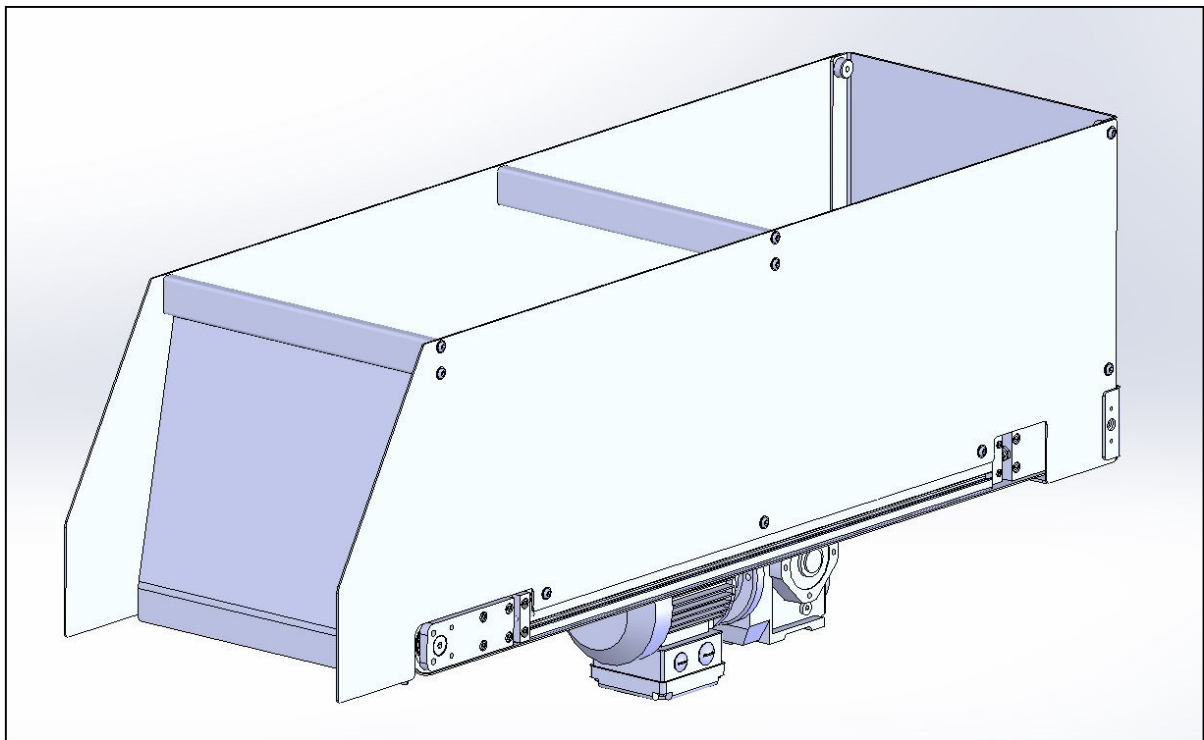


# Belt bunker BB-TB60

Filling weight up to maximum 90kg



# Belt bunker BB-TB60

Filling weight up to maximum 90kg

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# Belt bunker BB-TB60

Filling weight up to maximum 90kg

## General information

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### 1. Belt bunker BB-TB60 - general information

#### Device description:

The basis of the belt bunker with filling weight up to 90Kg is formed by a conveyor belt in the TB60 series from our standard range. The belt supporting structure is formed by a framework of Item6 60x30mm aluminum profiles, deflection rollers and sliding plates are made up of stainless steel, and a worm gear motor of make SEW is used as a drive. A parts storage container, also in stainless steel, is placed over the conveyor belt to achieve the specified filling volume.

Individual adaptation of the bunker depending on the material to be stored and the application case is made possible through extensive accessories, options and bunker sizes.

It is also possible to carry out customer-specific modifications / alterations to all the various types. Special models / prototypes can also be supplied on request!

#### Application areas:

- parts storage for sorting and feed equipments (longer refilling intervals for operating personnel)
- filling of packaging equipment and scales
- metered parts provision
- optimisation of feed equipment transport behaviour
- reduction of feed equipment size, therefore cost reduction and space saving using external parts provision

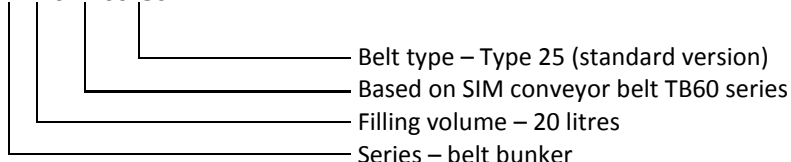
#### Assembly:

A solid substructure, plate, tripod or similar can be used as an installation location for the belt bunker. The band run must not be obstructed during assembly.

Stands and fixing plates can be manufactured to suit customer requirements.

