bucket shapes and materials
- easy maintenance due to large-sized access openings
- on request with detectors for monitoring



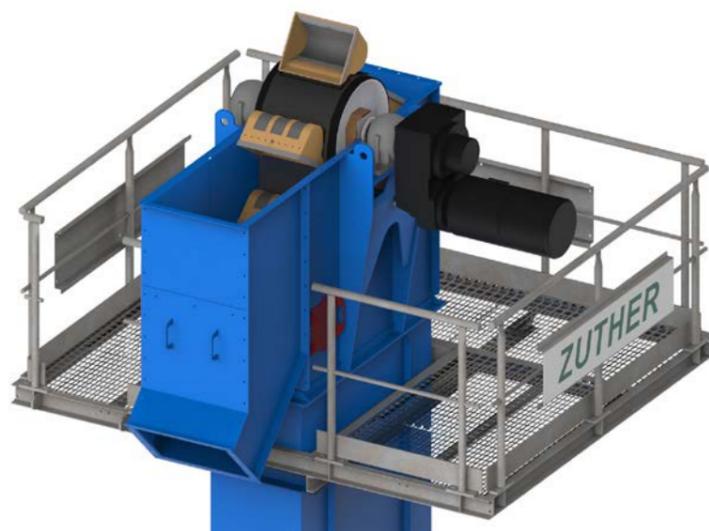
Elevator base – chain bucket elevator with two-strand chain



Elevator head, chain bucket elevator – rocks+soil



Belt elevator base – rocks+soil



Belt elevator head with bucket+rubber inserts, no adhesion



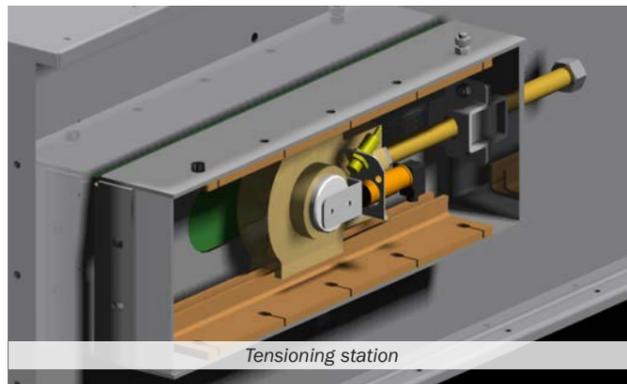
### CHAIN BUCKET ELEVATORS FROM ZUTHER

At higher temperatures, our **CHAIN BUCKET ELEVATORS** are used. Temperatures up to 400°C and grain sizes of more than 45 mm mean no challenge to our chain bucket elevators. This is guaranteed by using individual components of the highest quality and the only way to achieve peak capacities of up to 1.000 t/h. For conveying hot materials, we recommend our complete insulation for heat/noise, which can considerably enhance the cost effectiveness of a plant. When it comes to the most important component, the chain, customers can choose between a central chain (Rex) and the Zuther chain. We use genuine parts only from Rex (USA).

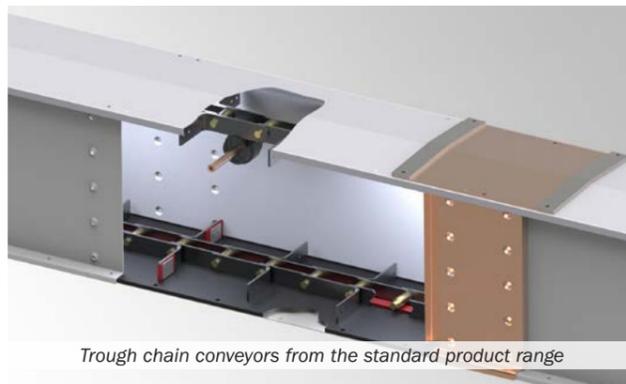
## Trough-chain conveyors

### TYPE TFX R26-65

- capacity to 450 t/h in the standard product line, on specific customer request also higher
- also suitable for sensitive products and food products
- very quiet thanks to factory standard plastic floor
- completely dust tight construction
- simultaneous transport also possible on the return level
- available galvanized and in stainless steel
- easy assembly and maintenance
- robust design, thus self-supporting even over long distances



Tensioning station



Trough chain conveyors from the standard product range



Trough chain conveyors for silo filling



Silo filling 2x 250 t/h

#### TROUGH CHAIN CONVEYORS FROM ZUTHER

The **TROUGH CHAIN CONVEYOR** is at home everywhere, whether as a simple link conveyor, a silo feeder or a removal conveyor. Trough chain conveyors are even used in our high-performance intake pits for grain receiving systems.

