

Motion technology Lifting technology Product overview by Pfaff-silberblau



Motion technology by Columbus McKinnon – Pfaff-silberblau

For the highest requirements.

The mechanical motion technology created by Columbus McKinnon Corporation has been designed for use in many different industries such as the construction industries, the automotive, logistics, steel and energy industries along with the petrochemical and entertainment industries etc.

Motion technology is hardworking, safe, precise and reliable.

The traditional Pfaff-silberblau brand is positioned under the umbrella of Columbus McKinnon Corporation and offers a

comprehensive range of sophisticated electromechanical components of linear motion technology, with screw jacks, lifting columns and threaded drives.

This unique portfolio, means we can provide solutions to meet our customer's demands.

Our customers will profit from the innovative solutions that we provide. Columbus McKinnon is a global market leader and is always nearby to provide service and advice.



Service: We offer professional support on site on request.

Motion technology

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Motion technology

Overview screw jacks



Type 1: Lifting screw



Type 2: Rotating screw

Standard worm gear screw jack SHE

14 different sizes

Lifting capacities from 5 to 2000 kN

Input speeds up to 1500 min⁻¹

- Self-locking trapezoidal screw
- Grease-lubricated configuration
- Worm gear pairs in two ratio steps (normal „N“ and slow „L“)
- Worm-drive shaft case-hardened and ground
- Robust construction for slow and medium lifting speeds



Possible usage according to directive 2014/34/EU (ATEX)



Type 1: Lifting screw



Type 2: Rotating screw

Stainless worm gear screw jack SHE-S

4 different sizes

Lifting capacities from 30 to 200 kN

Input speeds up to 1500 min⁻¹

- Self-locking trapezoidal screw
- Complete stainless design
- Grease-lubricated configuration
- Worm gear pairs in two ratio steps (normal „N“ and slow „L“)
- Worm-drive shaft case-hardened and ground



Possible usage according to directive 2014/34/EU (ATEX)



Type 1: Lifting screw



Type 2: Rotating screw

Stainless worm gear screw jack with swivel brackets SSP

4 different sizes

Lifting capacities from 50 to 250 kN

Input speeds up to 1500 min⁻¹

- Self-locking trapezoidal screw
- Completely stainless design
- Grease-lubricated configuration
- Worm gear pairs in two ratio steps (normal „N“ and slow „L“)
- Worm-drive shaft case-hardened and ground



Possible usage according to directive 2014/34/EU (ATEX)

Motion technology

Overview screw jacks

Standard worm gear screw jack MERKUR

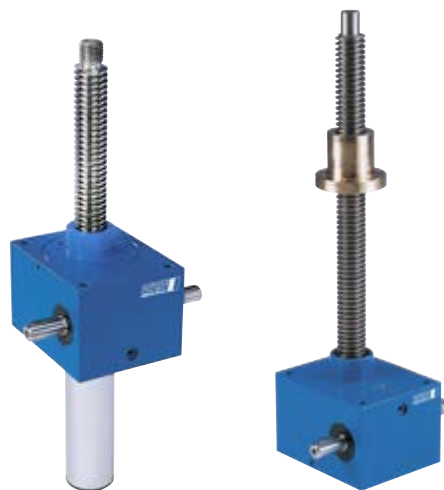
9 different sizes

Lifting capacities from 2.5 to 500 kN

Input speeds up to 1500 min⁻¹

- All-round configuration permits easier alignment
- Conforms to European manufacturers' standards for cubic shaped worm gear screw jacks
- Self-locking trapezoidal screw
- Grease-lubricated configuration
- Worm gear pairs in two ratio steps (normal „N“ and slow „L“)

Possible usage according to directive 2014/34/EU (ATEX)



Type 1: Lifting screw

Type 2: Rotating screw

High-performance worm gear screw jack HSE

8 different sizes

Lifting capacities from 5 to 1000 kN

Input speeds up to 3000 min⁻¹

- Self-locking trapezoidal screw
- Separate lubrication circuits: Tr screw with grease-lubrication and worm gears with oil lubrication
- Worm gear pairs in two ratio steps (normal „N“ and slow „L“)
- Worm-drive shaft case-hardened and ground
- Patented gearing construction with different heat zones for medium and high lifting speeds

Possible usage according to directive 2014/34/EU (ATEX)



Type 1: Lifting screw

Type 2: Rotating screw

Quick lifting screw jack SHG

4 different sizes

Lifting capacities from 15 to 90 kN

Input speeds up to 3000 min⁻¹

- Self-locking trapezoidal screw
- Separate lubrication circuits: Tr screw grease-lubrication and bevel gear boxes with splash lubrication
- Bevel gear boxes in two ratio steps (2:1 and 3:1 as required)
- Gearing is case-hardened and ground
- Spiral bevel gear boxes for high lifting speeds, high efficiency ratings and long service life