#### Type designation:

Example: **BB-20-TB60-G6**



# Belt bunker BB-TB60

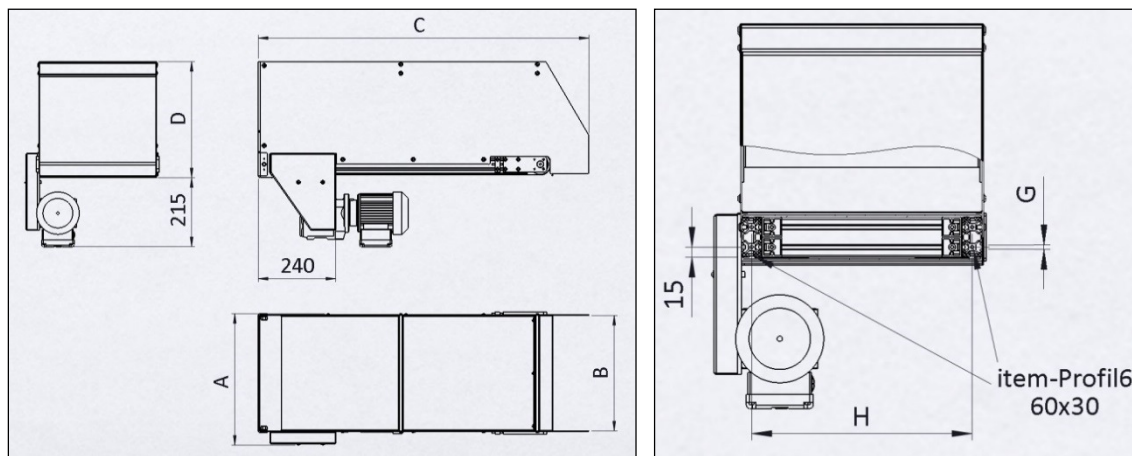
Filling weight up to maximum 90kg

## General information

### 2. Specifications:

#### Specifications:

- max. filling weight: 90 kg
- Conveyor speed: 1.1 m/min (50 Hz)  
1.4 m/min (60 Hz)
- Belt: G6: black, without FDA certification
- Belt tensioning: using external tensioning screws
- Bunker trough: Stainless steel
- Outfeed curtain: vulkollan
- Worm gear motor: IP54  
Star triangle: 220 V – 240 V/50 Hz  
240 V – 266 V/60 Hz  
Star: 380 V – 415 V/50 Hz  
415 V – 460 V/60 Hz  
Power consumption 0.12 kW  
Motor protection: TF temperature sensor
- Surfaces: drive protection stainless steel
- Different versions or data on request



	A [mm]	B [mm]	C [mm]	D [mm]	G [mm] (slot width)	H [mm]
<b>BB-20-TB60</b>	270	220	785	260	6	190
<b>BB-50-TB60</b>	410	360	820	360	6	330
<b>BB-75-TB60</b>	410	360	1020	360	6	330
<b>BB-100-TB60</b>	410	360	1220	360	6	330

# Belt bunker BB-TB60

Filling weight up to maximum 90kg

## Accessories - dosing panel

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### 3. Accessories for belt bunker

#### 3.1. Fill level checks

##### Fill level checks general

We differentiate between fill level checks for querying the fill level for the belt bunker or for the conveyor pot.

##### Fill level checks for belt bunker general

The fill level check for the belt bunker is used for acquiring signals for refilling with parts. Here, we differentiate between 2 different query possibilities.

- optically using through-beam sensors
- reflection using ultrasound sensors

Both query types work without contact.

The selection of the fill level check depends on the application case and the parts to be identified. In this case, the size and belt used by the belt bunker also play a major role.

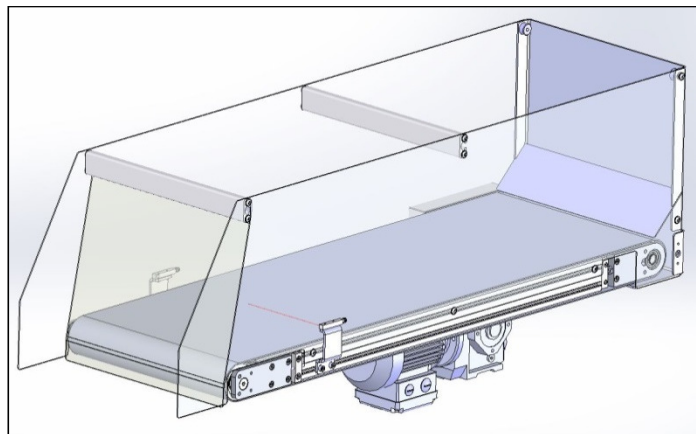
Please contact us in order to make the right selection for the use of a fill level check for your belt bunker.

Please clarify the individual application.

##### Fill level checks for belt bunker sideways

In this case, a through-beam sensor is used,

- works without contact
- is fitted to the side of the belt bunker
- a drill hole diameter of around 5 mm is required for the light beam



Designation: ZFSKB-Einweg

5

# Belt bunker BB-TB60

Filling weight up to maximum 90kg

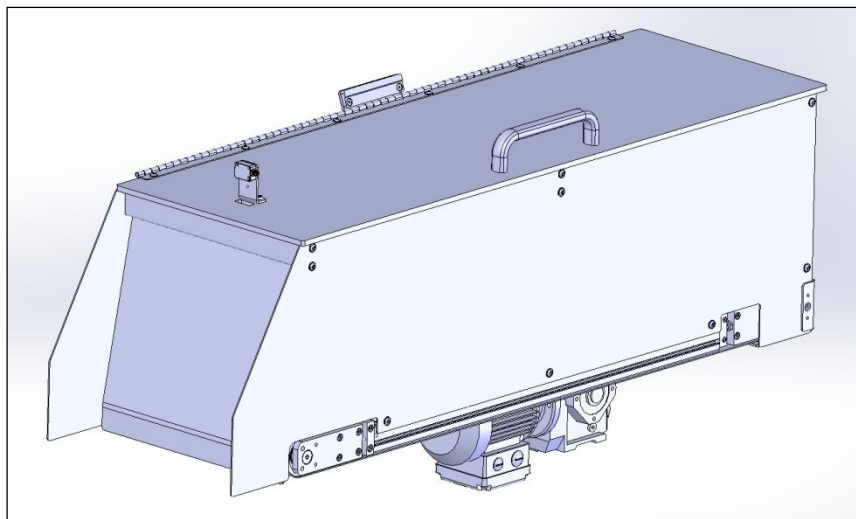
## Accessories - dosing panel

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### Fill level check for belt bunker from above

In this case, an ultrasound sensor is used

- use depends on material, surface and shape of parts
- works from above
- works without contact



Designation: ZFSKB-Ultra

Caution: this variation can only be ordered in combination with the hinged cover!

