

# CATALOGUE

components  
for  
elevators



## SOLID PARTNERS FOR POWDER & BULK HANDLING COMPONENTS

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INSTALLATION

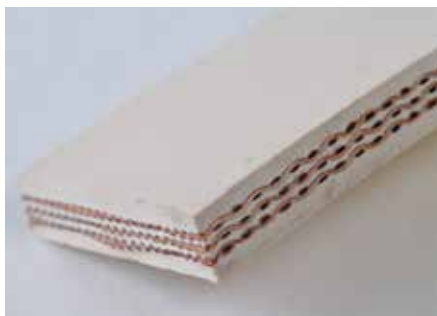
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# ELEVATOR BELTS

components  
for  
elevators



## POLYSUR® TYPE 272 NBR-FDA WHITE FOOD-GRADE QUALITY

Polysur® type 272 NBR-FDA white food-grade rubber quality elevator belts are mainly used for elevators in the food processing industry. This belt quality is FDA approved acc. to EU1935-2004, good resistant to oils and fats and low concentrations of acids and lyes, anti-static, flame-retardant and therefore applicable in accordance with the European norms in applications for conveying dry foodstuffs.

### Applications

- flour
- rice
- sugar
- salt
- milk powders

### Available from stock

- EP 500/3 1,5+1,5 mm
- EP 630/4 2,0+2,0 mm
- EP 800/4 2,0+2,0 mm

Other constructions available on request.

### TECHNICAL SPECIFICATIONS - POLYSUR® TYPE 272

	Unit/testing standard	500/3	630/4	800/4
<b>Construction</b>				
Carcass type		EP	EP	EP
Warp		Polyester	Polyester	Polyester
Weft		Polyamid	Polyamid	Polyamid
Textile plies		3	4	4
Type per ply		EP 160	EP 160	EP 200
Belt thickness nom.	mm	6,5	8,2	9,2
Rubber covers top nom.	mm	1,5	2,0	2,0
Rubber covers bottom nom.	mm	1,5	2,0	2,0
Belt weight nom.	kg/m <sup>2</sup>	11,1	12,9	13,6
<b>Properties</b>				
Tensile strength	N/mm	>500	>630	>800
Elongation at break	%	>10	>10	>10
Elongation at 10% working load	%	<1,5	<1,5	<1,5
Adhesion covers - plies	N/mm	>6	>6	>6
Adhesion between plies	N/mm	>6	>6	>6
<b>Rubber properties</b>				
Type of rubber	Polymer	NBR	NBR	NBR
Oil and fat resistance		good	good	good
Swelling in oil IRM 903	72u / 70° C. in %	<8	<8	<8
Tensile strength	Mpa	>11	>11	>11
Elongation	%	>500	>500	>500
Hardness (+/- 5°)	° Shore A	70 +/- 5	70 +/- 5	70 +/- 5
Abrasion resistance	mm <sup>3</sup>	<200	<200	<200
<b>Additional properties</b>				
Temperature dry, low fat product	°C.	-25 / +80	-25 / +80	-25 / +80
Temperature fat and/or moist product	°C.	-25 / +60	-25 / +60	-25 / +60
Anti-static <3.10 <sup>8</sup>	Ω ISO conform	yes	yes	yes
Flame retardant	ISO conform	yes	yes	yes
Minimum pulley diameter		300 mm	400 mm	450 mm
Recommended elevator belt fasteners		Maxi-CI Maxi-ULTRA	Maxi-AB Maxi-ULTRA	Maxi-AB Maxi-ULTRA

Testing norm in accordance with DIN22102, ISO 37, 251, 252, 283, 284, 340, 583, 868, 13934, 2781, 4649, 7619, 9856

Showing values are average values.



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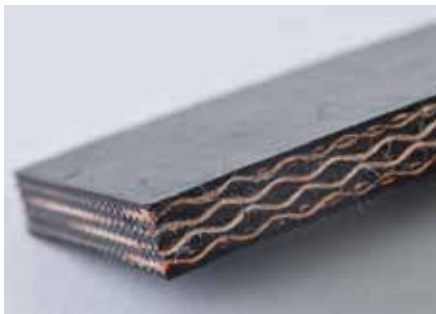


Polysur® elevator belts are provided with a Polysur® logo after each 20 meter of elevator belt.



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**muller|beltex**



## TECHNICAL SPECIFICATIONS - POLYSUR® TYPE 274

	Unit/testing standard	630/4	630/4
<b>Construction</b>			
Carcass type		EP	EP
Warp		Polyester	Polyester
Weft		Polyamid	Polyamid
Textile plies		4	4
Type per ply		EP 160	EP 160
Belt thickness nom.	mm	6	7,5
Rubber covers top nom.	mm	0,5	1,5
Rubber covers bottom nom.	mm	0,5	1,5
Belt weight nom.	kg/m <sup>2</sup>	7,9	10,1
<b>Properties</b>			
Tensile strength	N/mm	>630	>630
Elongation at break	%	>10	>10
Elongation at 10% working load	%	<1,5	<1,5
Adhesion covers - plies	N/mm	>6	>6
Adhesion between plies	N/mm	>6	>6
<b>Rubber properties</b>			
Type of rubber	Polymer	SBR	SBR
Oil and fat resistance		no	no
Swelling in oil IRM 903	72u / 70° C. in %		
Tensile strength	Mpa	>14	>14
Elongation	%	>350	>350
Hardness (+/- 5°)	° Shore A	65 +/- 5	65 +/- 5
Abrasion resistance	mm <sup>3</sup>	<150	<150
<b>Additional properties</b>			
Temperature dry, low fat product	°C.	-25 / +60	-25 / +60
Temperature fat and/or moist product	°C.		
Anti-static <3.10 <sup>8</sup>	Ω ISO conform	yes	yes
Flame retardant	ISO conform	no	no
Minimum pulley diameter		400 mm	400 mm
Recommended elevator belt fasteners		Type CI	Maxi-AB Maxi-ULTRA

Testing norm in accordance with DIN22102, ISO 37, 251, 252, 283, 284, 340, 583, 868, 13934, 2781, 4649, 7619, 9856

Shown values are average values.



**polysur®**



## POLYSUR® TYPE 274 SBR - Y-GRADE VERY ABRASION RESISTANT QUALITY

Polysur® type 274 standard rubber elevator belts are designed for general industrial use and handling of non-fat agricultural or aggregate products. This quality is characterised by very high wear resistance and is ideal for the conveying of products such as sand, gravel, crushed stones, etc. at temperatures up to max. +60°C.

### Applications

- non-fatty animal feed
- minerals
- stones
- grains
- sand
- shotblast
- glass

### Available from stock

- EP 630/4 0,5+0,5 mm
- EP 630/4 1,5+1,5 mm

Other constructions available on request.

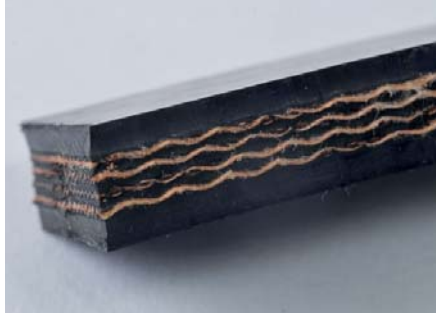


Polysur® elevator belts are provided with a Polysur® logo after each 20 meter of elevator belt.



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**POLYSUR®**  
**TYPE 275 NBR**  
**OIL- AND FAT**  
**RESISTANT**  
**QUALITY**

This belt quality is very good oil and fat resistant and is especially designed for use in combination with agricultural products and animal feed. This elevator belt is suitable for conveying products containing vegetable and animal oils and fats and low concentrations of acids, lyes and chemicals.

**Applications**

- raw materials for animal feed
- grains

**Available from stock**

- EP 500/3 1,5+1,5 mm
- EP 630/4 2,0+2,0 mm
- EP 800/4 2,0+2,0 mm
- EP 1000/5 2,0+2,0 mm
- EP 1250/5 2,0+2,0 mm

Other constructions available on request.



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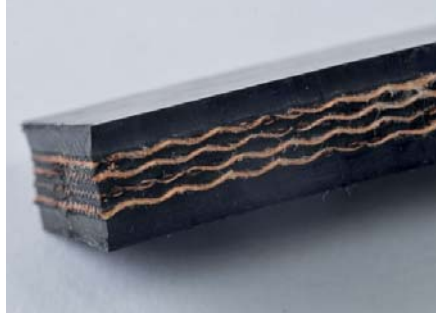
**TECHNICAL SPECIFICATIONS - POLYSUR® TYPE 275**

	Unit/testing standard	500/3	630/4	800/4	1000/5	1250/5
<b>Construction</b>						
Carcass type		EP	EP	EP	EP	EP
Warp		Polyester	Polyester	Polyester	Polyester	Polyester
Weft		Polyamid	Polyamid	Polyamid	Polyamid	Polyamid
Textile plies		3	4	4	5	5
Type per ply		EP 160	EP 160	EP 200	EP200	EP 250
Belt thickness nom.	mm	6	7,2	8,3	10	12
Rubber covers top nom.	mm	1,0	2,0	2,0	2,0	2,0
Rubber covers bottom nom.	mm	1,0	2,0	2,0	2,0	2,0
Belt weight nom.	kg/m²	7,3	9,3	10,8	11,5	15,9
<b>Properties</b>						
Tensile strength	N/mm	>500	>630	>800	>1000	>1250
Elongation at break	%	>10	>10	>10	>10	>10
Elongation at 10% working	%	<1,5	<1,5	<1,5	<1,5	<1,5
Adhesion covers - plies	N/mm	>6	>6	>6	>6	>6
Adhesion between plies	N/mm	>6	>6	>6	>6	>6
<b>Rubber properties</b>						
Type of rubber	Polymer	NBR	NBR	NBR	NBR	NBR
Oil and fat resistance		very good	very good	very good	very good	very good
Swelling in oil IRM 903	72u / 70° C.	<8	<8	<8	<8	<8
Tensile strength	Mpa	>14	>14	>14	>14	>14
Elongation	%	>350	>350	>350	>350	>350
Hardness (+/- 5°)	° Shore A	65 +/- 5	65 +/- 5	65 +/- 5	65 +/- 5	65 +/- 5
Abrasion resistance	mm³	<170	<170	<170	<170	<170
<b>Additional properties</b>						
Temperature dry, low fat	°C.	-25/+100	-25/+100	-25/+100	-25/+100	-25/+100
Temperature fat and/or moist	°C.	-25/+70	-25/+70	-25/+70	-25/+100	-25/+70
Anti-static <3.10 <sup>9</sup>	Ω ISO	yes	yes	yes	yes	yes
Flame retardant	ISO conform	no	no	no	no	n
Minimum pulley diameter		300 mm	400 mm	450 mm	500	600 mm
Recommended elevator belt fasteners		Maxi-CI	Maxi-CI/AB Maxi-ULTRA	Maxi-AB Maxi-ULTRA	Maxi-AB Maxi-ULTRA	Maxi-SUPER

Testing norm in accordance with DIN22102, ISO 37, 251, 252, 283, 284, 340, 583, 868, 13934, 2781, 4649, 7619, 9856

Showing values are average values.





**POLYSUR<sup>®</sup>**  
**TYPE 275-K NBR**  
**OIL- AND FAT**  
**RESISTANT**  
**QUALITY**

This belt quality is very good oil and fat resistant and also flame retardant acc. to ISO 340 (=DIN -K-) and is especially designed for use in combination with agricultural products and animal feed. This elevator belt is suitable for conveying products containing vegetable and animal oils and fats and low concentrations of acids, lyes and chemicals.

**Applications**

- raw materials for animal feed
- grains
- vegetable oil extraction processing

**Available from stock**

- EP 630/4 2,0+2,0 mm
- EP 800/4 2,0+2,0 mm
- EP 1000/5 2,0+2,0 mm

Other constructions available on request.



Polysur<sup>®</sup> elevator belts are provided with a Polysur<sup>®</sup> logo after each 20 meter of elevator belt.



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**TECHNICAL SPECIFICATIONS - POLYSUR<sup>®</sup> TYPE 275-K**

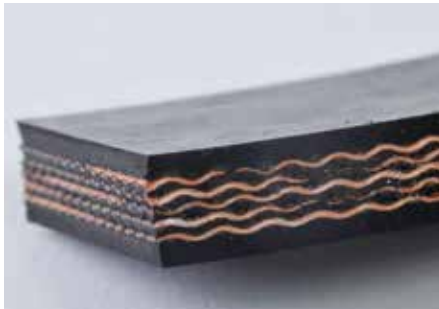
	Unit/testing standard	630/4	800/4	1000/5
<b>Construction</b>				
Carcass type		EP	EP	EP
Warp		Polyester	Polyester	Polyester
Weft		Polyamid	Polyamid	Polyamid
Textile plies		4	4	5
Type per ply		EP 160	EP 200	EP200
Belt thickness nom.	mm	7,6	8,7	11,2
Rubber covers top nom.	mm	2,0	2,0	2,0
Rubber covers bottom nom.	mm	2,0	2,0	2,0
Belt weight nom.	kg/m <sup>2</sup>	9,8	11,9	15,6
<b>Properties</b>				
Tensile strength	N/mm	>630	>800	>1000
Elongation at break	%	>10	>10	>10
Elongation at 10% working	%	<1,5	<1,5	<1,5
Adhesion covers - plies	N/mm	>6	>6	>6
Adhesion between plies	N/mm	>6	>6	>6
<b>Rubber properties</b>				
Type of rubber	Polymer	NBR-K	NBR-K	NBR-K
Oil and fat resistance		very good	very good	very good
Swelling in oil IRM 903	72u / 70° C.	<8	<8	<8
Tensile strength	Mpa	>14	>14	>14
Elongation	%	>350	>350	>350
Hardness (+/- 5°)	° Shore A	70 +/- 5	70 +/- 5	70 +/-5
Abrasion resistance	mm <sup>3</sup>	<170	<170	<170
<b>Additional properties</b>				
Temperature dry, low fat	°C.	-25/+100	-25/+100	-25/+100
Temperature fat and/or moist	°C.	-25/+70	-25/+70	-25/+70
Anti-static <3.10 <sup>8</sup>	Ω ISO	yes	yes	yes
Flame retardant	ISO conform	yes	yes	yes
Minimum pulley diameter		400 mm	450 mm	500 mm
Recommended elevator belt fasteners		Maxi-CI/AB Maxi-ULTRA	Maxi-AB Maxi-ULTRA	Maxi-AB Maxi-ULTRA

Testing norm in accordance with DIN22102, ISO 37, 251, 252, 283, 284, 340, 583, 868, 13934, 2781, 4649, 7619, 9856

Showing values are average values.







TECHNICAL SPECIFICATIONS - POLYSUR® TYPE 276

	Unit/testing standard	500/3	630/4	800/4	1000/5	1250/5
<b>Construction</b>						
Carcass type		EP	EP	EP	EP	EP
Warp		Polyester	Polyester	Polyester	Polyester	Polyester
Weft		Polyamid	Polyamid	Polyamid	Polyamid	Polyamid
Textile plies		3	4	4	5	5
Type per ply		EP 160	EP 160	EP 200	EP 200	EP 250
Belt thickness nom.	mm	5,5	6,7	8,1	9,4	11,6
Rubber covers top nom.	mm	1,0	1,5	2,0	2,0	2,0
Rubber covers bottom nom.	mm	1,0	1,5	2,0	2,0	2,0
Belt weight nom.	kg/m <sup>2</sup>	6,2	7,8	9,7	11,3	15,6
<b>Properties</b>						
Tensile strength	N/mm	>500	>630	>800	>1000	>1250
Elongation at break	%	>10	>10	>10	>10	>10
Elongation at 10% working	%	<1,5	<1,5	<1,5	<1,5	<1,5
Adhesion covers - plies	N/mm	>6	>6	>6	>6	>6
Adhesion between plies	N/mm	>6	>6	>6	>6	>6
<b>Rubber properties</b>						
Type of rubber	Polymer	NBR	NBR	NBR	NBR	NBR
Oil and fat resistance		excellent	excellent	excellent	excellent	excellent
Swelling in oil IRM 903	72u / 70° C.	<5	<5	<5	<5	<5
Tensile strength	Mpa	>14	>14	>14	>14	>14
Elongation	%	>350	>350	>350	>350	>350
Hardness (+/- 5°)	° Shore A	64 +/- 5	64 +/- 5	64 +/- 5	64 +/- 5	64 +/- 5
Abrasion resistance	mm <sup>3</sup>	<180	<180	<180	<180	<180
<b>Additional properties</b>						
Temperature dry, low fat	°C.	-25/+100	-25/+120	-25/+120	-25/+120	-25/+120
Temperature fat and/or moist	°C.	-25/+80	-25/+80	-25/+80	-25/+80	-25/+80
Anti-static <3.10 <sup>8</sup>	Ω ISO	yes	yes	yes	yes	yes
Flame retardant	ISO conform	no	no	no	no	no
Minimum pulley diameter		300 mm	400 mm	450 mm	500 mm	600 mm
Recommended elevator belt fasteners		Maxi-CI	Maxi-CI/AB Maxi-ULTRA	Maxi-AB Maxi-ULTRA	Maxi-AB Maxi-ULTRA	Maxi-SUPER

Testing norm in accordance with DIN22102, ISO 37, 251, 252, 283, 284, 340, 583, 868, 13934, 2781, 4649, 7619, 9856

Showing values are average values.



POLYSUR®  
TYPE 276 NBR  
OIL- AND FAT  
RESISTANT  
QUALITY

This proven "ETGX" belt quality is excellent oil-and fat resistant and therefore offers the highest possible degree of resistance against vegetable, animal and mineral oils and fats. This belt quality is also good resistant against a certain amount of acids, lyes and chemicals. Polysur® type 276 has proven itself in elevators operating 24/7 at challenging conditions.

Applications

- animal feed
- crushed soybean and rapeseed
- bituminous products
- fertilizer
- sunflower seed
- fish meal
- derivatives

Available from stock

- EP 500/3 1,5+1,5 mm
- EP 630/4 1,5+1,5 mm
- EP 800/4 2,0+2,0 mm
- EP 1000/5 2,0+2,0 mm
- EP 1250/5 2,0+2,0 mm

Other constructions available on request.



Polysur® elevator belts are provided with a Polysur® logo after each 20 meter of elevator belt.



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## TECHNICAL SPECIFICATIONS - POLYSUR® TYPE 278

	Unit/testing standard	800/4
<b>Construction</b>		
Carcass type		PP
Warp		Polyamid
Weft		Polyamid
Textile plies		4
Type per ply		EP 200
Belt thickness nom.	mm	9,3
Rubber covers top nom.	mm	2
Rubber covers bottom nom.	mm	2
Belt weight nom.	kg/m <sup>2</sup>	12,3
<b>Properties</b>		
Tensile strength	N/mm	>800
Elongation at break	%	>10
Elongation at 10% working load	%	<2,0
Adhesion covers - plies	N/mm	>6
Adhesion between plies	N/mm	>6
<b>Rubber properties</b>		
Type of rubber	Polymer	NBR
Oil and fat resistance		very good
Swelling in oil IRM 903	72u / 70° C. in %	<5
Tensile strength	Mpa	>13
Elongation	%	>350
Hardness (+/- 5°)	° Shore A	70 +/- 5
Abrasion resistance	mm <sup>3</sup>	<180
<b>Additional properties</b>		
Temperature dry, low fat product	°C.	-25/+120
Temperature fat and/or moist product	°C.	-25/+120
Anti-static <3.10 <sup>9</sup>	Ω ISO conform	yes
Flame retardant	ISO conform	yes
Minimum pulley diameter		450 mm
Recommended elevator belt fasteners		Maxi-AB Maxi-ULTRA

Testing norm in accordance with DIN22102, ISO 37, 251, 252, 283, 284, 340, 583, 868, 13934, 2781, 4649, 7619, 9856

Showing values are average values.



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## POLYSUR® TYPE 278 NBR - HOT OIL OIL- AND FAT RESISTANT QUALITY

Polysur® type 278 elevator belts offer a special resistance to the combination of fats and oils at higher processing temperatures up to +100-120° C in humid working conditions. This belt quality features specially treated plies and together with the high rubber to plies adhesion offering increased resistance to ply separation due to fat and humidity attack at higher operating temperatures.

### Applications

- toaster applications
- soybean and rapeseed rocessing
- grain processing
- foundry sand
- recycling
- bituminous products

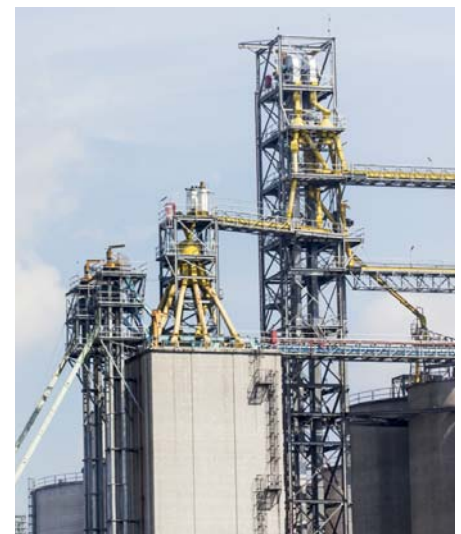
### Available from stock

- EP 800/4 2,0+2,0 mm

Other constructions available on request.

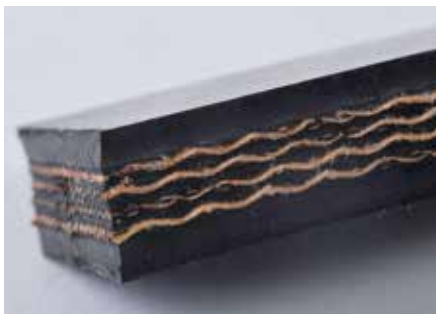


Polysur® elevator belts are provided with a Polysur® logo after each 20 meter of elevator belt.



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## TECHNICAL SPECIFICATIONS - POLYSUR® TYPE T150

	Unit/testing standard	800/4
<b>Construction</b>		
Carcass type		EP
Warp		Polyester
Weft		Polyamid
Textile plies		4
Type per ply		EP 200
Belt thickness nom.	mm	12
Rubber covers top nom.	mm	3
Rubber covers bottom nom.	mm	3
Belt weight nom.	kg/m <sup>2</sup>	13,6
<b>Properties</b>		
Tensile strength	N/mm	>800
Elongation at break	%	>10
Elongation at 10% working load	%	<2,0
Adhesion covers - plies	N/mm	>6
Adhesion between plies	N/mm	>6
<b>Rubber properties</b>		
Type of rubber	Polymer	EPM
Oil and fat resistance		no
Swelling in oil IRM 903	72u / 70° C. in %	
Tensile strength	Mpa	>14
Elongation	%	>400
Hardness (+/- 5°)	° Shore A	61 +/- 5
Abrasion resistance	mm <sup>3</sup>	<115
<b>Additional properties</b>		
Temperature dry, low fat product	°C.	-30/+130
Temperature fat and/or moist product	°C.	
Anti-static <3.10 <sup>8</sup>	Ω ISO conform	yes
Flame retardant	ISO conform	no
Minimum pulley diameter		500 mm
Recommended elevator belt fasteners		Maxi-ULTRA
Testing norm in accordance with DIN22102, ISO 37, 251, 252, 283, 284, 340, 583, 868, 13934, 2781, 4649, 7619, 9856		

Showing values are average values.



