

# RERAILING SYSTEMS



# HOLMATRO SETS THE NEW STANDARD FOR RERAILING

## Mastering power

Holmatro products are all about the principle that only controlled power can be deployed effectively. We have expressed this vision in the slogan 'Mastering Power'. Still, for over 50 years after the foundation in 1967, we keep honoring our traditional Dutch roots and represent innovation, quality and support. That is why we design, develop, manufacture, and test our tools in-house. Our experience with high-pressure hydraulics enables us to seek out the boundaries of what is technically possible. This has made our tools lighter, compact, more durable, and easier to use.

[holmatro.com](http://holmatro.com)

# RERAILING SYSTEMS

## Years of rerailing experience combined with the most modern technology

For decades rerailing systems have been available and provide excellent assistance for putting derailed railway vehicles back on their track. A lot of rerailing system providers claim to offer the most innovative lightweight system, but user experiences seem to tell us otherwise. Reason enough for Holmatro to study the rerailing process closer in collaboration with the biggest Dutch rail infrastructure management company and examine the current rerailing systems available in the market. Together we were able to combine years of rerailing experience with the most modern technology in a single system. The result is revolutionary.

### Faster, safer and a more controllable rerailing solution for all types of railway vehicles

When it comes to rerailing a rail vehicle back on track it's important to do the job fast, safely and controlled. Reducing delay and costs are main priority, as well as providing workers a safe environment while lifting, moving and lowering the railway vehicle. By taking these priorities as guidance, Holmatro developed an extremely user-friendly solution that allows users to do the job faster, safer and with better control. No matter the type of railway vehicle.

### Maximum performance with minimum weight

Thanks to the lightweight components – up to 50% lighter than those of similar systems available on the market – physical burden is minimized considerably. All components have optimally placed grips and are easy to assemble and disassemble without the use of extra equipment. Comfortable carrying, handling, positioning, assembling and disassembling can be done by two persons.

### Independent control valves for synchronized lifting and lowering

As they say, a system is only as good as its operator. Therefore, controlling oil flows is often done by experienced workers who have a great feeling for the equipment. Holmatro's powerful Quattro pump makes controlling the vehicle easier. The pump sends 4 equal flows to 4 independent control valves. Operating the control valves simultaneously results in guaranteed uniform cylinder stroke speeds during lifting and lowering, regardless of the load they're carrying. Of course, the valves can also be controlled separately to operate the cylinders individually.

### Wireless remote control to operate the electromagnet valves

The pump can be operated remotely. Therefore it does not need to be right next to the railway, but can remain for example in the recovery vehicle. The wireless remote control allows the operator to adopt a safe position. It also enables him to move around the railway vehicle freely and keep an eye on the situation, without being dependent on the observations of others.

### Safely working near the railway vehicle

The lifting cylinders of the Rerailing System are connected to colored hoses, which also match the colors on the pump control panel. Color coding helps to avoid incorrect assembly and thus faulty operations are decreased enormously. Lowering valves with an integrated hose rupture security on each lifting cylinder keep the load steady when the operator stops controlling the pump or in the event of a hose rupture. When a railway vehicle has to hold its position for a longer time period, mechanical securing is provided by special stacking rings that can be easily placed around the plunger of the lifting cylinder.

### Controlled lateral movements

Holmatro's Rerailing System consists of lightweight modular converted traverse beams. To enable sideways movement, traverse cylinders with an equal capacity for both pushing and pulling are connected to traverse sleds which are placed on the beams. By using easily replaceable sleeve bearings both under and in the traverse sleds instead of traditional steel wheel rollers, less stress is created on the railway vehicle and the equipment during the movement. To prevent instability of the railway vehicle and the equipment the traverse sleds are also designed with an indicator which will alert the operator timely to traverse limits in lateral direction.