# Belt bunker BB-TB60

Filling weight up to maximum 90kg

## Accessories - dosing panel

### Fill level checks for conveyor pot general

The fill level check for the conveyor pot is used to ensure an optimum or minimum fill level in the vibratory bowl feeder or similar. With the help of the signal, the system or level controller regulates automatic refilling or signals the personnel that refilling is required. Here, we differentiate between 2 different query possibilities.

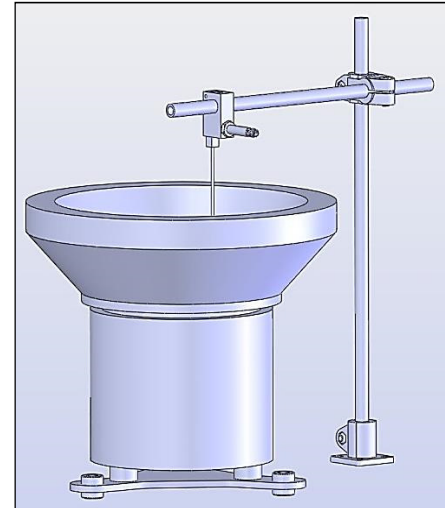
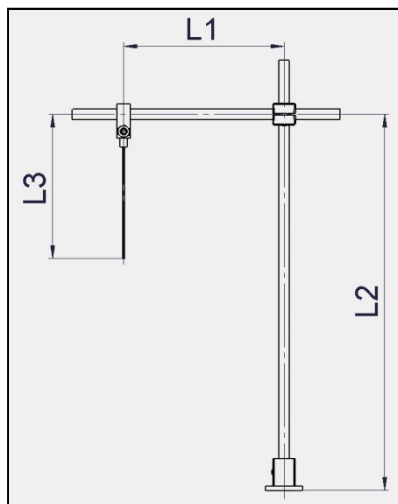
- electromechanical using a pendulum
- reflection using ultrasound sensors

The first query type works using contact, the second is contactless which means it works more carefully for the parts.

The selection of the fill level check depends on the application case and the parts to be identified. In this case, the size and type of conveyor pot also play a major role.

### Fill level control for conveyor pot with pendulum

- electromechanical components for conveyor pot fill level queries
- the fill level is checked using a pendulum
- the size of crossbeam can vary depending on customer requirements
- parts are contacted



Designation: ZFSKT pendulum

Length: L1 standard 300 mm

L2 standard 400 mm

L3 standard 200 mm

Other lengths on request

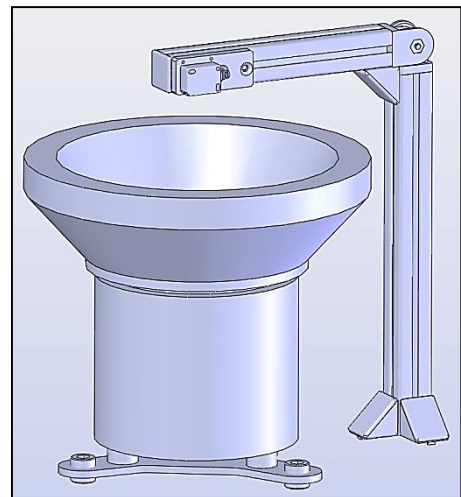
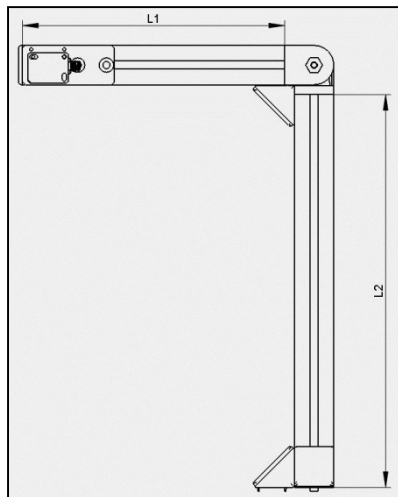
# Belt bunker BB-TB60

Filling weight up to maximum 90kg

## Accessories - dosing panel

### Fill level control for conveyor pot with ultrasound sensor

- fill level check for helical conveyor using ultrasound sensor
- works without contact
- the size of crossbeam can vary depending on customer requirements
- detection range: 25 – 400mm
- cross strut is implemented foldable



Designation: ZFSKT Ultra

Length: L1 standard 300 mm  
L2 standard 400 mm

Other lengths on request



# Belt bunker BB-TB60

Filling weight up to maximum 90kg

## Accessories - dosing panel

### 3.2. BSN level control

#### Level controls general

Level controls are used to switch belt bunkers on or off depending on fill level checks of the downstream components.

