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## **EXPRESSO BalanceLift Systems**

Effortless load handling with  
completely natural movements



## EXPRESSO DEUTSCHLAND GMBH & CO. KG – YOUR EXPERT PARTNER FOR HANDLING OPERATIONS

For over 70 years, we have been assisting people all over the world with solutions for handling valuable and heavy goods. In close cooperation with our customers, we develop individual professional products for industry and trade. Our high-quality manual transport equipment, motorised transport systems, and handling solutions close the gap between lifting by hand and moving by forklift truck. They increase the efficiency of work processes as they facilitate, simplify and accelerate. In the process, human health is a central theme in the development of every product.

With our product innovations in our CLASSIC, DYNAMIC and LOGIS-TIC divisions, we increase the ergonomics and efficiency of work equipment and thus improve the conditions for keeping people healthy at work. In the process, environmental aspects are consistently included all considerations. We continually optimise energy and raw material use according to ecological criteria in order to sustainably protect the environment.

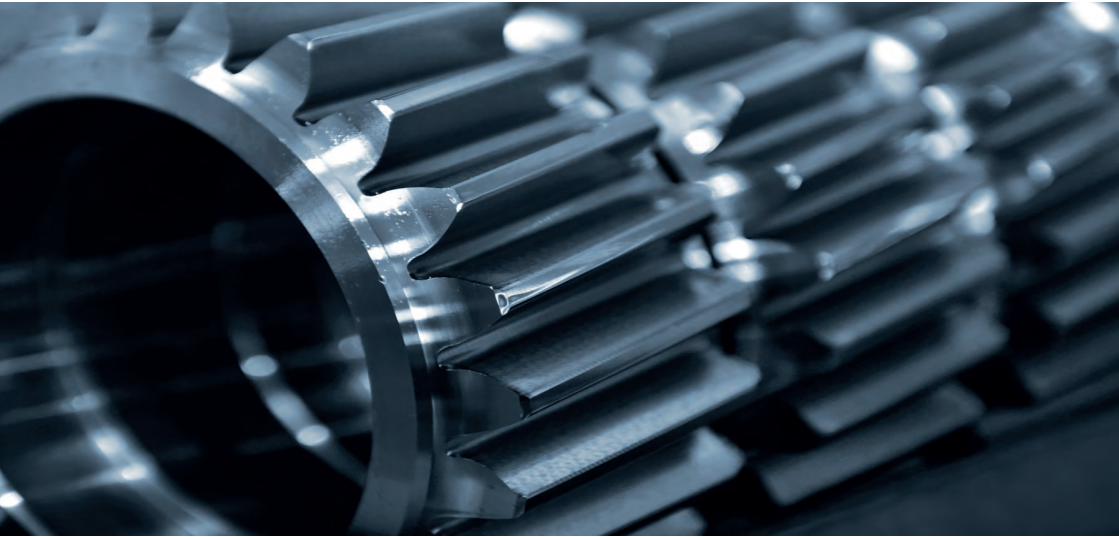
**EXPRESSO – THEY CAN HANDLE IT**



**WE ARE AWARD WINNERS.**

## POWERED HANDLING AND TRANSPORT SYSTEMS

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## EXPRESSO DYNAMIC PERFORMANCE AREA– INTELLIGENT IDEAS FOR YOUR HANDLING TASKS

In the development of our powered products, equal focus is placed on people and business. Unique handling and transport systems make work easier, more precise and controllable. This benefits employees as their health is protected. And, since tasks can be solved more easily, safely and quickly, the company also benefits.

In an environment increasingly characterised by specialisation and international competition, work efficiency is increasingly gaining in importance – but this objective should never be pursued at the expense of people. A proactive and sustainable measure is the use of universal and individual EXPRESSO solutions. In this way, companies can gain a decisive advantage over their competition.

### PRODUCTIVITY



### ERGONOMICS



### OCCUPATIONAL SAFETY



# EXPRESSO DYNAMIC PERFORMANCE AREA— POWERED HANDLING AND TRANSPORT SYSTEMS

EXPRESSO manual transport equipment and powered handling and transport systems facilitate and optimise work processes all over the world. They have their place wherever future-oriented, special logistics are asked for. All products are manufactured in a modular system in order to be able to provide customised solutions. They have been convincing since 1953 due to their safety,

quality and their precision in processing and offer extremely high stability. Their extended service life and permanent operational availability underline their high economic value.

**WE ARE DRIVEN BY PEOPLE, NOT MACHINES.**



## lift2move solution

The mobile lifting aid is particularly suitable for individual goods, packages and equipment that need to be moved from one location to another.



## BalanceLift

Effortless handling of loads without electricity thanks to the pneumatic lifting cylinder with vacuum, pneumatic and mechanical load handling devices and gripping tools for a wide variety of goods.



The handling systems are designed in close cooperation with the planners and users and then realised - for your very individual device.

The EXPRESSO handling consultants first discuss the task on site and create an individual handling analysis. Within a few days, you will then be presented with the handling concept and the corresponding quotation.





## BALANCELIFT – PNEUMATIC LIFTING CYLINDER FOR ERGONOMIC LOAD HANDLING

An enormous range of vacuum, pneumatic, and mechanical load handling devices and gripping tools offers application-oriented solutions for handling the most varied goods weighing up to 150 kg with possible vertical travels of up to 4 m. Simple, continuous and precise manoeuvrability is possible via up/down controls or with the balancer control (without control buttons; load is balanced automatically). As a result, the user has perfect control over the handling operation – and all without physical effort in completely natural movements. This increases productivity and contributes substantially to the health of the employees.

Load handling is pneumatic, i.e. without a power connector. All that is needed is a compressed air supply (6 bar). Since compressed air is only consumed during lifting activities, this energy supply is extremely cost-effective. Moreover, the BalanceLift offers flexible mounting options: In combination with BalanceRail traverse systems with pillar/wall-mounted swivel cranes, BalancePort, or with existing on-site customer systems, the BalanceLift system optimises handling processes performed at the workplace.



Individual vacuum, pneumatic or mechanical load handling devices are designed and then developed in close cooperation with planners and users.

The EXPRESSO handling advisors will first discuss the task on your premises and prepare an individual handling analysis. The handling concept including our corresponding offer will then be presented to you within a few days.



# BALANCELIFT

## PNEUMATIC LIFTING CYLINDER



### LIFTING CYLINDER

possible for individually adapted handling solutions with payloads of up to 150 kg. Vertical travels of 0.3 to 4.0 m possible; horizontal or vertical fixing points possible (depending on circumstances on site).



### POWER SUPPLY

Compressed air operation (without electricity)  
Compressed air consumption ONLY during effective lifting operation, therefore very cost-efficient.



### SPIRAL HOSE

The compressed air is supplied to the gripper unit via the flexible spiral hose. This makes it possible to handle loads conveniently and ergonomically.



### “VARIO” CONTROL VARIANT

The control using the up/down button on the gripper is suitable for a wide variety of loads (no need to pre-set any weights). Depending on the application/gripper, includes additional switch for switching the vacuum on/off or pneumatic clamping/release, for example.



### “BALANCE” CONTROL VARIANT

for selectively sorted handling thanks to the intuitive and keyless guidance of the load or gripper. With this variant, the control is first finely tuned to the weight of the load to be handled. Depending on the application/gripper, includes additional switch for switching the vacuum on/off or pneumatic clamping/release, for example.







## FIXING POINT

The BalanceLift can be mounted on various support systems, e.g. aluminium rail systems, gantry rail systems, pillar/wall-mounted slewing cranes or on systems provided by the customer.



## ANTI-JUMP SAFETY FUNCTION

All BalanceLift models are equipped with an anti-jump safety function.



## LOAD CABLE WITH SWIVEL

The plastic-coated load cable enables the lifting movement, has a high strength and is abrasion-proof. The swivel prevents the load cable from twisting.



## GRIPPING TOOLS

Can be individually tailored to customer specifications. Vacuum, pneumatic, and mechanical gripping tools are available for the most diverse handling operations.

The vacuum gripper with bellow suction cups can, for example, safely and quickly lift goods of varying surfaces (such as cardboard boxes, metal sheets, wood, gas cylinders, etc.).