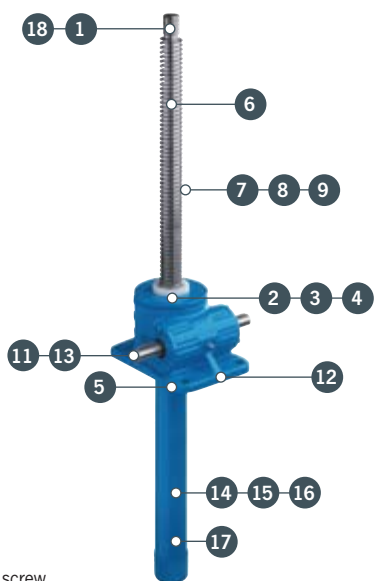
Type 1: Lifting screw

Type 2: Rotating screw

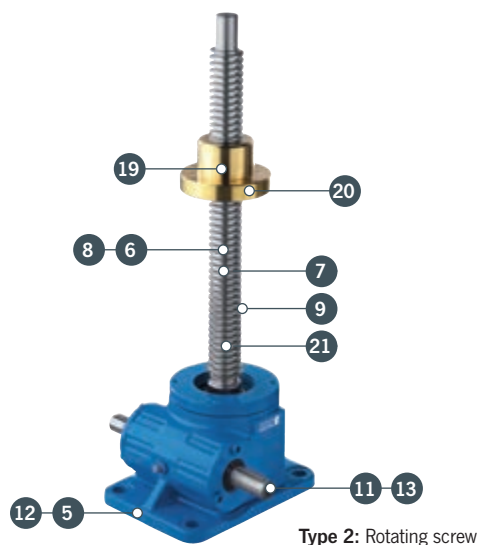


Motion technology

Standard worm gear screw jacks SHE



Type 1: Lifting screw

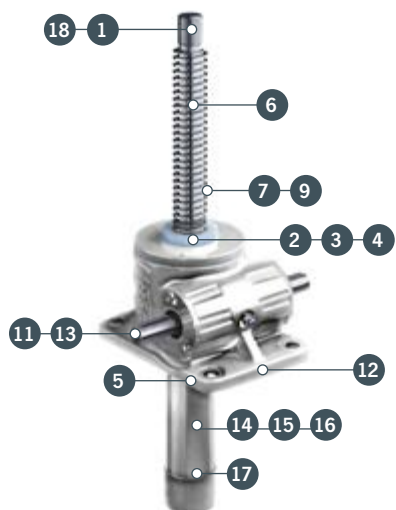


Type 2: Rotating screw

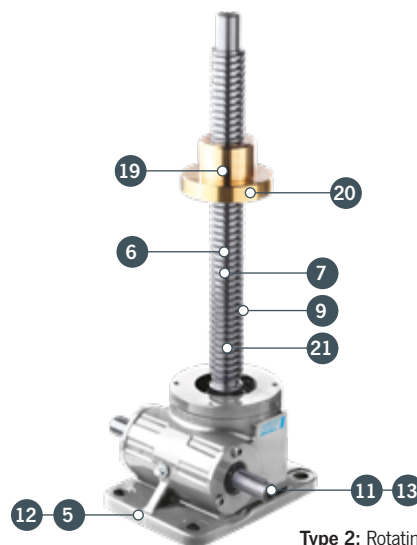
Equipment SHE range							
Number	Symbol	SHE Type 1	SHE Type 2	Number	Symbol	SHE Type 1	SHE Type 2
1		•		12		•	•
2		•		13		•	•
3		•		14		•	
4		•		15		•	
5		•	•	16		•	
6		•	•	17		•	
7		•	•	18		•	
8		•	•	19			•
9		•	•	20			•
10				21			•
11		•	•				

Motion technology

Stainless worm gear screw jacks SHE-S



Type 1: Lifting screw



Type 2: Rotating screw

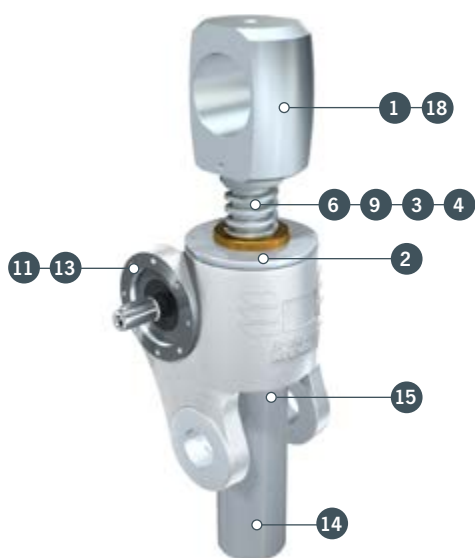
Equipment SHE-S range

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2		•		13		•	•
3		•		14		•	
4		•		15		•	
5		•	•	16		•	
6		•	•	17		•	
7		•	•	18		•	
8				19			•
9		•	•	20			•
10				21			•
11		•	•				

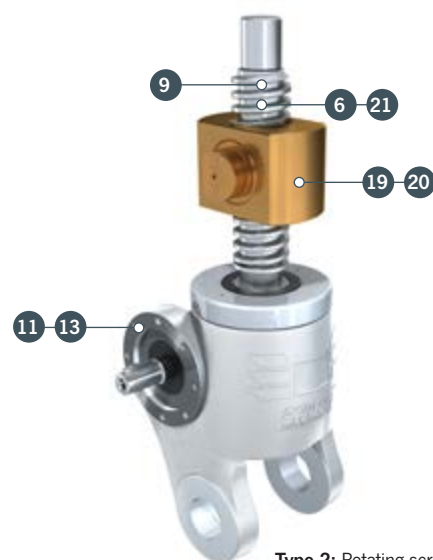


Motion technology

Stainless worm gear screw jacks with swivel brackets SPP



Type 1: Lifting screw



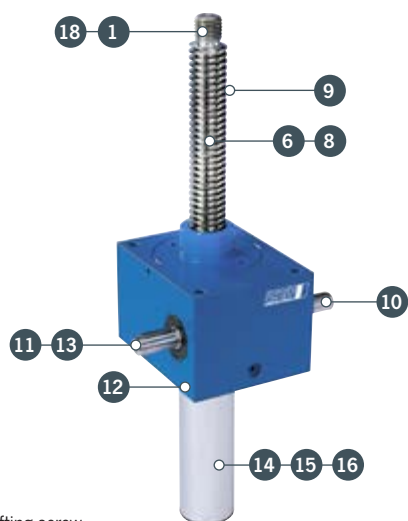
Type 2: Rotating screw

Equipment of stainless SSP range

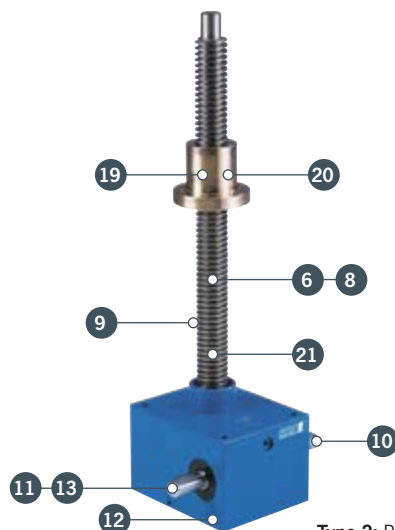
Number	Symbol	SSP Type 1	SSP Type 2	Number	Symbol	SSP Type 1	SSP Type 2
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2		•		13		•	•
3		•		14		•	
4		•		15		•	
5				16			
6		•	•	17			
7				18		•	
8				19			•
9		•	•	20			•
10				21			•
11		•	•				