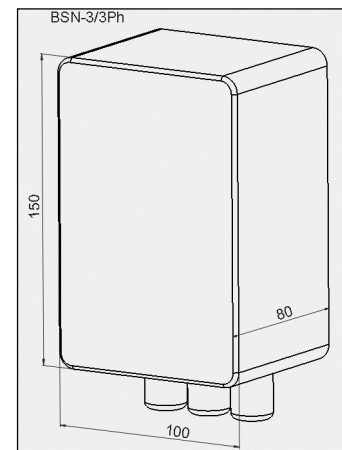
The fill level is checked by a sensor at a specific position. 0 V is provided to the sensor output if parts are available. The belt bunker is switched off.

If the level is fallen below, the sensor switches a 24 V output through. The sensor output now carries +24 V and then switches the power supply phase for the belt bunker through after around 2-3 seconds. The belt bunker is now switched on.

In the case of the BSN 3/3Ph level controller, the voltages can be changed and signal voltages can be reversed additionally with the help of jumpers.

#### Specifications:

		BSN-3/3Ph
<b>Mains supply</b>	230 V AC / 50 Hz	x
	115 V AC / 60 Hz	x
	3 Ph. 400 V AC / 50 Hz	x
	3 Ph. 200 V AC / 60 Hz	x
	Output fuse	T 3.15 A (3x)
<b>Sensor connection</b>	24 V DC	x
	Signal reversible	x
<b>Enable input</b> (blocks BSN output)	24 V	x
	Signal reversible	x
<b>Operating voltage</b>	24 V DC / max. 250mA	x



Designation: BSN-3/3 Ph

# Belt bunker BB-TB60

Filling weight up to maximum 90kg

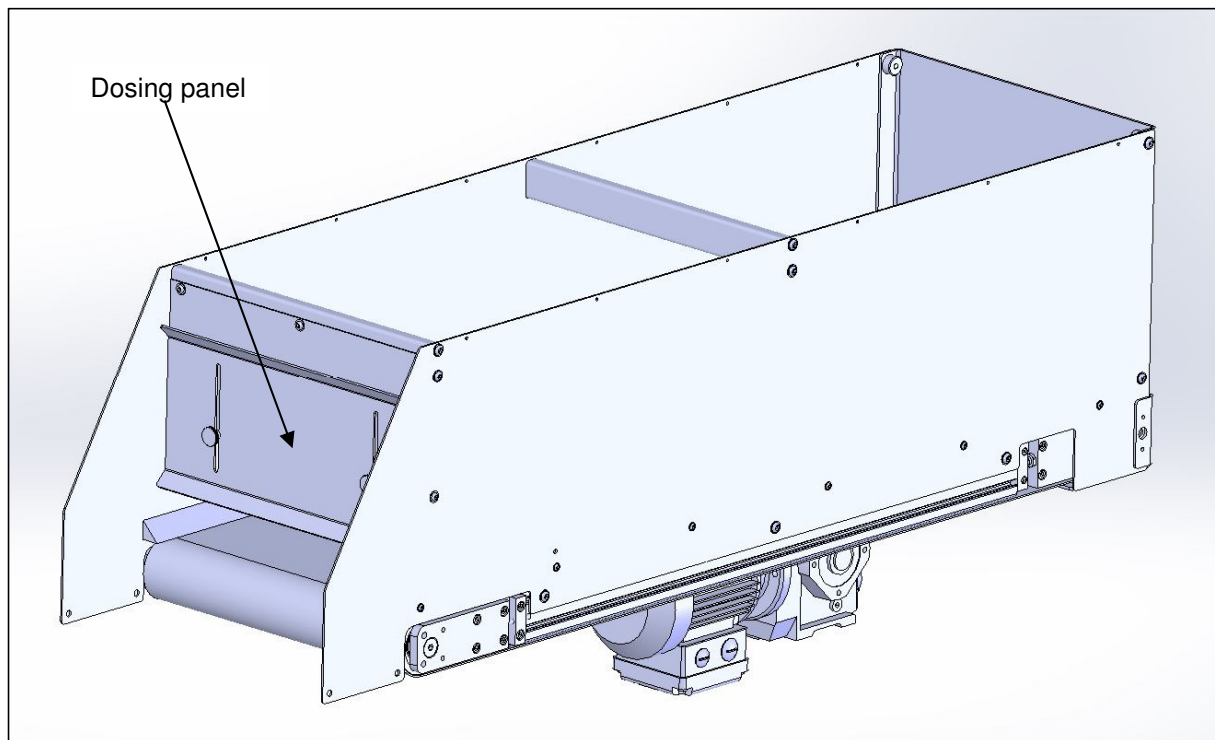
## Accessories - dosing panel

### 3.3. Dosing panel

Using the dosing panel it is possible to limit the belt bunker outfeed opening, and to adjust it permanently. This is particularly helpful when working with heavy parts since these cannot be sufficiently kept back by the lock curtain.

The dosing panel is mechanically connected to the belt bunker when ordered complete.

If you order the dosing panel retrospectively, an additional crossbeam is required which means that you will have to make to drill holes in the side panels. The necessary graining points are already provided so that this can be carried out quickly and simply. Please state the bunker type for the dosing panel when ordering!