**polysur®**



## POLYSUR® TYPE T150 HIGH HEAT HEAT RESISTANT QUALITY

Polysur® type T150 elevator belts are specially designed for use in elevators with an ambient temperature in the elevator of continuous +100° C. or higher combined with dry product. By using 3+3 mm thick rubber covers to insulate the carcass from the high operating temperature in combination with a rubber quality such as EPM, the rubber stays longer flexible under the influence of high temperatures resulting in a longer service life of the elevator belt itself.

### Applications

- cement powder
- fly ash
- fertilizer
- raw meal
- foundry sand
- cokes
- recycling

### Available from stock

- EP 800/4 3,0+3,0 mm

Other constructions available on request.



Polysur® elevator belts are provided with a Polysur® logo after each 20 meter of elevator belt.



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# POLYSUR<sup>®</sup> FERRO STEEL CORD BELT FOR BUCKET ELEVATORS



Polysur<sup>®</sup> Ferro steel cord reinforced elevator belts are designed for heavy duty industrial applications with long centre distances, requiring straight running and reliability with high safety factors. Their construction and characteristics differ from those of traditional steel cable belts. Their steel cord carcass consists of low elongation, yet high elasticity steel cords in the length and cross rigid cables in the width, all embedded in a solid rubber mass that can not delaminate. The built-in elasticity allows running over lightly crowned pulleys while the rigid weft construction warrants excellent straight tracking. Manufacturing norms: DIN 22102, DIN 22131-C and ISO norms.

Polysur<sup>®</sup> Ferro elevator belts has been Muller Beltex's registered trademark for elevators since 1973 specially manufactured for the use in belt bucket elevators, to withstand the belt deformation when forces are at play during operation. This apart from the characteristics of the material conveyed that have an effect on the belt. Polysur<sup>®</sup> Ferro stands for durability in performance and life expectation and is available in normal and high temperature resistant qualities and offer excellent life in the most arduous applications.

**Based on know-how and vast field experience the Polysur<sup>®</sup> Ferro range offers following belt qualities**

#### **Polysur<sup>®</sup> Ferro T60**

a very good abrasion resistant quality, based on SBR rubber for use at ambient temperature of +60°C.

#### **Polysur<sup>®</sup> Ferro T100**

an improved version of the above suitable for product temperature of +100°C.

#### **Polysur<sup>®</sup> Ferro T130**

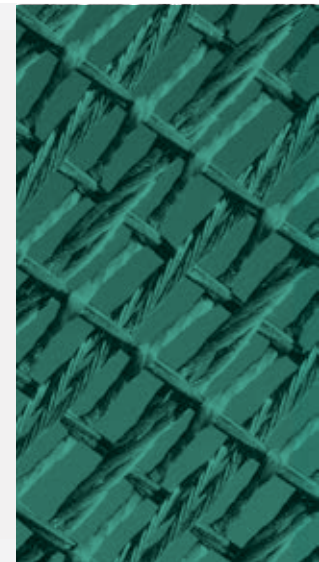
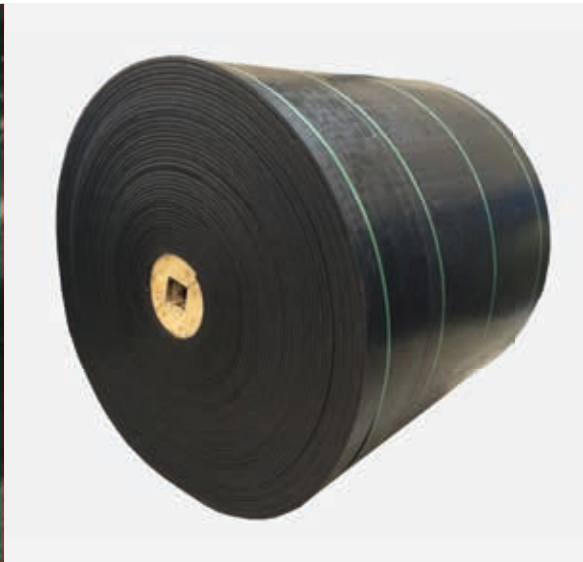
based on EPDM rubber, suitable for product temperatures up to +130°C.

#### **Polysur<sup>®</sup> Ferro T150**

based on EPM rubber, suitable for product temperatures up to +130°C. **plus**

#### **Polysur<sup>®</sup> Ferro G**

suitable for handling oily and fatty product at ambient temperatures up to +80°C.



# MULLER BELTEX RUBBER TECHNOLOGY POLYSUR<sup>®</sup> FERRO

## Heat resistant elevator belts

Rubber belts are usually factory produced in a vulcanisation press at a temperature of approx. 145-150° C., sometimes at a somewhat higher temperature to accelerate the vulcanisation process. When the vulcanising temperature is lowered, the vulcanising process is slowed down, but will still continue.

Rubber in its fresh un-vulcanised state is like putty. Once vulcanised most synthetic rubbers will show a hardness of 60-70° shore A with usually a +/- 5° tolerance. Depending on belt thickness and rubber type, the vulcanisation process in the factory will take 20-45 minutes per pressing, which is usually 10-20 meters, the length of the press. Longer exposure of the belt to the vulcanisation temperature will lead to increased hardness of the belt.

Once a belt is installed in the conveying equipment and exposed to a temperature higher than normal ambient, the vulcanisation process will continue, the hardness of the rubber continues to increase. Exposure, continuous or intermittent, to temperatures close to, or higher than the vulcanisation temperature shall further and more rapidly continue the hardening process, the aging of the belt.

Heat resistant rubbers are not really 'heat resistant', but 'resist aging better' than normal rubber qualities. If they were truly heat

resistant, they would not age, not harden any further, under heat influence.

Permanent exposure of heat resistant rubber belts to temperatures approaching or exceeding their manufacturing temperatures (145-150°C.) should be avoided. Only when a belt is allowed to properly cool down in the return section, the effect of heat on the aging of the belt can be partly reduced.

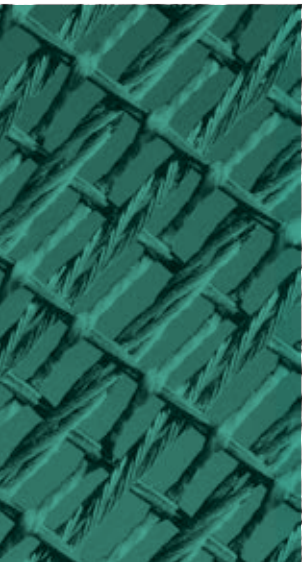
## Inside the elevator casing

In the enclosed environment inside bucket elevators the cooling ability of a belt is very limited. The reigning air temperature in the system is usually on the high side compared to the temperature surrounding overland belt conveyors. Due to lack of a cooling airflow inside the elevator casing, the heat penetrating the belt inside the elevator casing has a hardening, vulcanising effect on the rubber belt.

### TECHNICAL SPECIFICATIONS

Rubber quality	Hardness: original (-/+5°)	90 days continuous exposure at +125°C.	90 days continuous exposure at +150°C.
T130 EPDM	67° A	78° A	86° A
T150 EPM	68° A	74° A	77° A

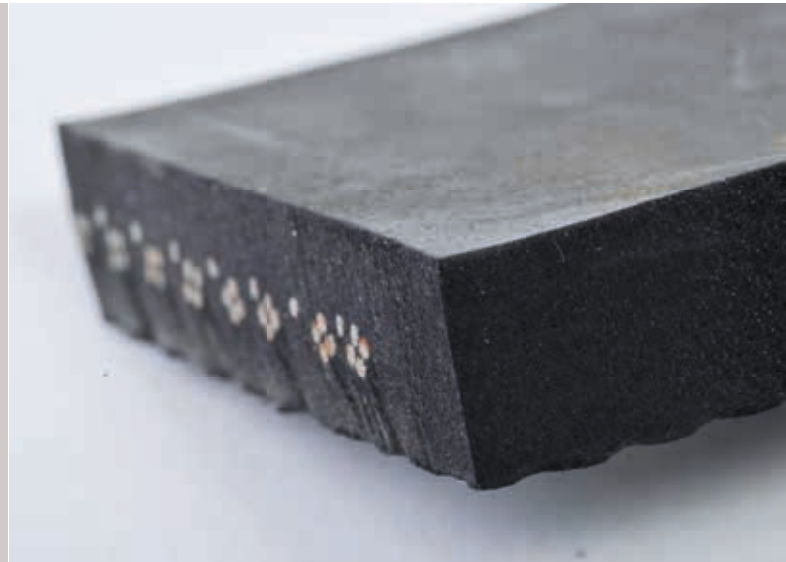
Lab test during 3 months at a constant temperature in an oven (no mechanical load or friction) shows above results



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NO CONCESSIONS  
TO THE  
QUALITY OF  
THE RUBBER

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Factors that aid the hardening process of a belt are: any ambient and product temperature over +80°C., temporary increased temperatures of the product handled (peak temperatures), increased volume of product handled, increased operating hours, reduced cooling airflow in the system, or a combination of these factors. Chemical elements in the product handled can also have a direct hardening effect on the belt (e.g. sulphur).

#### **Thickness and strength of the belt**

As soon as a belt reaches a hardness of 85° shore A the covers will start to show cracks and at 90° shore A the rubber covers will lose their adhesion to the steel cables. The belt must soon be replaced. At a hardness of 85° shore A it is advisable to consider obtaining a spare belt in stock.

The resistance to ageing of an elevator belt can be improved by increasing the thickness of the rubber covers on both faces of the belt. The thicker cover will allow less heat penetration into the core of the belt that means that also the reduction in adhesion of

the rubber covers to the steel cables shall occur at a slower pace, resulting in later loss of rubber from the steel cables. Belts with minimum 4 mm covers are recommended, preferably 5 mm.

The choice of thickness of the rubber covers on an elevator belt also depends on the belt strength class. The strength class of the belt is chosen because of the load the belt has to carry, consisting of its own weight and bucket and product weight. If that total weight is so high that a very strong belt is required, this total weight spread over a belt area half the pulley circumference causes the steel cables in the belt to exercise a high pressure load on the rubber belt cover when passing the drive pulley.

This high pressure can lead to weakening a thin rubber cover, or weaken its adhesion to the cables. A thicker rubber layer will be able to better support a higher load than a thin layer of rubber, avoiding internal weakening of the belt and avoiding the slow process of the cover rubber splitting under the pressure. A higher number of cables supporting the total weight is to be preferred to a smaller number of cables, spreading the load per cable.

# MULLER BELTEX RUBBER TECHNOLOGY POLYSUR® FERRO SW-RE

## The construction of the SW-RE steel carcass

Polysur® Ferro belts are constructed with Fleximat® E-cords, flexible, specially designed straight warp, open type steel cords with built-in elasticity in the warp direction, onto which rigid weft cords are tied using a special weaving technique.

This special weaving technique means that neither warp nor weft cords are in any way deformed, but both lay perfectly straight all over the belt length resulting in maximum strength performance and high resistance to damage.

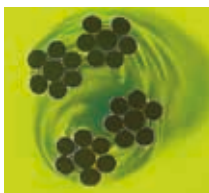


## Advantages of the open e-cords in belt length (warp)

- highly flexible
- low permanent elongation max. 0.35% at 10-safety factor
- unique elastic elongation 0.15%
- improved shock resistance
- improved compression behaviour
- allows maximum rubber penetration
- minimising corrosion risk in case of belt damage; very high rubber to steel adhesion



Polysur® Ferro belt with moulded rubber edges



Warp E-cord



Rubber penetration in the steel cord.

TECHNICAL SPECIFICATIONS - POLYSUR® FERRO SW-RE				
Strength	Construction	Belt thickness	Min. pulley	Appr. weight
SW630RE	3+3 mm	11 mm	Ø 1400 mm	15,21 kg/m <sup>2</sup>
SW800RE	3+3 mm	12 mm	Ø 1500 mm	17,20 kg/m <sup>2</sup>
SW1000RE	3+3 mm	13 mm	Ø 1500 mm	17,93 kg/m <sup>2</sup>
SW1250RE	4+4 mm	14 mm	Ø 1630 mm	22,37 kg/m <sup>2</sup>
SW1400RE	4+4 mm	14 mm	Ø 1630 mm	23,12 kg/m <sup>2</sup>
SW1600RE	4+4 mm	14 mm	Ø 1630 mm	23,97 kg/m <sup>2</sup>
SW1800RE	4+4 mm	14 mm	Ø 1630 mm	24,67 kg/m <sup>2</sup>
SW2000RE	4+4 mm	14 mm	Ø 1800 mm	25,17 kg/m <sup>2</sup>
SW2500RE	5+5 mm	17 mm	Ø 1000 mm	27,71 kg/m <sup>2</sup>
SW2750RE	5+5 mm	17 mm	Ø 1000 mm	28,70 kg/m <sup>2</sup>

Recommended minimum covers, other combinations are possible. Thicknesses and weights are approximate.

min. belt width 250 mm

min. belt length 50 meter (exception 450 and 550 mm SW1250RE 4+4 mm T130)

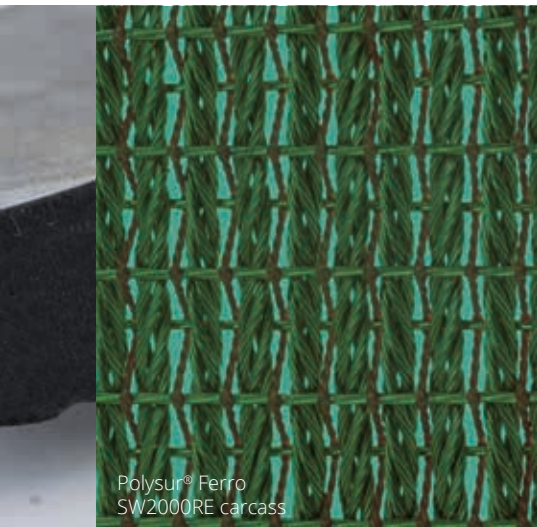
max. width 2000 mm

max. length depending on coil weight

### Unique feature

Polysur® Ferro SW-RE elevator belts display only max. 0.35% permanent elongation at maximum permissible working load (at safety factor 10), ensuring constant belt tension even at long centre distances. As an unique feature these E-cords show an elastic elongation of 0.15%, increasing shock resistance and allowing the belts to run over lightly crowned pulleys.

The elastic elongation is the 'give' in the belt, the variation in length when subjected to a load variation between 20% and 100% of the maximum permissible load at 10-fold safety factor.



Polysur® Ferro  
SW2000RE carcass

### Advantages of the open e-cords in belt width (weft)

- very cross rigid and dense weft construction with cords of 1.29 mm diam. at 6.67 mm pitch
- acts as a barrier to ripping and tearing
- increases bucket bolt holding ability
- minimises risk of bucket bolts slitting through the belt
- produces a very cross rigid belt that offers excellent straight running abilities
- allows light pulley crown further improving straight running



SW1250RE carcass  
embedded in rubber



Polysur® Ferro SW-RE carcass  
during production

TECHNICAL SPECIFICATIONS - BELT CARCASS SW-RE (E-CORD)CONSTRUCTION				
Strength	Warp cords	Pitch	Weft cords	Pitch
SW630RE	Ø 2.00 mm	4.63 mm	Ø 1.29 mm	6.67 mm
SW800RE	Ø 2.85 mm	6.67 mm	Ø 1.29 mm	6.67 mm
SW1000RE	Ø 2.85 mm	5.38 mm	Ø 1.29 mm	6.67 mm
SW1250RE	Ø 3.90 mm	7.04 mm	Ø 1.29 mm	6.67 mm
SW1400RE	Ø 3.90 mm	6.25 mm	Ø 1.29 mm	6.67 mm
SW1600RE	Ø 3.90 mm	5.50 mm	Ø 1.29 mm	6.67 mm
SW1800RE	Ø 3.90 mm	5.00 mm	Ø 1.29 mm	6.67 mm
SW2000RE	Ø 3.90 mm	4.65 mm	Ø 1.29 mm	6.67 mm
SW2500RE	Ø 4.35 mm	6.33 mm	Ø 1.29 mm	6.67 mm
SW2750RE	Ø 4.35 mm	5.71 mm	Ø 1.29 mm	6.67 mm



# MULLER BELTEX RUBBER TECHNOLOGY POLYSUR® FERRO SW-R/RE

## The construction of the SW-R/RE steel carcass

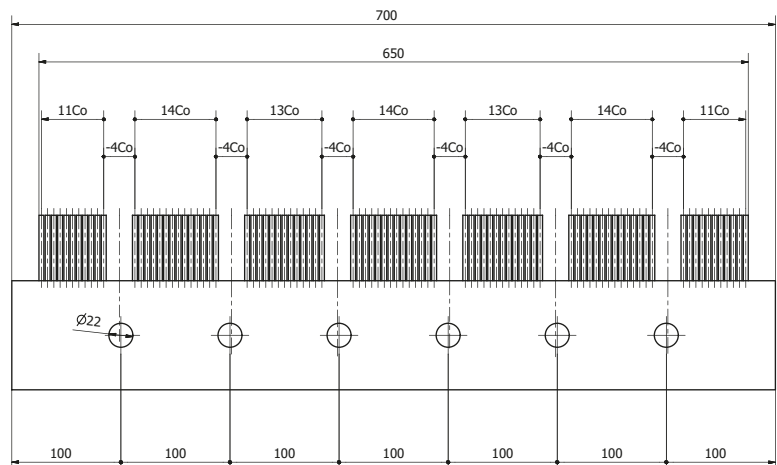
Polysur® Ferro belts are constructed with Fleximat® conventional specially designed straight warp cords with minimum elasticity in the warp direction, onto which rigid weft cords are tied using a special weaving technique. These single layer steel cord elevators belts have been specially designed for belt bucket elevators with a very high long centre distance and bigger capacities.

This special weaving technique means that neither warp nor weft cords are in any way deformed, but both lay perfectly straight all over the belt length resulting in maximum strength performance and high resistance to damage.

## Advantages of the conventional steel cord belt in belt length (warp)

- still highly flexible
- max. 0.15% elastic elongation at safety factor 10
- suitable for elevators with a long centre distance
- the belt of choice for very high capacities

Drawing of a 'cable free zone' belt with bucket bolt hole layout supplied with order



## TECHNICAL SPECIFICATIONS - STANDARD BELT SW-R/RE (CONVENTIONAL-CORD) CONSTRUCTIONS

Strength	Construction	Belt thickness	Min. pulley	Appr. weight
SW3000R/RE	5+5 mm	17 mm	Ø 11000 mm	30,20 kg/m <sup>2</sup>
SW3200R/RE	5+5 mm	17 mm	Ø 11000 mm	31,14 kg/m <sup>2</sup>
SW3500R/RE	5+5 mm	17 mm	Ø 11000 mm	32,82 kg/m <sup>2</sup>
SW4000R/RE	5+5 mm	17 mm	Ø 11000 mm	34,69 kg/m <sup>2</sup>



Conventional warp cord

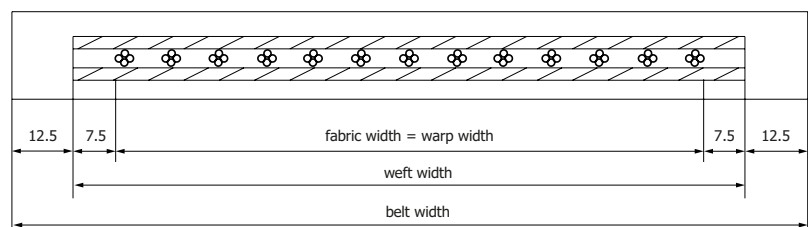
Recommended minimum covers, other combinations are possible. Thicknesses and weights are approximate.

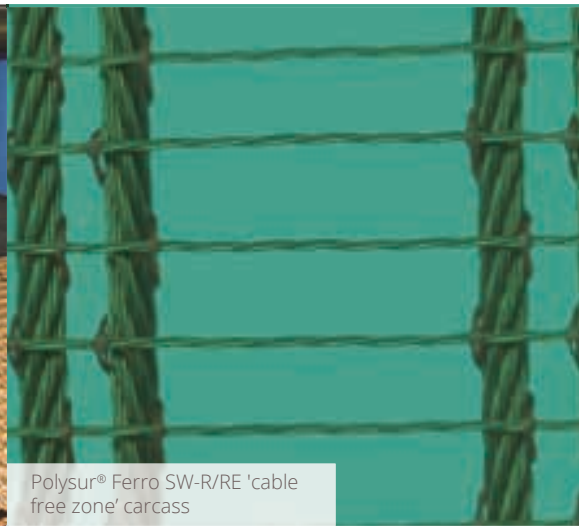
min. belt width 250 mm

min. belt length 50 meter (exception 450 and 550 mm SW1250RE 4+4 mm T130)

max. width 2000 mm

max. length depending on coil weight





Polysur® Ferro 'cable free zone' carcass during production

Polysur® Ferro SW-R/RE 'cable free zone' carcass

### Crowning of pulleys

Polysur® Ferro SW-R/RE elevator belts display a max. 0.15% elastic elongation at safety factor 10, ensuring constant belt tension at very long centre distances. Still this belt construction allows the belt to run over slightly crowned pulleys. Please consult Muller Beltex to advise you on the crowning of your pulleys.

### Advantages of the rigid cords in belt width (weft)

- very cross rigid and dense weft construction with cords of 1.29 mm diam. at 6.67 mm pitch
- acts as a barrier to ripping and tearing
- although the SW-R/RE belt construction require 'cable free zones' in the belt, due to the weft cables in the belt, the elevator bucket bolts can not shift in the belt in case of an obstruction in the boot of the elevator and therefore increases bucket bolt holding ability and minimises risk of bucket bolts slitting through the belt
- produces a very cross rigid belt that offers excellent straight running abilities
- allows very small pulley crown to further improving straight running



Loading a Polysur® Ferro elevator belt with crane in a 20' ft. open top container

TECHNICAL SPECIFICATIONS - BELT CARCASS SW-R/RE (CONVENTIONAL-CORD) CONSTRUCTION				
Strength	Warp cords	pitch	Weft cords	pitch
SW3000R/RE	Ø 5.20 mm	9.00 mm	Ø 1.29 mm	6.67 mm
SW3200R/RE	Ø 5.20 mm	8.33 mm	Ø 1.29 mm	6.67 mm
SW3500R/RE	Ø 5.20 mm	7.35 mm	Ø 1.29 mm	6.67 mm
SW4000R/RE	Ø 5.20 mm	6.50 mm	Ø 1.29 mm	6.67 mm



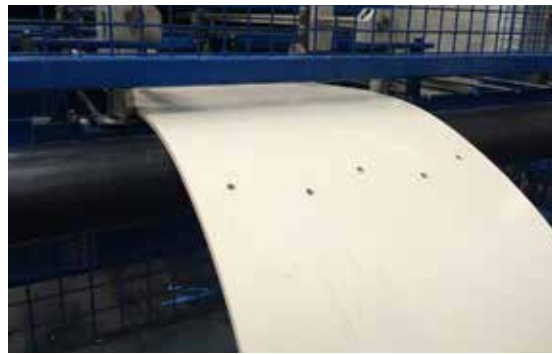
# PUNCHING & DRILLING

components  
for  
elevators



## READY PUNCHED OR DRILLED ELEVATOR BELTS

With our uniquely developed fully automatic hole punching/drilling machine we are able to process elevator belts ready for shipment within 1 to 2 hours at max. 2000 mm wide with a max. elevator bucket bolt hole pattern width of 1980 mm width.