Motion technology

Standard worm gear screw jacks MERKUR



Type 1: Lifting screw



Type 2: Rotating screw

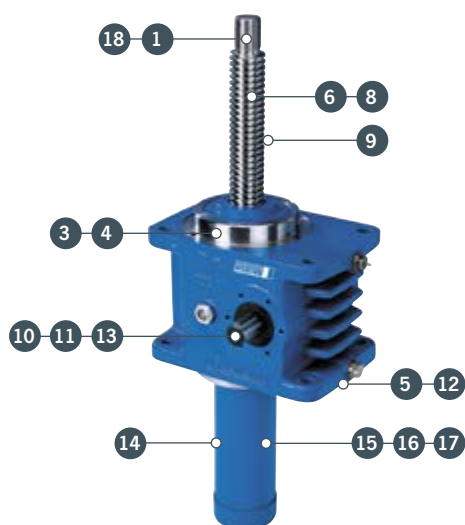
Equipment MERKUR range

Number	Symbol	MERKUR Type 1	MERKUR Type 2	Number	Symbol	MERKUR Type 1	MERKUR Type 2
1		•		12		•	•
2				13		•	•
3				14		•	
4				15		•	
5				16		•	
6		•	•	17			
7				18		•	
8		•	•	19			•
9		•	•	20			•
10		•	•	21			•
11		•	•				

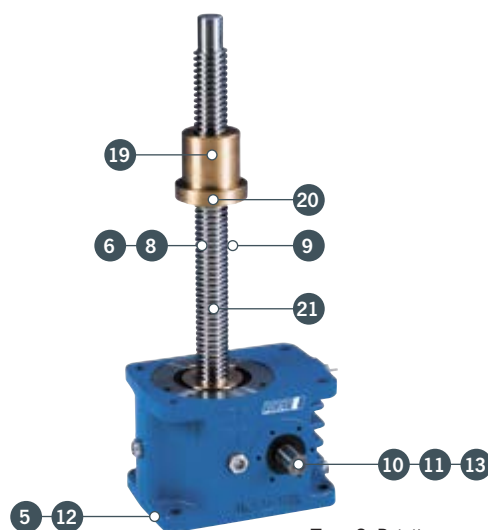


Motion technology

High-performance worm gear screw jacks HSE



Type 1: Lifting screw

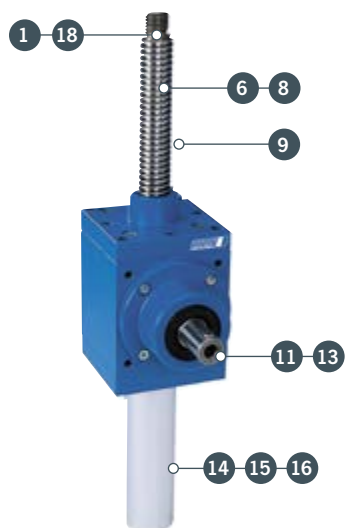


Type 2: Rotating screw

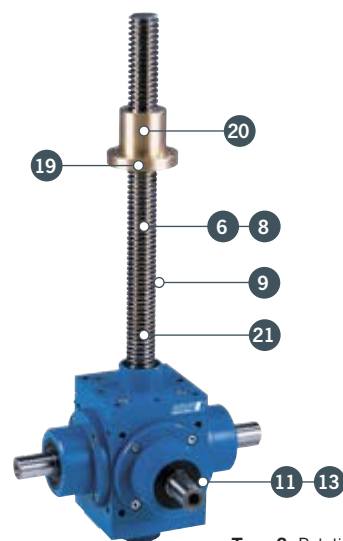
Equipment HSE range				Equipment HSE range			
Number	Symbol	HSE Type 1	HSE Type 2	Number	Symbol	HSE Type 1	HSE Type 2
1		•		12		•	•
2				13		•	•
3		•		14		•	
4		•		15		•	
5		•	•	16		•	
6		•	•	17		•	
7				18		•	
8		•	•	19			•
9		•	•	20			•
10		•	•	21			•
11		•	•				

Motion technology

Quick lifting screw jacks SHG



Type 1: Lifting screw



Type 2: Rotating screw

Equipment SHG range

Number	Symbol	SHG Type 1	SHG Type 2	Number	Symbol	SHG Type 1	SHG Type 2
1		•		12			
2				13		•	•
3				14		•	
4				15		•	
5				16		•	
6		•	•	17			
7				18		•	
8		•	•	19			•
9		•	•	20			•
10				21			•
11		•	•				



Motion technology

Overview linear actuators



Electromechanical linear actuators ELA

4 different sizes with four different transmissions each

Maximum dynamic axial loads from 0.55 kN to 13 kN

Lifting speeds up to 84 mm/s

- Three-phase motor AC (standard) with IEC-flange B14, Optional direct current motor or alternating current motor
- Optional with brake
- Self-locking trapezoidal screws, optional ball screw
- Worm gear with different reductions
- Service life lubrication under normal operating conditions from high-quality grease and encapsulated design

Possible usage according to directive 2014/34/EU (ATEX)



High-performance linear actuators HLA

4 different sizes

Maximum dynamic axial loads from 12.5 kN to 100 kN

Lifting speeds up to 10 m/min

- Low-maintenance from high-quality grease and encapsulated design
- Possible use in multi-screw lifting systems
- Several single drives can be synchronized
- Comprehensive accessories range
- Attachment options for any flange connection capable gear motor in solid or hollow shaft design

Possible usage according to directive 2014/34/EU (ATEX)



Electromechanical screw rams ALS/R

4 different sizes

Maximum dynamic axial loads from 12.5 kN to 100 kN

Lifting speeds up to 10 m/min

- Self-locking trapezoidal screw
- Attachment options for any flange connection capable gear motor in solid or hollow shaft design
- Encapsulated design with a long-term lubrication by high-quality grease
- Comprehensive accessories range

Possible usage according to directive 2014/34/EU (ATEX)

Motion technology

Overview lifting columns

Lifting column PHOENIX

Variable modular construction system

Lifting speeds up to 250 mm/s

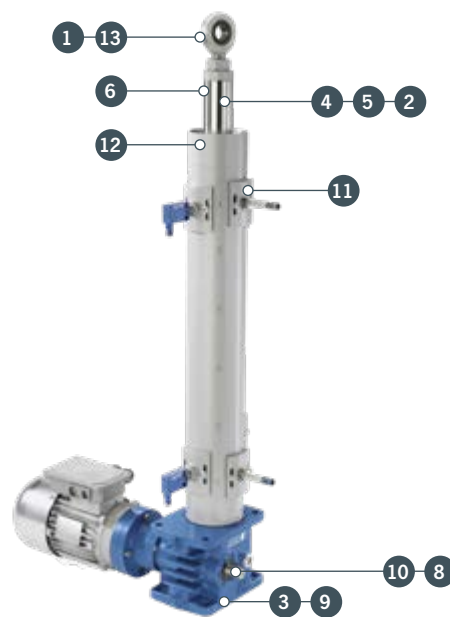
High compression and tensile forces up to 25 kN