Designation: ZDB ... "state bunker type"

# Belt bunker BB-TB60

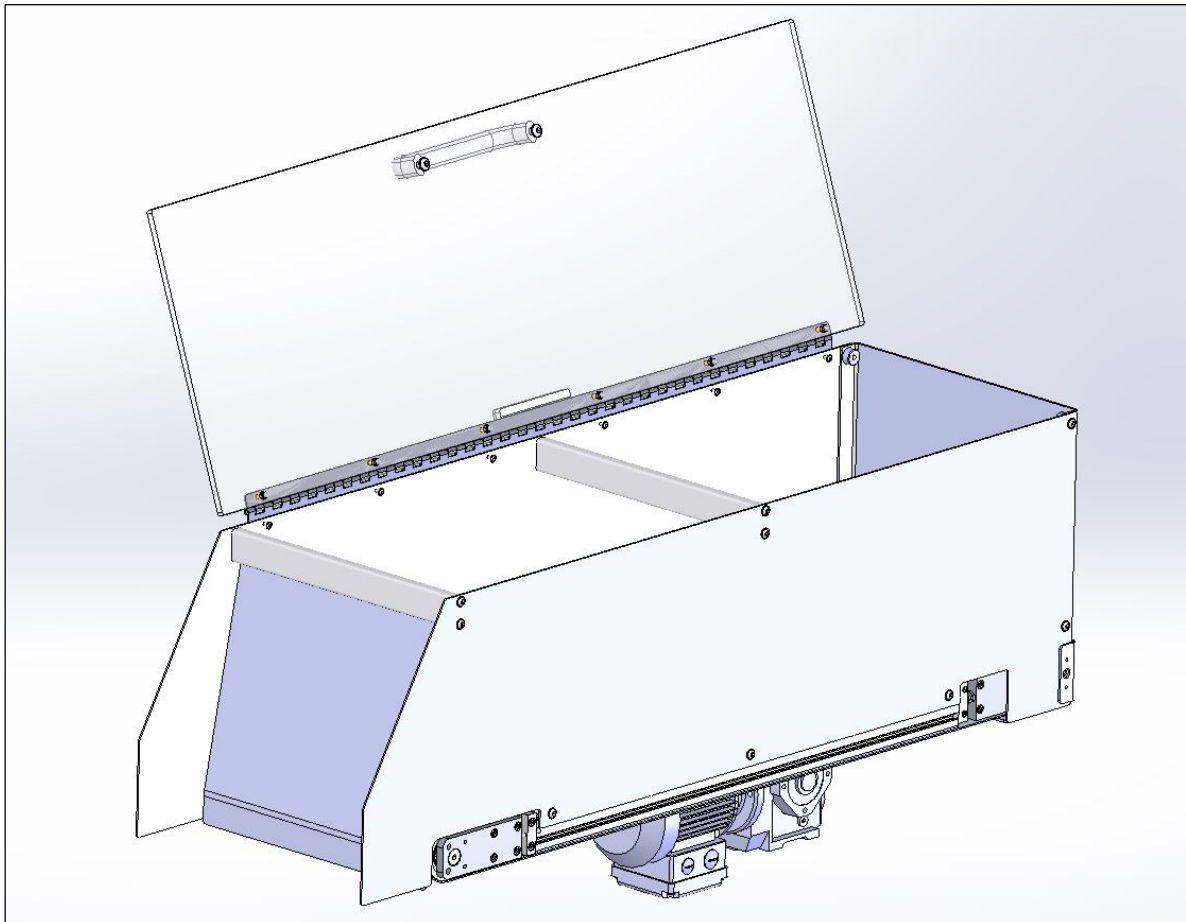
Filling weight up to maximum 90kg

## Accessories - hinged cover

### 3.4. Cover

#### Hinged cover

The cover (made of polycarbonate with stirrup handle) is bolted to the bunker wall using a piano hinge.



Designation: ZDKR – right-hand hinged cover  
ZDKL – left-hand hinged cover

Caution: the side information defines the position of the hinge as viewed from the direction of transport.

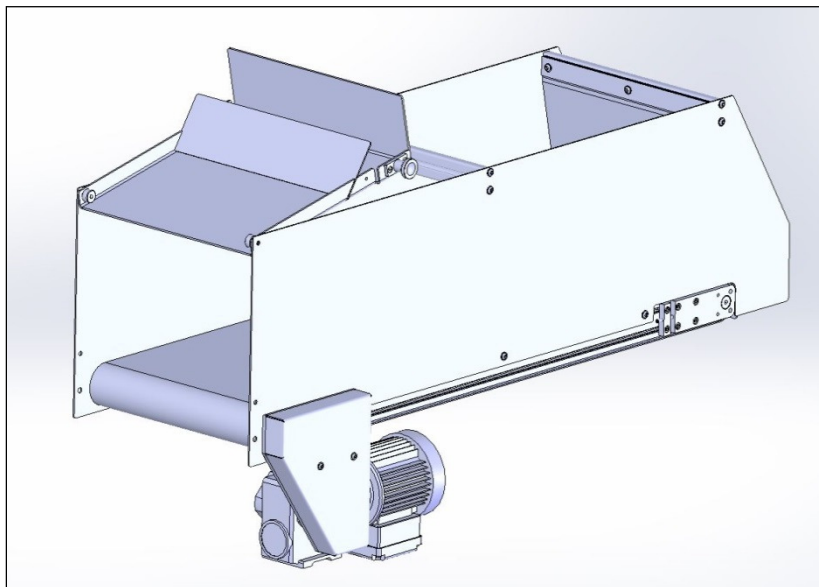
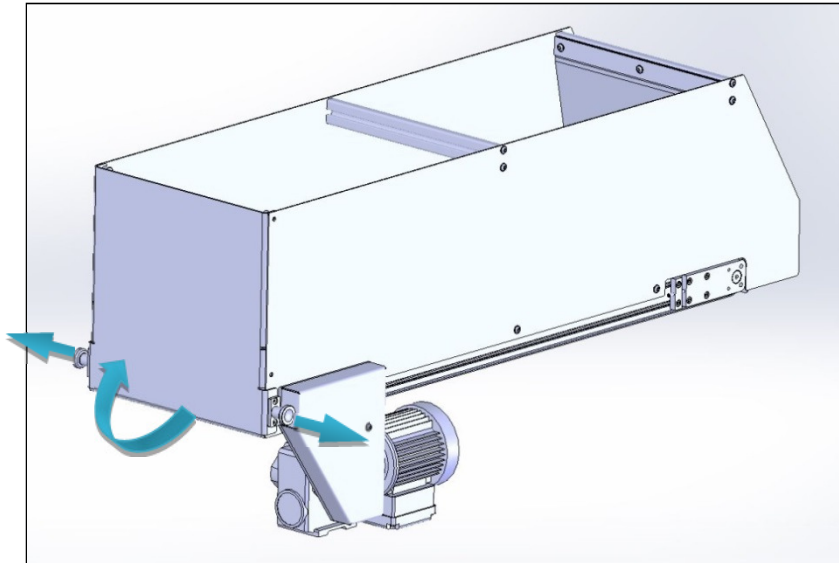
# Belt bunker BB-TB60