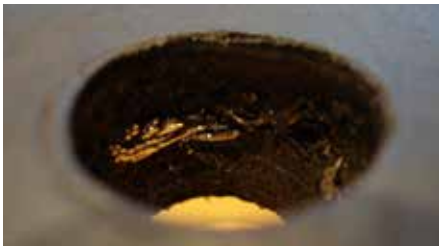


CNC drill unit for drilling elevator bucket bolt holes and belt fastener bolt holes in Polysur® FERRO steel cord reinforced elevator belt

CNC punched Polysur® type 272 food grade rubber elevator belt with staggered elevator bucket bolt hole pattern



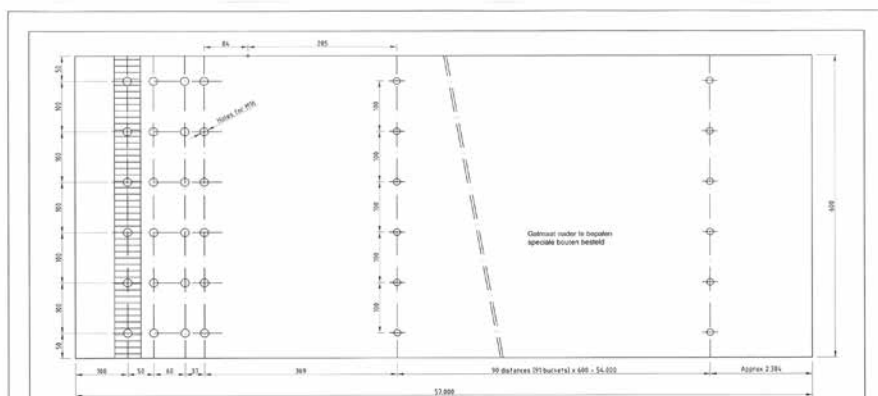
Polysur® EP textile reinforced rubber elevator belt provided with CNC punched elevator bucket bolt holes. Two rows of elevator buckets situated in staggered pattern on the elevator belt



CNC drilled hole in Polysur® FERRO steel cord reinforced elevator belt. Dry process no water involved



CNC punched elevator bolt hole in Polysur® EP textile reinforced rubber elevator belt



Muller Beltex AutoCAD drawing provided with order with exact elevator bucket and belt fastener bolt hole pattern



**DESIGNED  
ENGINEERED**  
by Muller Beltex

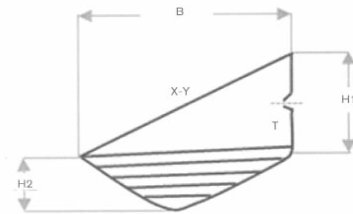
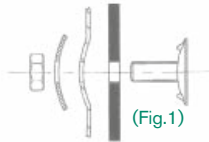
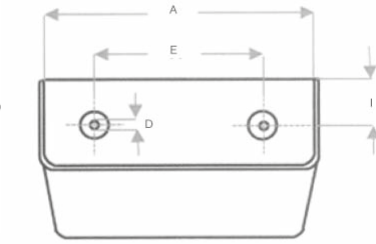
**muller|beltex**




# ELEVATOR BUCKETS

components  
for  
elevators

**BLS**  
(BOTTOMLESS SYSTEM)  
**STEEL**  
**ELEVATOR BUCKET**

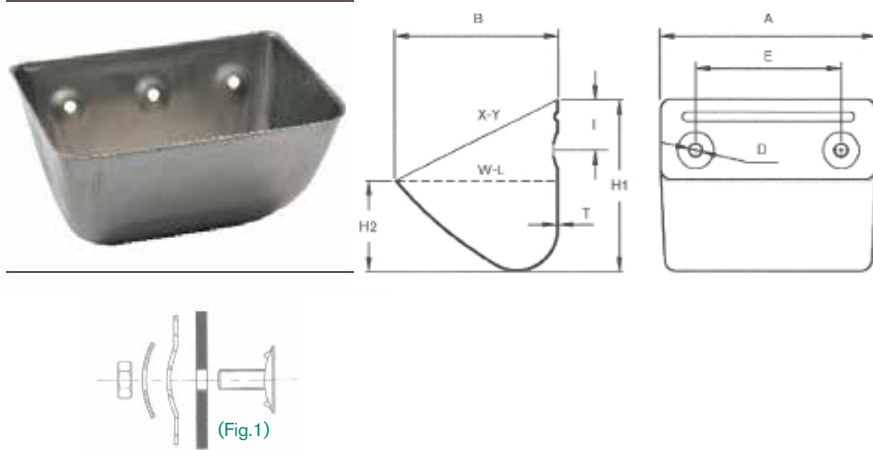


**TECHNICAL SPECIFICATION - BOTTOMLESS STEEL ELEVATOR BUCKET**

Type	A	B	H1	H2	T	 Steel With bottom / without bottom	Capacity (X-Y)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	No.	mm	mm	mm	Pcs.
BLS90-90	90	90	45	35	1,0	0,11 / 0,10	0,20	2	8,5	40	18	20
BLS100-90	106	88	45	35	1,0	0,12 / 0,11	0,23	2	8,5	50	17	20
BLS130-110	136	114	51	35	1,5	0,30 / 0,24	0,50	2	8,5	70	24	17,5
BLS180-140	185	139	65	50	1,5	0,54 / 0,42	1,08	2	8,5	100	32	14
BLS230-165	237	160	71	58	2,0	1,07 / 0,75	2,00	2	11,0	120	35	12,5
BLS280-165	284	165	80	62	2,0	1,27 / 0,97	2,67	3	11,0	90	37	11,5
BLS300-165	305	166	80	62	2,0	1,40 / 1,10	2,75	3	11,0	90	36	11,4
BLS330-190	334	185	100	75	3,0	2,70 / 2,10	4,50	3	11,0	100	49	9,5

- Type BLS elevator bucket has recessed holes on the back of the bucket and a recess on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).
- Also available in stainless steel.
- non-standard bolt hole pattern available on request.

COLUMBUS  
STEEL  
ELEVATOR BUCKET



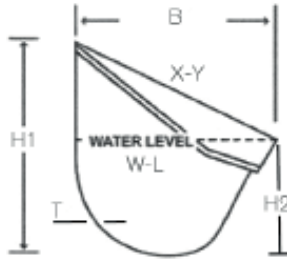
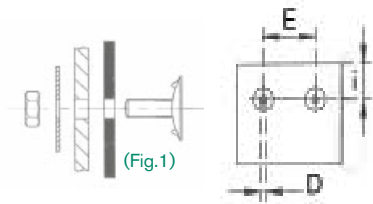
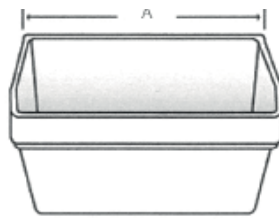
TECHNICAL SPECIFICATION - COLUMBUS STEEL ELEVATOR BUCKET

Type	A	B	H1	H2	T	 Steel	Capacity (W-L)	Capacity (X-Y)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	Ltr.	No.	mm	mm	mm	Pcs.
G70	70	70	70	35	1,0	0,10	0,11	0,17	2	8,0	34	16	14
G 80	80	75	80	40	1,0	0,13	0,16	0,25	2	8,0	43	19	12
G90	90	80	85	45	1,0	0,16	0,22	0,33	2	8,0	46	19	11,5
G100	100	90	91	48	1,0	0,18	0,27	0,42	2	8,0	58	23	10,5
G110	110	95	95	50	1,0	0,21	0,33	0,51	2	8,0	64	26	10
G120	120	100	105	55	1,0	0,25	0,41	0,70	2	8,0	67	29	9
G130	130	105	110	58	1,0	0,30	0,49	0,81	2	8,0	78	32	9
G140	140	115	117	63	1,0	0,33	0,62	1,05	2	8,0	86	35	8
G150	150	125	123	66	1,0	0,36	0,77	1,21	2	8,0	87	33	8
G 160	160	125	126	70	1,5 / 2,0	0,57 / 0,76	0,89	1,31	2	9,5	101	36	7,5
G 180	180	130	130	76	1,5 / 2,0	0,67 / 0,89	1,04	1,62	2	9,5	110	39	7,5
G 200	200	140	145	88	1,5 / 2,0	0,84 / 1,12	1,50	2,25	2	9,5	131	45	6,5
G 225	225	145	153	90	1,5 / 2,0	1,01 / 1,30	1,80	2,81	3	9,5	70	40	6
G 250	250	150	158	92	1,5 / 2,0	1,13 / 1,46	2,07	3,15	3	9,5	77	45	6
G 300	300	155	160	95	1,5 / 2,0	1,35 / 1,74	2,75	4,20	3	9,5	104	48	6
G 350	350	180	190	100	1,5 / 2,0	1,86 / 2,35	4,03	6,37	4	11,0	90	54	5
G 400	400	200	212	112	2,0 / 2,5	3,00 / 3,75	5,32	8,17	4	11,0	100	80	4,5
G 500	500	224	236	125	3,0	6,00	9,5	14,50	5	14,0	100	90	4,5

- Type Columbus elevator bucket has recessed holes in the back of the bucket and need to be fitted on the elevator belt with a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).

- Also available in stainless steel.

- non-standard bolt hole pattern available on request.



**DI-MAX®**  
DUCTILE IRON  
ELEVATOR BUCKET



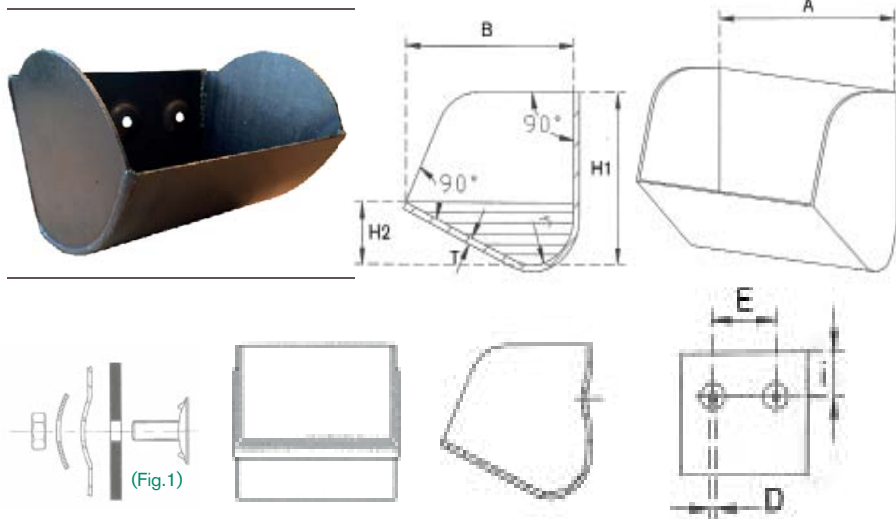
TECHNICAL SPECIFICATION - DI-MAX® DUCTILE IRON ELEVATOR BUCKET

Type	A	B	H1	T	 Ductile iron	Capacity (W-L)	Capacity (X-Y)	Holes	D	E	I
Dimensions	mm	mm	mm	mm	kgs.	Ltr.	Ltr.	No .	mm	mm	mm
4 x 3	102	86	89	4,7	0,77	0,28	0,40	cust. spec.	cust. spec.	cust. spec.	cust. spec.
6 x 4	152	102	114	6,4	1,72	0,69	1,04	cust. spec.	cust. spec.	cust. spec.	cust. spec.
7 x 4-1/2	191	114	114	6,4	1,81	0,81	1,25	cust. spec.	cust. spec.	cust. spec.	cust. spec.
7 x 5	200	130	140	6,4	2,77	1,12	1,69	cust. spec.	cust. spec.	cust. spec.	cust. spec.
8 x 5	216	137	140	6,4	2,95	1,36	2,07	cust. spec.	cust. spec.	cust. spec.	cust. spec.
9 x 5	241	137	140	6,4	2,95	1,49	2,27	cust. spec.	cust. spec.	cust. spec.	cust. spec.
11 x 5	302	133	140	5,3	3,18	1,68	2,52	cust. spec.	cust. spec.	cust. spec.	cust. spec.
15 x 5	403	127	140	5,3	2,95	2,53	3,87	cust. spec.	cust. spec.	cust. spec.	cust. spec.
19 x 5	505	133	140	6,4	6,40	3,25	4,97	cust. spec.	cust. spec.	cust. spec.	cust. spec.
9 x 6	244	162	165	7,6	4,63	2,04	3,13	cust. spec.	cust. spec.	cust. spec.	cust. spec.
10 x 6	270	162	165	7,6	5,08	2,35	3,60	cust. spec.	cust. spec.	cust. spec.	cust. spec.
11 x 6	295	162	165	7,6	5,53	2,62	4,01	cust. spec.	cust. spec.	cust. spec.	cust. spec.
12 x 6	321	162	165	7,6	5,94	2,87	4,40	cust. spec.	cust. spec.	cust. spec.	cust. spec.
12 x 7	321	187	191	8,4	8,39	3,60	5,75	cust. spec.	cust. spec.	cust. spec.	cust. spec.
14 x 7	371	187	191	8,4	9,25	4,35	6,67	cust. spec.	cust. spec.	cust. spec.	cust. spec.
16 x 7	422	187	191	8,4	10,39	4,94	7,55	cust. spec.	cust. spec.	cust. spec.	cust. spec.
14 x 8	371	213	216	8,4	11,16	6,00	8,62	cust. spec.	cust. spec.	cust. spec.	cust. spec.
16 x 8	422	213	216	8,4	12,16	6,25	9,82	cust. spec.	cust. spec.	cust. spec.	cust. spec.
18 x 8	473	213	216	8,4	13,61	7,38	11,39	cust. spec.	cust. spec.	cust. spec.	cust. spec.
20 x 8	524	213	216	8,4	15,56	8,18	12,52	cust. spec.	cust. spec.	cust. spec.	cust. spec.
24 x 8	625	213	216	8,4	19,46	9,79	14,98	cust. spec.	cust. spec.	cust. spec.	cust. spec.
18 x 10	476	264	267	11,2	20,23	10,8	16,60	cust. spec.	cust. spec.	cust. spec.	cust. spec.


- Type DI-MAX® elevator bucket has flat holes on the back of the bucket and on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt or Norway elevator bolt (metric) type STM in combination with a flat washer according to DIN9021 (Fig.1). Contact a Muller Beltex representative for advice on the recommended bolt hole pattern.



FABRICATED  
DIN 15231  
ELEVATOR BUCKET



TECHNICAL SPECIFICATION - FABRICATED DIN 15231 ELEVATOR BUCKET

Type	A	B	H1	H2	T	 Steel	Capacity (W-L)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	No.	mm	mm	mm	Pcs.
DIN15231	80	75	67	24	2,0	0,30	0,09	2	7,0	40	25	14,0
	100	91	80	28	2,0	0,44	0,15	2	7,0	50	28	11,5
	125	106	95	34	2,0	0,64	0,28	2	9,5	63	32	10,0
	160	125	112	40	2,0	0,96	0,49	2	9,5	80	40	8,5
	200	140	125	45	2,0 / 3,0	1,30 / 1,90	0,77	2	11,5	125	45	7,5
	250	160	140	50	2,0 / 3,0	1,75 / 2,60	1,22	3	11,5	80	50	6,5
	315	180	160	56	2,0 / 3,0 / 4,0	2,40 / 3,60 / 4,80	1,93	3	11,5	112	56	6,0
	400	200	180	63	2,0 / 3,0 / 4,0	3,25 / 4,90 / 6,50	3,07	4	11,5	100	63	5,0
	500	224	200	71	3,0 / 4,0	6,60 / 8,80	4,84	5	13,5	100	71	4,5

- Fabricated DIN 15231 elevator bucket have recessed holes in the back of the bucket acc. to DIN 15236 part 1 and need to be fitted on the elevator belt with a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).
- Optional: reinforced wearlip welded on the digging lip of the bucket and halfway down each side of the bucket.
- Optional: non-standard bucket bolt hole pattern to differ from DIN15236 part 1.
- Optional: elevator bucket provided with protective coating.
- Optional: instead of standard steel 37, also available in other materials as: aluminium, stainless steel, steel 52, etc.
- Optional: elevator bucket provided with half-round segments and counter sunk head screw with allen key in conformity with DIN 7991 (Fig. 2).
- The dimensions as given above, are the inside dimensions of the elevator bucket. For the outer dimensions in the width (A), please add 2 x the wall thickness (T) and for the bucket projection (B) please add 2 x the wall thickness (T) and 1 x the thickness of the digging lip of the bucket.

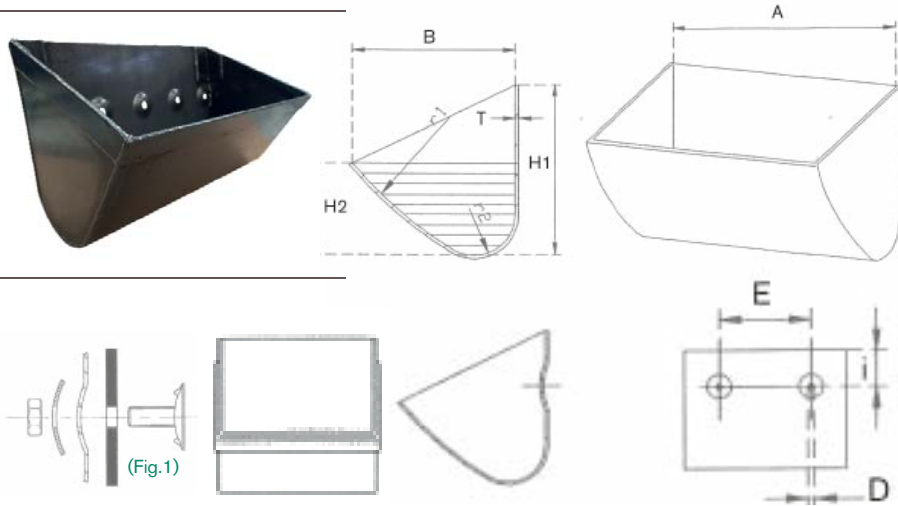


(Fig. 1)



(Fig. 2)

FABRICATED  
DIN 15232  
ELEVATOR BUCKET



TECHNICAL SPECIFICATION - FABRICATED DIN 15232 ELEVATOR BUCKET

Type	A	B	H1	H2	T	Steel	Capacity (W-L)	holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	No.	mm	mm	mm	Pcs.
DIN15232	80	75	80	43	2,0	0,33	0,17	2	7,0	40	28	11,5
	100	90	84	50	2,0	0,48	0,30	2	7,0	50	36	10,0
	125	105	112	60	2,0	0,68	0,53	2	9,5	63	42	8,5
	160	125	132	71	2,0	1,00	0,90	2	9,5	80	50	7,0
	200	140	150	80	2,0 / 3,0	1,40 / 2,10	1,40	2	11,5	125	56	6,0
	250	160	170	90	2,0 / 3,0	1,90 / 2,80	2,24	3	11,5	80	63	5,5
	315	180	190	100	2,0 / 3,0 / 4,0	2,60 / 3,85 / 5,20	3,55	3	11,5	112	71	5,0
	400	200	212	112	2,0 / 3,0 / 4,0	3,55 / 5,30 / 7,10	5,60	4	11,5	100	80	4,5
	500	224	236	125	3,0 / 4,0	7,20 / 9,60	9,00	5	13,5	100	90	4,0
	630	250	265	140	3,0 / 4,0	13,00 / 16,30	14,00	6	13,5	100	100	3,5

- Fabricated DIN 15232 elevator bucket have recessed holes in the back of the bucket acc. to DIN 15236 part 1 and need to be fitted on the elevator belt with a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).
- Optional: reinforced wearlip welded on the digging lip of the bucket and halfway down each side of the bucket.
- Optional: non-standard bucket bolt hole pattern to differ from DIN15236 part 1.
- Optional: elevator bucket provided with protective coating.
- Optional: instead of standard steel 37, also available in other materials as: aluminium, stainless steel, steel 52, etc.
- Optional: elevator bucket provided with half-round segments and counter sunk head screw with allen key in conformity with DIN 7991 (Fig. 2).
- The dimensions as given above, are the inside dimensions of the elevator bucket. For the outer dimensions in the width (A), please add 2 x the wall thickness (T) and for the bucket projection (B) please add 2 x the wall thickness (T) and 1 x the thickness of the digging lip of the bucket.