**SCAN THE QR CODE**  
Discover all features  
and benefits of the  
Rerailing System!



# RERAILING SETS

## Which rerailing system suits your application best?

Every rerailing application is different, and so is every budget. That's why Holmatro offers 3 defined sets, each one suitable for different circumstances. If a set suits your needs but a slight change would make it more perfect, changes can easily be made based on the components list. You can also compose your own customized Rerailing System. The choice is yours!

### Basic set

Holmatro's Basic Rerailing System set is suitable for rerailing railway vehicles with a maximum weight of 181t in the first stage and 56t in the second stage (given capacities are recommended load capacities taking in account a safety factor of 1.5 x load). The basic set contains all of the components needed to lift and move railway vehicles, and to properly control the Rerailing System.

### Advanced set

Holmatro's Advanced Rerailing System set is suitable for rerailing railway vehicles with a maximum weight of 181t in the first stage and 56t in the second stage. The advanced set contains all of the components included in the basic set, plus telescopic cylinders with a longer stroke that can take over the lifting of the railway vehicle when the

basic lifting cylinders are fully extended. All of the cylinders contain lowering valves with an integrated hose rupture security feature. The set is also provided with a powerful manually-controlled Quattro pump for synchronized lifting and lowering.

### Premium set

Holmatro's Premium Rerailing System set is the most extensive Rerailing System available, and is suitable for rerailing heavier railway vehicles with a maximum weight of 339t in the first stage and 168t in the second stage. The premium set contains all of the components included in the advanced set, plus high capacity telescopic cylinders and a powerful wireless remote-controlled Quattro pump for synchronized lifting and lowering.

	Basic set	Advanced set	Premium set
Lightweight components	●	●	●
Suitable for synchronized lifting		●	●
Lowering valves on cylinders: - controlled lowering - hose rupture security - disconnect the hose from cylinders when placed under a load		●	●
Wireless remote control			●
Color coding	●	●	●
Stacking rings	●	●	●
Traverse limit indicator	●	●	●

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**A 90 ton freight wagon back on the track in no time with safe and controlled rerailing**

Johan Knuivers, the Incident Response Team Leader at ProRail: "We were looking for an innovative Rerailing System in which our years of experience could be included. It soon became apparent that Holmatro was the most suitable partner for solving our problem. The result of our close collaboration was astounding: a rerailing system was completely adapted to our requirements, and was equipped with the most modern technology. We have tested the system extensively on different types of wagons, as well as on a freight wagon which was completely filled with water. The total weight of the wagon amounted to 90 tons. Despite this extreme weight, the rerailing system functioned safely and in a controlled manner. Because we were able to move the wagon sideways on the lifting cylinders, it was back on the track in no time."



**SCAN THE QR CODE**  
See Holmatro's Rerailing System into action!

# BASIC SET

Holmatro's Basic Rerailing set is suitable for railway vehicles with a maximum weight of 181t. The two telescopic cylinders (1) each have a capacity of 68t in the first and 21t in the second stage, and a total stroke of 220 mm to lift the railway vehicle. Both of the cylinders are placed on traverse sleds (2), which are located on the beam (3). The traverse sleds are connected to each other by two length-adjustable traverse struts (4). Between the traverse struts a traverse cylinder (5) is located, with a pulling and pushing capacity of 12t. This traverse cylinder pushes or pulls the traverse sleds over the beam. In this set, two beams – 2200 mm and 1100 mm – are included. The beams are connected to each other by a connection set (6).

Mechanical locking is provided by different stacking rings (7). With a fork tool (8), the stacking rings can be placed safely around the plunger of the telescopic cylinders. Sled fill plates (9) can be placed under the telescopic cylinder if necessary, when spaces between the cylinders and the lifting points need to be filled. The locking device (10) will prevent the vehicle from sliding during the lifting.

All of the cylinders are operated by a 230V hydraulic Vari pump and a FlowPanel (11). With the FlowPanel, the operator is able to accurately regulate the oil flow to each individual cylinder and control the load in the lifting and sliding operation. The actual pressure on each cylinder can be seen on the easy-to-read pressure gauges. The cylinders and the pump are connected to each other by colored single or double extension hoses (12) measuring 20 meters. The colors of the hoses match with the colors on the FlowPanel to help prevent incorrect connections.





