## DIRECTIVES

Manufactured according to Machinery Directive 2006/42/EC, CE-compliant, if required ESD-dissipative according to VDE DIN EN 61340



# BALANCELIFT LIFTING CYLINDER – AN INNOVATION FOR PARTICULARLY SAFE AND EFFICIENT WORK PROCESSES

## «MINI» VERSION

A compact lifting cylinder with only one chamber for pulleys and piston. Thanks to its compact design, it is ideal for BalanceRail or BalancePort applications and for pillar/wall-mounted swivel cranes.

Horizontal and vertical assembly is possible in various weight categories or lifting heights.



- ▶ Aluminium cylinder
- ▶ compressed-air controlled cable-hoist system (pulley principle)
- ▶ Load cable is moved via pulleys by means of a piston
- ▶ Anti-jump safety function
- ▶ Overload protection prevents handling of excessively high loads
- ▶ Net weight 3.5 - 13.7 kg, depending on version

## «COMPACT» VERSION

Lifting cylinder with two separate chambers for the piston or load cable. The pressure chamber is separated from the pulleys. This version is suitable for use in combination with swivel cranes.

Horizontal and vertical assembly is possible in various weight categories or lifting heights.

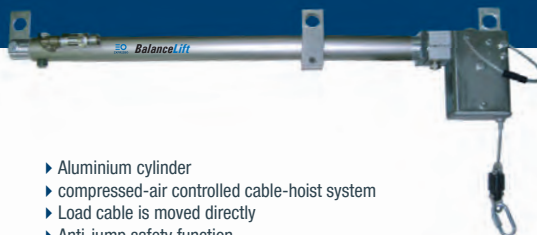


- ▶ Aluminium cylinder
- ▶ compressed-air controlled cable-hoist system (pulley principle)
- ▶ Load cable is moved via pulleys by means of a piston
- ▶ Anti-jump safety function
- ▶ Overload protection prevents handling of excessively high loads
- ▶ Net weight 5.4 - 16.9 kg, depending on version

## «FULL-SCALE» VERSION

The load cable is not wound up. Therefore, this system is considerably longer than the two other variants (vertical travel corresponds approximately to the length of the lifting cylinder). If assembled vertically, this version is particularly suitable for rooms with high ceilings.

Horizontal and vertical assembly is possible in various weight categories or lifting heights.



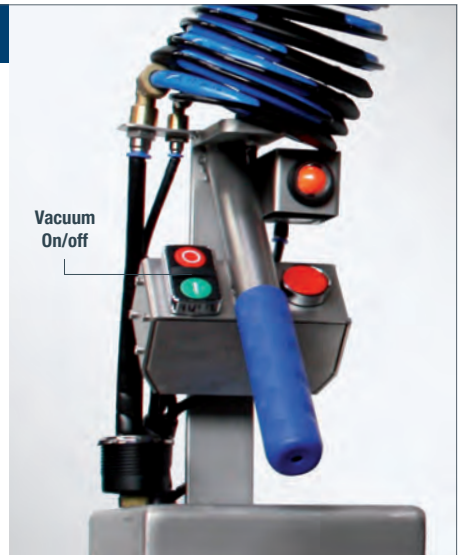
- ▶ Aluminium cylinder
- ▶ compressed-air controlled cable-hoist system
- ▶ Load cable is moved directly
- ▶ Anti-jump safety function
- ▶ Overload protection prevents handling of excessively high loads
- ▶ Net weight 4 - 16 kg, depending on version

## EFFORTLESS LOAD HANDLING WITH COMPLETELY NATURAL MOVEMENTS

### BALANCER CONTROL

In combination with a customer-specific device (vacuum, pneumatic or mechanical gripper), the Balancer control makes it possible to freely handle one or two defined suspended loads in the area of the selectively sorted handling of large quantities (order picking, palletising, assembly, etc.).

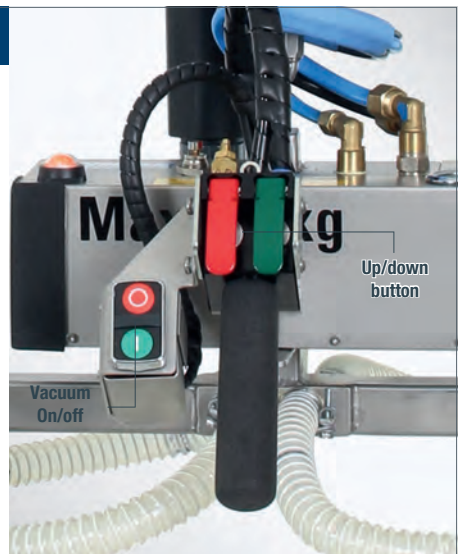
The lifting operation with the Balancer control is performed concurrently with the natural movements of the user, i.e. directly on the load to be handled. This means that no control buttons need to be pressed for the lifting and lowering operations, and the user has perfect control over the handling operation.



### VARIO CONTROL

The Vario control is used for lifting and lowering different goods with the BalanceLift and an individual vacuum, pneumatic, magnetic or mechanical gripper.

Using the up/down button, loads within the specified payload capacity limits can thus be quickly, easily and ergonomically handled.



# ELECTRONIC ROPE BALANCER eBALANCELIFT

## RAIL AND COLUMN EQUIPMENT

### ELECTRONIC ROPE BALANCER eBALANCELIFT RAIL

Electronic rope balancer eBalanceLift RAIL for manual handling technology, for installation in all types of rails in different weight classes between 75 and 600 kg for individual use. The control head is connected to the lifting unit by a rope.

The operating handle, which can be installed on the control head or on a load handling device, controls the up and down movement. A measuring cell integrated in the control head is used to control the system, resulting in optimum running behavior. The weight of the load is precisely weighed and displayed. Rotary feedthroughs are installed on the operating handle as standard, enabling endless rotation and movement of the load.

- ▶ Ergonomic design with low system weight
- ▶ Electrical and pneumatic rotary feed-throughs are optionally installed on the operating handle.
- ▶ Programmable inputs/outputs (I/O's) on operator head and actuator
- ▶ Customized software solutions:  
Software can be flexibly adapted to individual requirements.
- ▶ Only one trolley:  
The design requirements allow the use of only one trolley.
- ▶ This minimizes costs, the assembly effort and extends the range of action for moving in the rail system or crane, as less installation space is required.



### THE eBALANCELIFT OPERATING UNIT

The operating unit detects the operator's force and converts it into a lifting motion of the wire rope. Only a minimum operator force is required, regardless of the size of the load. When the operator releases the handle, the hoist stops the vertical movement.

Three different modes: grip, balance and touchdown mode.



# ELECTRONIC ROPE BALANCER eBALANCELIFT

## RAIL AND COLUMN EQUIPMENT

### ELECTRONIC ROPE BALANCER eBALANCELIFT ARM

Electronic rope balancer eBalanceLift ARM in column version for manual handling of goods from 75 - 300 kg. It consists of an articulated arm mounted on a column (suspension). The suspension cable is connected to the eBalanceLift motor, which drives the up and down movement. The standard center joint connects the arm segments of the articulated arm. This allows any point within the arm radius to be approached.

The lifting device consists of a lifting unit and a control head, which is connected to the lifting unit by a rope. An operating handle, which can be installed on the control head or on a load handling attachment, controls the up and down movement. A measuring cell integrated in the control head is used to control the system, resulting in optimum running behavior. The weight of the load is precisely weighed and displayed. As standard, rotary unions are installed on the column, which allow endless rotation and movement of the load or the boom arm.

- ▶ Ergonomic design with aluminum arm
- ▶ Middle hinge as standard - The standard built-in center joint connects the arm segments. This allows truly any point within the arm radius to be approached.
- ▶ Electrical and pneumatic rotary feed-throughs are optionally installed on the operating handle and on the column installed.
- ▶ Programmable inputs/outputs (I/O's) on operator head and actuator
- ▶ Customized software solutions: The software can be flexibly adapted to individual requirements.