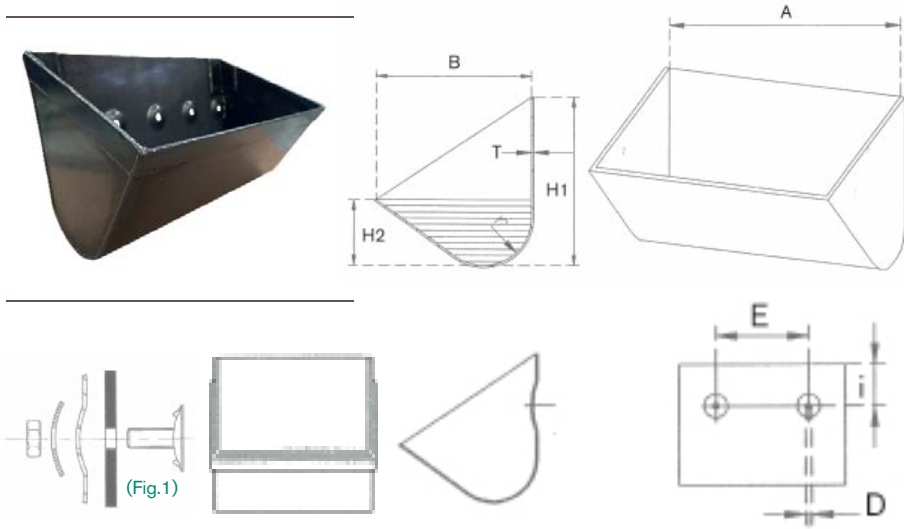


(Fig. 1)



(Fig. 2)

FABRICATED  
DIN 15233  
ELEVATOR BUCKET

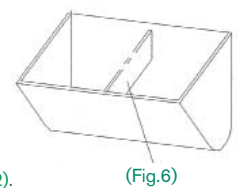


TECHNICAL SPECIFICATION - FABRICATED DIN 15233 ELEVATOR BUCKET

Type	A	B	H1	H2	T	Steel	Capacity (W-L)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	No.	mm	mm	mm	Pcs.
DIN15233	160	160	180	71	2,0 / 3,0	1,44 / 2,17	1,20	2	9,5	80	63	5,0
	200	160	180	71	2,0 / 3,0 / 4,0	1,66 / 2,57 / 3,46	1,50	2	11,5	125	63	5,0
	250	200	224	90	2,0 / 3,0 / 4,0	2,63 / 3,94 / 5,26	3,00	3	11,5	80	80	4,0
	315	200	224	90	3,0 / 4,0 / 5,0	4,56 / 6,08 / 7,85	3,80	3	11,5	112	80	4,0
	400	224	250	100	3,0 / 4,0 / 5,0	6,06 / 8,15 / 10,30	5,90	4	11,5	100	90	3,5
	500	250	280	112	4,0 / 5,0 / 6,0	11,50 / 14,40 / 17,30	9,30	5	13,5	100	100	3,0
	630	280	315	125	4,0 / 5,0 / 6,0	16,10 / 20,20 / 24,30	14,60	6	13,5	100	112	3,0
	800	315	355	140	5,0 / 6,0 / 8,0	27,50 / 33,30 / 44,30	23,30	7	13,5	200*	125	2,5
	1000	355	400	160	5,0 / 6,0 / 8,0	38,20 / 46,00 / 61,20	37,60	9	13,5	200*	140	2,0

\* staggered bolt hole pattern

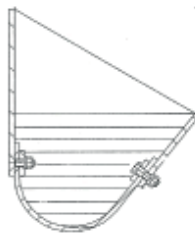
- Fabricated DIN 15233 elevator bucket have recessed holes in the back of the bucket acc. to DIN 15236 part 1 and need to be fitted on the elevator belt with a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).
- Optional: reinforced wearlip welded on the digging lip of the bucket and halfway down each side of the bucket.
- Optional: non-standard bucket bolt hole pattern to differ from DIN15236 part 1.
- Optional: elevator bucket provided with protective coating.
- Optional: instead of standard steel 37, also available in other materials as: aluminium, stainless steel, steel 52, etc.
- Optional: elevator bucket provided with half-round segments and counter sunk head screw with allen key in conformity with DIN 7991 (Fig. 2).
- Optional: elevator bucket can be provided with a 10 mm thick rubber bottom in a variety of rubber qualities acc. to sketch and photos as shown under Fig 3, 4 and 5. elevator buckets with rubber bottom starting from 500 mm in width, have a steel reinforcement strip at the bottom as shown at Fig 5 to prevent the rubber from stretching if the bucket is full of product.
- DIN 15233 elevator buckets with a width starting from 800 mm have a steel support strip in the middle of the bucket (Fig.6).
- The dimensions as given above, are the inside dimensions of the elevator bucket. For the outer dimensions in the width (A), please add 2 x the wall thickness (T) and for the bucket projection (B) please add 2 x the wall thickness (T) and 1 x the thickness of the digging lip of the bucket.



(Fig. 1)



(Fig. 2)



(Fig. 3)

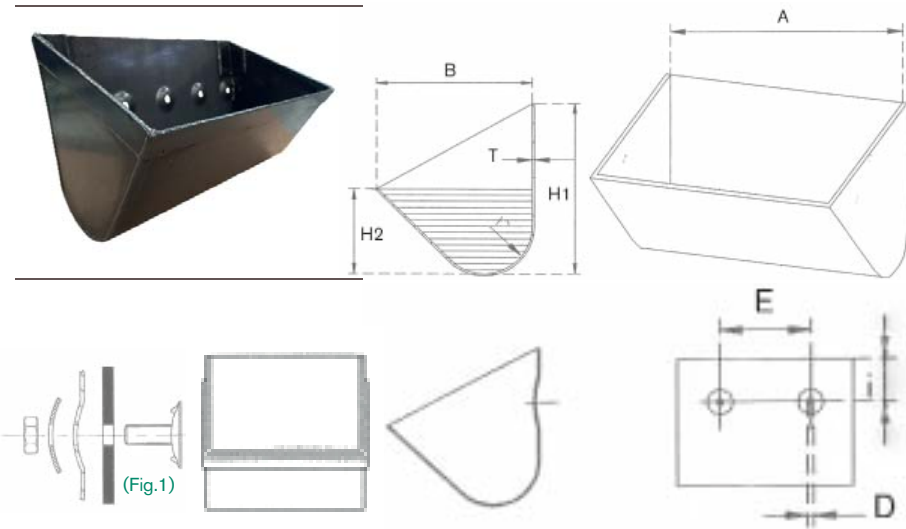


(Fig. 4)




(Fig. 5)

FABRICATED  
DIN 15234  
ELEVATOR BUCKET

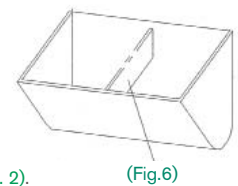


TECHNICAL SPECIFICATION - FABRICATED DIN 15234 ELEVATOR BUCKET

Type	A	B	H1	H2	T	 Steel	Capacity (W-L)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	No.	mm	mm	mm	Pcs.
DIN15234	160	160	200	106	2,0 / 3,0 / 4,0	1,59 / 2,39 / 3,18	1,9	2	9,5	80	75	4,5
	200	160	200	106	2,0 / 3,0 / 4,0	1,85 / 2,80 / 3,76	2,4	2	11,5	125	75	4,5
	250	200	250	132	3,0 / 4,0 / 5,0	4,36 / 5,82 / 7,27	4,6	3	11,5	80	95	3,5
	315	200	250	132	3,0 / 4,0 / 5,0	5,09 / 6,82 / 8,59	5,8	3	11,5	112	95	3,5
	400	224	280	150	3,0 / 4,0 / 5,0	7,03 / 9,40 / 11,80	9,4	4	11,5	100	106	3,0
	500	250	315	170	4,0 / 5,0 / 6,0	12,80 / 16,10 / 19,40	14,9	5	13,5	100	118	3,0
	630	280	355	190	4,0 / 5,0 / 6,0	17,60 / 22,10 / 26,60	23,5	6	13,5	100	132	2,5
	800	315	400	212	5,0 / 6,0 / 8,0	30,60 / 36,90 / 49,60	37,3	7	13,5	200*	150	2,0
	1000	355	450	236	5,0 / 6,0 / 8,0	42,00 / 50,30 / 67,00	58,3	9	13,5	200*	170	2,0

\* staggered bolt hole pattern

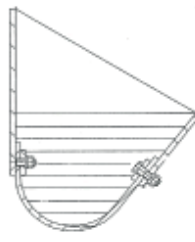
- Fabricated DIN 15234 elevator bucket have recessed holes in the back of the bucket acc. to DIN 15236 part 1 and need to be fitted on the elevator belt with a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).
- Optional: reinforced wearlip welded on the digging lip of the bucket and halfway down each side of the bucket.
- Optional: non-standard bucket bolt hole pattern to differ from DIN15236 part 1.
- Optional: elevator bucket provided with protective coating.
- Optional: instead of standard steel 37, also available in other materials as: aluminium, stainless steel, steel 52, etc.
- Optional: elevator bucket provided with half-round segments and counter sunk head screw with allen key in conformity with DIN 7991 (Fig. 2).
- Optional: elevator bucket can be provided with a 10 mm thick rubber bottom in a variety of rubber qualities acc. to sketch and photos as shown under Fig 3, 4 and 5. elevator buckets with rubber bottom starting from 500 mm in width, have a steel reinforcement strip at the bottom as shown at Fig 5 to prevent the rubber from stretching if the bucket is full of product.
- The dimensions as given above, are the inside dimensions of the elevator bucket. For the outer dimensions in the width (A), please add 2 x the wall thickness (T) and for the bucket projection (B) please add 2 x the wall thickness (T) and 1 x the thickness of the digging lip of the bucket.



(Fig. 1)



(Fig. 2)



(Fig. 3)

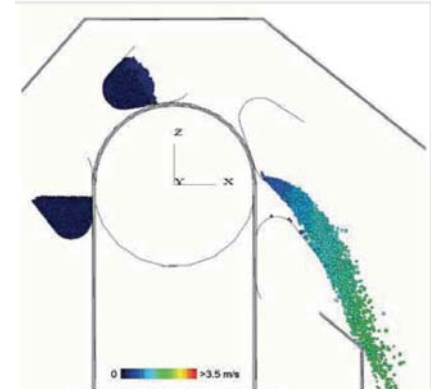
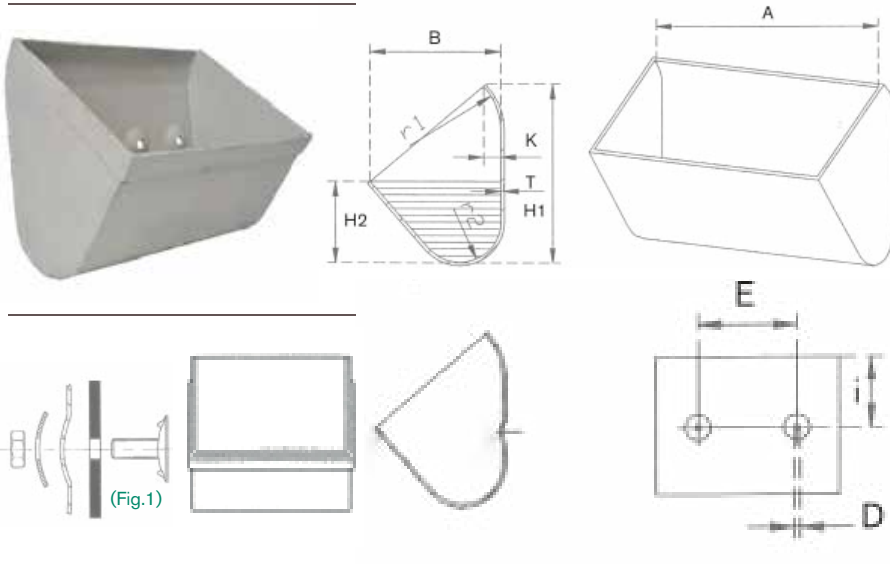


(Fig. 4)



(Fig. 5)

FABRICATED  
DIN 15235  
ELEVATOR BUCKET



TECHNICAL SPECIFICATION - FABRICATED DIN 15235 ELEVATOR BUCKET

Type	A	B	H1	H2	K	r1	r2	T	Steel	Capacity (W-L)	holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	mm	mm	mm	kgs.	Ltr.	No.	mm	mm	mm	Pcs.
DIN15235	160	160	224	106	23	80	50	2,0 / 3,0 / 4,0	1,71 / 2,56 / 3,42	1,9	2	9,5	80	112	4,0
	200	160	224	106	23	80	50	2,0 / 3,0 / 4,0	2,04 / 3,07 / 4,15	2,4	2	11,5	125	112	4,0
	250	200	280	132	28	100	63	3,0 / 4,0 / 5,0	4,62 / 6,16 / 7,70	4,6	3	11,5	80	140	3,0
	315	200	280	132	28	100	63	3,0 / 4,0 / 5,0	5,59 / 7,41 / 9,46	5,8	3	11,5	112	140	3,0
	400	224	315	150	32	112	71	3,0 / 4,0 / 5,0	7,72 / 10,40 / 13,00	9,4	4	11,5	100	160	3,0
	500	250	355	170	36	125	80	4,0 / 5,0 / 6,0	14,10 / 17,70 / 21,40	14,9	5	13,5	100	180	2,5
	630	280	400	190	40	140	90	4,0 / 5,0 / 6,0	19,20 / 24,10 / 29,00	23,5	6	13,5	100	200	2,0
	800	315	450	212	45	160	100	5,0 / 6,0 / 7,0	32,50 / 39,30 / 52,50	37,3	7	13,5	200*	224	2,0
	1000	355	500	236	50	180	112	5,0 / 6,0 / 7,0	44,50 / 53,50 / 71,20	58,3	9	13,5	200*	250	1,5

\* staggered bolt hole pattern

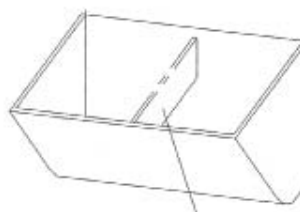
- Fabricated DIN 15235 elevator bucket have recessed holes in the back of the bucket acc. to DIN 15236 part 1 and need to be fitted on the elevator belt with a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).
- Optional: reinforced wearlip welded on the digging lip of the bucket and halfway down each side of the bucket.
- Optional: non-standard bucket bolt hole pattern to differ from DIN15236 part 1.
- Optional: elevator bucket provided with protective coating.
- Optional: instead of standard steel 37,also available in other materials as: aluminium, stainless steel, steel 52, etc.
- Optional: elevator bucket provided with half-round segments and counter sunk head screw with allen key in conformity with DIN 7991 (Fig. 2).
- DIN 15235 elevator buckets with a width starting from 800 mm have a steel support strip in the middle of the bucket (Fig.3).
- The dimensions as given above, are the inside dimensions of the elevator bucket. For the outer dimensions in the width (A), please add 2 x the wall thickness (T) and 2 x the thickness of the integrated digging lip of the bucket, which is around 6 to 8 mm. For the bucket projection (B) please add 2 x the wall thickness (T) and 1 x the thickness of the digging lip of the bucket, which is around 6 to 8 mm.



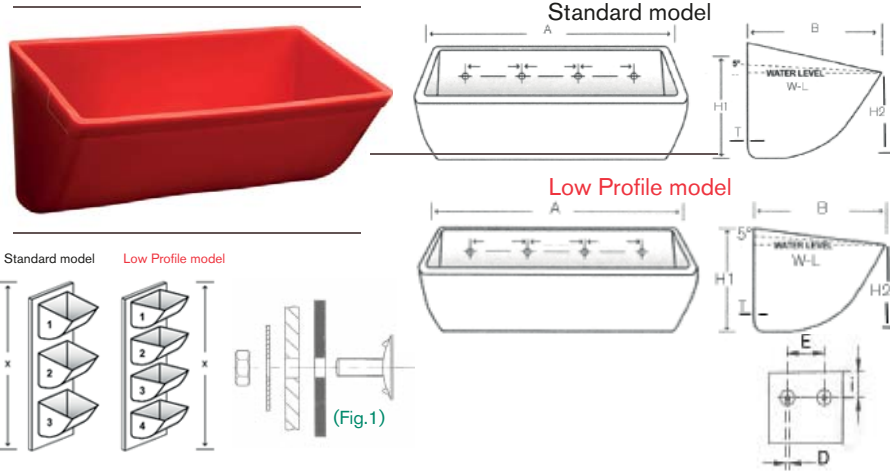
(Fig. 1)



(Fig. 2)



(Fig.3)



**HD-MAX®**  
**PLASTIC**  
**ELEVATOR BUCKET**



**TECHNICAL SPECIFICATION - HD-MAX® PLASTIC ELEVATOR BUCKET**

Standard model	A	B	H1	H2	T	kg HDP	kg PU	kg Nylon	Capacity (W-L)	Capacity (W-L +5°)	Holes	D	E	I	Max. buckets per meter	Low Profile	kg HDP	kg PU	kg Nylon	Capacity (W-L +5°)	Max. buckets per meter
																H1	kgs.	kgs.	kgs.	Ltr.	Pcs.
3 x 2	83	59	57	40	4,0	0,05	0,08	0,07	0,11	0,13	cust. spec.	cust. spec.	cust. spec.	cust. spec.	9,8	57	0,04	0,07	0,06	0,13	17,5
4 x 3	111	83	76	45	4,0	0,10	0,14	0,11	0,25	0,29	cust. spec.	cust. spec.	cust. spec.	cust. spec.	7,9	70	0,09	0,13	0,10	0,29	14,3
5 x 4	133	114	102	70	8,0	0,21	0,29	0,24	0,60	0,65	cust. spec.	cust. spec.	cust. spec.	cust. spec.	6,6	83	0,19	0,26	0,22	0,65	12,1
6 x 4	159	114	102	70	8,0	0,25	0,35	0,29	0,73	0,81	cust. spec.	cust. spec.	cust. spec.	cust. spec.	6,6	89	0,23	0,32	0,26	0,81	11,2
7 x 4	184	114	102	70	8,0	0,30	0,40	0,32	0,84	0,94	cust. spec.	cust. spec.	cust. spec.	cust. spec.	6,6	89	0,27	0,36	0,29	0,94	11,2
6 x 5	162	143	127	85	8,0	0,32	0,54	0,45	1,10	1,21	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,29	0,49	0,41	1,21	9,8
7 x 5	187	143	127	85	8,0	0,44	0,59	0,52	1,31	1,46	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,40	0,53	0,47	1,46	9,8
8 x 5	213	143	127	85	8,0	0,52	0,62	0,54	1,69	1,90	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,47	0,56	0,49	1,90	9,8
8 x 6	213	168	152	110	8,0	0,61	0,84	0,70	2,22	2,47	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	0,55	0,76	0,63	2,47	7,9
9 x 5	238	143	127	85	8,0	0,54	0,63	0,54	1,76	1,99	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,49	0,57	0,49	1,99	9,8
9 x 6	238	168	152	110	8,0	0,69	0,95	0,79	2,46	2,72	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	0,62	0,86	0,71	2,72	7,9
10 x 5	260	143	127	85	8,0	0,57	X	0,66	1,99	2,28	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	114	0,51	X	0,59	2,28	8,7
10 x 6	264	168	152	110	8,0	0,74	1,02	0,85	2,80	3,04	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	0,67	0,92	0,77	3,04	7,9
10 x 7	267	197	181	140	8,0	1,07	1,46	1,22	3,95	4,34	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	152	0,96	1,31	1,10	4,34	6,6
10 x 8	267	222	203	145	10,0	1,31	1,80	1,49	5,38	5,80	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	152	1,18	1,62	1,34	5,80	5,6
11 x 5	286	143	127	110	8,0	0,62	X	0,72	2,31	2,51	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	114	0,56	X	0,65	2,51	8,7
11 x 6	289	168	152	110	8,0	0,83	1,13	0,94	3,03	3,29	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	0,75	1,02	0,85	3,29	7,9
11 x 7	292	197	181	140	8,0	1,16	1,58	1,32	4,41	4,79	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	152	1,04	1,42	1,19	4,79	6,6
11 x 8	292	222	203	145	10,0	1,44	1,97	1,64	5,87	6,37	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	1,30	1,77	1,48	6,37	5,6
12 x 5	311	143	127	110	8,0	0,70	X	0,81	2,62	2,74	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	114	0,63	X	0,73	2,74	8,7
12 x 6	314	168	152	110	8,0	0,86	1,17	0,98	3,28	3,62	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	0,77	1,05	0,88	3,62	7,9
12 x 7	318	197	181	140	8,0	1,24	1,71	1,43	4,79	5,24	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	152	1,12	1,54	1,29	5,24	6,6
12 x 8	318	222	203	145	10,0	1,57	2,15	1,79	6,40	6,94	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	1,41	1,94	1,61	6,94	5,6
13 x 6	340	168	152	110	8,0	0,93	1,27	1,05	3,62	3,94	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	0,84	1,14	0,95	3,94	7,9
13 x 7	343	197	181	140	8,0	1,31	1,77	1,51	5,64	5,84	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	152	1,18	1,59	1,36	5,84	6,6
14 x 7	368	197	181	140	8,0	1,41	1,90	1,62	5,84	6,39	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	152	1,27	1,71	1,46	6,39	6,6
14 x 8	368	222	203	145	10,0	1,75	2,36	2,01	7,62	8,24	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	1,58	2,12	1,81	8,24	5,6
15 x 7	394	197	181	135	8,0	1,47	1,98	1,68	6,22	6,69	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	152	1,32	1,78	1,51	6,69	6,6
15 x 8	394	222	203	140	10,0	1,84	2,49	2,12	8,38	8,88	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	1,66	2,24	1,91	8,88	5,6
16 x 7	419	197	181	140	8,0	1,53	2,06	1,76	6,66	7,08	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	152	1,38	1,85	1,58	7,08	6,6
16 x 8	419	222	203	145	10,0	1,93	2,61	2,22	8,90	9,36	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	1,74	2,35	2,00	9,36	5,6
18 x 8	470	222	203	150	10,0	2,11	X	2,43	10,00	10,62	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	1,90	X	2,19	10,62	5,6

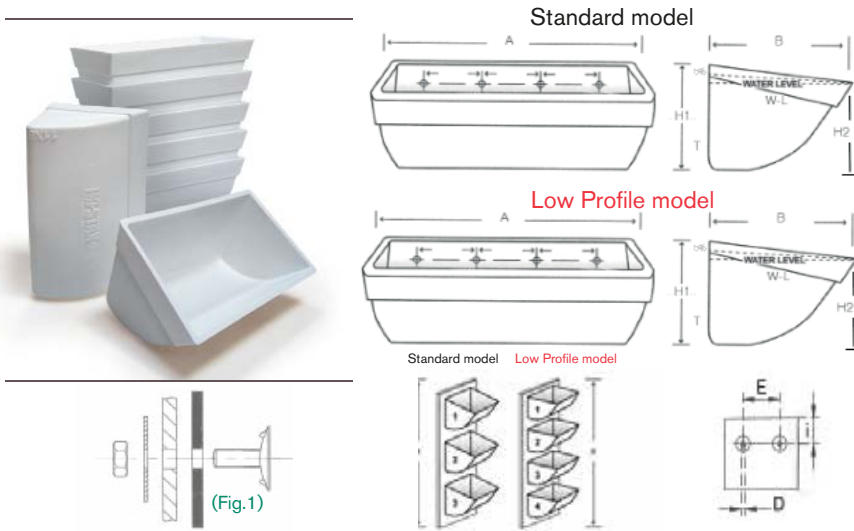
- Type HD-MAX® elevator bucket has flat holes in the back of the bucket and on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt or Norway elevator bolt (metric) type STM in combination with a flat washer according to DIN9021 (Fig.1).

- Available in polyethylene color red. Not available in color white, please see for white color buckets the HD-STAX range (max. temp +80° C.), Polyurethane color green (max. temp +80° C. X = not available) and nylon color tan (max. temp +120° C.).