- Integrated linear guide
- Enclosed and low-maintenance design
- Eccentric load application permitted
- Self-locking mechanism at single-start trapezoidal screw in standstill
- Single- and multi-stage design
- Short safety nut at single-stage design with trapezoidal screw



Motion technology

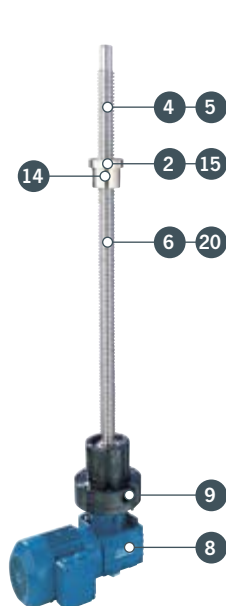
Linear actuators ELA and HLA



Equipment linear actuators ELA and HLA			
Number	Symbol	ELA	HLA
1		•	•
2			•
3			•
4		•	•
5		•	•
6		•	•
7		•	
8			•
9			•
10		•	•
11		•	•
12		•	•
13		•	•
14			
15			
16		•	
17		•	
18		•	
19		•	
20			

Motion technology

Electromechanical screw rams ALS/R and lifting column PHOENIX



Equipment electromechanical screw rams ALS/R and lifting column PHOENIX

Number	Symbol	ALS/R	PHOENIX	Number	Symbol	ALS/R	PHOENIX
1		•		11		•	•
2		•	•	12		•	•
3				13		•	
4		•	•	14		•	
5		•		15		•	
6		•		16			
7				17			
8		•	•	18			
9		•		19			
10			•	20		•	



Motion technology

Accessories



Bevel gear boxes

- 3 different series
- Output torques up to 8500 Nm
- Hardened and ground spiral gear tooth system in pairs
- Configuration can be delivered with input-side hollow shaft and IEC-flange
- Ratios 1:1 to 6:1



Screw protection covers

- To protect the screw from contamination
- Different materials for different application areas
- Polygonal folds or round design
- Temperature max. up to 200° C



Couplings

- Torques up to 3600 Nm
- Temperature range up to 90° C
- Different shore hardness of the plastic star 92°/95°/98° Shore



Connecting shafts

- Standard length up to 6 m
- Special lengths > 6 m possible
- Rotary speeds up to 3000 min⁻¹
- Temperature range up to 150° C
- Torques 900 Nm

Motion technology

Screw drives: Screws and nuts



Trapezoidal screw TGS-R, rolled design

Type	Standard	Stainless
Thread	Metric ISO-trapezoidal thread according to DIN 103-7e	Metric ISO-trapezoidal thread according to DIN 103-7e
Diameter	12 to 80 mm	12 to 50 mm
Pitch	3 to 16 mm	3 to 8 mm
Number of thread	Single- or multi-start thread	Single-start thread
Thread direction	Right-handed thread, single-start also left-handed thread	Right-handed thread
Manufacture length	< Tr30x6 to 3000 mm > Tr30x6 to 5500 mm	Standard 3000 mm
End processing	According to customer requirement	According to customer requirement

Trapezoidal threaded nuts (selection examples):



Ready-to-install flange nut



Flange blank nut



Travelling nut with trunnion



Ball screw KGS-R, rolled design

Type	KGS-R
Thread	Gothic profile (pointed profile)
Diameter	12 to 80 mm
Pitch	5 to 50 mm
Number of thread	Single- or multi-start thread
Thread direction	Right-handed thread, left-handed thread partially possible
Manufacture length	KGS-12x05: 2500 mm From KGS-16x05: 3000 mm From KGS-20x05: 5500 mm (longer dimensions on request)
Accuracy	T7
End processing	According to customer requirement

Ball screws nuts (selection examples):



DIN Flange nut



Flange nut



Cylindrical nut



Lifting technology by Columbus McKinnon – Pfaff-silberblau

Lifting technology: made ready for strong loads.

Columbus McKinnon lifting technology stands for innovative technology for efficient lifting, pulling and positioning of loads. The different designs and options of our rope winches are as diverse as their many uses. Columbus McKinnon lifting technology has proved its worth in industrial and works well under extreme climates, e.g. offshore. Classical applications are also in goods movement in trade and in stage technology and theaters etc.

Pfaff-silberblau have developed the diversity of wire rope winches over decades. Today, the portfolio of manual rope winches for standard applications goes all the way to electro-motor-powered

winches. The range of carrying capacity is large. All products share their efficient force transmission, safe operation and high-quality processing.

Columbus McKinnon always keeps an eye on market development and implements products according to current and individual customer demands. More importantly, Columbus McKinnon is in constant communication with customers this promotes improvements on parts and on the modular product range. All of this ensures that the Columbus McKinnon and the Pfaff-silberblau brands will remain synonymous with lifting, turning and moving well into the future.



Service: We offer professional support on site on request.

Lifting technology

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Lifting technology

Electrical wire rope winches

Electrical wire rope winch BETA SL, 250 – 2000 kg

Equipment and processing

- Maintenance-free worm gear pairs or low-maintenance spur gear with milled and ground gears – running in oil bath
- Very quiet running by diagonal interlock
- Electrically released spring-applied disk brake
- Duty ratio S3 – 40 %
- Range of temperature: -20 °C – +40 °C
- Powerful three-phase motor for multi-range voltage 380 – 420 V / 50 Hz or 440 – 460 V / 60 Hz
- Delivery time 1 week
- Motor protection type IP 55
- Electronic overload protection as of 1250 kg lifting load as standard
- Grooved rope drum
- Large wire rope capacity
- According to the accident prevention provisions DGUV V54 (BGV D8)

Options

Size	Capacity	Control	Mechanical
SL0	250 kg	Control pendant	./.
SL1	500/630 kg	Control pendant or frequency converter	Pressure roller or slack rope switch, alternatively combination of pressure roller and slack-rope switch
SL2	980/1250 kg	Control pendant or frequency converter	Pressure roller or slack rope switch, alternatively combination of pressure roller and slack-rope switch
SL3	2000 kg	Control pendant or frequency converter	Pressure roller or slack rope switch, alternatively combination of pressure roller and slack-rope switch



Option: pressure roller



Option: slack rope switch



Option: control pendant



Option: frequency converter



BETA SLO



BETA SL1 – SL3

Lifting technology

Electrical wire rope winch THETA

Electrical wire rope winch THETA, 100 kg

The compact Pfaff-silberblau THETA series offers reliable safety, besides being suitable for a wide range of applications and very easy to use. Its high safety standard is achieved, amongst other things, by a mechanical double safety drum brake, separate from the drive, for safe and firm holding of the load.