The conveyor concept involving a drag chain is especially well suited for sensitive materials because the product moves like a continuous strand in the conveyor and runs smoothly due to plastic bottoms. Thus the product remains undamaged.

## Chain scraper system in flat storage warehouses

- large storage volumes even with difficult floors
- adapted solutions for a variety of different bulk solids
- automatic filling and emptying
- complete planning
- turnkey delivery



Chain scraper (Skrapper)  
incl. guide rail system



Chain scraper system (Skrapper) in operation

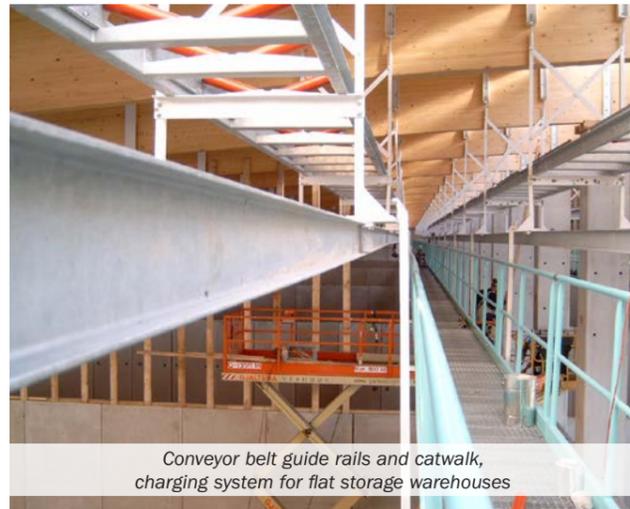
#### CHAIN SCRAPER SYSTEMS FROM ZUTHER

When it comes to managing flat storage warehouses for free-flowing bulk solids, the **SKRAPPER** (or chain scraper) has established itself as a conveying element. The focus here is on being able to fill as well as empty the warehouse with the flexible Skrapper.

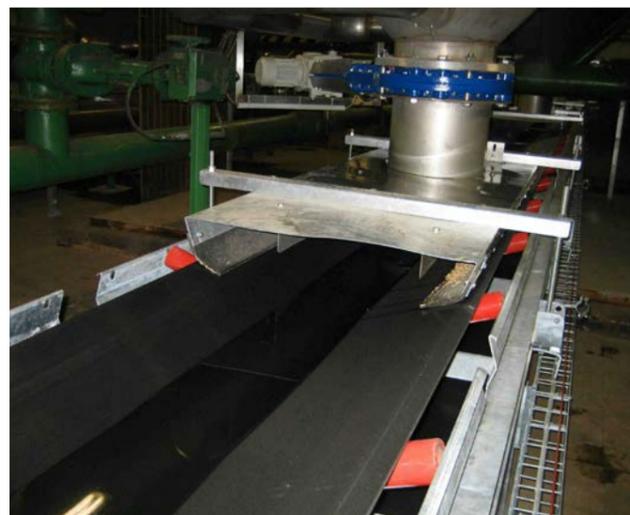
This double use is not offered by any other flat warehouse technology. Its high level of flexibility is primarily due to the fact that the chain scraper can be used at various heights. When combined with a longitudinal movement device, it can reach every point in the flat warehouse. Moreover, the filling and emptying procedures can be automated with the appropriate intelligent control technology.

## Trough conveyor belts

- up to 750 m<sup>3</sup>/h
- with German Federal Health Office (BGA) approval, suitable for unpacked food products
- suitable for sensitive goods as well as extremely abrasive material
- cost effective thanks to modular system design
- compact and lightweight
- easy maintenance



Conveyor belt guide rails and catwalk, charging system for flat storage warehouses