## Features and benefits

- Set components are up to **50% lighter** than those of similar systems available on the market. The components have **optimally placed grips** and are also easy to assemble and disassemble without the use of extra equipment.
  - Easy to carry, handle, position and assemble all the components by one person
  - Reduces the physical burden
  - Maximum performance at a minimum weight
- 230V electrical pump with a FlowPanel for **accurately regulating** the **oil flow** to each individual cylinder and controlling the load during lifting and sliding operations.
  - Safe and controlled operations
- Stacking rings which can be **easily placed** around the plunger of the lifting cylinder when **securing** the load.
  - Mechanically holds the load in its position for a longer time period
  - Work safely near and under the load
- Traverse cylinder with an **equal capacity** for both pushing and pulling.
  - Ability to push or pull the vehicle into position, instead of only pushing
- Easily **replaceable** slide bearings both under and in the traverse sled
  - Ensures controlled lateral movements
  - A safer operation with **less stress** on the railway vehicle and the equipment
  - Shorter maintenance times
  - Lighter parts (no steel roller wheels)
- An indicator on the traverse sleds will **alert** the operator to the **traverse limits**.
  - Prevents instability of the railway vehicle and the equipment
- Colored hoses, which match the colors on the FlowPanel.
  - Reduces the chance of incorrect assembly and thus faulty operations



# BASIC SET

lifting	description	model	qty
	Telescopic cylinder	HJ 68/21 H 22	2
	Stacking ring 50 mm for cylinder HJ 68/21 H **	SR 68/21 - 50 (1)	2
	Stacking ring 50 mm for cylinder HJ 68/21 H **	SR 68/21 - 50 (2)	2
	Stacking ring 110 mm for cylinder HJ 68/21 H **	SR 68/21 - 110 (1)	2
	Stacking ring 110 mm for cylinder HJ 68/21 H **	SR 68/21 - 110 (2)	2
	Fork stacking ring for safely place the stacking rings	FORK	2
sliding	description	model	qty
	Long beam to slide the sleds on	B 30 - 2200	1
	Short beam to slide the sleds on	B 30 - 1100	1
	Connection set for connecting two beams to each other	CPS 30	1
	Traverse sled	TS 232	2
	Sled fill plate	SFP 260x50	2
	Adapter plate for the HJ 68/21 cylinder to use with the sled fill plate	AP 170x5	2
	Locking device rerailing	LDR 30 B	1
	Traverse strut for connecting the traverse sleds to each other	TST 1390-2090	2
	Traverse cylinder	RTC 12 H 23	1
	Top plate - Flat for not sliding on the cylinders, but on the sled (only in combination with sled fill plate)	STP 260x10	2

operation	description	model	qty
	Vari pump + FlowPanel - Operation with manual control valves (knobs) - without synchronization possibility - Suitable for connecting 2 lifting cylinders and a traverse cylinder	12 W 25 D + HMD 4 C	1
	Tool station, 2500 x 2000 mm PVC coated polyester canvas basis to position tools on	2500 x 2000	1
connection	description	model	qty
	Double extension hose for connecting traverse cylinder to pump (black)	RVL 20 DU	1
	Single extension hose for connecting locking cylinder of traverse cylinder to pump (black)	RVL 20 SU	1
	Double extension hose for connecting lifting cylinders to pump (orange / black)	RVL 20 DOU	1
	Double extension hose for connecting lifting cylinders to pump (green / black)	RVL 20 DGU	1

→ Is this set suitable for your needs, but a slight change would make it more perfect? Contact us, and together we'll adjust the components or compose your own customized Rerailing System!