# BALANCELIFT SYSTEMS

## FLEXIBLE MOUNTING OPTIONS

### PILLAR/WALL-MOUNTED SWIVEL CRANE movable or stationary

#### *Fixed floor or wall mounting*

The crane booms are simultaneously light and stable and, together with the chassis frame, the smooth sliding and swivel joints enable extremely easy and ergonomic handling.

The pillar jib crane is fixed to the floor using heavy-duty anchors, while the wall-mounted swivel crane is secured to existing walls or supports. Subsequently, the boom and its two braces, which connect the swivel joint and the boom tip, are aligned.

Customer-specific solutions can be implemented with telescoping booms (see fig.) and individual lengths and heights.

The mobile variant is delivered with a base plate that can be transported with a forklift.



### BALANCERAIL stationary

#### *Smooth-running aluminium rail system for your handling*

The BalanceRail rail system can be easily mounted on existing support systems (e.g. BalancePort or steel/ concrete supports) or installed in suitable hall ceilings. Its smooth operation is highly impressive.

Thanks to the carriage with its dual ball bearings, the BalanceLift moves smoothly and easily along the BalanceRail rail system. The design of the carriage prevents the crane bridge from tilting.

Individual versions are possible, e.g. for low hall ceilings.



## FLEXIBLE MOUNTING OPTIONS

### SYSTEM SOLUTIONS AND SPECIAL CRANES

#### stationary

Where production processes have to be changed in existing buildings, lifting equipment is usually required. The building structure often makes it difficult to use standard solutions, which requires specially adapted crane systems. Together with our partners, we at EXPRESSO are the full-range supplier who designs, offers and implements crane solutions specially adapted to your application. Our expertise ranges from elevated [1] or suspended [2] gantry crane systems with, for example, jacked-up bridges [3], special slewing cranes, slewing tower cranes and knuckle boom cranes via the appropriate lifting equipment, such as our BalanceLift or eBalanceLift, right up to specially adapted grabs for your goods to be lifted. In this way, you get a solution tailored to your needs with the highest quality standards from a single source. Installation, commissioning incl. acceptance in accordance with applicable regulations, as well as regular maintenance are also part of our range of services.



# GRIPPING TOOLS / EXAMPLES OF USE

## MECHANICAL CONTAINER GRIPPER

Loading fork for the horizontal transferring of containers

>> Can be combined with BalanceLift and eBalanceLift



## MECHANICAL CONTAINER GRIPPER

Load attachment using the ballpoint principle and positioning aids for easily picking up containers

>> Can be combined with BalanceLift and eBalanceLift



## MECHANICAL CLAW GRIPPER

Load hook for canisters

>> Can be combined with BalanceLift and eBalanceLift



## MECHANICAL PARCEL GRIPPER

Load attachment for handling packaged tiles using the ballpoint principle, adjustable for different parcel sizes



# FOR PNEUMATIC BALANCER AND ELETRONIC ROPE BALANCER

## PNEUMATIC COMPONENT GRIPPER

Gripper for the horizontal transferring of selectively sorted components

For further details on this application, see page 24 et seq.



## PNEUMATIC BARREL GRIPPER

with pneumatic cylinders for clamping/release and 180° swivelling, incl. counterbalancing function



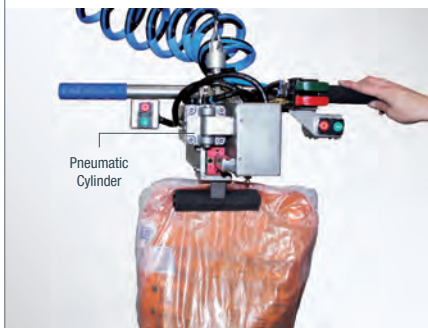
## PNEUMATIC CONTAINER GRIPPER

with pneumatic cylinder for clamping/releasing the container and positioning aids



## PNEUMATIC BAG GRIPPER

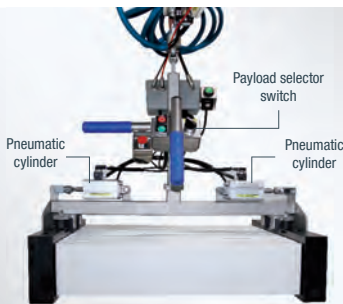
Bag gripper with pneumatic-cylinder for clamping/ releasing the clamping jaws



# GRIPPING TOOLS / EXAMPLES OF USE

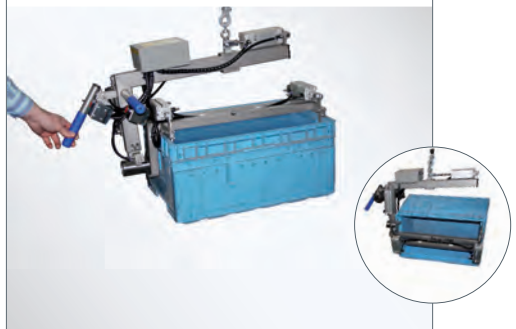
## PNEUMATIC MODULE GRIPPER

with pneumatic cylinders for clamping / releasing the gripper, for the horizontal transferring of filter modules



## PNEUMATIC CONTAINER GRIPPER

with 120° rotating function for emptying; container is picked up via clamping slots, meaning that the containers can be closely stacked.



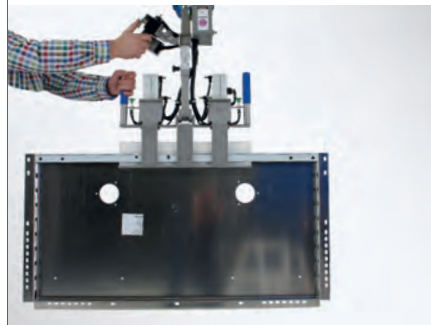
## PNEUMATIC COMPONENT GRIPPER

with counterbalancing function, for clamping/release and 90° swivelling of the gripper



## PNEUMATIC SHEET METAL GRIPPER

Pneumatic clamping of sheet metal, incl. mechanical 90° swivel function for the horizontal lifting and vertical depositing of sheet metal

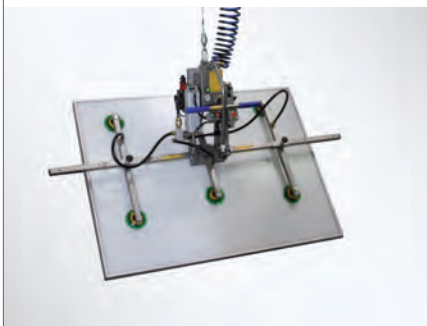




# FOR PNEUMATIC BALANCER AND ELETRONIC ROPE BALANCER

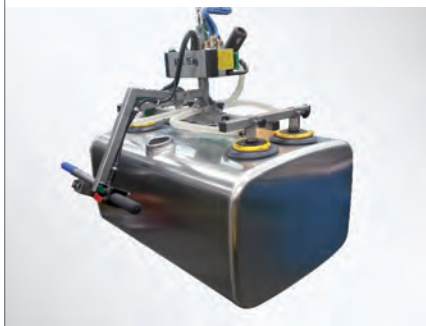
## VACUUM SOLAR PANEL GRIPPER

Vacuum gripper for handling solar panels with 90° swivel mechanism for horizontal and vertical lifting / depositing



## VACUUM TANK GRIPPER

Vacuum gripper for picking up and horizontally transferring tanks



## VACUUM BUCKET GRIPPER

with counterbalancing function and pneumatic 135° rotating device for emptying buckets



## VACUUM BARREL GRIPPER

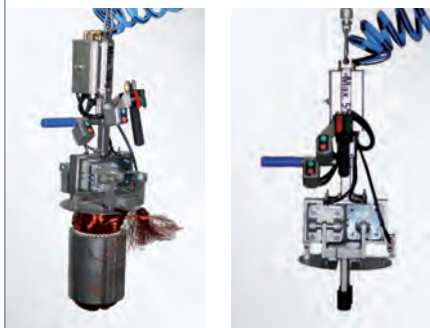
Vacuum gripper for the horizontal transferring of buckets/barrels