Filling weight up to maximum 90kg

## Accessories - foldable rear panel

### 3.5. Foldable rear panel

Enables rapid emptying of the bunker. The rear panel can be opened using a quick lock and then folded up over the swivel joint. Can be retrofitted at any time!



Designation: ZRWK – foldable rear panel

# Belt bunker BB-TB60

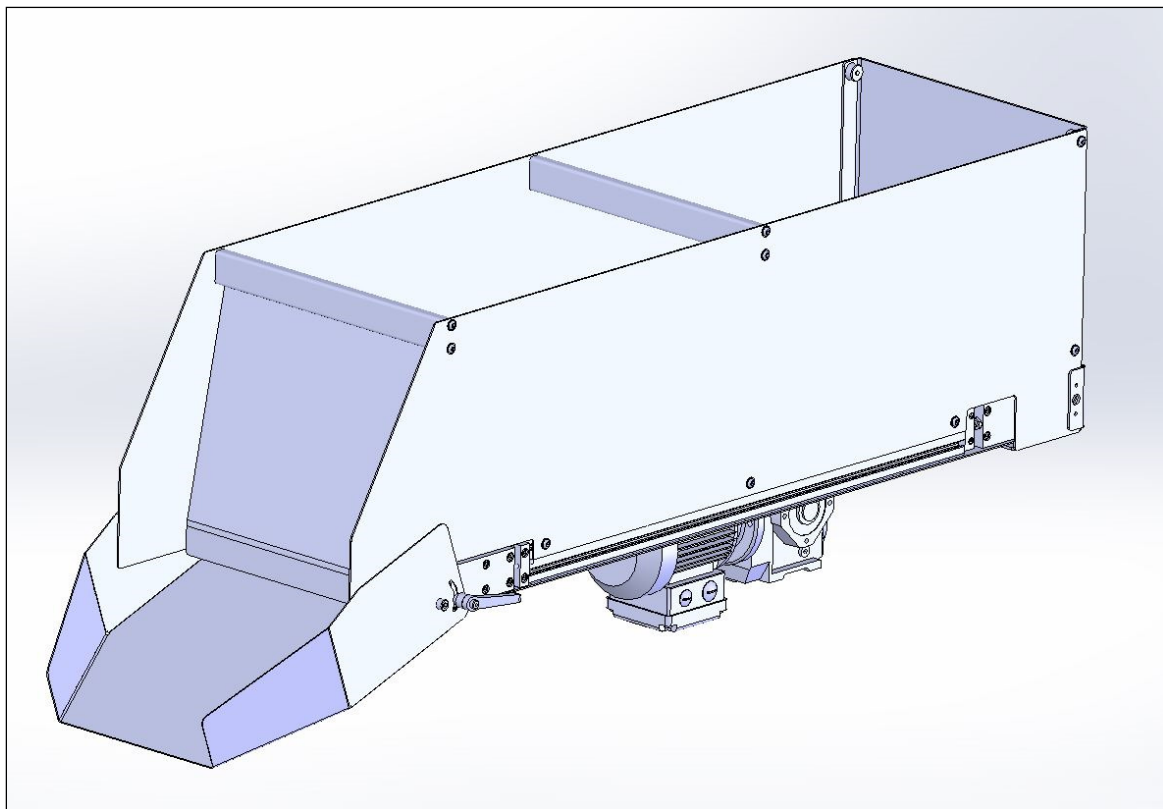
Filling weight up to maximum 90kg

Accessories - bunker chute / bunker shaft

### 3.6. Bunker chute / enclosed bunker shaft

#### Bunker chute

In stainless steel. Inclination adjustable (up to 45°).



Designation: ZBR bunker chute.

Types	BB-20-TB60	BB-50-TB60	BB-75-TB60	BB-100-TB60
Chute width [mm]	123		243	

Other widths possible on request.