50 m trough conveyor

### TROUGH CONVEYOR BELTS FROM ZUTHER

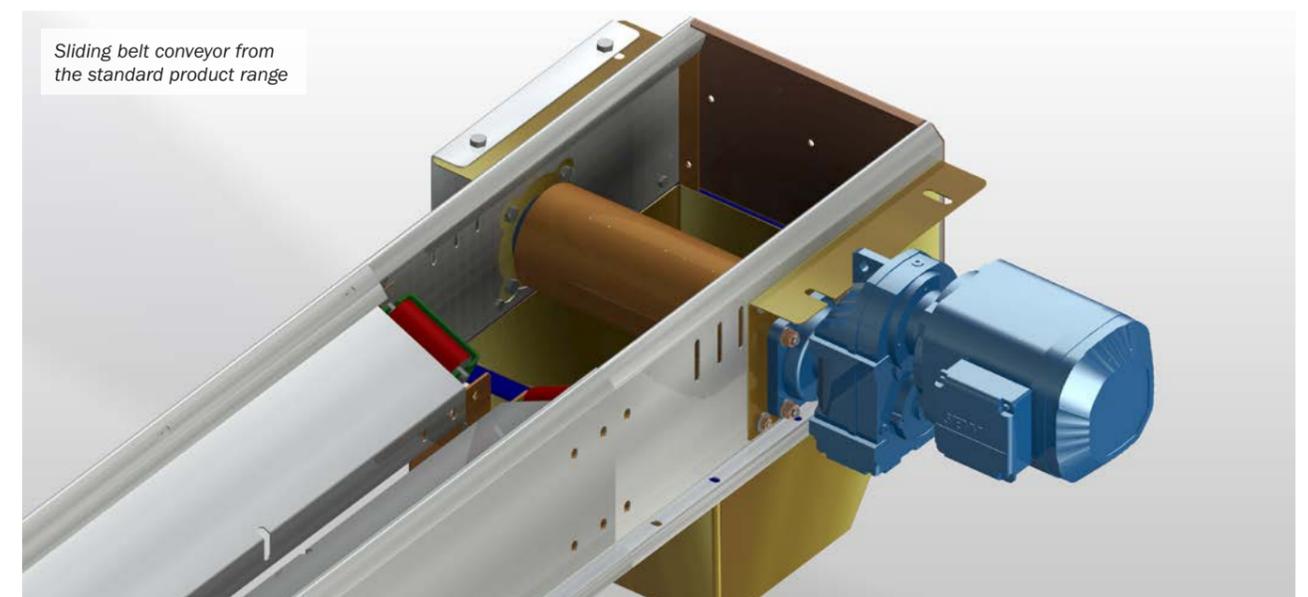
**CONVEYOR BELTS WITH SUPPORT ROLLERS** offer huge capacity reserves, up to 750 m<sup>3</sup>/h, and can bridge distances of far more than 150 m. The support rollers themselves require no maintenance whatsoever.

With the aid of our innovative ejection carriage, the ejection point of every belt can be changed at any time. In addition, conveyor belts are a central element of our very efficient, fully automatic hall charging for flat storage warehouses.

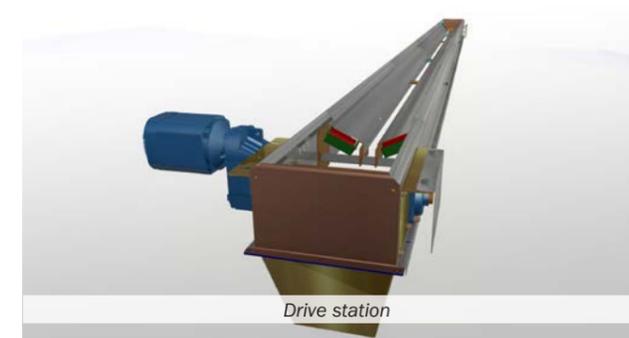
## Sliding belt conveyor as box belt

### Mono-fraction with divided sliding trough

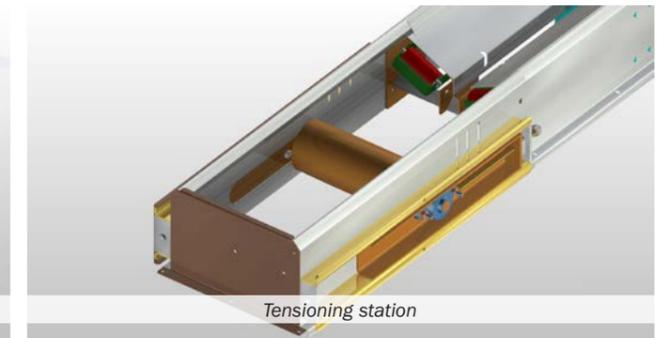
- capacity to 90 m<sup>3</sup>/h
- with German Federal Health Office (BGA) / FDA approval, suitable for unpacked food products
- for sliding belt conveyor belts also available as a closed system
- suitable for sensitive goods as well as extremely abrasive material
- cost effective thanks to modular system design
- compact and lightweight
- easy maintenance