Factory-specified features make this safety electric wire rope winch interesting for many applications, such as construction sites, in building technology or sports facilities - and thus also for individuals, craftsmen, local councils and construction yards. The Pfaff-silberblau THETA wire rope winch is operated with a supply voltage of 230 V (50 Hz).

Equipment and processing

- Compact design
- Two independently acting brakes
- Ready for use with control/limit switch
- Connection cable with plug
- Test and maintenance friendly
- Made in Germany
- Available from stock
- In accordance with the accident prevention regulations DGUV V 54 (BGV D8) with special release for static suspension of loads above persons incl. expert test certificate



Lifting technology

Electrical wire rope winches

Electrical wire rope winch BETA EL, 320 – 7500 kg

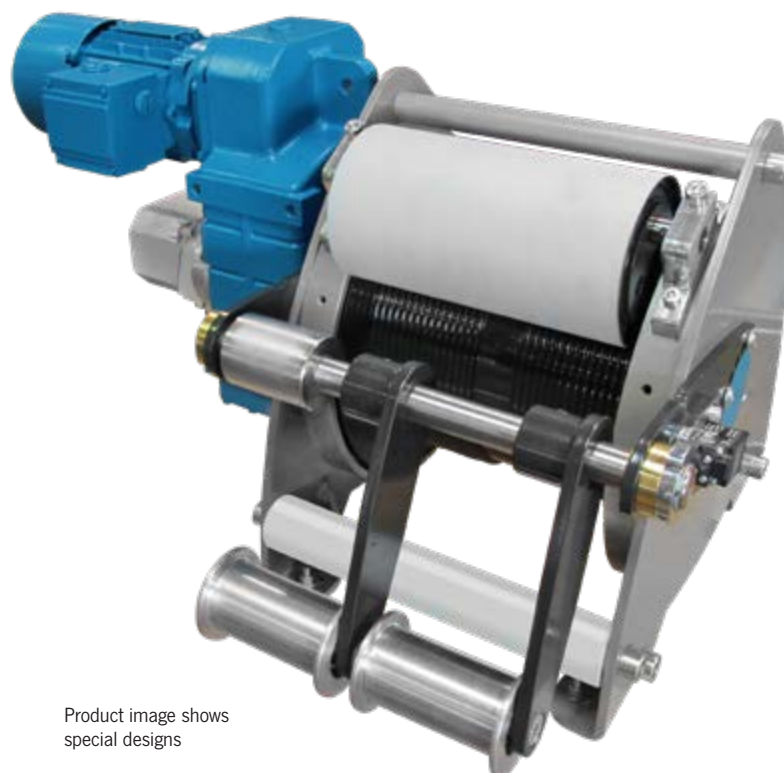
Equipment and processing

- Maintenance-free worm gear pairs or low-maintenance spur gear with milled and ground gears – running in oil bath
- Very quiet running by diagonal interlock
- Electrically released spring-applied disk brake
- Duty ratio S3 – 40 %
- Contactor control 42 V
- Powerful three-phase motor for multi-range voltage 380 – 420 V / 50 Hz or 440 – 460 V / 60 Hz
- Motor protection type IP 55
- Grooved wire rope drum
- Large wire rope capacity
- 2 rope fasteners for variable rope direction
- Modular construction system with many versions
- Electronic overload protection as of 1000 kg lifting load as standard
- According to the accident prevention provisions DGUV V54 (BGV D8)

Additional equipment and options

- External operation via control pendant / radio
- Gear limit switch, adjustable
- Slack rope switch
- Rope pressure rollers
- Special wire rope drums for multi-rope operation
- Drum extensions for higher stroke travel
- Special preservation
- Other operating voltages
- Other motor protection types
- Absolute and incremental encoders
- Control with frequency converter for continuously adjustable variable speeds

 **Explosion-protected design available**



Product image shows special designs

Lifting technology

Electrical wire rope winches

Electrical wire rope winch BETA EL BGV D8 PLUS/DGUV V 17/18 (BGV C1), 160 – 1200 kg

Equipment and processing

- Tensile loads from 160 – 1200 kg
- Additional equipment as in the rope winch BETA EL

Shopping gallery, sport halls or churches: BETA EL DGUV V 17/18 offers the solution for safely positioning decorations.

Additionally, BETA EL DGUV V 17/18 is also used in theaters together with the tried and tested DELTA-theater winch.

Electrical wire rope winch BETA EL DGUV V 17/18 also available in design BGV D8 PLUS.

We will gladly offer your individual solution on request as well.



Image source: Stadthalle Gersthofen

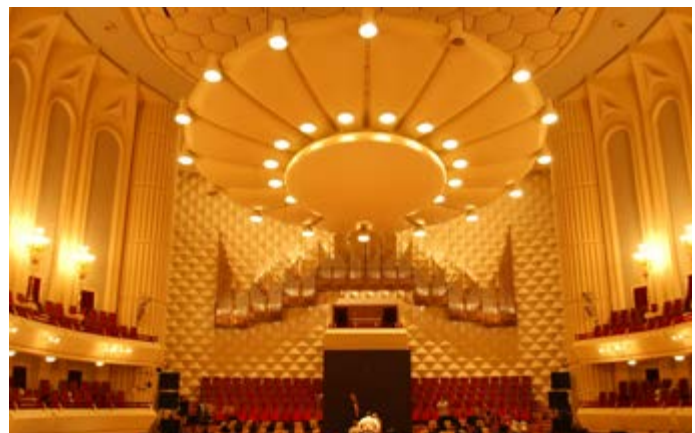


Image source: Tbilisi Centre of Music and Culture, Tiflis



Image source: Königsgalerie Duisburg



Lifting technology

Overview manual wire rope winches

The most important criteria for quick product selection

Selection criteria per product model:

- Max. possible lifting capacity
- Attachment/consolas/wall attachments
- Coating (inner-outer attachment): Alu, galvanized, stainless steel, painted



Console-mounted wire rope winch SW-K-LB, galvanized design



Console-mounted wire rope winch SW-K-LB-VA, stainless steel design



Wall-mounted wire rope winch SW-W ALPHA



Wall-mounted wire winch SW-W



Aluminum console wire rope winch SW-K GAMMA



Compact aluminum wire rope winch SW-KAL with free-wheeling



Console-mounted wire rope winch OMEGA



Console-mounted wire rope winch SW-K LAMBDA, BGV C1

Criteria for quick product selection											
Model	Norm	Mounting	Gearbox	Coating	Tensile loads 1 st rope position across entire series						Page
					250	500	750	1000	1500	2000	
SW-K-LB galvanized	BGV D8	Console	Spur gear	Galvanized					1200		25
SW-K-LB stainless steel	BGV D8	Console	Spur gear	Stainless steel				900			25
SW-W ALPHA	BGV D8	Wall	Spur gear	Galvanized				1000			26
SW-W	BGV D8	Wall	Spur gear	Alu (-125kg) painted			750				26
SW-K GAMMA	BGV D8	Console	Spur gear	Alu				800			27
SW-KAL	BGV D8	Console	Worm gear	Alu					1120		27
OMEGA BGV D8	BGV D8	Console	Spur gear	Painted				1000			28
OMEGA ATEX	BGV D8	Console	Spur gear	Painted				1000			28
OMEGA OFFSHORE	BGV D8	Console	Spur gear	Painted				800			28
SW-K LAMBDA	BGV C1	Console	Spur gear	Painted		300					29

Lifting technology

Manual wire rope winches

Console-mounted wire rope winch SW-K-LB

The rope winch SW-K-LB, originally developed as a vehicle winch, is now used to lift and pull many different loads. It is available in two designs, „galvanized“ and „stainless steel“.

Equipment and processing of the galvanized design

- Carrying loads 150 – 1200 kg
- Robust steel sheet housing with low weight
- Smoothly running spur gear
- Attached load pressure brake securely holds load in any position
- All parts galvanized, rope drum additionally coated for increased corrosion protection (KTL)
- Simple and quick console attachment



Figure:
Galvanized design, 150-350 kg

Equipment and processing of stainless steel design

- Carrying loads 250 – 900 kg
- All parts in high-quality stainless steel design V2A
- Robust steel sheet housing with low weight
- Smoothly running spur gear
- Attached load pressure brake securely holds load in any position
- Simple and quick console attachment



Figure:
Stainless steel design, 650 kg



Figure:
Galvanized design, 650-900 kg



Figure:
Stainless steel design, 900 kg



Lifting technology

Manual wire rope winches

Wall-mounted wire rope winch SW-W ALPHA

The diverse wall-mounted wire rope winch SW-W ALPHA for lifting loads.

Equipment and processing

- Carrying loads 300 – 1000 kg
- Robust steel sheet housing with low weight and flat build
- Smoothly running spur gear for high efficiency
- Rope output possible in all directions
- All parts galvanized, the rope drum is additionally coated with KTL
- Attached hand crank with load pressure brake ensures secure hold of the load in any position
- Simple and quick attachment to walls



Wall-mounted wire rope winch SW-W

The wall rope winches SW-W are intended for stationary installation. Wire rope pulley blocks lead the steel cable to the desired suspension point of the load.

Equipment and processing

- Carrying loads 80 – 750 kg
- Robust aluminum housing for SW-W 80 and 125 kg
- Tried and tested steel sheet design for rope winches 300 to 750 kg
- Smoothly running spur gear for high efficiency
- Direct drive for carrying loads up to 125 kg
- Low-noise safety spring brake holds the load securely in any position
- Removable hand crank for wall rope winch 80 and 125 kg
- Folding crank for design 300 to 750 kg
- Simple and quick attachment to walls



Figure:
SW-W 80 kg/125 kg

Lifting technology

Manual wire rope winches

Console-mounted aluminum wire rope winch SW-K GAMMA

The alu console-mounted wire rope winch SW-K GAMMA is suitable for use outdoors with its robust build.

Equipment and processing

- Carrying loads 200 – 800 kg
- Compact aluminum housing and closed chain drive
- As of 500 kg carrying load with fast gear for small loads and faster coiling and uncoiling of the unloaded rope
- Smoothly running spur gear for high efficiency
- Low-friction shaft with plain bearings for better rope unwinding and a longer service life of the winch
- Wide rope drum for large rope holder and two rope attachments
- Simple and quick attachment
- Integrated safety spring brake system and removable hand crank
- Winch can be operated from either side



Figure:
GAMMA 800 kg

Compact aluminum wire rope winch SW-KAL with drum free-wheeling

Alu compact rope winch SW-KAL with drum free-wheeling is used for setup on vehicles and trailers, as well as for lifting and lowering of loads.

Equipment and processing

- Carrying loads 750 – 1120 kg
- Drum, gear and crank in aluminum design
- Self-locking worm gear
- Drum free-wheeling for direct pulling off of the wire rope from the drum when there is no tension on the drum
- Closed gear to protect the inner parts, even when in rough use
- Low-friction shaft bearings for a longer service life of the rope winch
- Simple and quick attachment



Lifting technology

Manual wire rope winches

Console-mounted wire rope winch OMEGA

Even in special areas such as ATEX or offshore, the OMEGA-hand rope winch with its closed spur gear and the brake running in the oil bath offers a high degree of functionality and safety.

OMEGA DGUV V 54 (BGV D8) and **OMEGA Offshore** are intended for operation with an external motor drive with the addition of hand operation.

Equipment and processing OMEGA DGUV V 54 (BGV D8)

- Carrying loads 1000 kg
- Removable hand crank
- Hand drive or external motor drive
- Encapsulated gear

Equipment and processing OMEGA ATEX

- Carrying loads 1000 kg
- Removable hand crank
- Safe against inadmissible heating and spark formation
- Equipotential bonding offers protection from static charge
- Use according to directive 2014/34/EU (ATEX)

Our **OMEGA ATEX** was successfully subjected to many dangerous tests including ignition source analyses by the Pfaff-silberblau engineers, in cooperation with the TÜV. It is therefore approved for category 2 (=Zone 1/21) and category 3 (=Zone 2/22).

Also suitable for motor operation!