# ADVANCED SET

Holmatro's Advanced Rerailing set is suitable for railway vehicles with a maximum weight of 181t. The two types of telescopic cylinders (1) each have a capacity of 68t in the first and 21t in the second stage, and a total stroke of 220 and 550 mm to lift the railway vehicle. Both of the cylinders are placed on traverse sleds (2), which are located on the beam (3). The traverse sleds are connected to each other by two length-adjustable traverse struts (4). Between the traverse struts a traverse cylinder (5) is located, with a pulling and pushing capacity of 12t. This traverse cylinder pushes or pulls the traverse sleds over the beam. In this set, two beams – 2200 mm and 1100 mm – are included. The beams are connected to each other by a connection set (6).

Mechanical locking is provided by different stacking rings (7). With a fork tool (8), the stacking rings can be placed safely around the plunger of the telescopic cylinders. sled fill plates (9) can be placed under the telescopic cylinder if necessary, when spaces between the cylinders and the lifting points need to be filled. The locking device (10) will prevent the vehicle from sliding during the lifting.

All of the cylinders are operated by a powerful Quattro pump (11) which sends 4 equal flows to 4 independent manually operated control valves. Operating the control valves simultaneously results in guaranteed uniform cylinder stroke speeds during lifting and lowering, regardless the load they're carrying. Of course, the valves can also be controlled separately to individually operate the cylinders. The actual pressure on each cylinder can be seen on the easy-to-read pressure gauges. The cylinders and the pump are connected to each other by colored single or double extension hoses (12) measuring 20 meters. The colors of the hoses match with the colors on the pump control panel to help prevent incorrect connections.













## Features and benefits



- Set components are up to **50% lighter** than those of similar systems available on the market. The components have **optimally placed grips** and are also easy to assemble and disassemble without the use of extra equipment.
  - Easy to carry, handle, position and assemble all the components by one person
  - Reduces the physical burden
  - Maximum performance at a minimum weight
- Quattro pump with 4 independent valves and **equal flows** for uniform cylinder stroke speeds (synchronized lifting and lowering), regardless the weight of the load.
  - Safe and more controlled operations
- Stacking rings which can be **easily placed** around the plunger of the lifting cylinder when **securing** the load.
  - Mechanically holds the load in its position for a longer time period
  - Work safely near and under the load
- Lowering valves with an **integrated hose rupture security** feature on each lifting cylinder.
  - Safe and more controlled lowering of the vehicle, regardless of the load on each cylinder
  - Ensured safety, because of the load holding function, even in the event of a hose rupture
- Traverse cylinder with an **equal capacity** for both pushing and pulling.
  - Ability to push or pull the vehicle into position, instead of only pushing
- Easily **replaceable** slide bearings both under and in the traverse sled
  - Ensures controlled lateral movements
  - A safer operation with **less stress** on the railway vehicle and the equipment
  - Shorter maintenance times
  - Lighter parts (no steel roller wheels)
- An indicator on the traverse sleds will **alert** the operator to the **traverse limits**.
  - Prevents instability of the railway vehicle and the equipment
- Colored hoses, which match the colors on the pump control panel.
  - Reduces the chance of incorrect assembly and thus faulty operations









# ADVANCED SET

lifting	description	model	qty
	Telescopic cylinder	HJ 68/21 H 22	2
	Telescopic cylinder	HJ 68/21 H 55	2
	Stacking ring 50 mm for cylinder HJ 68/21 H **	SR 68/21 - 50 (1)	2
	Stacking ring 50 mm for cylinder HJ 68/21 H **	SR 68/21 - 50 (2)	2
	Stacking ring 110 mm for cylinder HJ 68/21 H **	SR 68/21 - 110 (1)	2
	Stacking ring 110 mm for cylinder HJ 68/21 H **	SR 68/21 - 110 (2)	8
	Fork stacking ring for safely place the stacking rings	FORK	2
	Base plate for lifting cylinders HJ 68/21 H 22 & HJ 68/21 H 55	BP 68/21	4