- FDA 1935/2004

Not legally binding - subject to change and terms. Version 2016 / 1.1

HD-STAX®  
PLASTIC  
ELEVATOR BUCKET



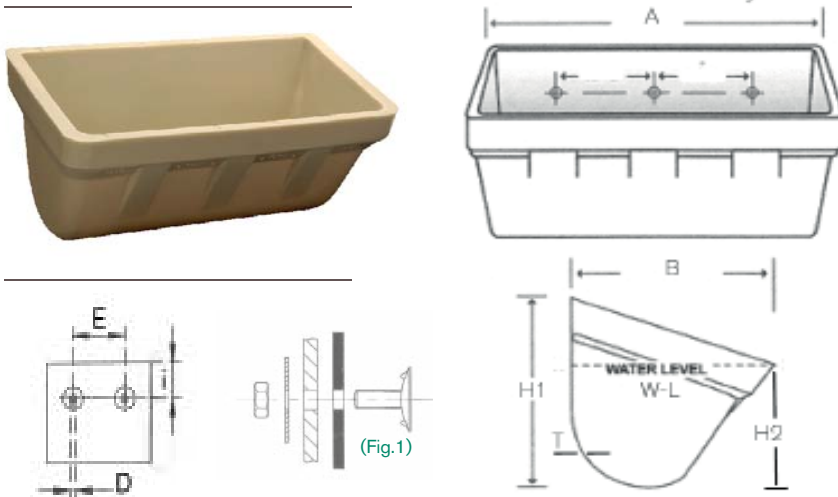
TECHNICAL SPECIFICATION - HD-STAX® PLASTIC ELEVATOR BUCKET

Standard model	A	B	H1	H2	T	kg HDP	Capacity (W-L)	Capacity (W-L +10%)	Holes	D	E	I	Max. buckets per meter	Low Profile model	kg HDP	Capacity (W-L +5%)	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	Ltr.	No.	mm	mm	mm	Pcs.	H1	kgs.	Ltr.	Pcs.
5 x 4	143	118	102	80	8,1	0,21	0,62	0,66	cust. spec.	cust. spec.	cust. spec.	cust. spec.	7,9	89	0,19	0,66	11,2
6 x 4	168	118	102	80	8,1	0,25	0,75	0,79	cust. spec.	cust. spec.	cust. spec.	cust. spec.	7,9	89	0,23	0,79	11,2
7 x 4	194	118	102	80	8,1	0,28	0,85	0,90	cust. spec.	cust. spec.	cust. spec.	cust. spec.	7,9	89	0,25	0,90	11,2
6 x 5	172	146	127	90	8,9	0,37	1,18	1,25	cust. spec.	cust. spec.	cust. spec.	cust. spec.	6,6	102	0,33	1,25	9,8
7 x 5	197	146	127	90	8,9	0,42	1,39	1,46	cust. spec.	cust. spec.	cust. spec.	cust. spec.	6,6	102	0,38	1,46	9,8
8 x 5	222	146	127	95	8,9	0,46	1,69	1,77	cust. spec.	cust. spec.	cust. spec.	cust. spec.	6,6	102	0,41	1,77	9,8
9 x 5	248	146	127	95	8,9	0,50	1,80	1,90	cust. spec.	cust. spec.	cust. spec.	cust. spec.	6,6	102	0,45	1,90	9,8
8 x 6	221	175	156	100	9,1	0,63	2,29	2,53	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	124	0,57	2,53	7,9
9 x 6	246	175	156	100	9,1	0,68	2,59	2,84	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	124	0,61	2,84	7,9
10 x 6	271	175	156	105	9,1	0,74	2,88	3,16	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	124	0,67	3,16	7,9
11 x 6	297	175	156	105	9,1	0,79	3,18	3,49	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	124	0,71	3,49	7,9
12 x 6	322	175	156	105	9,1	0,85	3,47	3,82	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	124	0,77	3,82	7,9
13 x 6	348	175	156	105	9,1	0,90	3,77	4,15	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	124	0,81	4,15	7,9
10 x 7	278	202	181	130	9,7	1,05	4,03	4,44	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	152	0,95	4,44	6,6
11 x 7	303	202	181	130	9,7	1,14	4,46	4,90	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	152	1,03	4,90	6,6
12 x 7	329	202	181	130	9,7	1,22	4,85	5,33	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	152	1,10	5,33	6,6
13 x 7	354	202	181	130	9,7	1,29	5,25	5,77	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	152	1,16	5,77	6,6
14 x 7	379	202	181	130	9,7	1,36	5,66	6,23	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	152	1,22	6,23	6,6
16 x 7	430	202	181	130	9,7	1,52	6,56	7,21	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	152	1,37	7,21	6,6
12 x 8	333	227	206	155	10,2	1,68	6,48	7,13	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,3	172	1,51	6,79	5,6
14 x 8	384	227	206	155	10,2	1,88	7,71	8,48	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,3	172	1,69	8,08	5,6
16 x 8	410	227	206	155	10,2	2,08	9,02	9,48	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,3	172	1,87	9,48	5,6
18 x 8	486	227	206	155	10,2	2,29	10,08	10,66	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,3	172	2,06	10,66	5,6

- Type HD-STAX® elevator bucket has flat holes in the back of the bucket and on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt or Norway elevator bolt (metric) type STM in combination with a flat washer according to DIN9021 (Fig.1). Contact us for advice on the recommended bolt hole pattern.

- Only available in polyethylene color white (max. temp +80° C.)

**MAXI-TUFF® AA**  
**PLASTIC**  
**ELEVATOR BUCKET**



**TECHNICAL SPECIFICATION - MAXI-TUFF® AA PLASTIC ELEVATOR BUCKET**

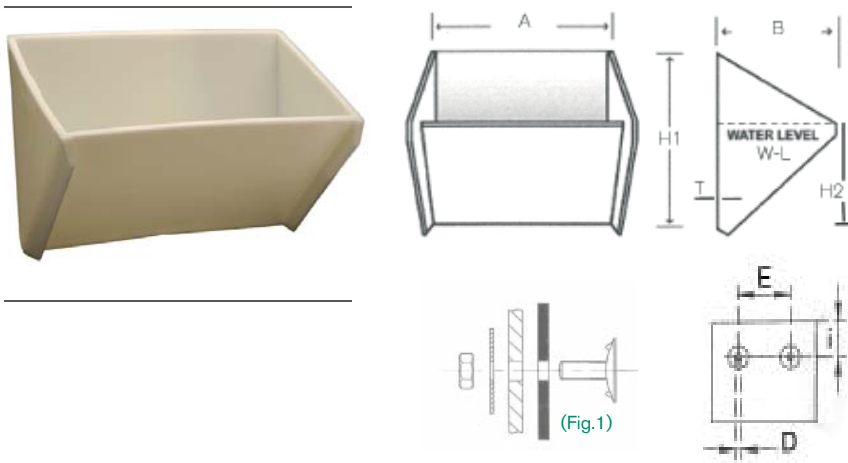
Type	A	B	H1	H2	T	kg HDP	kg PU	kg Nylon	Capacity (W-L)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	kgs.	kgs.	Ltr.	No.	mm	mm	mm	Pcs.
4 x 3	108	79	79	60	5,0	0,08	0,11	0,09	0,22	cust. spec.	cust. spec.	cust. spec.	cust. spec.	6,6
5 x 4	133	105	105	75	5,0	0,20	0,27	0,23	0,57	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9
6 x 4	159	105	105	75	5,0	0,22	0,31	0,25	0,68	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9
7 x 4	184	105	105	75	6,0	0,25	0,35	0,29	0,84	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9
7 x 5	181	130	133	95	8,0	0,37	0,52	0,42	1,26	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9
8 x 5	206	130	133	95	8,0	0,46	0,64	0,53	1,47	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9
9 x 5	232	130	133	95	8,0	0,46	0,64	0,53	1,66	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9
9 x 6	238	156	156	110	7,0	0,56	0,78	0,66	2,17	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
10 x 6	264	156	156	110	8,0	0,63	0,85	0,70	2,43	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
11 x 6	289	156	156	110	7,0	0,65	0,90	0,74	2,68	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
12 x 6	314	156	156	110	9,0	0,88	1,19	1,00	3,05	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
12 x 7	314	181	181	130	7,0	1,00	1,36	1,12	4,00	cust. spec.	cust. spec.	cust. spec.	cust. spec.	2,8
14 x 7	365	181	181	130	8,0	1,17	1,59	1,32	4,89	cust. spec.	cust. spec.	cust. spec.	cust. spec.	2,8
14 x 8	365	206	206	150	12,0	1,65	2,24	1,87	5,76	cust. spec.	cust. spec.	cust. spec.	cust. spec.	2,5
16 x 8	416	206	206	150	12,0	1,87	2,53	2,10	6,66	cust. spec.	cust. spec.	cust. spec.	cust. spec.	2,5
18 x 8	460	206	206	150	12,0	2,05	2,76	2,38	7,66	cust. spec.	cust. spec.	cust. spec.	cust. spec.	2,5
18 x 10	470	254	254	170	12,0	3,54	4,26	3,10	11,35	cust. spec.	cust. spec.	cust. spec.	cust. spec.	2,0

- Type MAXI-TUFF® AA elevator bucket has flat holes on the back of the bucket and on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt or Norway elevator bolt (metric) type STM in combination with a flat washer according to DIN9021 (Fig.1). Contact a Muller Beltex representative for advice on the recommended bolt hole pattern.

- Available in polyethylene color white (max. temp +80° C.), Polyurethane color green (max. temp +80° C. X = not available) and nylon color tan (max. temp +120° C.).

- FDA 1935/2004





**MAXI-TUFF® MF**  
**PLASTIC**  
**ELEVATOR BUCKET**



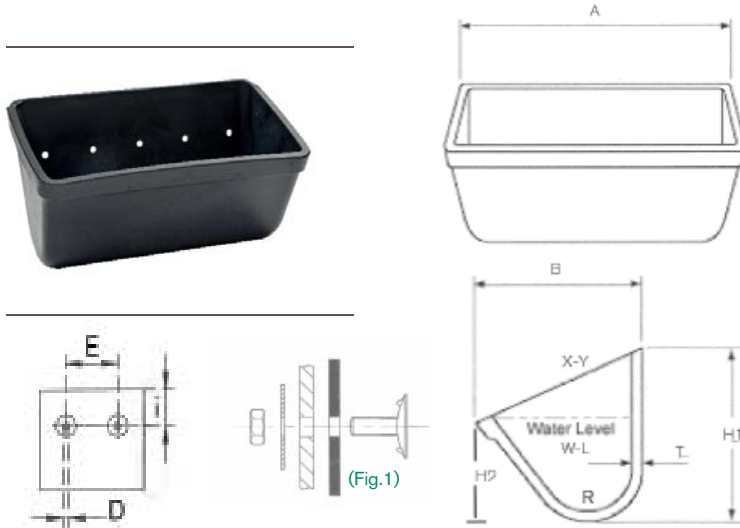
**TECHNICAL SPECIFICATION - MAXI-TUFF® MF PLASTIC ELEVATOR BUCKET**

Type	A	B	H1	H1	T	HDP	PU	Nylon	Capacity (W-L)	holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	kgs.	kgs.	Ltr.	No.	mm	mm	mm	Pcs.
8 x 5 x 7	210	140	191	120	9,7	0,77	1,08	0,89	1,32	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9
10 x 5 x 7	260	140	191	120	10,0	0,93	1,30	1,51	1,56	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9
12 x 7 x 11	311	191	292	160	8,9	1,64	2,18	1,81	2,83	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
12 x 8 x 11	311	216	292	175	8,3	1,96	2,56	2,18	4,50	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
14 x 7 x 11	362	191	292	160	8,3	1,76	2,42	2,05	3,30	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
14 x 8 x 11	362	216	292	175	8,3	2,07	X	2,39	5,50	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
16 x 7 x 11	413	191	292	160	8,3	1,99	2,71	2,25	3,91	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
16 x 8 x 11	413	216	292	175	8,3	2,35	X	2,64	6,50	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
18 x 7 x 11	464	191	292	160	8,3	2,25	3,06	2,64	4,00	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3
18 x 8 x 11	464	216	292	175	8,3	2,64	X	3,07	7,66	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3

- Type MAXI-TUFF® MF elevator bucket has flat holes in the back of the bucket and on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt or Norway elevator bolt (metric) type STM in combination with a flat washer according to DIN9021 (Fig.1). Contact a Muller Beltex representative for advice on the recommended bolt hole pattern.

- Available in polyethylene color white (max. temp +80° C.), Polyurethane color green (max. temp +80° C. X = not available) and nylon color tan (max. temp +120° C.).

- FDA 1935/2004



PA-6G  
NYLON  
ELEVATOR BUCKET



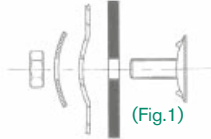
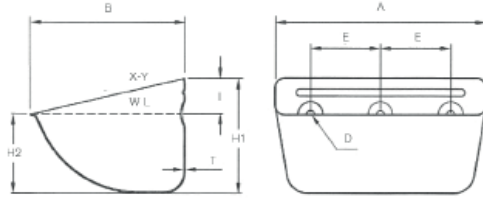
TECHNICAL SPECIFICATION - PA-6G NYLON ELEVATOR BUCKET

Type	A	B	H1	H2	R	T	Nylon	Capacity (W-L)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	mm	kgs.	Ltr.	No.	mm	mm	mm	Pcs.
111501001	160	140	180	95	45	7,0	0,9	1,5	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,5
111501002	200	160	200	106	50	7,0	1,2	2,4	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,5
111501003	250	180	224	118	56	7,5	1,6	3,8	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,5
111501004	315	200	250	132	63	8,0	2,0	6,0	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,5
111501005	400	224	280	150	71	8,5	2,9	9,5	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,0
111501006	500	250	315	170	80	9,5	4,8	15,0	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,0
111501007	630	280	355	190	90	10,0	5,6	24,0	cust. spec.	cust. spec.	cust. spec.	cust. spec.	2,5
111501008	800	315	400	212	100	10,5	9,2	38,0	cust. spec.	cust. spec.	cust. spec.	cust. spec.	2,0
111501009	1000	355	450	236	112	11,0	15,0	60,0	cust. spec.	cust. spec.	cust. spec.	cust. spec.	2,0

- Type PA6-G elevator bucket is modulated acc. to the DIN 15234 style elevator bucket and has flat holes on the back of the bucket and on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt in combination with a flat washer according to DIN9021 (Fig.1). The pattern of the bolt holes can be drilled in the back of the bucket acc. to DIN 15236 part 1.
- When handling abrasive product, a steel DIGGER bucket acc. to DIN 15234 with a slightly bigger bucket projection (Fig.2) can be fitted on the belt after a certain quantity of PA6-G nylon bucket bucket. Please consult a Muller Beltex representative for further technical advice.
- Only available in PA6-G nylon, color black (max. temp +110° C.)
- The dimensions as given above, are the inside dimensions of the elevator bucket. For the outer dimensions in the width (A), please add 2 x the wall thickness (T) and for the bucket projection (B) please add 2 x the wall thickness (T) and 1 x the integrated digging lip of the bucket which is around 6 to 8 mm extra.



(Fig.2)



**PELICAN**  
**STEEL**  
**ELEVATOR BUCKET**

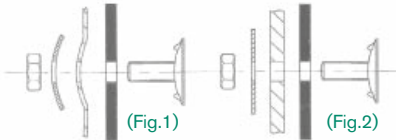
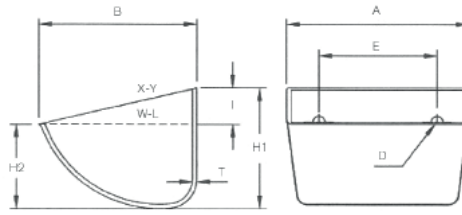


TECHNICAL SPECIFICATION - PELICAN STEEL ELEVATOR BUCKET

Type	A	B	H1	H2	T	 Steel	Capacity (W-L)	Capacity (X-Y)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	Ltr.	No.	mm	mm	mm	Pcs.
Pelican 330-250	340	260	190	130	3,0 / 4,0	4,50 / 6,00	7,20	9,60	3	13,0	80	55	5
Pelican 370-250	380	260	190	130	3,0 / 4,0	5,10 / 6,10	8,30	10,80	4	13,0	80	55	5
Pelican 470-250	480	260	190	130	3,0 / 4,0 / 4,7	6,50 / 8,60 / 10,10	10,50	14,00	5	13,0	80	55	5

- Type Pelican elevator bucket has recessed holes on the back of the bucket and a recess on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).
- Also available in stainless steel or steel fabricated version.
- non-standard bolt hole pattern available on request.

STARCO  
PLASTIC  
ELEVATOR BUCKET



TECHNICAL SPECIFICATION - STARCO PLASTIC ELEVATOR BUCKET

Type	A	B	H1	H2	T	HDP	PU	Nylon	Capacity (W-L)	Capacity (X-Y)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.		kgs.	Ltr.	Ltr.	No.	mm	mm	mm	Pcs.
S100-90HDP-MD*	109	90	62	39	4,0	0,06	0,11	0,09	0,21	0,27	2	8,5	50	17	14,2
S130-120HDP-MD*	140	121	81	54	4,7	0,13	0,19	0,16	0,46	0,62	2	8,5	70	22	11,1
S150-110HDP-MD*	159	113	77	52	4,5	0,17	0,25	0,21	0,54	0,67	2	9,0	88	26	12
S180-140HDP-MD*	190	146	94	56	6,0	0,22	0,35	0,29	0,84	1,22	2	9,0	100	30	10,5
S200-140HDP-MD*	203	147	111	58	6,0	0,28	0,48	0,40	1,40	1,96	2	9,0	100	32	9
S230-170HDP-MD*	240	173	113	70	6,0	0,43	0,56	0,47	1,64	2,23	2	11,0	120	38	9
S280-170HDP-MD*	290	173	113	72	6,0	0,50	0,72	0,60	2,02	2,89	3	11,0	80	38	9
S300-180HDP-MD*	315	188	123	81	6,0	0,58	0,90	0,75	3,17	4,25	3	9,0	100	35	8
S330-215HDP-MD*	340	220	138	92	6,5	0,93	1,42	1,18	4,47	5,60	3	11,0	120	38	7
S350-180HDP-MD*	370	188	132	85	7,0	0,79	1,31	1,09	3,66	5,00	4	9,0	90	35	8
S370-215HDP-MD*	380	220	142	90	9,0	1,05	1,68	1,40	5,20	6,20	4	11,0	90	36	7
S150-110HDP(*)	159	113	78	51	5,2	0,17	0,28	0,23	0,49	0,72	2	9,0	89	24	12
S180-140HDP(*)	190	146	94	56	6,0	0,22	0,35	0,29	0,97	1,30	2	9,0	100	30	10,5
S225-140HDP(*)	235	140	94	60	6,0	0,34	0,54	0,45	1,16	1,67	2	9,0	120	30	10,5
S230-170HDP(*)	240	173	110	70	6,0	0,43	0,68	0,57	1,75	2,32	2	11,0	120	35	9
S280-170HDP(*)	290	173	113	72	6,0	0,50	0,80	0,67	2,28	3,00	3	11,0	80	35	9
S300-180HDP(*)	314	181	124	81	6,0	0,58	0,92	0,77	2,70	3,85	3	9,0	102	38	8,13
S350-180HDP(*)	367	181	124	85	7,0	0,79	1,26	1,05	3,30	4,51	4	9,0	90	38	8,13
S330-215HDP	342	222	141	92	8,5	0,93	1,49	1,24	4,51	5,90	3	11,0	120	38	7,14
S370-215HDP(*)	380	218	141	90	9,0	1,07	1,72	1,43	4,60	6,30	4	11,0	90	38	7,14

- Type Starco-MD\* elevator bucket has recessed holes on the back of the bucket and a recess on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).

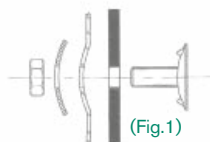
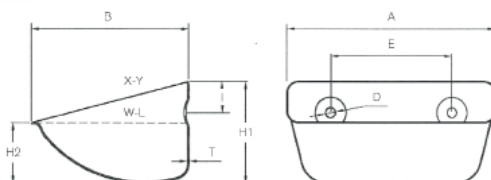
- Type Starco-(\*) elevator bucket has flat holes on the back of the bucket and no recess on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt or Norway elevator bolt (metric) type STM in combination with a flat washer according to DIN9021 (Fig.2). With exception of the S330-215HDP bucket which has recessed holes on the back of the bucket, but no recess on the inside of the bucket and therefore can only except a DIN15237 bolt with flat washer.

- Available in polyethylene (max. temp +80° C.), Polyurethane (max. temp +80° C.) and nylon (max. temp +110° C.).

- FDA 1935/2004

Not legally binding - subject to change and terms. Version 2016 / 1.1

STARCO  
STEEL  
ELEVATOR BUCKET



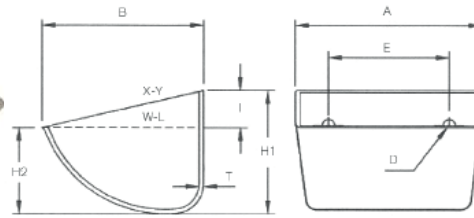
TECHNICAL SPECIFICATION - STARCO STEEL ELEVATOR BUCKET

Type	A	B	H1	H2	T	 Steel	Capacity (W-L)	Capacity (X-Y)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	Ltr.	No.	mm	mm	mm	Pcs.
S100-90	106	89	62	36	1,0 / 1,5	0,15 / 0,22	0,29	0,19	2	8,5	50	16	15
S120-100	120	101	72	47	1,0 / 1,5	0,21 / 0,31	0,40	0,55	2	8,5	67	21	13
S130-110	130	110	76	48	1,0 / 1,5	0,24 / 0,36	0,49	0,61	2	8,5	70	22	12,5
S130-120	138	114	80	54	1,5 / 2,0	0,43 / 0,57	0,50	0,68	2	8,5	70	22	12
S160-125	160	125	90	59	1,5 / 2,0	0,53 / 0,70	0,85	1,15	2	8,5	101	25	10,5
S180-140	185	140	92	56	1,5 / 2,0	0,57 / 0,76	0,90	1,29	2	8,5	100	27	10,5
S200-140	200	140	100	67	1,5 / 2,0	0,73 / 0,97	1,25	1,75	2	11,0	131	28	9
S230-165	238	165	108	68	2,0	1,18	1,65	2,25	2	11,0	120	36	9
S250-150	250	150	107	70	2,0	1,26	1,95	2,60	3	11,0	77	30	9
S280-165	289	165	108	68	2,0 / 2,5	1,38 / 1,72	2,08	2,91	3	11,0	80	38	9
S300-180	308	182	117	68	2,0 / 2,5	1,79 / 2,24	2,46	3,66	3	9,0	100	35	7,5
S300-215	310	217	140	86	2,0 / 2,5	2,05	4,00	5,50	3	11,0	100	38	7
S330-215	340	214	130	81	2,0 / 2,5	2,16 / 2,71	3,92	5,51	3	11,0	120	38	7,
S350-190	350	188	134	87	2,0 / 2,5	2,21 / 2,76	4,05	5,75	4	11,0	90	37	7
S370-215	381	214	130	82	2,0 / 2,5 / 3,0	2,52 / 3,15 / 3,78	4,18	6,18	4	11,0	90	38	7
S400-200	400	198	142	93	2,5	3,13	5,26	7,46	4	11,5	100	39	6,5
S450-215	464	214	130	85	2,5	3,40	5,59	8,00	5	11,0	90	38	7
S500-225	500	223	160	104	3,0	6,00	8,34	11,84	5	13,6	100	43	5,5

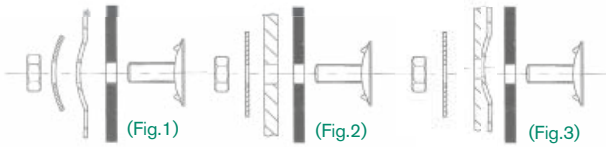
- Type Starco elevator bucket has recessed holes on the back of the bucket and a recess on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).

- Also available in stainless steel.

- non-standard bolt hole pattern available on request.