Sliding belt conveyor from the standard product range



Drive station



Tensioning station

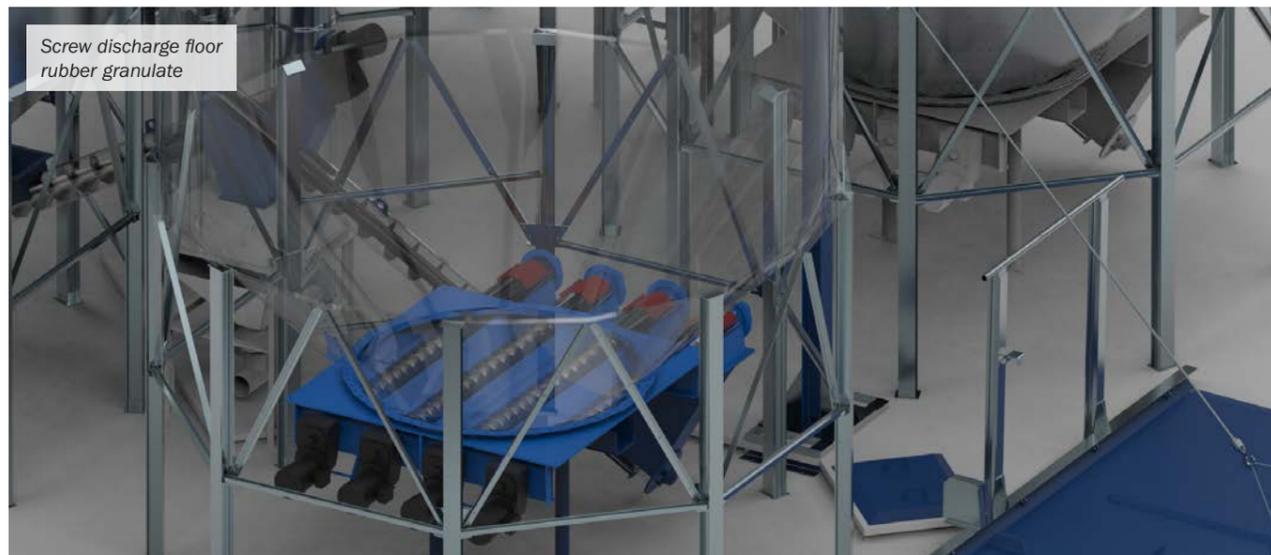
### SLIDING BELT CONVEYORS FROM ZUTHER

Conveyor belts are frequently used where a high level of reliability is required.

**SLIDING BELT CONVEYORS** are a natural choice for low to moderate capacities. Here the belt slides on a split recess which contributes to the fact that absolutely mono-fraction material can be conveyed. In addition, the system can optionally be encapsulated dust-tight and thus it can even be aspirated for disposal of dust.

## Trough screw conveyors & augers with chain scraper systems

- capacities to 250 t/h
- compact design
- dust-tight and odor-tight
- bearings especially protected for long service life
- easy maintenance
- also works in the most difficult environments
- with open screw conveyor trough the system can also be used for discharge
- also available galvanized or in stainless steel
- auger wings optionally of wear resistant material
- suitable for many different tasks (e.g. as dosing screw, stuffing screw or dewatering screw)
- for many kinds of bulk materials



### SCREW CONVEYORS FROM ZUTHER

**SCREW CONVEYORS** are by far the most space-saving conveyors because they do not require the space other conveyors need for the chain or conveyor belt return. ZUTHER adapts characteristics, such as materials of stainless steel, lining with wear-resistant plastic, wings of wear resistant steel, etc. specifically to your requirements. Thus screw conveyors are suitable for any type of product.

## Planning, production, assembly and maintenance – all from a single source.



With us, you always have a project manager responsible for you, who will be your personal contact from the planning to the completion of your project.

You get a system that is all of a piece. Our highly skilled employees do the planning on a 3-D CAD systems at the most modern CAD workstations. So you can see in detail even before the ground-breaking how your system is going to look. By using 3-D design, we prevent planning errors which cannot be immediately detected in complex 2-D designs.

A modern materials management system ensures that all the parts required for your order go into production with the right properties, in the required quantities and at the right time. The system provides immediate information at any time on the current status of your order.

## Even after the assembly of your system, we will still be there for you.

### EMERGENCY SERVICE

Even outside our normal business hours, you can always reach a contact person who will help you solve your problem. During grain harvest time, we set up a 24-hour emergency service which guarantees immediate troubleshooting. If it should prove necessary, we can put a customer service technician at your disposal at any time. Thanks to our location in the immediate vicinity of Hamburg Airport, a specialist can soon be on site even abroad.

### SPARE PARTS DELIVERY SERVICE

Even the best component has to be replaced sometime. To make sure that the downtimes of your system are as short as possible, we keep a large portion of the required spare and wear parts in stock at our central warehouse. Selected logistic partners take over the transport so you get your parts safely and on time, even if it means immediately sending the part by courier.