sliding	description	model	qty
	Long beam to slide the sleds on	B 30 - 2200	1
	Short beam to slide the sleds on	B 30 - 1100	1
	Connection set for connecting two beams to each other	CPS 30	1
	Traverse sled	TS 232	2
	Sled fill plate	SFP 260x50	4
	Adapter plate for the HJ 68/21 cylinder to use with the sled fill plate	AP 170x5	2
	Locking device rerailling	LDR 30 B	1
	Traverse strut for connecting the traverse sleds to each other	TST 1390-2090	2
	Traverse cylinder	RTC 12 H 23	1

sliding	description	model	qty
	Wheel set rerailling	WSR 30 B	1
	Top plate - Flat for not sliding on the cylinders, but on the sled (only in combination with sled fill plate)	STP 260x10	2

operation	description	model	qty
	Quattro pump 1 - Operation with manual control valves (handles) - With synchronization possibility - Suitable for connecting 2 lifting cylinders and a traverse cylinder	04 Q 50 D + 4MV	1
	Tool station, 2500 x 2000 mm PVC coated polyester canvas basis to position tools on	2500 x 2000	1

connection	description	model	qty
	Double extension hose for connecting traverse cylinder to pump (black)	RVL 20 DU	1
	Single extension hose for connecting locking cylinder of traverse cylinder to pump (black)	RVL 20 SU	1
	Double extension hose for connecting lifting cylinders to pump (orange / black)	RVL 20 DOU	1
	Double extension hose for connecting lifting cylinders to pump (green / black)	RVL 20 DGU	1

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# PREMIUM SET

Holmatro's Premium Rerailing set is suitable for railway vehicles with a maximum weight of 339t. Three types of telescopic cylinders (1) are provided for lifting the railway vehicle: cylinders with a capacity of 127t in the first and 63t in the second stage, and a total stroke of 500 mm; plus cylinders with a capacity of 68t in the first and 21t in the second stage, and a total stroke of either 200 or 550 mm. Two cylinders – equal models – are placed on the traverse sleds (2), which are located on the beam (3). The traverse sleds are connected to each other by two length-adjustable traverse struts (4). Between the traverse struts a traverse cylinder (5) is located, with a pulling and pushing capacity of 12t. This traverse cylinder pushes or pulls the traverse sleds over the beam. In this set, two beams – 2200 mm and 1100 mm – are included. The beams are connected to each other by a connection set (6).

Mechanical locking is provided by different stacking rings (7). With a fork tool (8), the stacking rings can be placed safely around the plunger of the telescopic cylinders. Sled fill plates (9) can be placed under the telescopic cylinder if necessary, when spaces between the cylinders and the lifting points need to be filled. The locking device (10) will prevent the vehicle from sliding during the lifting.

All of the cylinders are operated by a powerful Quattro pump (11) which sends 4 equal flows to 4 independent wirelessly (12) operated control valves. Operating the control valves simultaneously results in guaranteed uniform cylinder stroke speeds during lifting and lowering, regardless the load they're carrying. Of course, the valves can also be controlled separately to individually operate the cylinders. The actual pressure on each cylinder can be seen on the easy-to-read pressure gauges. The cylinders and the pump are connected to each other by colored single or double extension hoses (13) measuring 20 meters. The colors of the hoses match with the colors on the pump control panel to help prevent incorrect connections.



