# GRIPPING TOOLS / EXAMPLES OF USE

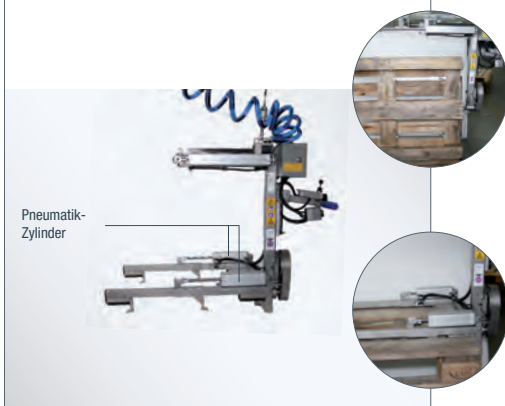
## PNEUMATIC COIL GRIPPER

Coil load attachment with pneumatic cylinders for clamping coils from inside



## PNEUMATIC PALLET GRIPPER

with pneumatic cylinders for clamping/release and 180° swivelling of the pallet, counterbalancing function



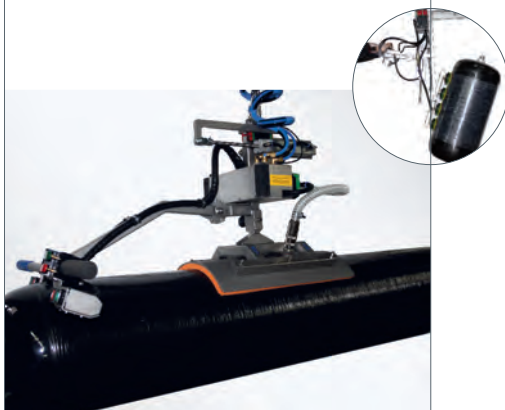
## PNEUMATIC WASHBASIN GRIPPER

Handling with pneumatic clamping, with 90° swivel function and counterbalancing function



## VACUUM GAS CYLINDER GRIPPER

Vacuum gripper for the horizontal transferring of gas cylinders, incl. pneumatic counterbalancing function for the off-centred picking up of the load.



# FOR PNEUMATIC BALANCER AND ELETRONIC ROPE BALANCER

## VACUUM CARDBOARD BOX GRIPPER

Adjustable vacuum suction unit for different cardboard box sizes



## VACUUM CARDBOARD BOX GRIPPER

Vacuum gripper for the horizontal transferring of cardboard boxes, incl. extended handle for handling at high working heights



## VACUUM BAG GRIPPER

Suction unit for the horizontal transferring of bags



## VACUUM CARDBOARD BOX GRIPPER

Cardboard box gripper with multiple suction cups; maximum flexibility through the automatic deactivation of suction units that are not in contact with the load to be handled.



# BALANCELIFT QUICK-EXCHANGE GRIPPER

## QUICK-EXCHANGE GRIPPER

The basic vacuum unit is equipped with a quick change system for the adaptation of different gripping devices and is operated via Vario control with an up/down button and vacuum on/off button.

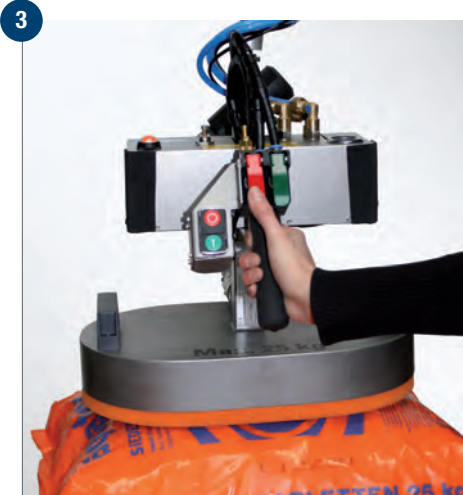
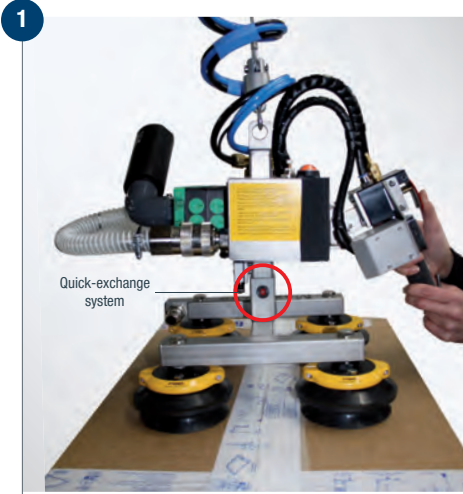
- 1 Pneumatic gripper for handling bags
- 2 Pneumatic gripper for handling cylinders
- 3 Mechanical gripper for handling containers
- 4 Load hook for handling buckets



## QUICK-EXCHANGE GRIPPER

The basic vacuum unit is equipped with a quick change system for the adaptation of different gripping devices and is operated via Vario control with an up/down button and vacuum on/off button.

- 1 Vacuum gripper for picking up cardboard boxes
- 2 Load hook for handling canisters
- 3 Vacuum gripper for handling bags
- 4 Vacuum barrel gripper





# BALANCELIFT GRIPPING TOOLS – CUSTOMISATION

## CUSTOMISATION OF EXPRESSO STANDARD-GRIPPING TOOLS



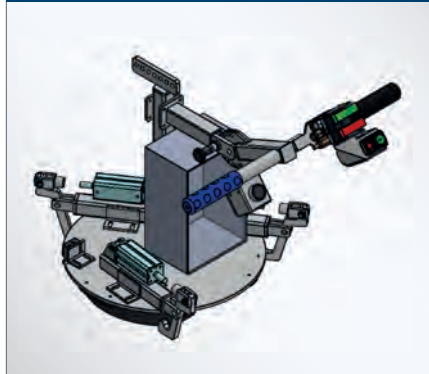
We are glad to customise our standard gripping tool individually to your application. Of course, this is done in close cooperation with you - for the best possible solution.

For more information, please contact us.  
Tel.: +49 5 61 95 91-0 • E-mail: [info@expresso.de](mailto:info@expresso.de)

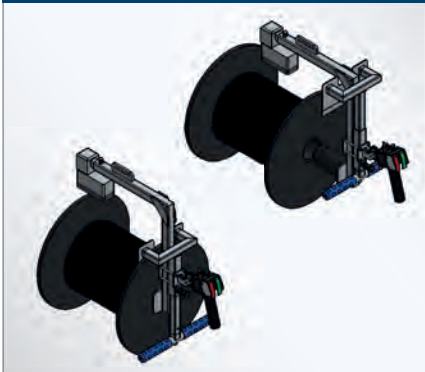
**STANDARD-GRIPPING TOOLS (e.g.)**



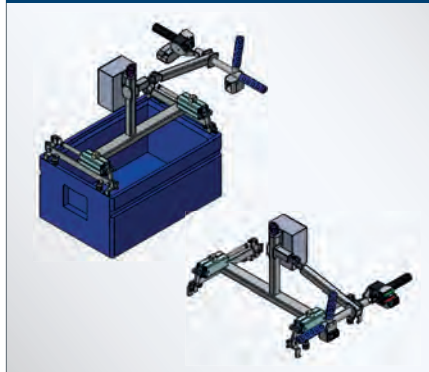
**STANDARD-GRIPPING TOOLS (e.g.)**



**STANDARD-GRIPPING TOOLS (e.g.)**



**STANDARD-GRIPPING TOOLS (e.g.)**



## LIFTING AXLE

Fixing point with chassis frame on rail systems. Individual grippers can be adapted. Backlash-free, steady lifting, high load capacity, even with off-centred loads, continuously adjustable lifting speed, Load capacity up to 1000 kg. Individual load capacities and lifting heights possible



## CHAIN HOIST

Versions with hook suspension, infrequent and easy maintenance thanks to its modular construction, patented coupling locking device prevents the load from falling if the coupling fails, load capacity: 125 - 500 kg, lifting height: up to 3 m, individual load capacities and lifting heights possible. Incl. innovative safety function for vacuum or pneumatic grippers. The chain hoist only starts after a successful safety query.