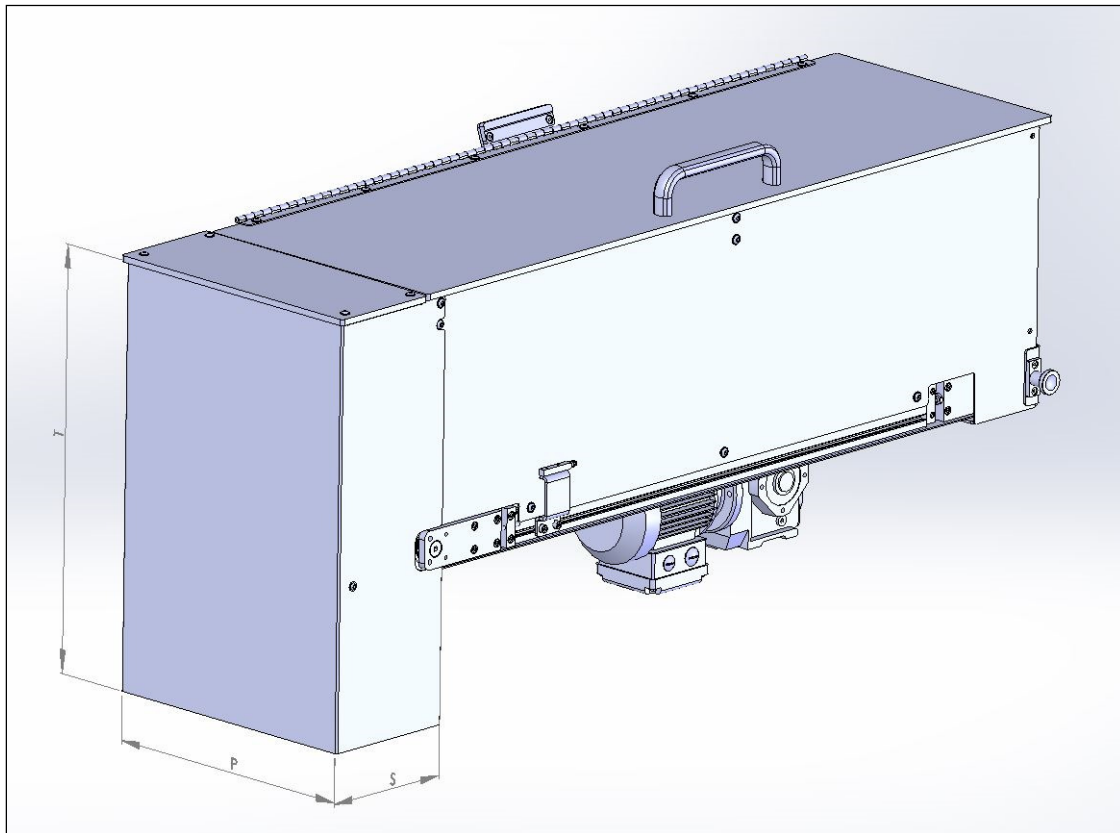
# Belt bunker BB-TB60

Filling weight up to maximum 90kg

Accessories - bunker chute / bunker shaft

## Enclosed bunker shaft

In stainless steel.



Designation: ZBS – bunker shaft

Types	BB-20-TB60	BB-50-TB60	BB-75-TB60	BB-100-TB60
P	230		370	
S	150		180	
D	400		550	

# Belt bunker BB-TB60

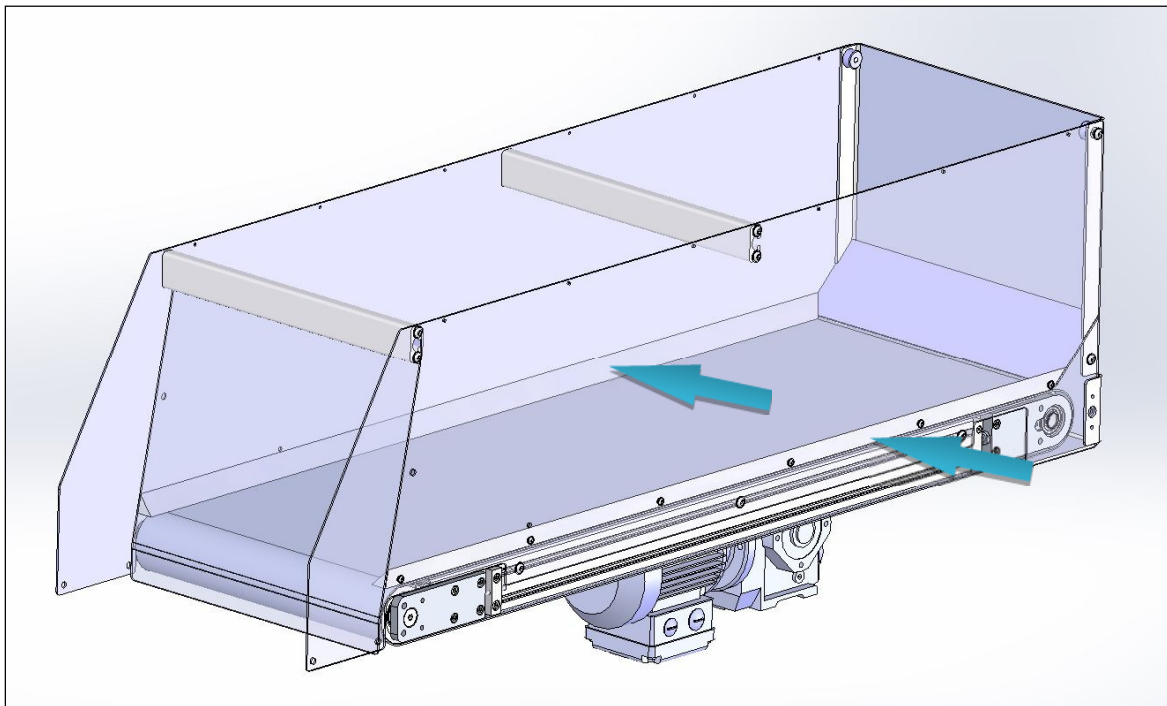
Filling weight up to maximum 90kg

## Accessories - triangular strips

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### 3.6. Triangular strips

Made of PE 1000 natural. The strips prevent jamming of very small parts between the side panels and the conveyor belt.