Equipment and processing OMEGA Offshore

- Carrying loads 800 kg
- Parts running in the oil bath ensure safe usage
- High-quality painting to improve corrosion protection
- Hand drive or external motor drive



Lifting technology

Manual wire rope winches

Console-mounted wire rope winch SW-K LAMBDA DGUV V 17/18 (BGV C1)

The compact rope winch SW-K LAMBDA (DGUV V 17/18) for use in the shopping galleries, churches, sport sites, display areas (stages, studios, theaters, etc.)

Equipment and processing

- Carrying loads 300 kg
- Modern design with galvanized sides for simple handling
- Grooved drum for single-layer coiling of the steel rope
- Long service life of the rope by 18-fold drum diameter
- With spring-loaded rope pressure roller against the jump of the unstressed rope at the drum
- Gear design for double nominal load
- Smoothly running spur gear for high efficiency
- Attached safety crank with two spring brakes acting independently of each other for safe hold of the load in any position
- The latest accident prevention corresponds to provisions DGUV V 17/18 (DIN 56925) the sample type and GS tested by the specialist committee for hoisting devices

Options

- Drum extension for a larger rope intake
- Special grooving (multiple ropes)



Lifting technology

Electrical and manual wire rope winches: Accessories

Sheaves DSR

The sheaves DSR of steel offer an all-round safe concept by low-wear rope, run by precisely turning the rope groove to the rope.

The sheaves are variable in rope and roller diameter from 80 to 490 mm and are constant on ball bearings.



DSR 400

Equipment and processing

- Rope and roller diameter adjusted to our BETA drum dimensions, permitting long service life of the ropes
- Rope deflections of 90° and 180° possible
- Loads up to 8 t at 90° and 5 t at 180° possible
- Constantly equipped with high-quality closed ball bearings
- Suitable for hand and force operation

 Sheaves and wire rope pulley blocks also available according to directive 2014/34/EU (ATEX).

Wire rope pulley blocks DSRB for console attachment

Wire rope pulley blocks for customized deflection solutions also when deflecting 90°.

Wire ropes

For the manual rope winch or electrical rope winch, we supply wire cable matching the respective purpose for any lifting device as an accessory, in the required length and with the corresponding rope end connection.



DSRB 270



Standard rope

Lifting technology

Worm gear drive unit

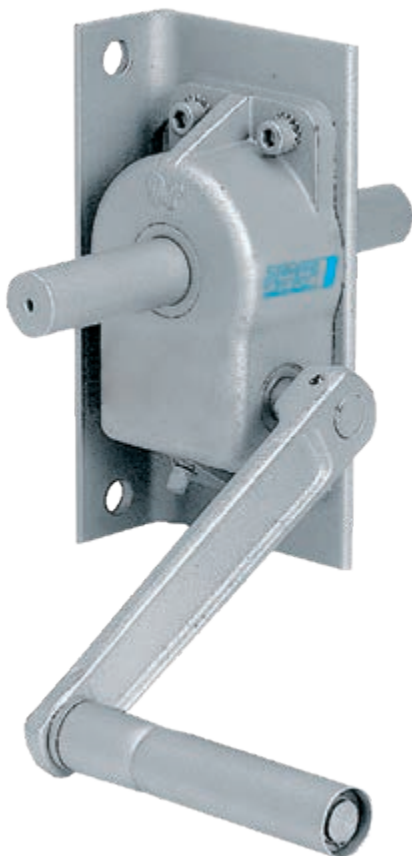
Worm gear drive unit S

The S 20 and S 24 drive units with self-locking worm gear (at standstill) secure the load in any position and can be used universally.

The spectrum ranges from applications in constructions for moving or rotating loads, as gearboxes for rope drums, for sprockets, or as a rotary drive.

Equipment and processing

- Enclosed housing for the protection of parts inside
- Enclosed and precisely machined gear for little effort and a long service life
- Ratio 20:1 and 24:1



Model S 20



Model S 24



Lifting technology

Lifting tables

Lifting tables of Columbus McKinnon – Pfaff-silberblau have one objective: They want to contribute to efficient, seamless work flows in your company. In industry and plant construction, construction industry and loading technology, the lifting tables complete present production and logistics chains. We at Columbus McKinnon know that different loading and mounting situations require individual lifting table solutions.

They all share this: They offer true competitive benefit in terms of working power, ergonomics, operating safety and energy efficiency.

Our all-round package of services corresponds to our partnership-aligned thinking. In addition to high-performance products, we will support you with continuous services such as investment consulting and reliable maintenance.

The pleasant result for you and your lifting table is a long product life cycle and quick return-on-investment.



Service: We offer professional support on site on request.

Lifting technology

Lifting tables

All of our products meet the following prerequisites:

- All lifting tables correspond to the DIN EN 1570-1, or EC – machinery directive 2006/42/EC
- Operating voltage 400 V – 50 Hz
- Ambient temperature indoor area 0° C to +40° C
- Maintenance supports, surrounding contact strip, line break protection, lowering brake valve

Series	HTF	HTH	HTP	HTPA	HTPL
Page	34	34	35	35	35
Handling area	•	•	•	-	-
▪ Lifting table for mounting, packaging and maintenance work	•	•	•	-	-
▪ Ergonomic workplaces	•	•	•	-	-
▪ Height-adjustable platform	•	•	•	-	-
System and industrial applications	-	-	-	•	-
▪ Lifting table as PLC-controlled means of production	-	-	-	•	-
▪ Individual adjustment to production processes	-	-	-	•	-
▪ Suitable for customer-specific attachments	-	-	-	•	-
Loading area	-	-	-	-	•
Lifting table for the logistics industry	-	-	-	-	•
▪ Roust build	-	-	-	-	•
▪ Loading work in warehouse and carrier	-	-	-	-	•
▪ Optional adjustment for taking along passenger	-	-	-	-	•
Use indoors – hall operation	•	•	•	•	•
Use outdoors – optional adjustment	-	-	•	•	•
Lifting table with available accessories	-	-	•	•	•



Lifting technology

Overview lifting tables



Flat scissor lifting table HTF (platform smooth)

Carrying load 1000 kg

Lifting height 760 mm

- Low height
- Shearing in lifting table for evenly distributed loads
- Platform of smooth steel sheet
- Use on industrial ground, without pitch installation
- External hydraulic unit with operation



Flat scissor lifting table HTF (platform U-shape)