## EXPRESSO CUSTOMER SERVICE

Do you have any further questions?  
Please feel free to contact us  
**+49 (0)561 / 95 91 - 0**

or visit us at  
[shop.expresso.de](http://shop.expresso.de)



## EXPRESSO TRANSPORT AND HANDLING SYSTEMS IN USE AT VOLKSWAGEN AG

Volkswagen AG places great importance on the protection and promotion of the health of their employees. Besides comprehensive health management and a preventive health programme, they also deal with the prevention of work accidents and occupational illnesses. For this reason, ergonomic working equipment is always used to make work processes easier.

As a result, numerous EXPRESSO products are in use at various Volkswagen AG plants, such as the mobile lift2move lifts, the motorised touch2move and LEO transport systems and the suspended BalanceLift for handling goods.

### APPLICATION EXAMPLE: USE OF BALANCELIFT AT VW'S KASSEL PLANT IN BAUNATAL

In the following example, the Volkswagen AG was searching for an ergonomic solution for the placement of 420 gearbox housings per day on an assembly line at its Kassel plant and once again opted to cooperate with EXPRESSO.

#### CONVENTIONAL WORKING METHOD

In the construction of gears at the Volkswagen AG plant in Baunatal, some workplaces are repeatedly associated with

physical strain. This frequently occurs in the event of increases in capacity and conversions. For example, on a assembly line, gearbox housings were laboriously lifted out of a cage and lowered onto a line below by a distance of approx. two metres. The employees not only had to lift the parts, but also adopt a bent-over position to set them down on the line.

Mario Xourgias: "Ergonomic aids were sought as the physical strain was particularly high for the employees."

#### HANDLING GEARBOXES WITH THE BALANCELIFT

With EXPRESSO's BalanceLift, this cumbersome activity was simplified for the employees at Volkswagen AG. The Balancer lifts the gearbox housing from the cage and easily handles it on the assembly line. The employees now only have to effortlessly guide the load from the cage to the assembly line using the BalanceLift.

The use of the BalanceLift has made the work considerably easier. "After a shift we just feel fitter than we did before when we had to lift the gearbox housings by hand", explains Mario Xourgias. The employees quickly and easily adapted to working with the Balancer. "At first we had to get a feel for the new working equipment – then everything became almost automatic", says Mario Xourgias. "I recommend each new colleague to work with it."



Effortless: With the BalanceLift, Mario Xourgas can lift the gearbox housings over the edge of the high cage and move it to the low assembly line with ease.



In combination with the BalanceRail rail system, the BalanceLift makes it possible to produce large quantities of gears efficiently Volkswagen AG and for the employees to work ergonomically and safely.



It is now possible to place the gearbox housings onto the assembly line safely in an ergonomically correct posture.



### MARIO XOURGIAS, VOLKSWAGEN AG, WERK KASSEL

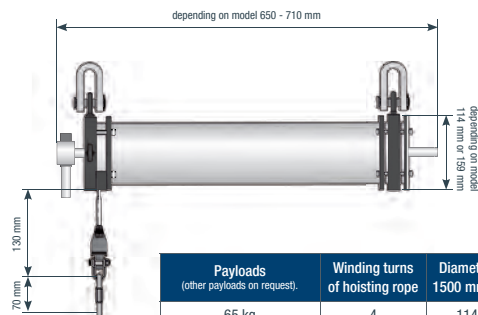
*"In our work area, 420 gearbox housings with a weight of approx. 12 kg lifted onto an assembly line every day. Before using the BalanceLift, these housings were moved manually with a great amount of physical effort. This was a strenuous activity with high level of physical strain."*

# TECHNICAL DATA

## BalanceLift

### «MINI» VERSION

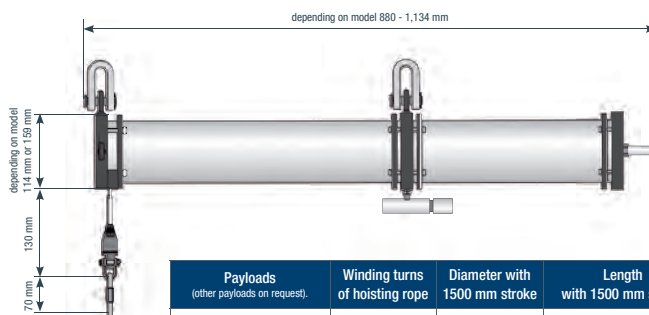
Values based on standard vertical travel of 1500 mm with horizontal fixing points.



Payloads (other payloads on request).	Winding turns of hoisting rope	Diameter with 1500 mm stroke	Length with 1500 mm stroke
65 kg	4	114 mm	650 mm
100 kg	6	159 mm	583 mm
150 kg	4	159 mm	710 mm

### «COMPACT» VERSION

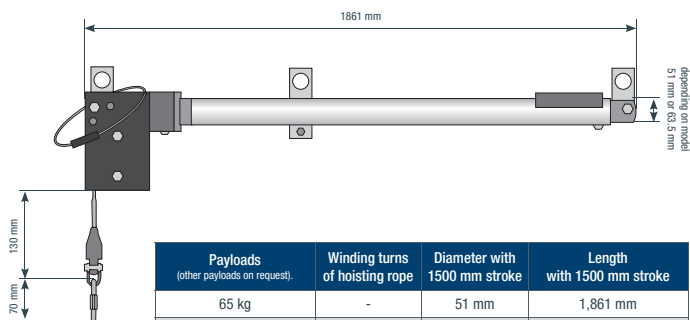
Values based on standard vertical travel of 1500 mm with horizontal fixing points.



Payloads (other payloads on request).	Winding turns of hoisting rope	Diameter with 1500 mm stroke	Length with 1500 mm stroke
65 kg	4	114 mm	1102 mm
100 kg	6	159 mm	880 mm
150 kg	4	159 mm	1134 mm

### «FULL-SCALE» VERSION

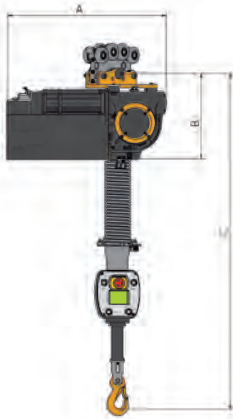
Values based on standard vertical travel of 1500 mm with horizontal fixing points.



Payloads (other payloads on request).	Winding turns of hoisting rope	Diameter with 1500 mm stroke	Length with 1500 mm stroke
65 kg	-	51 mm	1,861 mm
100 kg	-	51 mm	1,861 mm
150 kg	-	63.5 mm	1,861 mm



## eBALANCELIFT RAIL



**W75 R / W150 R**



**W225 R / W300 R**



**W600 R**

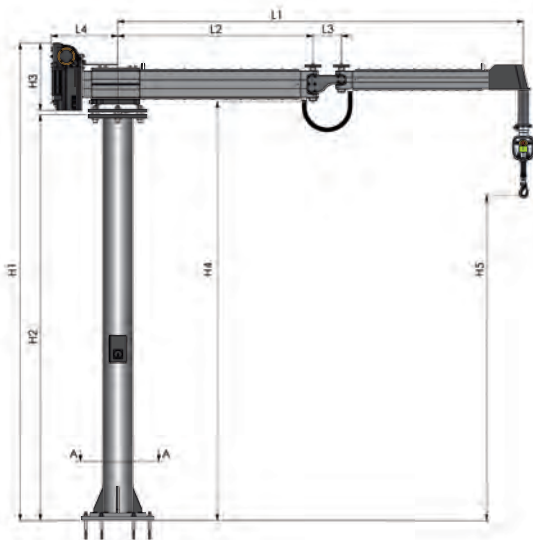
Type	A / B / C (mm)	Load capacity (kg)	Net weight (kg)	Lifting speed (mm/s)	Lifting motor	Max. stroke (mm)	Protection class	Power supply	Supply voltage
W75 R	498 / 269 / 985	75	31,0	max. 650	Servo motor	2,500	IP 54	1,700 VA	230 V single-phase
W150 R	498 / 269 / 985	150	31,0	max. 392	Servo motor	2,500	IP 54	1,700 VA	230 V single-phase
W225 R	520 / 309 / 1.025	225	41,0	max. 392	Servo motor	2,500	IP 54	2,300 VA	230 V single-phase
W300 R	520 / 309 / 1.025	300	41,0	max. 327	Servo motor	2,500	IP 54	2,300 VA	230 V single-phase
W600 R	520 / 329 / 1.118	600	55,0	max. 164	Servo motor	1,250	IP 54	2,300 VA	230 V single-phase

- ▶ Installation possible in all rail types
- ▶ The up / down movement is initiated via the operating handle of the operating unit.  
When the handle is released, the movement is stopped immediately.
- ▶ Note! - Type W600 R has an external handle.