### MODIFYING YOUR SYSTEM AND ENHANCING ITS PERFORMANCE

Even if your company is expanding and the system that was supplied is stretched to its limits, we will be at your service with the expertise we have gained in nearly 100 years, working up solutions to modify or enhance the performance of your system. So you see, we will still be your partner tomorrow.



»Quality starts with a focus on customer satisfaction«

Matthias Warnke, Technology

## The right solution for every requirement

### SYSTEMS ENGINEERING

- Silo systems
- Flat storage warehouses
- Grain reception systems
- Grain drying systems
- Asphalt mixing systems
- Loading plants
- Biomass plants
- Malting plant technology

### MATERIALS HANDLING TECHNOLOGY

- Belt elevators
- Chain elevators
- Trough conveyors
- Conveyor belts
- Screw conveyors
- Loading
- Biomass materials handling technology
- Chain scrapers

### MEASURING AND CONTROL TECHNOLOGY

- System control
- Level sensing
- Temperature monitoring
- Weighing technology

### PIPE SYSTEMS

- Round pipe systems
- Rectangular pipe systems
- Sliders
- Distributors
- Wear-resistant liners

### DUST REMOVAL TECHNOLOGY

- Filter systems
- dust removal at grain reception
- Point filters
- Double door systems

### LABORATORY EQUIPMENT

- Truck sampling
- Pipe sampling
- Sample cleaning
- Sample dividers

### MATERIALS PREPARATION TECHNOLOGY

- Optima
- Vortex
- Accessories

### PRESERVATION TECHNOLOGY

- Drying systems
- Refrigerating devices

### CONTRACT PRODUCTION & SERVICE

- Contract production
- Spare parts service
- Engineering

## We put great value on returning customers – not returned products.

Our most important value is to ensure that our products and services are of high quality. We achieve this with our QM system, based on a large number of ongoing inspection plans. These plans are not used at the end of a process, but rather accompany it from design to production up to assembly.

Thus we ensure that faults are identified at an early stage of the process and helps avoiding expensive reworking. The way we select and constantly assess our suppliers also helps us guarantee high quality and nearly faultless production.

Kunde:	Auftrag/Nr:	Meilen:	ZUTHER Engineering & Technology		
ANR:	Beleg-Nr:	Konkurrenz-Nr:	Prüfprotokoll Gurtelevatoren Typ ELXG + ELY		
			Zusammenbau/Endmontage Werker		
			ACHTUNG: Höhenmaße vor dem Einzug des Gurtes prüfen		
LPD	Anlagenstell	Tätigkeit	OK abhaken	ist-Maß	Soll-Maß
1	Kopf, Schacht und Fuß ausrichten und Flansche anschließen	prüfen			
	Maße gem. umeisiger Zeichnung eintragen	eintragen			siehe Zeichnung umeisig
2	Auswurfhöhe mm	messen		mm	mm
3	Einlaufhöhe mm	messen		mm	mm
4	Höhe Brevatorbefestigungsrahmen 1	messen		mm	mm
5	Höhe Brevatorbefestigungsrahmen 2	messen		mm	mm
6	Höhe Bühnenbefestigungsrahmen	messen		mm	mm
7	Brevatorgurt einzeln und verbinden	prüfen			
8	Doppelrollen auf gleiche Gurtängen achten	prüfen			
9	Brevatorbecher angeschraubt und gekontrolliert	prüfen			
10	Bechertyp und Bechergröße	prüfen			
11	Becherindikator, Becher-Schweißnähte geprüft	prüfen			
12	Auslaufrolle montiert und Verschleißschutz Seiten und Abwurfbach verschweißt	prüfen			
	Abwurfbach eingeschaut	prüfen			
	Bei RC-Elevator u. Helfelelevator mit RC-Zugabe keine Querleisten im Auslauf montiert	prüfen	JA / NEIN	NEIN	
	Außenblech montiert u. Wellendichtung verschweißt	prüfen			
	Alle Montageelemente geprüft (s. Liste)	prüfen			

## Quality that origins from tradition. Your specialist for conveyor technology. For nearly 100 years.

As has been shown in the past, enterprises with a long tradition are particularly well suited to meeting challenges like ongoing further development of design, and manufacture. ZUTHER can draw on expertise gained in nearly one hundred years of business.

Joining tradition and forward-looking technology with perfectly trained personnel is a determining factor in the daily activities of our enterprise. Principles such as partnership, quality, efficiency, innovation, and sustainability were already pronounced back then and will be considered self-evident in the future, as well.

Decades of practical experience and the close cooperation with our customers have enabled conveyor technology from ZUTHER to reach a whole new level of performance capability, efficiency, and ease of maintenance.

Zuther engineering proves its worth every day around the world under the most difficult operating conditions.



**ZUTHER GMBH**

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