## Features and benefits



- Set components are up to **50% lighter** than those of similar systems available on the market. The components have **optimally placed grips** and are also easy to assemble and disassemble without the use of extra equipment.
  - Easy to carry, handle, position and assemble all the components by one person
  - Reduces the physical burden
  - Maximum performance at a minimum weight
- Quattro pump with 4 independent valves and **equal flows** for uniform cylinder stroke speeds (synchronized lifting and lowering), regardless the weight of the load.
  - Safe and more controlled operations
- A wireless remote control can be used to operate the electromagnet valves (optional).
  - Ensures the operator is mobile and **free to move** around the railway vehicle
  - The pump does not need to be situated in the vicinity of the railway, but can remain in the recovery vehicle if necessary
- Stacking rings which can be **easily placed** around the plunger of the lifting cylinder when **securing** the load.
  - Mechanically holds the load in its position for a longer time period
  - Work safely near and under the load
- Lowering valves with an **integrated hose rupture security** feature on each lifting cylinder.
  - Safe and more controlled lowering of the vehicle, regardless of the load on each cylinder
  - Ensured safety, because of the load holding function, even in the event of a hose rupture
- Traverse cylinder with an **equal capacity** for both pushing and pulling.
  - Ability to push or pull the vehicle into position, instead of only pushing
- Easily **replaceable** slide bearings both under and in the traverse sled
  - Ensures controlled lateral movements
  - A safer operation with **less stress** on the railway vehicle and the equipment
  - Shorter maintenance times
  - Lighter parts (no steel roller wheels)
- An indicator on the traverse sleds will **alert** the operator to the **traverse limits**.
  - Prevents instability of the railway vehicle and the equipment
- Colored hoses, which match the colors on the pump control panel.
  - Reduces the chance of incorrect assembly and thus faulty operations









# PREMIUM SET

lifting	description	model	qty
	Telescopic cylinder	HJ 68/21 H 22	2
	Telescopic cylinder	HJ 68/21 H 55	2
	Telescopic cylinder	HJ 127/63 H 50	2
	Stacking ring 50 mm for cylinder HJ 68/21 H **	SR 68/21 - 50 (1)	2
	Stacking ring 50 mm for cylinder HJ 68/21 H **	SR 68/21 - 50 (2)	2
	Stacking ring 110 mm for cylinder HJ 68/21 H **	SR 68/21 - 110 (1)	2
	Stacking ring 110 mm for cylinder HJ 68/21 H **	SR 68/21 - 110 (2)	8
	Stacking ring 50 mm for cylinder HJ 127/63 H 50	SR 127/63 - 50 (1)	2
	Stacking ring 50 mm for cylinder HJ 127/63 H 50	SR 127/63 - 50 (2)	2
	Stacking ring 100 mm for cylinder HJ 127/63 H 50	SR 127/63 - 100 (1)	2
	Stacking ring 100 mm for cylinder HJ 127/63 H 50	SR 127/63 - 100 (2)	6
	Fork stacking ring for safely place the stacking rings	FORK	2
	Base plate for lifting cylinders HJ 68/21 H 22 & HJ 68/21 H 55	BP 68/21	4
	Base plate for lifting cylinder HJ 127/63 H 50	BP 127/63	2
sliding	description	model	qty
	Long beam to slide the sleds on	B 30 - 2200	1
	Short beam to slide the sleds on	B 30 - 1100	1
	Connection set for connecting two beams to each other	CPS 30	1
	Traverse sled	TS 232	2
	Sled fill plate	SFP 260x50	4
	Adapter plate for the HJ 68/21 cylinder to use with the sled fill plate	AP 170x5	2
	Locking device rerailing	LDR 30 B	1

sliding	description	model	qty
	Traverse strut for connecting the traverse sleds to each other	TST 1390-2090	2
	Traverse strut for connecting the traverse sleds to each other	TST 1990-3090	2
	Traverse cylinder	RTC 12 H 23	1
	Wheel set rerailing	WSR 30 B	1
	Top plate - Flat for not sliding on the cylinders, but on the sled (only in combination with sled fill plate)	STP 260x10	2

operation	description	model	qty
	Quattro pump 3 - Operation with electrical valves (push buttons on wireless remote control) - With synchronization possibility - Suitable for connecting 4 lifting cylinders and a traverse cylinder	04 Q 50 D + 6EWLRC	1
		Tool station, 2500 x 2000 mm PVC coated polyester canvas basis to position tools on	2500 x 2000

connection	description	model	qty
	Double extension hose for connecting traverse cylinder to pump (black)	RVL 20 DU	1
	Single extension hose for connecting locking cylinder of traverse cylinder to pump (black)	RVL 20 SU	1
	Double extension hose for connecting lifting cylinders to pump (orange / black)	RVL 20 DOU	1
	Double extension hose for connecting lifting cylinders to pump (green / black)	RVL 20 DGU	1
	Double extension hose for connecting lifting cylinders to pump (red / black)	RVL 20 DRU	1
	Double extension hose for connecting lifting cylinders to pump (blue / black)	RVL 20 DBU	1

→ Is this set suitable for your needs, but a slight change would make it more perfect? Contact us, and together we'll adjust the components or compose your own customized Rerailing System!