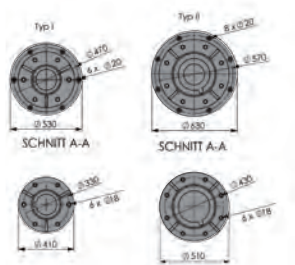


**WE WILL COORDINATE DIMENSIONS, DESIGNS AND VARIANTS  
IN CLOSE COOPERATION WITH YOU INDIVIDUALLY**

## TECHNICAL DATA

**eBALANCELIFT ARM: W75 C / W150 C**

—eBalanceLift



**W75 C**

L1 (mm)	L2 (mm)	L3 / L4 (mm)	H1 / H2 (mm)	H3 / H4 / H5 (mm)	Max. stroke (mm)	Net weight (kg) (arm, column, drive)	Protection class	Horizontal workspace (360° endless)	Mobile base plate 1.2 x 1.2 m	Load distribution plate (LDP) (required for floor mounting)
2,500	1,190	210 / 519	3,020 / 2,500	498 / 2,600 / 1,885	2,500	337	IP 54	5 m	optional	no
3,000	1,440					343		6 m	optional	Type 1
3,500	1,690					350		7 m	optional	Type 1
4,000	1,940					356		8 m	optional	Type 1
TECHNICAL DATA										
Load capacity			max. 75 kg							
Energy supply			230 V / 1,700 VA / single-phase / 10 A / Type C							
Lifting speed (Lifting motor)			max. 650 mm/s (servo motor)							

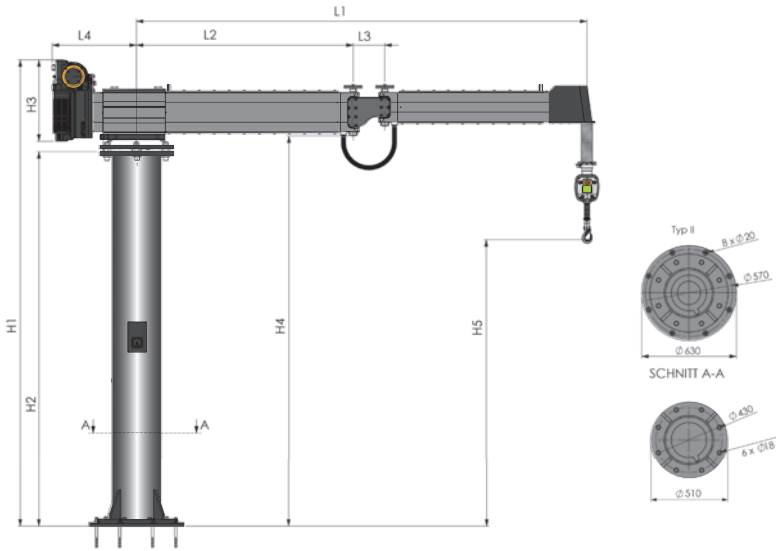
# W150 C

L1 (mm)	L2 (mm)	L3 / L4 (mm)	H1 / H2 (mm)	H3 / H4 / H5 (mm)	Max. stroke (mm)	Net weight (kg) (arm, column, drive)	Protection class	Horizontal workspace (360° endless)	Mobile base plate		Load distribution plate (LDP) (required for floor mounting)
2,500	1,190	210 / 519	3,020 / 2,500	498 / 2,600	2,500	337	IP 54	5 m	opt.	-	Type 1
3,000	1,440		/ 1,885	343		6 m		opt.	-	Type 1	
3,500	1,690	210 / 549	3,090 / 2,500	498 / 2,605		350		7 m	-	opt.	Type 2
4,000	1,940		/ 1,890	356		8 m		-	opt.	Type 2	
TECHNICAL DATA											
Load capacity			max. 150 kg								
Energy supply			230 V / 1,700 VA / single-phase / 10 A / Type C								
Lifting speed (Lifting motor)			max. 450 mm/s (servo motor)								

- ▶ Lightweight swivel arm (with center joint) made of anodized aluminum profiles; optional special lengths available
- ▶ Tubular steel column in standard height H2=2,500mm; optional column heights available
- ▶ The up / down movement is initiated via the operating handle of the operating unit. When the handle is released, the movement is stopped immediately.
- ▶ Floor mounting with floor anchors (6x M16 - see drilling diagram); optional reinforcement HIT-Z Hilti (chem. anchor with dynamic set) **OR** bolting to mobile base plate. Ground conditions: cracked and non-cracked concrete min. C20/25, max. C50/60 (B25-B55), min. 200 mm thick

This page shows sample illustrations. We reserve the right to make technical changes in the interest of continuous product innovation.

## eBALANCELIFT ARM: W225 C / W300 C



### W225 C

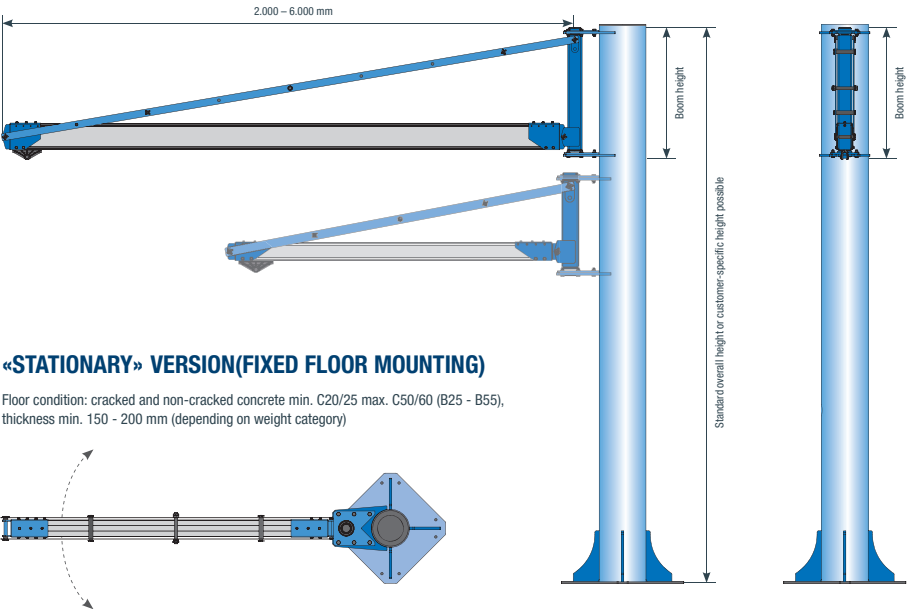
L1 (mm)	L2 (mm)	L3 / L4 (mm)	H1 / H2 (mm)	H3 / H4 / H5 (mm)	Max. stroke (mm)	Net weight (kg) (arm, column, drive)	Protection class	Horizontal workspace (360° endless)	Mobile base plate 1.5 x 1.5 m	Load distribution plate (LDP) (required for floor mounting)
2,500	1,190	210 / 585	3,160 / 2,500	520 / 2,605 / 1,890	2,500	447	IP 54	5 m	optional	Type 2
3,000	1,440					497		6 m	on request	Type 2
3,500	1,690					547		7 m	on request	Type 2
TECHNICAL DATA										
Load capacity			max. 225 kg							
Energy supply			230 V / 1,900 VA / single-phase / 10 A / Type C							
Lifting speed (Lifting motor)			max. 392 mm/s (servo motor)							