**SUPER STARCO  
PLASTIC  
ELEVATOR BUCKET**



**TECHNICAL SPECIFICATION - SUPER STARCO PLASTIC ELEVATOR BUCKET**

Type	A	B	H1	H2	T	HDP	PU	Nylon	Capacity (W-L)	Capacity (X-Y)	Holes	D	E	I	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	kgs.	kgs.	Ltr.	Ltr.	No.	mm	mm	mm	Pcs.
SPS80-80HDP-MD**	90	85	63	43	4,0	0,08	0,13	0,11	0,18	0,24	2	9,0	43	18	15
SPS100-90HDP-MD**	110	100	67	44	5,0	0,11	0,18	0,15	0,29	0,38	2	9,0	50	20	14
SPS120-100HDP-MD**	129	110	80	55	5,0	0,15	0,24	0,20	0,46	0,59	2	9,0	67	25	12
SPS130-120HDP-MD**	135	120	85	57	5,0	0,18	0,29	0,24	0,52	0,70	2	9,0	70	25	11
SPS140-120HDP-MD*	145	120	90	62	5,0	0,19	0,30	0,25	0,61	0,80	2	8,5	70	25	10,8
SPS130-130HDP-MD**	146	130	90	60	5,0	0,21	0,34	0,28	0,65	0,87	2	9,0	70	25	10,8
SPS160-140HDP-MD**	172	152	113	78	6,0	0,34	0,54	0,45	1,22	1,58	2	9,0	100	30	8,6
SPS180-140HDP-MD**	187	150	112	77	6,0	0,30	0,48	0,40	1,35	1,77	2	9,0	100	30	8,6
SPS200-150HDP-MD(*)	205	150	112	75	6,0	0,35	0,56	0,47	1,39	1,82	2	9,0	100	32	8,6
SPS300-150HDP-MD**	305	152	115	80	7,0	0,65	1,04	0,87	2,24	2,89	4	9,0	102	32	8,5
SPS200-160HDP-MD*	210	152	115	79	7,0	0,39	0,62	0,52	1,61	2,09	2	9,0	100	32	8,5
SPS240-165HDP-MD**	250	170	132	93	7,0	0,54	0,86	0,72	2,34	3,15	2	11,0	120	35	7,4
SPS280-165HDP(*)	293	170	132	95	7,0	0,67	1,07	0,89	3,00	3,75	3	11,0	80	36	7,4
SPS230-170HDP-MD**	240	175	138	93	7,0	0,61	0,97	0,81	2,40	3,06	2	11,0	120	36	7
SPS280-170HDP-MD**	282	175	138	97	7,0	0,67	1,07	0,89	2,96	3,76	3	11,0	80	37	7
SPS280-180HDP(*)	290	185	140	97	7,0	0,84	1,34	1,12	3,30	4,20	3	11,0	80	36	7
SPS300-180HDP(*)	316	185	140	97	8,0	0,85	1,36	1,13	3,60	4,60	3	11,0	100	36	7
SPS330-180HDP(*) (#)	347	185	140	97	8,0	0,90	1,44	1,20	4,00	5,00	3	11,0	110/120	38	7
SPS350-180HDP(*)	367	186	140	97	9,0	1,12	1,79	1,49	4,10	5,25	3	11,0	120	38	7
SPS300-215HDP-MD**	318	220	168	117	9,0	1,28	1,56	1,40	5,20	6,60	3	11,0	100	50	5,88
SPS330-215HDP(*)	343	220	168	117	9,0	1,30	2,08	1,73	5,73	7,10	3	11,0	120	50	5,88
SPS350-215HDP-MD** (#)	368	220	168	117	9,0	1,45	1,82	1,64	6,12	7,75	3/4	11,0	120/90	50	5,88
SPS370-215HDP(*)	390	220	168	117	9,0	1,45	2,32	1,93	6,42	8,15	4	11,0	90	50	5,88
SPS400-215HDP-MD**	420	220	168	117	9,0	1,54	2,03	1,83	7,00	8,80	4	11,0	100	50	5,88
SPS450-215HDP(*)	470	220	165	115	9,0	1,56	2,50	2,08	7,70	9,70	5	11,0	90	50	5,88
SPS500-215HDP(*)	525	220	168	117	9,0	1,84	2,95	2,46	9,00	11,25	5	11,0	100	50	5,88

- Type Super Starco-MD\* elevator bucket has recessed holes on the back of the bucket and a recess on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt in combination with a concave/domed washer (Fig.1).
- Type Super Starco-MD\*\* elevator bucket has recessed holes on the back of the bucket and no recess on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt in combination with flat washer according to DIN9021. Norway elevator bolt (metric) type STM can't be used with these buckets (Fig.3).
- Type Super Starco-(\*) elevator bucket has flat holes on the back of the bucket and no recess on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt or Norway elevator bolt (metric) type STM in combination with a flat washer according to DIN9021 (Fig.2).

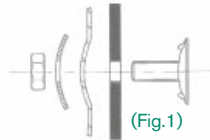
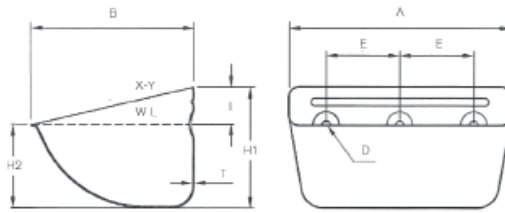
- (#) = slotted holes.

- Available in polyethylene (max. temp +80° C.), Polyurethane (max. temp +80° C.) and nylon (max. temp +110° C.).


- FDA 1935/2004

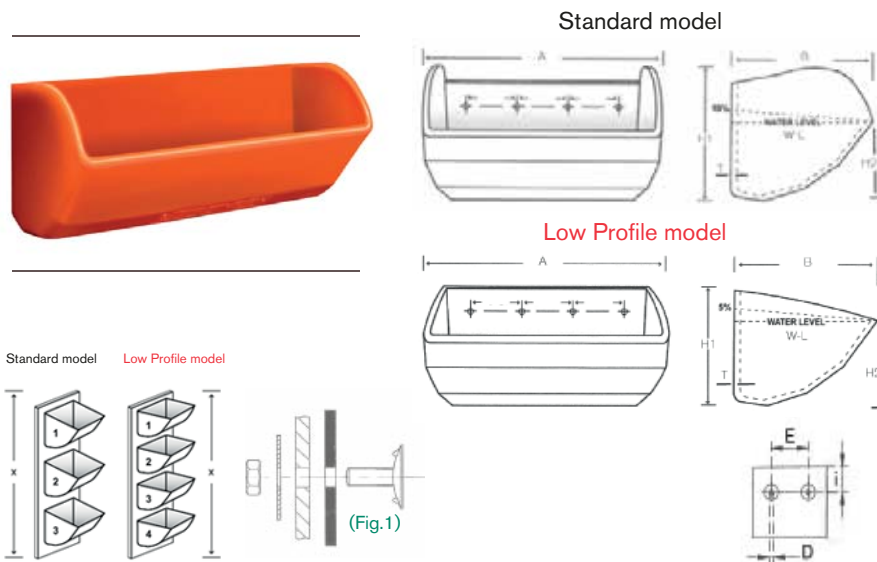


**SUPER STARCO  
STEEL  
ELEVATOR BUCKET**



**TECHNICAL SPECIFICATION - SUPER STARCO STEEL ELEVATOR BUCKET**

Type	A	B	H1	H2	T	 Steel	Capacity (W-L)	Capacity (X-Y)	Holes	D	E	l	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	Ltr.	No.	mm	mm	mm	Pcs.
SPS 80 - 80	85	80	58	39	1,0	0,11	0,18	0,21	2	8,0	43	16	15,00
SPS 100-90	106	89	66	45	1,0	0,12	0,25	0,33	2	8,5	50	20	14,00
SPS 100-100	105	97	78	45	1,0	0,18	0,29	0,42	2	8,5	50	25	12,00
SPS 120-100	125	105	77	53	1,0 / 1,5	0,22 / 0,33	0,44	0,58	2	8,0	67	25	12,00
SPS 140-110	146	112	91	40	1,5	0,43	0,41	0,76	2	8,5	70	25	10,5
SPS 130-120	138	120	90	62	1,2 / 1,5	0,30 / 0,38	0,65	0,83	2	8,5	70	22	10,50
SPS 140-120	146	120	90	62	1,5	0,32	0,65	0,87	2	8,5	70/86(#)	25	10,50
SPS 160-140	166	147	112	78	1,5	0,55	1,20	1,58	2	8,5	100	30	8,60
SPS 180-140	187	147	112	78	1,5	0,61	1,35	1,75	2	8,5	100	30	8,60
SPS 200-150	205	150	112	77	1,5	0,77	1,53	2,00	2	9,0	100/102(#)	32	8,60
SPS 230-160A	233	160	122	85	1,5 / 2,0	0,86 / 1,15	2,05	2,72	3	9,0	70	32	8,00
SPS 230-160B	233	160	122	85	1,5 / 2,0	0,86 / 1,15	2,05	2,72	2	10,5	120	32	8,00
SPS 240-160A	247	165	130	92	2,0 / 3,0	1,35 / 2,00	2,37	3,03	3	10,5	70/77(#)	35	7,40
SPS 240-160B	247	165	130	92	2,0 / 3,0	1,35 / 2,00	2,37	3,03	2	10,5	140	35	7,40
SPS 240-160C	247	165	130	92	2,0 / 3,0	1,35 / 2,00	2,37	3,03	2	10,5	120	35	7,40
SPS 260-165	262	165	130	92	2,0 / 3,0	1,38 / 2,10	2,55	3,28	3	10,5	77/80(#)	35	7,40
SPS 280-165	289	167	132	93	2,0 / 3,0	1,55 / 2,32	2,95	3,78	3	10,5	80	38	7,40
SPS 300-165A	308	165	135	94	2,0 / 3,0	1,65 / 2,50	2,90	3,88	3	9,0	100/104(#)	36	7,20
SPS 300-165B	308	165	135	94	2,0 / 3,0	1,65 / 2,50	2,90	3,88	3	11,0	100	36	7,20
SPS 330-165	340	165	135	97	2,0 / 3,0	1,90 / 2,85	3,50	4,40	3	11,0	110/120(#)	38	7,20
SPS 350-165/A	360	165	135	94	2,0 / 3,0	2,12 / 3,20	3,65	4,50	4	9,0	90	38	7,20
SPS 350-165/B	360	165	135	94	2,0 / 3,0	2,12 / 3,20	3,65	4,50	3	11,0	120	38	7,20
SPS 230-170	235	170	132	93	2,0	1,40	2,40	3,09	2	11,0	120	35	7,00
SPS 200-180	204	182	140	98	2,0	1,28	2,17	2,84	2	11,0	110	44	7,00
SPS 260-180	270	188	140	96	2,0	2,00	3,20	4,10	3	11,0	80	45	7,00
SPS 280-180	290	185	140	97	2,0 / 3,0	1,70 / 2,55	3,30	4,40	3	11,0	80	38	7,00
SPS 300-180/A	308	182	140	95	2,0 / 3,0	1,80 / 2,70	3,50	4,50	3	9,0	100/104(#)	36	7,00
SPS 300-180/B	308	182	140	95	2,0 / 3,0	1,80 / 2,70	3,50	4,50	3	11,0	100	36	7,00
SPS 330-180	340	182	140	98	2,0	2,00	4,00	5,20	3	11,0	110/120(#)	38	7,00
SPS 350-180/A	362	182	140	98	2,0 / 3,0	2,10 / 3,15	4,20	5,40	4	9,0	90	38	7,00
SPS 350-180/B	362	182	140	98	2,0 / 3,0	2,10 / 3,15	4,20	5,40	3	11,0	120	38	7,00



**TIGER-CC®**  
PLASTIC  
ELEVATOR BUCKET



TECHNICAL SPECIFICATION - TIGER-CC® PLASTIC ELEVATOR BUCKET

Standard model	A	B	H1	H2	T	kg HDP	Capacity (W-L +10%)		Holes	D	E	I	Max. buckets per meter	Low Profile model	kg HDP	Capacity (W+10%)		Max. buckets per mtr.
							Ltr.	Ltr.						H1		Ltr.	Pcs.	
Dimensions	mm	mm	mm	mm	mm	kgs.	Ltr.	Ltr.	No.	mm	mm	mm	Pcs.	H1	kgs.	Ltr.	Pcs.	
12 x 8	327	235	225	130	14,0	2,22	6,00	6,61	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	2,00	6,61	5,6	
14 x 8	377	235	225	130	14,0	2,45	7,05	7,75	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	2,21	7,75	5,6	
16 x 8	428	235	225	130	14,0	2,68	8,36	9,20	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	2,41	9,20	5,6	
18 x 8	479	235	225	130	14,0	2,99	9,18	10,10	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	2,69	10,10	5,6	
20 x 8	530	235	225	130	14,0	3,27	10,73	10,73	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,9	172	2,94	10,73	5,6	
20 x 10	533	292	264	170	18,0	5,53	16,47	18,12	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	223	4,98	18,12	4,4	
21 x 10	558	292	264	170	18,0	5,72	17,29	19,03	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	223	5,15	19,03	4,4	
22 x 10	584	292	264	170	18,0	5,90	18,11	19,93	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	223	5,31	19,93	4,4	
23 x 10	609	292	264	170	18,0	6,12	18,93	20,83	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	223	5,51	20,83	4,4	
24 x 10	635	292	264	170	18,0	6,35	19,76	21,75	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	223	5,72	21,75	4,4	
25 x 10	660	292	264	180	18,0	6,53	20,58	22,64	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	223	5,88	22,64	4,4	
26 x 10	685	292	264	180	18,0	6,71	21,40	23,55	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	223	6,04	23,55	4,4	
27 x 10	711	292	264	180	18,0	6,96	22,23	24,46	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	223	6,26	24,46	4,4	
28 x 10	737	292	264	180	18,0	7,18	22,95	25,25	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	223	6,46	25,25	4,4	

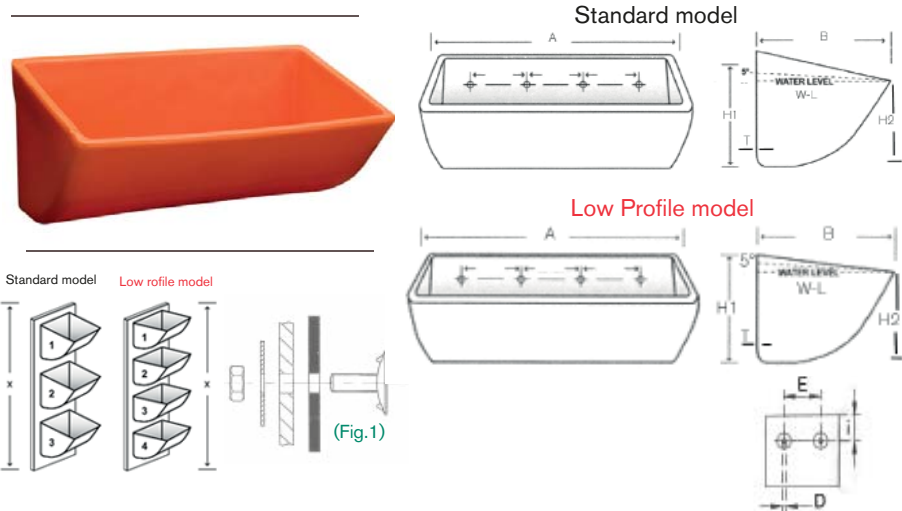
- Type TIGER-CC® elevator bucket has flat holes in the back of the bucket and on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt or Norway elevator bolt (metric) type STM in combination with a flat washer according to DIN9021 (Fig.1). Contact us for advice on the recommended bolt hole pattern.

- Only available in polyethylene color orange (max. temp +80° C.)

- FDA 1935/2004



**TIGER-TUFF®**  
PLASTIC  
ELEVATOR BUCKET



TECHNICAL SPECIFICATION - TIGER-TUFF® PLASTIC ELEVATOR BUCKET

Standard model	A	B	H1	H2	T	kg HDP	kg PU	kg Nylon	Capacity (W-L)	Capacity (W-L +5°)	Holes	D	E	I	Max. buckets per meter	Low Profile model					
																H1	kg HDP	kg PU	kg Nylon	Capacity (W-L +5°)	Max. buckets per meter
Dimensions	mm	mm	mm	mm	mm	kgs.	kgs.	kgs.	Ltr.	Ltr.	No.	mm	mm	mm	Pcs.	H1	kgs.	kgs.	kgs.	Ltr.	Pcs.
6 x 5	168	146	127	80	8,4	0,43	0,54	0,49	1,10	1,21	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,39	0,49	0,44	1,21	9,8
7 x 5	194	146	127	85	8,4	0,50	0,63	0,57	1,31	1,46	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,45	0,57	0,51	1,46	9,8
8 x 5	219	146	127	85	8,4	0,57	0,71	0,65	1,45	1,61	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,51	0,64	0,59	1,61	9,8
8 x 6	219	175	152	100	10,2	0,83	1,34	0,95	2,22	2,47	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	0,75	1,21	0,86	2,47	7,9
9 x 5	244	146	127	85	8,4	0,64	0,80	0,73	1,76	1,99	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,58	0,72	0,66	1,99	9,8
9 x 6	244	175	152	100	10,2	0,89	1,12	1,03	2,46	2,72	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	0,80	1,01	0,93	2,72	7,9
10 x 5	270	146	127	85	8,4	0,71	0,98	0,78	1,99	2,28	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,64	0,88	0,70	2,28	9,8
10 x 6	270	175	152	100	10,2	0,97	1,21	1,11	2,80	3,04	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	0,87	1,09	1,00	3,04	7,9
11 x 5	295	146	127	85	8,4	0,75	0,98	0,90	2,31	2,51	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,68	0,88	0,81	2,51	9,8
11 x 6	295	175	152	100	10,2	1,04	1,30	1,19	3,03	3,29	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	0,94	1,17	1,07	3,29	7,9
11 x 8	302	225	210	145	12,7	2,02	2,73	2,34	5,57	6,14	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,0	172	1,82	2,46	2,11	6,14	5,6
12 x 5	321	146	127	85	8,4	0,85	1,07	0,98	2,62	2,74	cust. spec.	cust. spec.	cust. spec.	cust. spec.	5,6	102	0,77	0,96	0,88	2,74	9,8
12 x 6	321	175	152	100	10,2	1,11	1,38	1,27	3,28	3,62	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	1,00	1,24	1,14	3,62	7,9
12 x 7	327	200	178	115	10,7	1,63	2,03	1,87	4,41	4,89	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	146	1,47	1,83	1,68	4,89	6,6
12 x 8	327	225	210	145	12,7	2,14	2,88	2,46	6,11	6,74	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,0	172	1,93	2,59	2,21	6,74	5,6
13 x 6	346	175	152	100	10,2	1,18	1,47	1,36	3,62	3,94	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,9	127	1,06	1,32	1,22	3,94	7,9
13 x 7	352	200	178	115	10,7	1,75	2,19	2,01	4,79	5,30	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	146	1,58	1,97	1,81	5,30	6,6
13 x 8	352	225	210	145	12,7	2,23	3,02	5,57	6,63	7,31	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,0	172	2,01	2,72	5,01	7,31	5,6
14 x 7	378	200	178	115	10,7	1,88	2,33	2,14	5,17	5,75	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	146	1,69	2,10	1,93	5,75	6,6
14 x 8	378	225	210	145	12,7	2,40	3,24	2,76	7,16	7,89	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,0	172	2,16	2,92	2,48	7,89	5,6
15 x 7	403	200	178	115	10,7	2,03	2,52	2,34	5,68	6,29	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	146	1,83	2,27	2,11	6,29	6,6
16 x 7	429	200	178	115	10,7	2,12	2,63	2,44	6,18	6,80	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,4	146	1,91	2,37	2,20	6,80	6,6
16 x 8	432	235	210	145	12,7	2,43	3,41	2,80	8,40	9,29	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,0	172	2,19	3,07	2,52	9,29	5,6
16 x 10	432	286	254	175	19,1	4,02	X	4,55	13,39	14,35	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	216	3,62	X	4,10	14,35	4,4
18 x 8	483	235	210	135	12,7	2,67	X	3,67	9,30	10,28	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,0	172	2,40	X	3,30	10,28	5,6
18 x 10	483	286	254	175	19,1	4,46	X	5,05	14,91	16,41	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	216	4,01	X	4,55	16,41	4,4
20 x 8	533	235	210	135	12,7	3,00	X	3,41	10,60	11,72	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,0	172	2,70	X	3,07	11,72	5,6
20 x 10	533	286	254	175	19,1	4,79	X	6,54	15,00	16,50	cust. spec.	cust. spec.	cust. spec.	cust. spec.	3,3	216	4,31	X	5,89	16,50	4,4
22 x 8	584	235	210	135	12,7	3,56	X	4,19	11,50	12,42	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,0	172	3,20	X	3,77	12,42	5,6
24 x 8	635	235	210	135	12,7	3,86	X	4,33	12,51	13,62	cust. spec.	cust. spec.	cust. spec.	cust. spec.	4,0	172	3,47	X	3,90	13,62	5,6

- Type TIGER-TUFF elevator bucket has flat holes in the back of the bucket and on the inside of the bucket and needs to be fitted on the elevator belt by using a DIN15237 elevator bolt or Norway elevator bolt (metric) type STM in combination with a flat washer according to DIN9021 (Fig.1).

- Available in polyethylene color orange (max. temp +80° C.), Polyurethane color green (max. temp +80° C. X = not available) and nylon color tan (max. temp +120° C.).