## Lifting components

# CYLINDERS

Telescopic cylinders are used for lifting the railway vehicle. Before selecting the cylinders, it's important to know the weight of the railway vehicle and the stroke you need.



HJ 68/21 H 22



HJ 68/21 H 5





HJ 127/63 H 50

specificaties		HJ 68/21 H 22	HJ 68/21 H 55	HJ 127/63 H 50
max. working pressure	bar/Mpa	550 / 55	550 / 55	550 / 55
stroke 1st plunger	mm	110	275	250
stroke 2nd plunger	mm	110	275	250
closed height	mm	240	440	460
capacity 1st plunger	kN/t	657 / 67	657 / 67	1249 / 127.4
capacity 2nd plunger	kN/t	212 / 21.6	212 / 21.6	622 / 63.4
return type		hydraulic	hydraulic	hydraulic
material		aluminium	aluminium	aluminium
weight, ready for use	kg	24.6	44	85

\* Also available: lifting cylinders with different capacities and/or strokes.










## BASE PLATES

Base plates are used under the lifting cylinders for lifting the railway vehicle on the ground, instead of on the beam.

base plates	description	model	suitable for cylinder	weight, ready for use
	Base plate for lifting cylinders	BP 68/21	HJ 68/21 H **	4.7
	Base plate for lifting cylinders	BP 127/63	HJ 127/36 H 50	4.4

## STACKING RINGS

Stacking rings can be easily placed around the plunger of the telescopic cylinders and are used for the mechanical securing of the railway vehicle, when the vehicle has to hold its position for a longer time period.

stacking rings	description	model	suitable for cylinder	filling height	weight, ready for use
				mm	kg
	Stacking ring 50 mm	SR 68/21 - 50 (1)	HJ 68/21 H **	50	1.6
	Stacking ring 50 mm	SR 68/21 - 50 (2)	HJ 68/21 H **	50	0.9
	Stacking ring 110 mm	SR 68/21 - 110 (1)	HJ 68/21 H **	110	3.1
	Stacking ring 110 mm	SR 68/21 - 110 (2)	HJ 68/21 H **	110	2.9
	Stacking ring 50 mm	SR 127/63 - 50 (1)	HJ 127/63 H **	50	2.9
	Stacking ring 50 mm	SR 127/63 - 50 (2)	HJ 127/63 H **	50	2.4
	Stacking ring 100 mm	SR 127/63 - 100 (1)	HJ 127/63 H **	100	4.8
	Stacking ring 100 mm	SR 127/63 - 100 (2)	HJ 127/63 H **	100	4.3
	Fork stacking ring for safely place the stacking rings	FORK	-		0.6

## Sliding components



# BEAMS

Choose the number of beams based on the max. derailing distance of the train.

beams	description	model	dimensions (lxwxh) mm	weight, ready for use kg
	Long beam to slide the sleds on	B 30 - 2200	2200 x 350 x 140	62.4
	Short beam to slide the sleds on	B 30 - 1100	1100 x 350 x 140	32.7
	Connection set for connecting two beams to each other	CPS 30	-	30.4
	Long beam to slide the sleds on (low)	B11 - 2200	2200 x 350 x 85	41.5
	Short beam to slide the sleds on (low)	B11 - 1100	1100 x 350 x 85	21.2
	Connection set for connecting two low beams to each other	CPS 11	-	14.2

# TRAVERSE STRUTS

The traverse struts are needed to connect the traverse sleds to each other. Choose the length of the traverse strut based on the necessary distance between the lifting points.

traverse struts	description	model	weight, ready for use kg
	Traverse strut for connecting the traverse sleds to each other	TST 1390-2090	15.0
	Traverse strut for connecting the traverse sleds to each other	TST 1990-3090	33.0

# TRAVERSE SLEDS





The traverse sled will facilitate side movements (perpendicular to the rails).