Carrying load 1000 kg

Lifting height 760 mm

- Low height
- Shearing in lifting table for evenly distributed loads
- Platform of smooth steel sheet in U-shape
- Use on industrial ground, without pitch installation
- External hydraulic unit with operation



Handling lifting table HTH

Carrying load 500 – 3000 kg

Lifting heights up to 820 mm

- Shearing in construction for evenly distributed loads
- Platform of smooth steel sheet
- Control between the shears –
Operation by suspended button

Lifting technology

Overview of lifting tables

Standard lifting table HTP

Carrying loads 500 – 2000 kg

Lifting heights 800 – 1250 mm

- Shearing in construction for evenly distributed loads
- Platform of smooth steel sheet
- Platform change possible
- Control between the shears – operation by suspended button
- Options – according to accessories list



Industrial plant lifting table HTPA

Carrying loads 1000 – 6000 kg

Lifting heights 800 – 2000 mm

- Individual customer solution
- Platform of smooth steel sheet
- With upper, adjustable limit switch
- Comprehensive accessories range

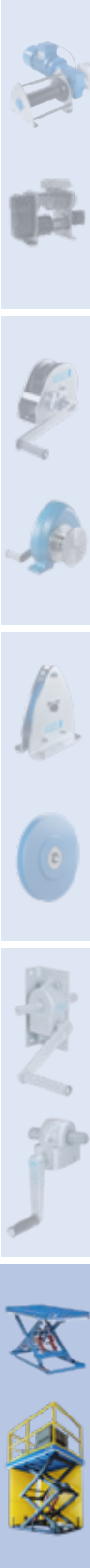


Loading process lifting table HTPL

Carrying loads 2000 – 6000 kg

Lifting heights 1100 – 1600 mm

- Shearing in construction for evenly distributed loads
- Overrun capacity by reinforced platform (up to axle load 3 tons)
- Platform of bulb plate with maintenance hatch
- Reinforced basic frame
- Control in separate control cabinet incl. operating elements
- With upper, adjustable limit switch
- Individual adjustment for use outdoors
- Comprehensive accessories range



Lifting technology

Lifting tables: Options

Series	HTP	HTPA	HTPL
Railing protects the staff traveling along against falling <ul style="list-style-type: none"> Available for the long and the narrow sides Screwed or pluggable Operating point at the railing possible 		•	•
Underrun protection <ul style="list-style-type: none"> Closes the open space under the platform Necessary when open sides cannot be viewed by the operator Design as PVC-roller shutter or bellows 		•	•
Safety portal <ul style="list-style-type: none"> Effective protection against people falling from building ramps 		•	•
Safety door <ul style="list-style-type: none"> Protects the staff traveling along against falling Electrically lockable (lifting table moves only with the door closed) 		•	•
Overloading flap <ul style="list-style-type: none"> Level compensation between truck and ramp Multiply divided 		•	•
Automatic unrolling protection <ul style="list-style-type: none"> Automatic protection against accidental unrolling 		•	•
Bulb plate <ul style="list-style-type: none"> Slip-inhibiting platform support 		•	•
Electrical equipment: e.g. Wall switch, foot switch, etc.		•	•
Drive-over capability <ul style="list-style-type: none"> Max. 5 t wheel load Max. 10 t axle load 			•
Turnable platform <ul style="list-style-type: none"> As plate or platter Endlessly rotatable 360 ° Rotatable in both directions 		•	

Lifting technology

Lifting tables: Options

Series		HTP	HTPA	HTPL
Anti-tilt device at the top <ul style="list-style-type: none"> Prevents uncontrolled lifting of the platform or scissors Safety so that persons can enter the platform 			•	•
Anti-tilt device at the bottom <ul style="list-style-type: none"> Prevents uncontrolled lifting of the platform or scissors Safety so that persons can enter the platform 			•	•
Maintenance hatch <ul style="list-style-type: none"> Standard on HTPA and HTPL Allows access to the aggregate 			•	•
Fixed limit <ul style="list-style-type: none"> Fixed limitation or roll-off protection 		•	•	•
Chassis <ul style="list-style-type: none"> For moving the lift table in unloaded condition Track-bound or with two fixed and two swivel castors 		•		
Raised basic frame <ul style="list-style-type: none"> For transport of the lift table by means of pallet truck or forklift truck 		•	•	•
Platform extension <ul style="list-style-type: none"> Customization of the platform 		•	•	•
Special coating <ul style="list-style-type: none"> Customized according to RAL 			•	•
Design for the outdoor area			•	•



Lifting technology

Lifting tables: Special solutions



HTPA-D

- Double scissor lifting table
- 500 kg – 1000 kg
- Lifting heights 1600 – 2000 mm



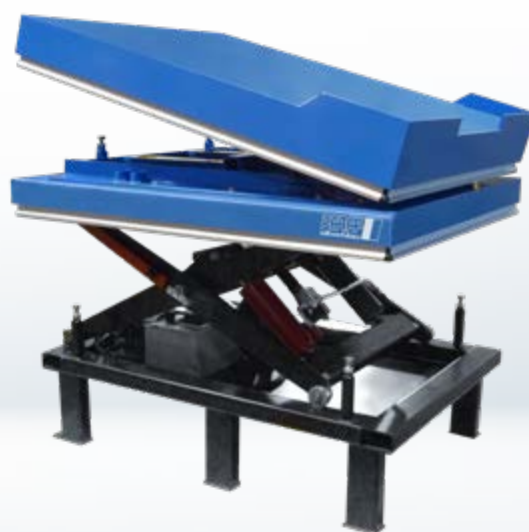
HTPA-T

- Tandem scissor lifting table
- 1000 kg – 6000 kg
- Lifting heights 800 – 1600 mm



Special lifting tables

e.g. lifting table with bellows and railing



Special lifting table

with raised base frame and tipping platform

Columbus McKinnon Catalog overview

Catalog overview

The force is not enough to move loads? Solutions by Columbus McKinnon Engineered Products GmbH come into play. They move, lift and position various goods perfectly reliable, safe and efficient.

Experience pays off. For more than 150 years, products from Pfaff-silberblau have been developed further and adjusted to the current market and customer requirements. You will also find your suitable product in our catalogs.

Lifting technology:

The manual and electric rope winches are perfect for work in industry and the event sector. Lifting tables are used in many industrial sectors and support production, logistics and enable ergonomic work.

Motion technology:

The motion technology products are characterized by diversity. You will find the right technical solution for any application among them.

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Precisely on track
for success

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