Designation: Z3EL – triangular strips

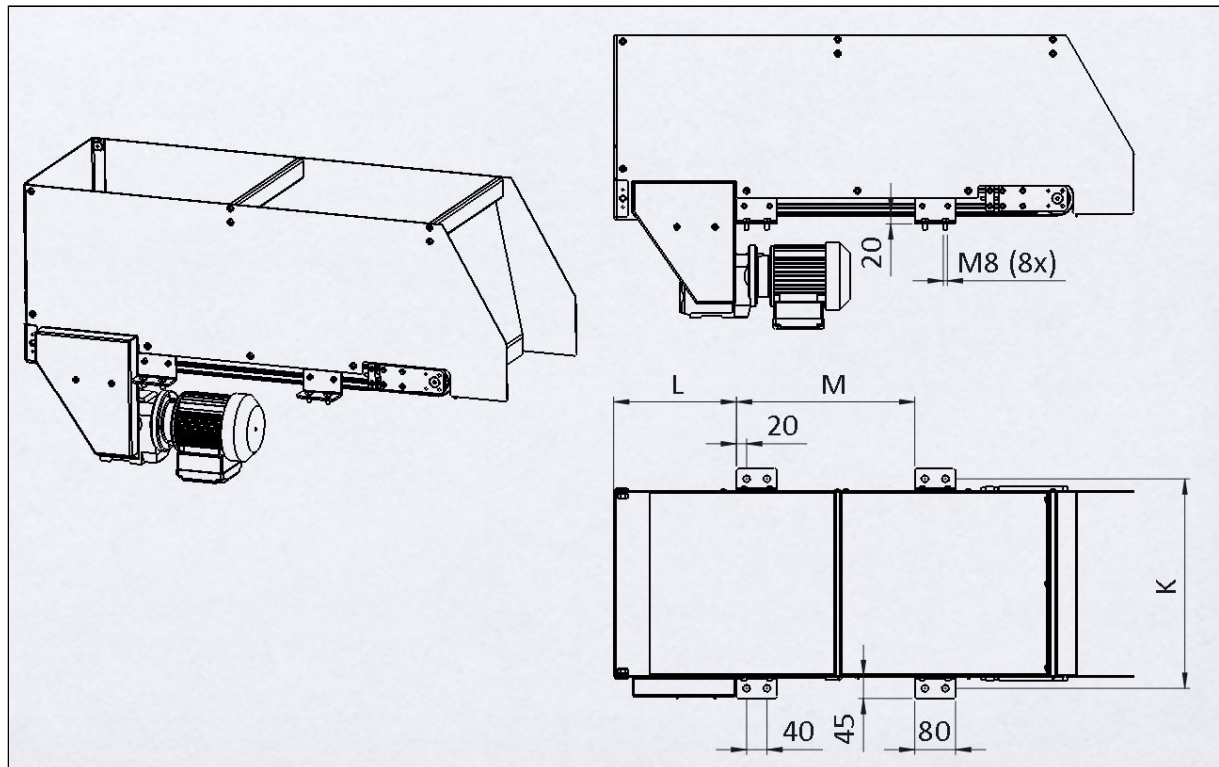
# Belt bunker BB-TB60

Filling weight up to maximum 90kg

## Accessories - holding brackets

### 3.7. Holding bracket

The holding brackets are used to fix the belt bunker. They are fixed to the bunker mounting profile using sliding blocks.



Designation: ZHW – holding bracket

Types	BB-20-TB60	BB-50-TB60	BB-75-TB60	BB-100-TB60
C	270	410	410	410
L	240	240	240	275
M	150	150	350	480



# Belt bunker BB-TB60

Filling weight up to maximum 90kg

## Accessories - belts

### 3.8. Conversion to other belts

The belt bunker is fitted with a black belt of Type G6 as standard.

Our belt bunkers (BB-xx-TB60) are also available with belt types G3, G7, G8 and G9 from stock.

Please contact us if you require other belt types with special properties.

#### Belt properties / approval:

	Type	Properties
<b>Standard version</b>	<b>G6</b>	Colour: black; Thickness: 2 mm; Surface: PVC, rough; accumulation-capable, permanently anti-static; Transport method: Collection/accumulation; Horizontal;
<b>Alternative</b>	<b>G3</b>	Colour: green; Thickness: 1,6 mm; Surface: PU, smooth, matt; FDA, EU-conform; Oil-resistant, cut-resistant, non-adhesive; accumulation-capable, permanently anti-static; Transport method: Collection/accumulation; Horizontal
	<b>G7</b>	Colour: blue; Thickness: 1,5 mm; Surface: PU, smooth, matt; FDA, EU-conform; Oil and grease-resistant; accumulation-capable, permanently anti-static; Transport method: Collection/accumulation; Horizontal;
	<b>G8</b>	Colour: white; Thickness: 1,8 mm; Surface: PU, smooth, matt; FDA, EU-conform; abrasion-proof, easy-clean, pore-free belt surface; accumulation-capable, permanently anti-static; Transport method: Horizontal, inclined conveying
	<b>G9</b>	Colour: black; Thickness: 5,3mm; Surface: PVC, textured; flame-resistant strongly adhesive, permanently anti-static Transport method: Horizontal; inclined conveying

Other belts available on request