- FDA 1935/2004



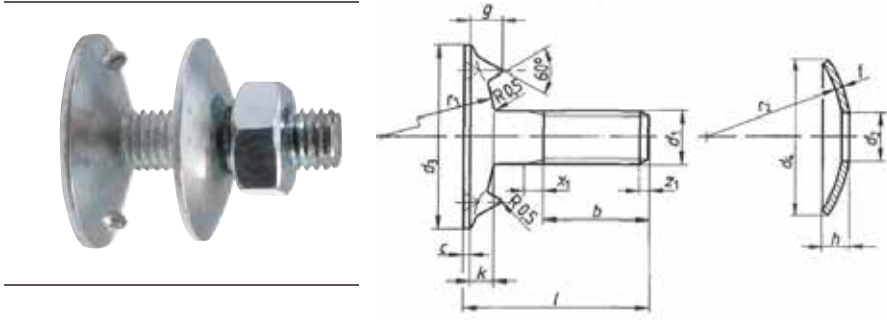





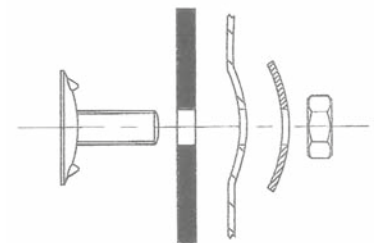
# ELEVATOR BOLTS

components  
for  
elevators

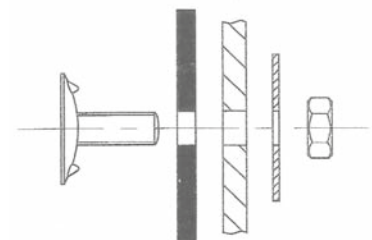
ELEVATOR BOLTS AND ACCESSORIES



TECHNICAL SPECIFICATION - DIN 15237 ELEVATOR BOLTS								
	Bolt head diameter	Allen key	Class	Weight (bolt only)	Packaging	Material	Material	Material
Dimensions (mm)	mm			gram	pcs.	zinc	carbon black	stainless steel
M6 x 25 small bolt head	Ø 18	optional	4.6	7,5	100	standard	optional	optional
M7 x 25	Ø 27	with and without	4.6	17,5	100	standard	optional	optional
M7 x 25 small bolt head	Ø 21	optional	4.6	10,5	100	standard	optional	standard
M8 x 25	Ø 30	with and without	4.6	19,5	100	standard	optional	optional
M8 x 25 small bolt head	Ø 24	optional	4.6	14,5	100	standard	optional	optional
M8 x 30	Ø 30	with and without	4.6	19,0	100	standard	optional	standard
M8 x 30 small bolt head	Ø 24	optional	4.6	16,5	100	standard	optional	optional
M8 x 35	Ø 30	with and without	4.6	21,5	100	standard	optional	standard
M8 x 35 small bolt head	Ø 24	optional	4.6	18,5	100	standard	optional	optional
M8 x 40	Ø 30	with and without	4.6	22,5	100	standard	optional	optional
M8 x 45	Ø 30	with and without	4.6	23,5	100	standard	optional	optional
M10 x 25	Ø 30	optional	4.6	31	100	standard	optional	optional
M10 x 30	Ø 30	with and without	4.6	37,5	100	standard	optional	standard
M10 x 35	Ø 30	with and without	4.6	38,5	100	standard	optional	standard
M10 x 40	Ø 30	with and without	4.6	39,5	100	standard	optional	standard
M10 x 45	Ø 30	with and without	4.6	40,5	100	standard	optional	standard
M10 x 50	Ø 30	with and without	4.6	43,5	100	standard	optional	optional
M10 x 55	Ø 30	with and without	4.6	46,5	100	standard	optional	optional
M12 x 45	Ø 42	with and without	4.6	68	100	standard	optional	optional
M12 x 50	Ø 42	with and without	4.6	70	100	standard	standard	optional
M12 x 55	Ø 42	with and without	4.6	73,5	100	standard	standard	optional
M12 x 60	Ø 42	with and without	4.6	83	100	standard	standard	optional
M12 x 65	Ø 42	with and without	4.6	92,5	100	standard	standard	optional
M12 x 70	Ø 42	with and without	4.6	102	100	standard	standard	optional




Elevator bucket installation with recessed elevator bucket bolt holes

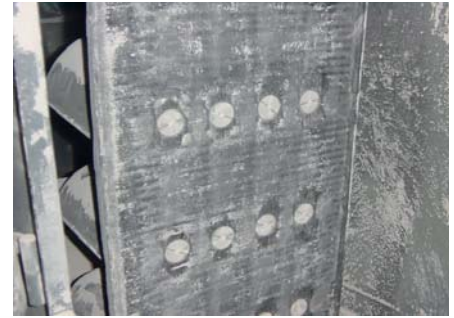


Elevator bucket installation with flat elevator bucket bolt holes


TECHNICAL SPECIFICATION - NORWAY STM (METRIC) ELEVATOR BOLT

	Bolt head diameter	Allen key	Class	Weight (bolt only)	Packaging	Material	Material	Material
Dimensions (mm)	mm			gram	pcs.	passivated	carbon black	stainless steel
M8 x 30	Ø 30	none		19,5	100	standard	optional	standard
M8 x 35	Ø 30	none		21,5	100	standard	optional	standard
M8 x 40	Ø 30	none		23	100	standard	optional	standard

ELEVATOR BOLTS AND ACCESSORIES




TECHNICAL SPECIFICATION - PTM ELEVATOR BOLT

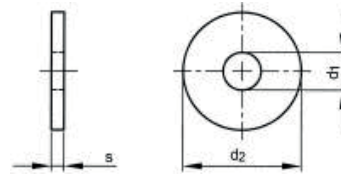
	Bolt head diameter	Allen key	Class	Weight (bolt only)	Packaging	Material	Material	Material
Dimensions (mm)	mm			gram	pcs.	zinc	carbon black	stainless steel
M12 x 55	Ø 50	alleen met	10.9	76,0	100	optioneel	standaard	optioneel




PTM elevator bolt with Ø 50 mm bolt head and allen key

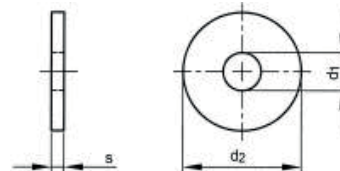
TECHNICAL SPECIFICATION - CONCAVE/DOMED WASHER

	s	d1	d2	Weight	Material	Material
Dimensions	mm	mm	mm	gram	zinc	stainless steel
M6	1,5	8,5	25	5,0	standard	standard
M7	1,5	8,5	25	5,0	standard	standard
M8	1,5	9,0	32	7,0	standard	standard
M10	2,0	12,0	41	15,5	standard	standard
M12	2,0	14,0	51	31,0	standard	standard




TECHNICAL SPECIFICATION - FLAT WASHER DIN9021

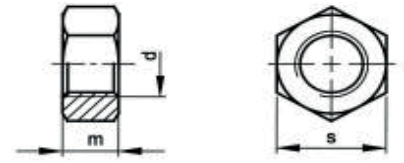
	s	d1	d2	Weight	Materiaal	Material
Dimensions	mm	mm	mm	gram	zinc	stainless steel
M6	1,9	7,5	21,5	5,0	standard	standard
M7	1,9	7,5	21,5	5,0	standard	standard
M8	2,0	8,5	23	6,0	standard	standard
M10	2,1	10,8	29,5	11,0	standard	standard
M12	2,5	13,0	36,5	19,0	standard	standard



TECHNICAL SPECIFICATION - HEXAGON NUT DIN 934


	m	d	s	Weight	Material	Material
						
Dimensions	mm	mm	mm	gram	zinc	stainless steel
M6	5,0	5,0	10,0	3,0	standard	standard
M7	5,0	6,0	11,0	3,0	standard	standard
M8	6,5	7,0	13,0	5,0	standard	standard
M10	8,0	9,0	17,0	11,0	standard	standard
M12	10,0	11,0	19,0	16,0	standard	standard

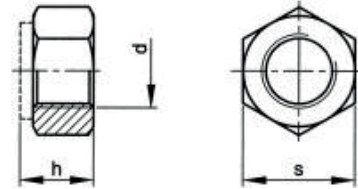
ELEVATOR BOLTS AND ACCESSORIES




DIN15237 elevator bolt with allen key

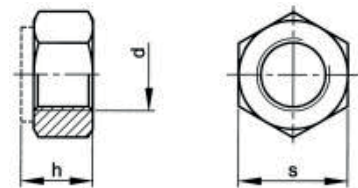
TECHNICAL SPECIFICATION - NYLOCK NUT DIN 985

	h	d	s	Weight	Material	Material
						
Dimensions	mm	mm	mm	gram	zinc	stainless steel
M6	6,0	5,0	10,0	3,0	standard	standard
M7	7,5	5,0	11,0	3,0	standard	standard
M8	8,0	7,0	13,0	5,0	standard	standard
M10	9,8	9,0	17,0	11,0	standard	standard
M12	11,9	11,0	19,0	16,0	standard	standard



TECHNICAL SPECIFICATION - HEAT RESISTANT LOCK NUT DIN 980V

	h	d	s	Weight	Material	Material
						
Dimensions	mm	mm	mm	gram	zinc	stainless steel
M6	6,0	5,0	10,0	5,0	standard	standard
M7	7,5	6,0	11,0	5,0	standard	standard
M8	8,0	7,0	13,0	7,0	standard	standard
M10	9,8	9,0	17,0	13,0	standard	standard
M12	11,9	11,0	19,0	18,0	standard	standard

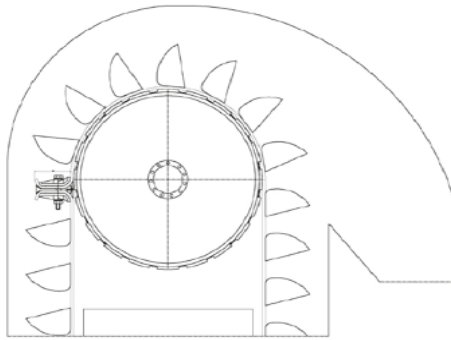


- The elevator bucket bolts en accessories as mentioned in this technical datasheet are our standard dimensions and materials available from stock. Non-standard dimensions en materials are available on request.
- Please contact your Muller Beltex representative to advise you on the correct bucket to belt attachment.



# ELEVATOR BELT FASTENERS

components  
for  
elevators



GRIPWELL, CI & AB  
ELEVATOR BELT  
FASTENERS



TECHNICAL SPECIFICATION - GRIPWELL ELEVATOR BELT FASTENER



- aluminium
- complete with M8 x 35 mm bolts class 4.8 at C/C \*40\* mm, zinc and nylock bolts DIN 985
- weight 109 gram per 100 mm
- suitable for Polysur® elevator belt construction EP 500/3 and 630/4 up to max. 300 mm in width and for use in belt bucket elevators with a height of <25 meter

TECHNICAL SPECIFICATION - MAXI-CI ELEVATOR BELT FASTENER



- zinc steel casting or stainless steel
- segment width 50 mm
- zinc steel casting belt fastener complete with 1 x M12 x 110 mm bolt class 8.8, zinc and 1 x hexagon nut DIN 934 and 1 x nylock nut DIN 985, weight 980 gram per complete segment
- Stainless steel belt fastener complete with 1 x M12 x 110 mm bolt class A4-70 and 1 x stainless steel hexagon nut DIN 934 and 1 x stainless steel nylock nut DIN985, weight 963 gram per complete segment
- suitable for Polysur® elevator belt construction EP 500/3 en 630/4

TECHNICAL SPECIFICATION - MAXI-AB ELEVATOR BELT FASTENER



- manganese bronze
- non-sparking, non-corroding and non-rusting
- segment width 50 mm
- complete with 1 x M14 x 120 mm bolt class 8.8, zinc and 2 x M14 flat washer DIN 9021 and 1 x M14 nylock nut DIN 985
- weight per complete segment 1385 gram
- suitable for Polysur® elevator belt construction EP 630/4, 800/4 and 1000/5



- Please contact your Muller Beltex representative to advise you on the recommended elevator belt fastener.
- Elevator belt fastener type MAXI-CI and MAXI-AB are supplied together with a template-sticker. A sample of this can be seen under Fig. 1. This template-sticker can be fitted on the elevator belt to drill the holes for the belt fastener bolts.

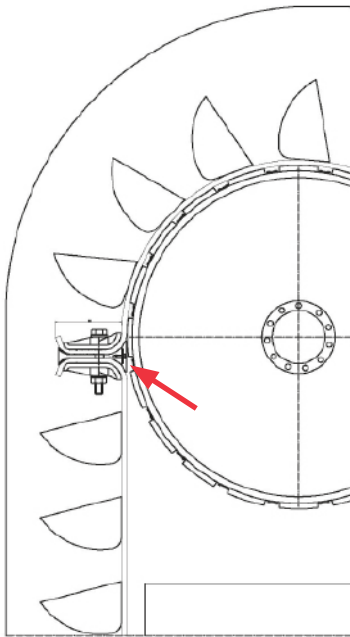
(Fig. 1)





## THE WORKING OF THE MAXI-SUPER IS BASED ON CLAMPING FORCES AND FRICTION

The joint area between the two elevator belt ends is the first area where wear will take place. The exact location where this occurs is where the fastener is caught by the drive pulley. In the sketch below the exact location is indicated by a red arrow. The unique removable rubber wear part that is fitted on the aluminium wedge section of the Maxi-Super wears down rather than the surface of the elevator belt.



The preferred method of making elevator belts endless is by using mechanical belt fasteners and because the belt fastener consists out of segments, it is able to follow the crowning on the surface of the pulleys resulting in quieter and better tracking. The two elevator belt ends are bend off at a 90° angle and the radius in the belt fastener has also been carefully designed for use in combination with the more thicker elevator belts, securing that the belt ends will not bend off to drastically, resulting in stress on this section of the belt.

## MAXI-SUPER

### Material

- High quality aluminium upper, wedge and lower part, 75 mm wide.
- Aluminium wedge section fitted with a removable oil and grease-resistant rubber wear part.
- 1 x DIN 931 hexagon bolt M20 x 140 mm, partially threaded, galvanised, class 8.8 and 1 x DIN 931 hexagon bolt M20 x 120 mm, partially threaded, galvanised, class 8.8.

### Features

- Lightweight. 2210 gram per segment.
- Very strong grip on the belt due to unique gripping teeth in combination with an M20 hexagon bolt, class 8.8.
- Corrosion resistant
- Non-sparking

### Usable on Polysur® belt constructions

- 1000/5 with 3+3 mm rubber covers instead of the standard 2+2 mm rubber covers
- 1250/5 elevator belt construction
- 1600/5 elevator belt construction
- 2000/5 elevator belt construction

### Advantages

- Usable for elevator belt constructions with a thickness of >12 mm due to the radius in the fastener.
- Usable with elevator bucket projection >170 mm.
- Wear of the removable rubber wear piece on the aluminium wedge section instead of wear on the surface of the elevator belt.
- Simple and quick installation due to supplied drilling template sticker.



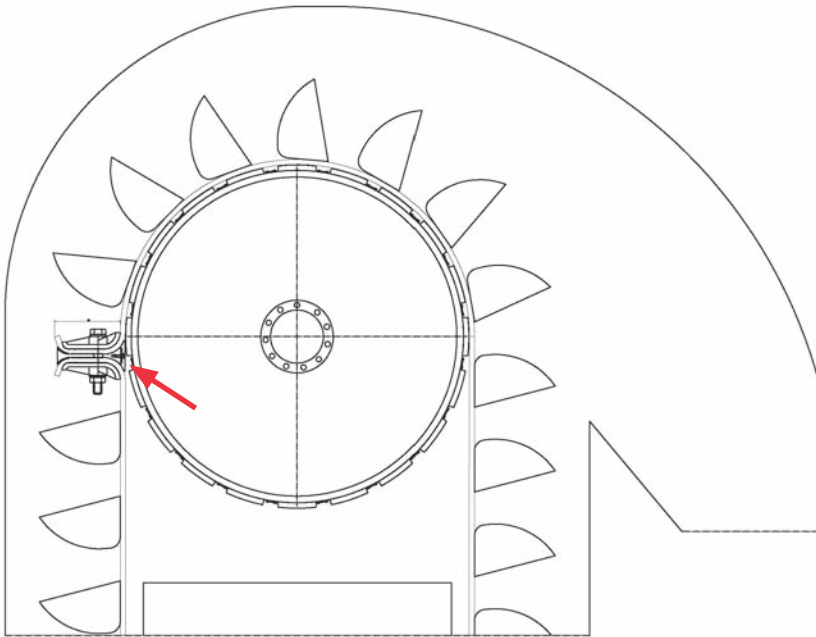
Replaceable oil and grease-resistant wear rubber fitted on the aluminium wedge part of the fastener by two Allen bolts.

**muller|beltex**



## THE WORKING OF THE MAXI-ULTRA IS BASED ON CLAMPING FORCES AND FRICTION

The joint area between the two elevator belt ends is the first area where wear will take place. The exact location where this occurs is where the fastener is caught by the drive pulley. In the sketch below the exact location is indicated by a red arrow. The unique removable rubber wear part that is fitted on the aluminium wedge section of the Maxi-Ultra wears down rather than the surface of the elevator belt.



The preferred method of making elevator belts endless is by using mechanical belt fasteners and because the belt fastener consists out of segments, it is able to follow the crowning on the surface of the pulleys resulting in quieter and better tracking. The two elevator belt ends are bend off at a 90° angle and the radius in the belt fastener has also been carefully designed for use in combination with the more thicker elevator belts, securing that the belt ends will not bend off to drastically, resulting in stress on this section of the belt.

## MAXI-ULTRA

### Material

- High quality aluminium upper, wedge and lower part, 60 mm wide.
- Aluminium wedge section fitted with a removable oil and grease-resistant rubber wear part.
- DIN 931 hexagon bolt M16 x 100 mm, partially threaded, galvanised, class 8.8.
- 2 x M16 flat washer, galvanised.
- DIN 985 Nylock nut M16, galvanised.

### Features

- Lightweight. 25% lighter than our steel Maxi-CI and 47% lighter than our bronze Maxi-AB fasteners.
- Very strong grip on the belt due to unique gripping teeth in combination with an M16 hexagonal bolt, class 8.8.
- Corrosion resistant
- Non-sparking

### Usable on Polysur® belt constructions

- 630/4
- 800/4
- 1000/5

### Advantages

- Usable virtually universally with various belt thicknesses due to the radius in the fastener.
- Usable with elevator bucket projection >120 mm.
- Wear of the removable rubber wear piece on the aluminium wedge section instead of wear on the surface of the elevator belt.
- Simple and quick installation due to supplied drilling template sticker.

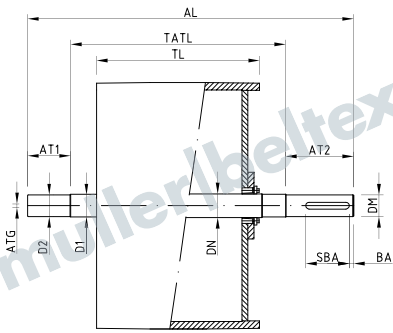


Replaceable oil and grease-resistant wear rubber fitted on the aluminium wedge part of the fastener by two Allen bolts.



# DRIVE AND RETURN PULLEYS

components  
for  
elevators



**DRIVE AND RETURN PULLEYS**

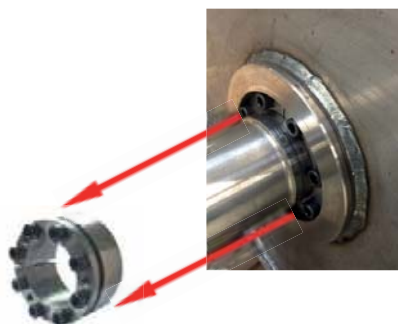
Drive and return pulleys should be properly constructed and be suitable for the type of elevator belt used and the type of product handled.

the pulleys are the only contact areas between the elevator belt and the main equipment. The total weight of elevator belt, buckets and product is supported by the drive pulley. This causes a high surface pressure on the elevator belt section in contact with the pulley. This pressure combined with the drive power has a wearing effect on the elevator belt.

The return pulley functions as a tensioning pulley and also exercises a high pressure on the elevator belt. Both pulleys should be properly constructed to avoid undue wear to the belt.



Shaft showing with 1 step juvenation and with keyway



Shaft to drive pulley attachment by taper locking device

**DRIVE PULLEY**

The drive pulley of a bucket elevator should preferably be a closed pulley offering maximum support for the elevator belt and exercising maximum grip on the elevator belt. Because of the potential problem of belts wandering (off-tracking) in practise drive pulleys are usually equipped with a crown. In general terms, a crown on a pulley should be flat in the centre and should be sloping down towards the rim of the pulley. Please consult a Muller Beltex engineer on the crowing of pulleys.

**Obtaining a quotation for a drive pulley**

To obtain a quotation for a drive pulley, please complete below drawing No.12.00.61 and return it to your Muller Beltex representative.

Please also mention the following 5 points:

- Material of the drive pulley and shaft
- Shaft / drive pulley connection: welded or taper locking device
- Shaft details e.g.: keyway, rejuvenations and shaft mortise
- Pulley lagging: Slide-Lag rubber, vulcanised rubber or heat resistant pulley lagging
- Surface treatment e.g.: protective coating, paint.



Close up of crowning on drive pulley surface

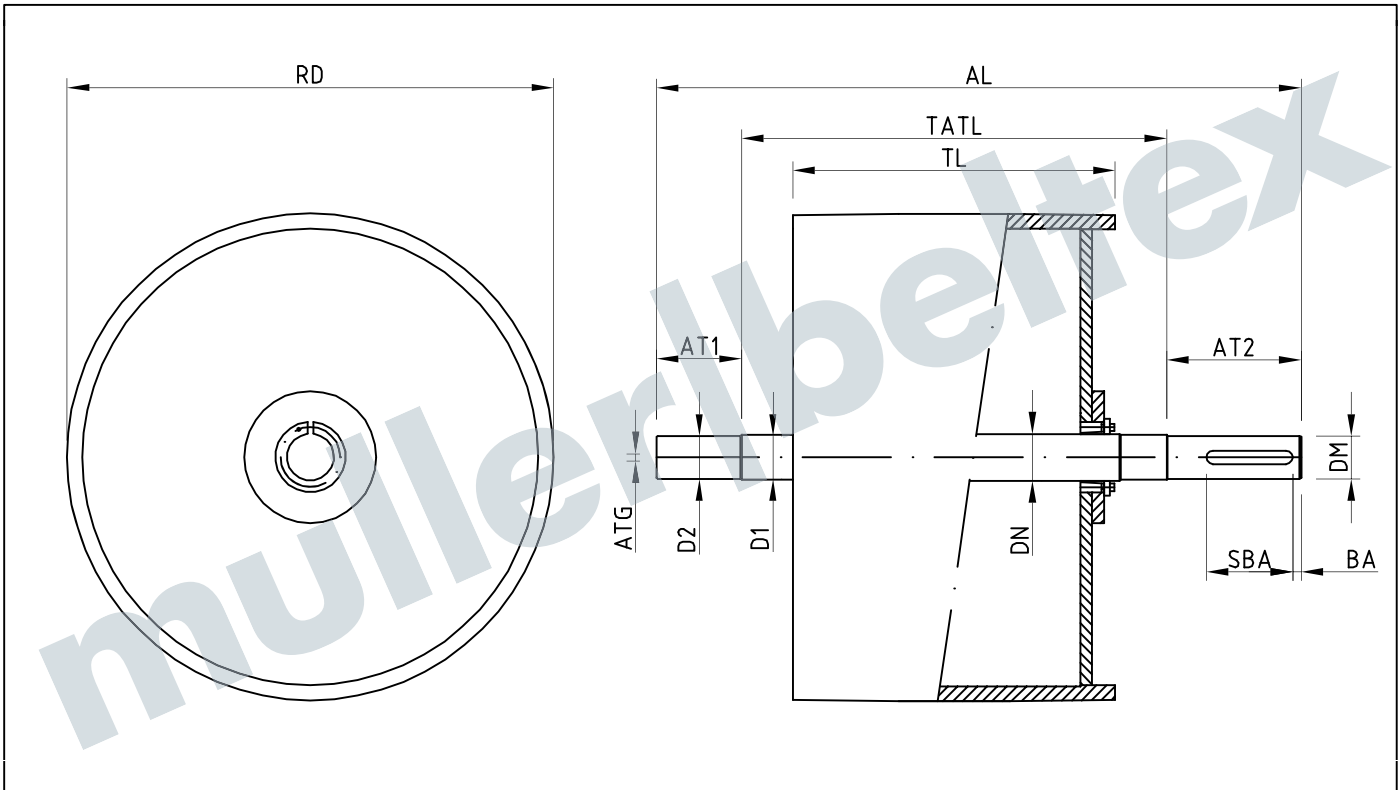


DESIGNED  
ENGINEEREC  
by Muller Beltex

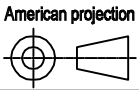
Not legally binding - subject to change and terms. Version 2016 / 1.1

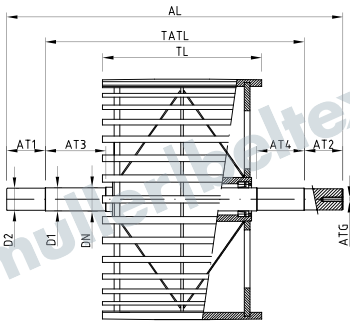
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DRIVE PULLEY



DM				
D2		AL		
D1		TATL		Shaft / Pulley connection
DN		BA		Crowning
TL		SBA		Lagging
RD		AT2		Coating
ATG		AT1		Material

		<p><b>Drive pulley</b></p>		Remarks:	
<p><b>Muller Beltex b.v.</b>                  Ambachtsweg 28a                  Pijnacker The Netherlands                  Tel. +31 (0)15 369 5 444 Fax +31 (0) 15 369 7 864</p>		Scale:	Name	Date	
		Drawn	WvdW		
		Checked			
		Size <b>A4</b>	Drawing nr. <b>12.00.61</b> Sheet: 1/1	Rev. <b>1</b> 2016	
This drawing is property of Muller Beltex b.v.. Reproduction or disclosure to third parties in any form whatsoever is not allowed without explicit written consens of Muller Beltex b.v.					