### W300 C

L1 (mm)	L2 (mm)	L3 / L4 (mm)	H1 / H2 (mm)	H3 / H4 / H5 (mm)	Max. stroke (mm)	Net weight (kg) (arm, column, drive)	Protection class	Horizontal workspace (360° endless)	Mobile base plate 1.5 x 1.5 m	Load distribution plate (LDP) (required for floor mounting)
2,500	1,190	210 / 585	3,160 / 2,500	520 / 2,605 / 1,890	2,500	447	IP 54	5 m	optional	Type 2
3,000	1,440					497		6 m	on request	Type 2
TECHNICAL DATA										
Load capacity			max. 300 kg							
Energy supply			230 V / 1,900 VA / single-phase / 10 A / Type C							
Lifting speed (Lifting motor)			max. 327 mm/s (servo motor)							

- ▶ Lightweight swivel arm (with center joint) made of anodized aluminum profiles; optional special lengths available
- ▶ Tubular steel column in standard height H2=2,500mm; optional column heights available
- ▶ The up / down movement is initiated via the operating handle of the operating unit. When the handle is released, the movement is stopped immediately.
- ▶ Floor mounting with floor anchors (6x M16 - see drilling diagram); our recommendation HIT-Z-D Hilti (chem. anchor with dynamics set) QR bolting to mobile base plate. Ground conditions: cracked and non-cracked concrete min. C20/25, max. C50/60 (B25-B55), min. 200 mm thick

PILLAR-MOUNTED SWIVEL CRANE



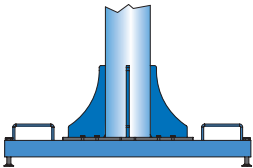
«STATIONARY» VERSION(FIXED FLOOR MOUNTING)

Floor condition: cracked and non-cracked concrete min. C20/25 max. C50/60 (B25 - B55), thickness min. 150 - 200 mm (depending on weight category)

Crane height	Boom height	Crane net weight	Possible payloads	Boom length	Base plate (depending on weight category)	Swivel angle	Power supply
3,500 - 4,200 mm (depending on weight category)	700 - 1,400 mm (depending on weight category)	200 kg - 670 kg (plus BalanceLift + gripper)	125 kg, 160 kg, 250 kg, 320 kg, 500 kg	2,000 - 6,000 mm (other lengths on request)	500 x 500 mm to 800 x 800 mm	270°	Electricity or compressed air

«MOBILE» VERSION

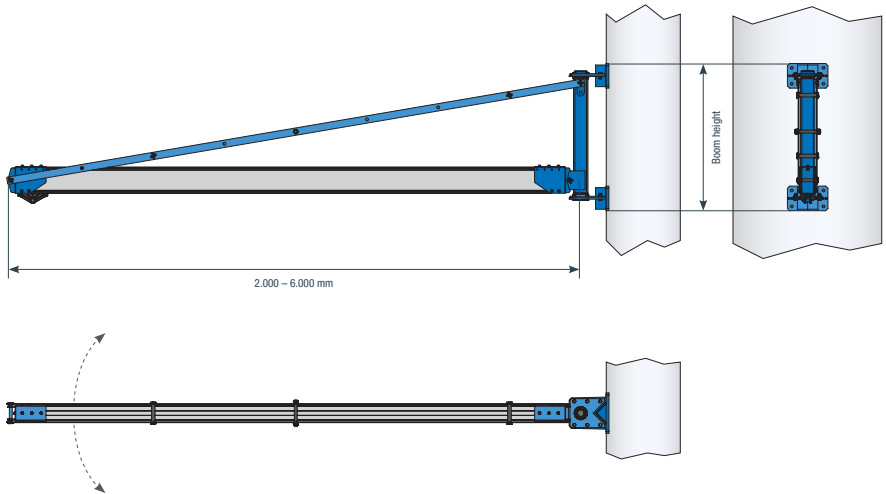
with mobile base plate, can be transported with a forklift



Crane height	Boom height	Crane net weight	Possible payloads	Boom length	Base plate (depending on weight category)	Swivel angle	Power supply
3,500 - 4,200 mm (plus 230 mm base plate height)	200 - 670 kg (plus BalanceLift + gripper) plus base plate	1,000 - 2,000 kg (depending on weight category)	75 kg, 125 kg, 160 kg	2,000 - 5,000 mm (depending on weight category) (other lengths on request)	1,200 x 1,200 mm to 1,500 x 1,500 mm	270°	Electricity or compressed air

WE WILL ADJUST THE DIMENSIONS, CONSTRUCTION FORMS AND VARIANTS INDIVIDUALLY IN CLOSE COOPERATION WITH YOU

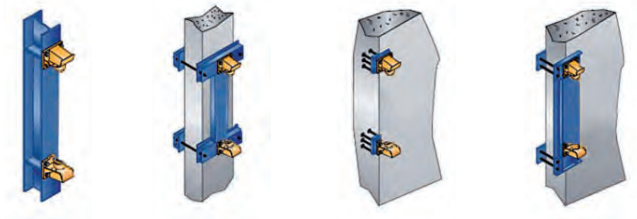
## WALL-MOUNTED SWIVEL CRANE



### «STATIONARY» VERSION (WALL MOUNTING)

Wall condition: cracked and non-cracked concrete,  
min. C20/25 max. C50/60 (B25 - B55), thickness min. 250 mm

Options for  
fixed wall  
mounting



Boom height	Net weight	Possible payloads	Boom length	Swivel angle	Power supply
700 - 1400 mm (depending on weight category)	80 - 200 kg (plus BalanceLift + gripper)	125/160/250/320/500 kg	2000 - 6000 mm (other lengths on request)	180° with wall mounting 270° with column mounting	Electricity or compressed air

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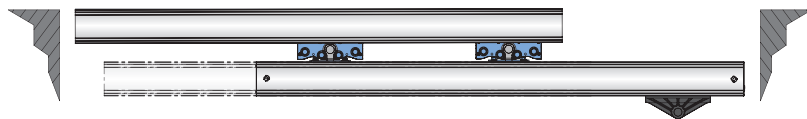
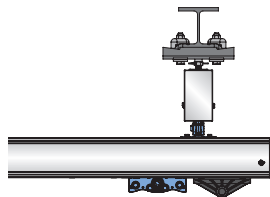
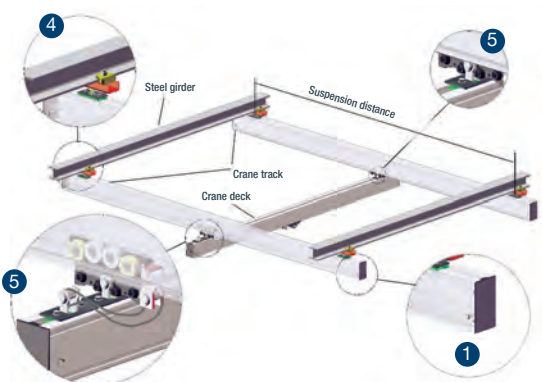
# TECHNICAL DATA