## BAR PULLEY

The return pulley in bucket elevators should be an open type pulley allowing product to pass through its surface. The bar pulley should preferably have an internal double cone to release trapped product sideways. In order to offer the elevator belt sufficient support, flat bars are recommended instead of round bars and the pitch between the bars should be as small as possible, but large enough to allow the conveyed product to pass through the gap. The bar style return pulley is the pulley of choice when handling powders and granulates.



Bar pulley with internal double cone showing



Shaft to bar pulley attachment by taper locking device



Close up of finished steel bar



Shaft showing with 2 step rejuvenation and with keyway

### Obtaining a quotation for a bar pulley

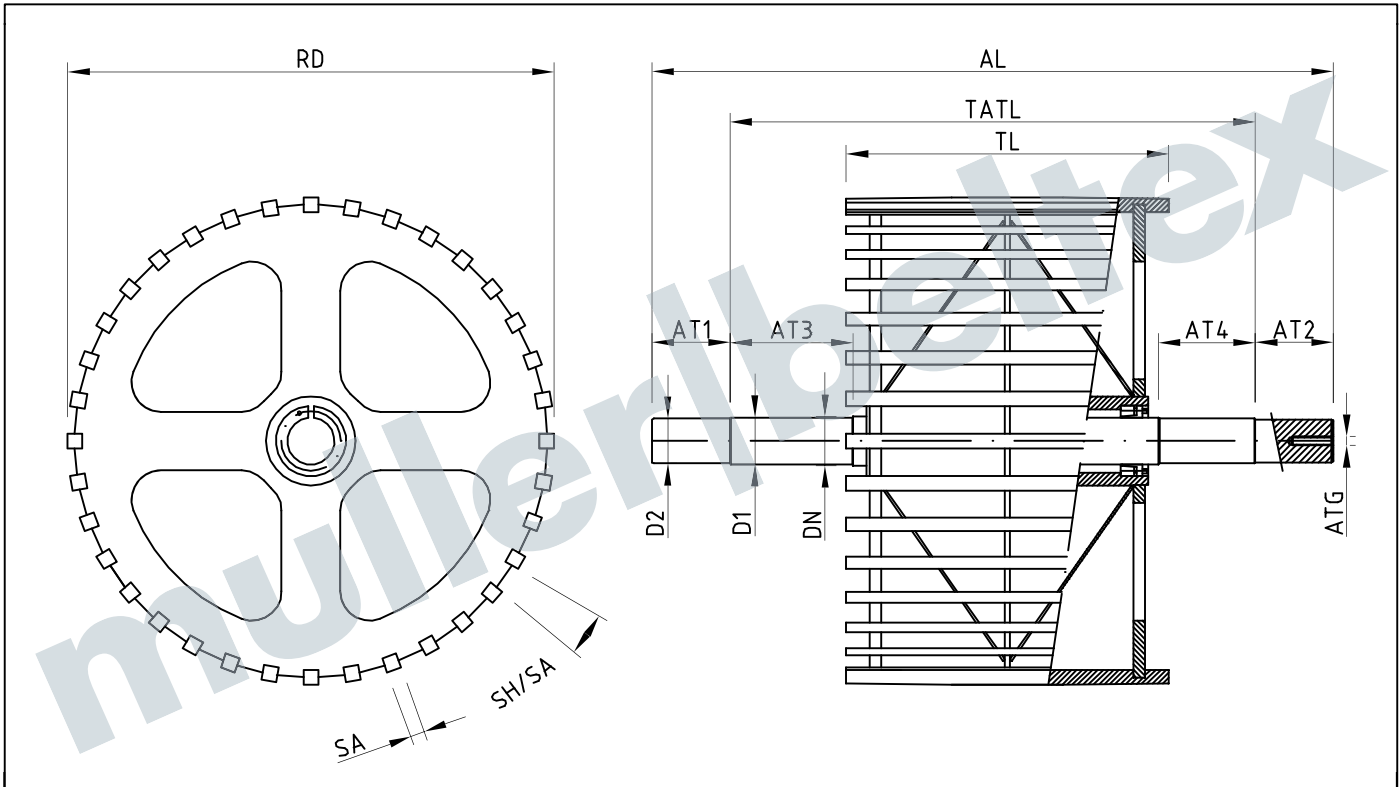
To obtain a quotation for a bar pulley, please complete below drawing No.12.00.62 and return it to your Muller Beltex representative.

Please also mention the following 4 points:

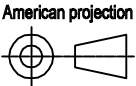
- Material of the bar pulley and shaft
- Shaft / bar pulley connection: welded or taper locking device
- Shaft details e.g.: keyway, rejuvenations and shaft mortise
- Surface treatment e.g.: protective coating, paint.



BAR PULLEY



TATL		D2		
AL		D1		
TL		DN		Shaft / Pulley connection
SH/SA		AT4		Crowning
SA		AT3		Product discharge cone
RD		AT2		Coating
ATG		AT1		Material

	<p><b>Bar pulley</b></p>	Remarks:															
		<table border="1"> <tr> <td>Scale:</td> <td>Name</td> <td>Date</td> </tr> <tr> <td>Drawn</td> <td>WvdW</td> <td>14-8-2012</td> </tr> <tr> <td>Checked</td> <td></td> <td></td> </tr> <tr> <td>Size <b>A4</b></td> <td>Drawing nr. <b>12.00.62</b></td> <td>Rev. <b>1</b></td> </tr> <tr> <td></td> <td>Sheet: 1/1</td> <td>2016</td> </tr> </table>			Scale:	Name	Date	Drawn	WvdW	14-8-2012	Checked			Size <b>A4</b>	Drawing nr. <b>12.00.62</b>	Rev. <b>1</b>	
Scale:	Name	Date															
Drawn	WvdW	14-8-2012															
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Size <b>A4</b>	Drawing nr. <b>12.00.62</b>	Rev. <b>1</b>															
	Sheet: 1/1	2016															
<p><b>Muller Beltex b.v.</b>                  Ambachtsweg 28a                  Pijnacker The Netherlands                  Tel. +31 (0)15 369 5 444 Fax +31 (0) 15 369 7 864</p>		<p>This drawing is property of Muller Beltex b.v. Reproduction or disclosure to third parties in any form whatsoever is not allowed without explicit written consens of Muller Beltex b.v.</p>															

## WING PULLEY

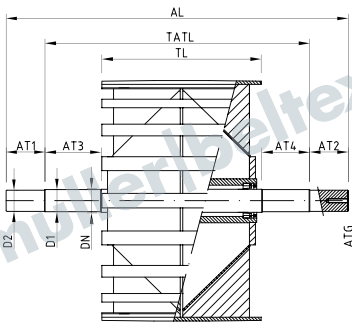
The return pulley in bucket elevators should be an open type pulley allowing product to pass through its surface. The wing pulley should preferably have an internal double cone to release trapped product sideways. In order to offer the elevator belt sufficient support the pitch between the wings should be as small as possible, but large enough to allow the conveyed product to pass through the gap. The wing style return pulley is the pulley of choice when handling coarse lumpy product and product that has the tendency to build.

### Obtaining a quotation for a wing pulley

To obtain a quotation for a wing pulley, please complete below drawing No.12.00.60 and return it to your Muller Beltex representative.

Please also mention the following 4 points:

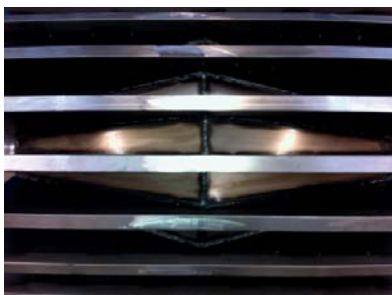
- Material of the wing pulley and shaft
- Shaft / wing pulley connection: welded or taper locking device
- Shaft details e.g.: keyway, rejuvenations and shaft mortise
- Surface treatment e.g.: protective coating, paint.



Close up of the wings that support the elevator belt



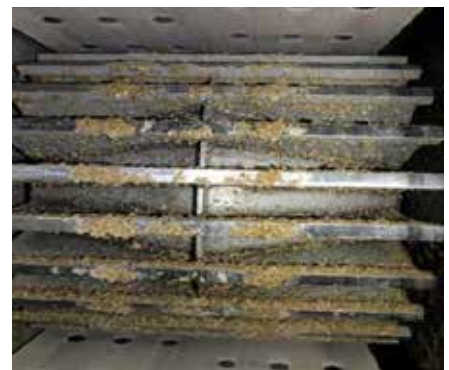
Shaft to wing pulley attachment by taper locking device



Wing pulley close up with the internal double cone showing

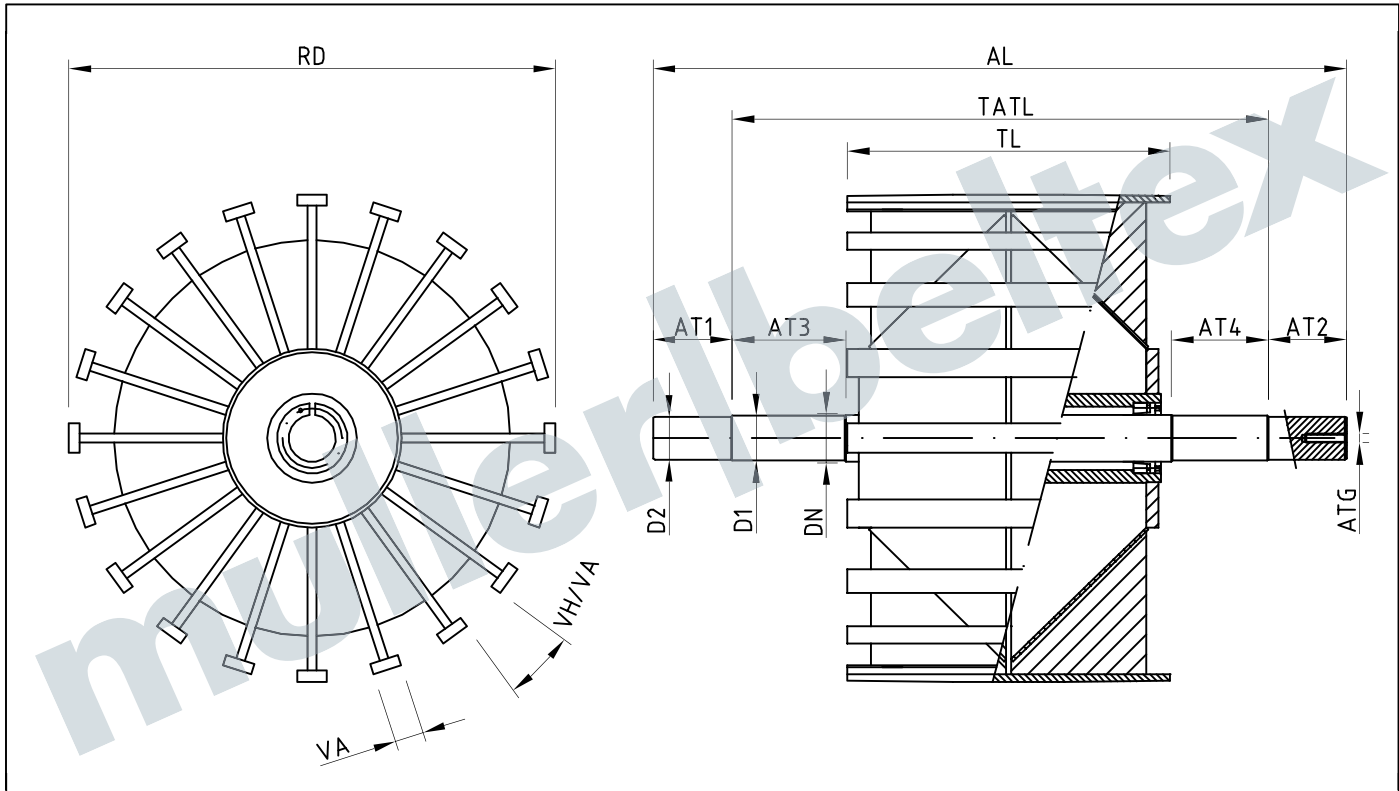


Shaft showing with 2 step rejuvenation and with keyway

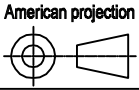




WING PULLEY



TATL		D2		
AL		D1		
TL		DN		Shaft / Pulley connection
VH/VA		AT4		Crowning
VA		AT3		Product discharge cone
RD		AT2		Coating
ATG		AT1		Material

	<p><b>Wing Pulley</b></p>	Remarks:		
		<p><b>Muller Beltex b.v.</b>                  Ambachtsweg 28a                  Pijnacker The Netherlands                  Tel. +31 (0)15 369 5 444 Fax +31 (0) 15 369 7 864</p>	Scale: Drawn Checked	Name WvdW
<p>This drawing is property of Muller Beltex b.v.. Reproduction or disclosure to third parties in any form whatsoever is not allowed without explicit written consens of Muller Beltex b.v.</p>		Size <b>A4</b>	Drawing nr. <b>12.00.60</b> Sheet: 1/1	Rev. <b>1</b> 2016



# PULLEY LAGGING

components  
for  
elevators



### DRIVE PULLEY LAGGINGS

Drive pulleys for elevator belts require in most cases to be covered with a friction layer in order to get a positive grip on the elevator belt and drive the belt without slip. This friction layer is called a lagging.

Muller Beltex offers the following types of drive pulley laggings:

- Diamond profile rubber pulley lagging for cold vulcanising to the pulley face
- Slide-Lag rubber pulley lagging for welding to the pulley face
- Preformed steel segments with rubber, ceramic or sintered metal (METTALLAG) for bolting to the rim of the pulley face

### DIAMOND PROFILE RUBBER LAGGING

SBR or NBR oil- and fat resistant rubber diamond profile pulley lagging, 10 mm thickness with CN glueing layer. Max. operating temperature +90° C.

Standard roll dimensions:  
6.500 mm x 1.400 mm  
10.000 mm x 2.000 mm

Additional components for fitting:

- Primer
- Glue for cold vulcanising
- Finishing paste

Muller Beltex is offering in house or on site fitting of the diamond profile rubber pulley lagging. Please contact your Muller Beltex representative for technical advice or further technical documentation.



Detail of finished seams on rubber pulley lagging with paste



## SLIDE-LAG WELDABLE RUBBER LAGGING

Slide-Lag replaceable pulley lagging is a 12 mm thick profiled rubber vulcanised under high pressure to a 2 mm thick metal segment for fitting in between steel retainer strips welded to the surface of the pulley.

Slide-Lag is available in normal SBR rubber (max. operating temperature +60° C.) and NBR oil and fat resistant, flame retardant ISO 340, 65° Shore A rubber, max. operating temperature +90° C.

Standard dimensions of Slide-Lag pads:  
 Type S = 135 mm x 1.830 mm  
 Type L = 142 mm x 1.830 mm  
 Single and double steel retainer = 1.830 mm  
 Slide-Lag also available cut to the required size acc. to customer specification

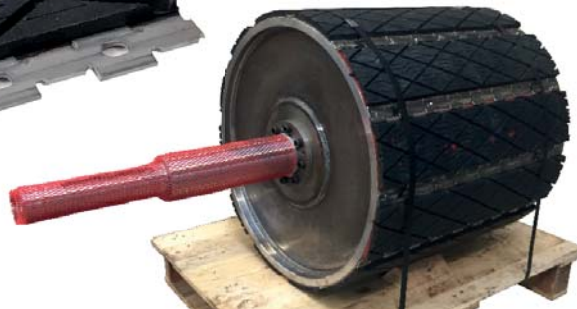
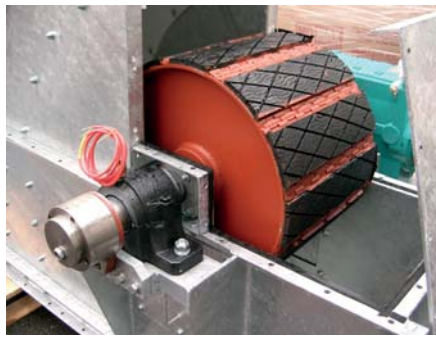


- 1 = 12 mm thick Slide-Lag rubber
- 2 = 2 mm thick steel preformed base
- 3 = drive pulley surface
- 4 = steel double retainer

Slide-Lag is a replaceable pulley lagging. The worn out Slide-Lag pads can be taken out between the two existing steel retainers and a new Slide-Lag pad can be fitted. The Slide-Lag pads can be extra secured between the two steel retainers by welding the 2 mm thick steel base plate to the rim of the drive pulley on each side or fit a counter head screw on each side of the Slide-Lag pad as can be seen on the sketch above.



Close up of the Slide-Lag pulley lagging welded on the surface of the drive pulley



**Example:** calculating a O.D. Ø500 mm diameter drive pulley. Always start with first fitting one single steel retainer and ending with one steel single steel retainer:

$$500 \times 3.14 = \underline{1.570 \text{ mm}}$$

Slide-Lag type S:  
 135 mm x 10 = 1.350mm  
 Double steel retainer:  
 20 mm x 9 = 180 mm  
 Single steel retainer:  
 17,5 mm x 2 = 35 mm

1.350 + 180 + 35 mm = 1.565 mm  
 (1.570 - 1.565 = +5 mm. The outcome should always be plus and as small as possible)

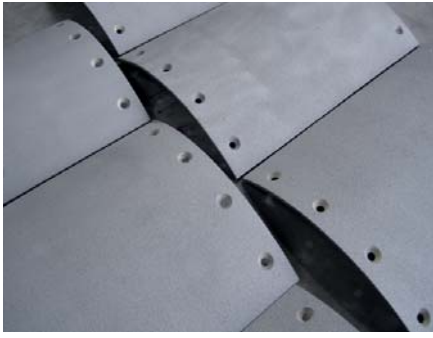
Please note:  
 O.D. Ø500 mm diameter drive pulley with Slide-Lag = O.D. Ø528 mm



Slide-Lag pad type S = 135 mm  
 Slide-Lag pad type L = 142 mm

Double steel retainer      Single steel retainer





## STEEL SEGMENTED PULLEY LAGGING

Preformed 10 mm thick steel segments with rubber, ceramic or sintered metal (METAL-LAG) complete with bolts and nuts for mounting to the rim of the pulley face.

On top of the 10 mm thick steel preformed segments, Muller Beltex offers the following types of drive pulley laggings:

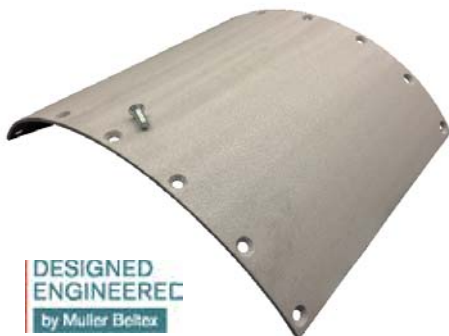
- 10 mm NBR diamond profile rubber (continuous operating temp. +90° C.)
- 10 mm ceramic (continuous operating temp. +140° C.)
- 0,6 mm sintered metal (continuous operating temp. +400° C.)

Please note that for the steel segmented pulley lagging, the segments with rubber and the sintered metal can be supplied with a certain crowning in the steel segments. For the ceramic, we can supply a certain crowning in the ceramic.

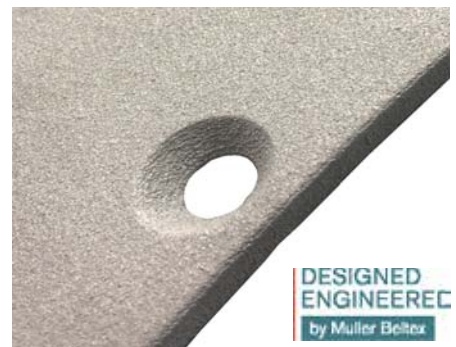
For replacement of an existing pulley lagging with one of the Muller Beltex pulley laggings as mentioned above, please note that the surface of the drive pulley itself should be cylindrical to suit the Muller Beltex preformed steel segments with the pulley lagging on top.

The holes in the new steel segmented pulley lagging will be in conformity with the existing bolt size and bolt hole pattern in the former pulley lagging. A Muller Beltex drawing will be supplied with order.

For further information or technical advice please contact your Muller Beltex representative.



DESIGNED  
ENGINEEREC  
by Muller Beltex



DESIGNED  
ENGINEEREC  
by Muller Beltex

Close up of sintered metal "METALLAG"



**SERVICE  
& ACADEMY** | components  
for  
elevators



## A COMPLETE SERVICE PACKAGE

Our specialists have extensive knowledge and field experience and are involved at an early stage to provide the right solution for you issue. Not only do we supply the best components, by carefully observing each situation, we also secure the mechanical side of your installation. With engineering, advice and supervision we support you wherever needed, from plan to completion. Advise for upgrading your existing belt conveyor and bucket elevators or how to build new ones.



### ADVISE AND MAINTENANCE

Also after completion we service you with a long-term plan for maintenance. To make sure continuity is maintained. We not only unburden you, we often ensure there is a capacity increase or a cost reduction per tonne of processed product too.



### ON-SITE SUPERVISION

Understandably, you expect a competent installation of your purchased components. When your company has an own technical service department we can offer on-site supervision to support and guide your employees during the fitting process, so a proper installation is secured.



### ENGINEERING AND SUPPORT

We gladly advise you on your technical issue and perform capacity calculations and recommendations about upgrading existing elevators or the build of new ones.

Advise and recommendations can also be given about your existing belt conveyors or other bulk transport issues. These are just a few options in our range of possibilities.



### MULLER BELTEX ACADEMY

Our 'Academy' is a knowledge and workshop institute where we invite our business friends for discussion, training and exchange of knowledge. From theory and practice. The purpose is the joint enhancement of knowledge and transfer of expertise to maximise the potential of your plant and create a safe and durable workplace. Workshops on how elevators work, the application of process monitoring (ATEX) and abrasion-resistant liners and making elevator belts endless are among the available options. Interested? Contact us.

MULLER BELTEX  
VISION,  
EXPERTISE  
& QUALITY



**muller|beltex**

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