## BalanceRail



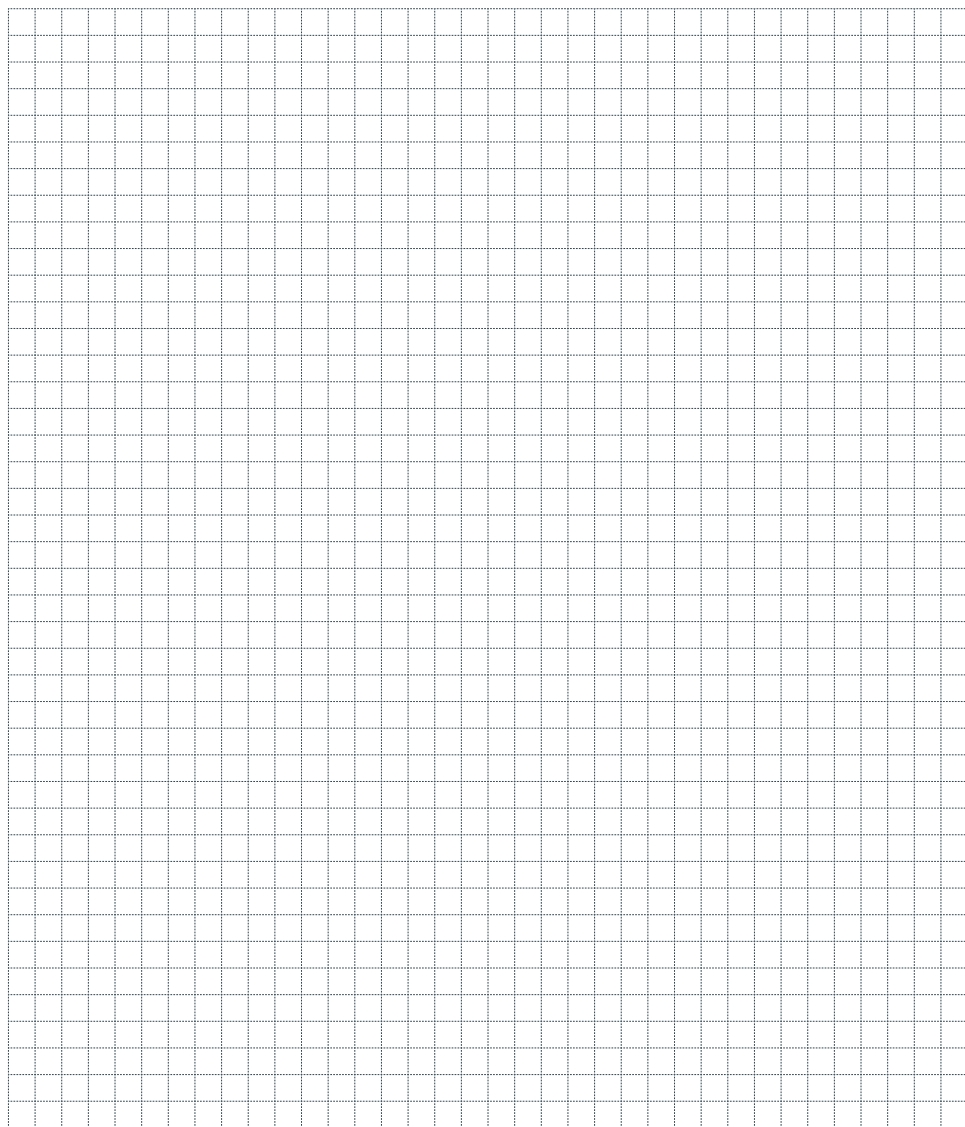
### OVERVIEW OF BALANCERAIL COMPONENTS

- 1 Crane profile
- 2 Curved segment
- 3 Slide-in profile for optimisation of existing systems
- 4 Fixing point
- 5 Chassis frame



WE WILL ADJUST THE DIMENSIONS, CONSTRUCTION FORMS AND VARIANTS INDIVIDUALLY IN CLOSE COOPERATION WITH YOU







## EXPRESSO ON-SITE SERVICE FAST AND FLEXIBLE

### MORE EFFICIENT USE WITHOUT COMPROMISE

What would a quality product be without corresponding service that fulfils all requirements competently, flexibly, and at short notice – thereby ensuring efficient and smooth operations with your EXPRESSO equipment? Besides the replacement of parts and annual inspections, our service technicians will optimise the use of your transport solution.

Thanks to regular inspections, wearing parts can be replaced in good time. In this way, you prevent downtime, extend the service life of your devices and ensure that your employees can work safely with the lifting aids.



**Technical support:** In most cases, a brief call is enough to help you in the event of a malfunction or minor defect. Our technical support is always at your side with advice and will quickly find a solution together with you so that your EXPRESSO device is quickly operational again.

However, should a service technician be required, we will gladly arrange an appointment with you:

Tel.: +49 (0)5 61 95 91-2233

Fax: +49 (0)5 61 95 91-2138

E-mail: [serviceteam@expresso.de](mailto:serviceteam@expresso.de)

## QUALIFIED AND COMPETENT

### EXPRESSO ORIGINAL PARTS

- ▶ Our machines are subject to strict quality controls at the time of delivery. However, if a wearing part needs to be replaced, use EXPRESSO original parts.
- ▶ On request, the replacement of spare parts can be carried out by an EXPRESSO service technician directly on site.

### MAINTENANCE AND MODERNISATION

- ▶ Maintenance, including DGUV testing, is carried out at regular intervals by an EXPRESSO service technician carried out. This ensures the longest possible service life for your equipment. If necessary we replace wearing parts immediately.
- ▶ The EXPRESSO service technician checks the proper condition of your appliances.
- ▶ If a device is damaged or defective, the EXPRESSO service technician will carry out a repair.
- ▶ The installation of new software updates or software adapted to your requirements is also part of our service. of our services.

### INSTALLATION

- ▶ Trained EXPRESSO employees will assemble complete systems and carrier systems for your lifting equipment. of your lifting equipment for you.
- ▶ Your special requirements and operational conditions are taken into account.
- ▶ You decide whether you need the complete package or individual service modules for the assembly.

### COMMISSIONING AND PRODUCT INSTRUCTION

- ▶ Our service technicians come to your site.
- ▶ Expert installation and commissioning of your units.
- ▶ Direct product instruction on site: On request, our service technicians will train your



# EXPRESSO MAINTENANCE PACKAGES

## INDIVIDUAL FOR ALL PRODUCTS

### SAFE ALL ROUND WITH THE EXPRESSO MAINTENANCE PACKAGE

- ▶ The regulations of the Employer's Liability Insurance Association are binding for companies with regard to health and safety at work, health and safety at the workplace. Our qualified service technicians inspect the equipment in accordance with the regulations (in accordance with DGUV regulations).
- ▶ The EXPRESSO service technician will carry out this inspection properly on site at the required intervals and enters the results in the corresponding inspection book.
- ▶ Our maintenance packages offer you the following advantages: EXPRESSO automatically monitors the inspection intervals for you and schedules the maintenance dates for you. On-site service and attractive prices round off the package.

### YOUR ADVANTAGES AT A GLANCE

- ▶ Exclusive service for all EXPRESSO lifting equipment, industrial trucks and loading equipment in use. products in use: lift2move solution, lift2move selective, products of the BalanceLift series, eBalanceLift and easyMoveR®.
- ▶ Our optimal route planning according to economic aspects keeps your travel costs low.
- ▶ The EXPRESSO complete package: Annual maintenance incl. DGUV inspection (with documentation in an inspection book) as well as maintenance and, if necessary, repair including immediate replacement of spare parts.
- ▶ We offer technical advice for optimal use - adapted to your individual task.

### EXPRESSO MAINTENANCE SERVICES INCL. DGUV TESTING:

- ▶ Visual/function test with documentation (incl. test according to DGUV regulations)
- ▶ Qualified inspection: All inspections are carried out by a „qualified person
- ▶ Maintenance and servicing: Care and maintenance by the manufacturer
- ▶ Immediate replacement of defective individual parts with EXPRESSO original spare parts (required materials will be charged separately)
- ▶ On-site service
- ▶ Certification with award of inspection sticker
- ▶ Proper documentation
- ▶ Including small materials and repair work up to 15 minutes (plus materials)



### YOUR SERVICE CONTACT

If you have any questions about your device, experience a malfunction or if you require technical advice concerning your individual tasks, you can contact us in the following ways:

Tel.: +49 (0)5 61 95 91-2233 | E-mail: [serviceteam@expresso.de](mailto:serviceteam@expresso.de)



## EXPRESSO PRODUCT DIVERSITY

### OUR PERFORMANCE AREAS



#### MANUAL TRANSPORT EQUIPMENT

Here you will find intelligent products that will facilitate your manual work and make handling and moving processes safer, gentler and more efficient: **hand trucks, four-wheel trolleys and baggage cart systems**



#### POWERED HANDLING SYSTEMS

In this area you will find motorised solutions used for lifting, handling and transporting goods of all kinds. **lift2move and BalanceLift**



#### SAFETY AND LOADING TECHNOLOGY

Our diverse range will offer you everything in the areas of **ramp safety and loading equipment that enables, simplifies and increases the safety of loading and unloading vehicles.**



ON REQUEST, WE WILL GLADLY SEND YOU INFORMATION MATERIAL ABOUT OUR OTHER PRODUCTS!



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