Main specifications:

- Max. load to be transported: 120 t
- Max. total load per sled over the beam: 60 t
- Max. total height: 250 mm
- Adjustment range TST 1390-2090: 1390 mm to 2090 mm
- Adjustment range TST 1990-3090: 1990 mm to 3090 mm


Use the sled fill plates to increase the height of the traverse sleds (for the HJ 68/21 cylinder, an adapter plate is needed)

Use a locking device to mechanically lock the traverse sleds.

traverse sleds	description	model	dimensions (lxwxh) mm	weight, ready for use kg
	Traverse sleds	TS 232	450 x 400 x 120	24.0
	Sled fill plate	SFP 260x50	Ø260 x 50	2.7
	Adapter plate for the HJ 68/21 cylinder to use with the sled fill plate	AP 170x5	Ø250 x 10	3.2
	Top plate; used on each traverse sled to ensure there is no sliding on the lifting cylinders, but only on the traverse	STP 260x10	Ø250 x 10	3.3
	Locking device rerailling Max. horizontal displacement: 230 mm	LDR 30 B	-	5.0


# TRAVERSE CYLINDER

A traverse cylinder is used for the horizontal movement (pushing and pulling) of the vehicle. The hydraulic unlocking of the cylinder is located inside of the device.

traverse cylinder	RTC 12 H 23		
	max. working pressure	bar / Mpa	550 / 55
	tonnage	t	12
	stroke	mm	230
	closed height	mm	593
	capacity (press)	kN/t	118 / 12
	capacity (retract)	kN/t	118 / 12
	return type		hydraulic
	material		steel
	weight, ready for use	kg	17.0

\* Also available: traverse cylinders with other capacities.

# SLIDING ACCESSORIES

sliding accessories	description	model	dimensions (lxwxh) mm	weight, ready for use kg
	Wheel set rerailling; for easy movement of the beams to their location	WSR 30 B		12.0

## Operation components

# PUMPS

Holmatro provides different pumps for operating the lifting cylinders and traverse cylinder of the Rerailing System. Pump differences are in terms of the accuracy of synchronization, flexibility and usability.



12 W 25 D + HMD 4 C

04 Q 50 D + 4MV

04 Q 50 D + 4EVWRC

04 Q 50 D + EVWLRC

motor pumps		12 W 25 D + HMD 4 C	04 Q 50 D + 4MV	04 Q 50 D + 4EVWRC	04 Q 50 D + 6EVWLRC
description		Vari pump + FlowPanel	Quattro pump 1	Quattro pump 2	Quattro pump 3
max. working pressure	bar / Mpa	550 / 55	550 / 55	550 / 55	550 / 55
number of outputs		4	4	4	6
number of stages		2	2	2	2
1st stage output / min.	cc	3200 (x1)	1100 (x4)	1100 (x4)	1100 (x4)
2nd stage output / min.	cc	1200 (x1)	400 (x4)	400 (x4)	400 (x4)
engine		230 VAC - 1.5 kW - 50 Hz - 1 Ph	230 VAC - 2.2 kW - 50 Hz - 1 Ph	230 VAC - 2.2 kW - 50 Hz - 1 Ph	230 VAC - 2.2 kW - 50 Hz - 1 Ph
dimensions (lxwxh)	mm	500 x 525 x 910	850 x 705 x 1250	700 x 570 x 1070	700 x 570 x 1070
weight, ready for use	kg	115	215	230	230

\* Also available: pumps with different engines (petrol/diesel) and/or flow speeds.

### Additional information

#### • Vari pump + FlowPanel

- Operation is with manual control valves (knobs)
- No synchronization possibility
- Suitable for connecting 2 lifting cylinders and a traverse cylinder

#### • Quattro pump 1

- Operation is with manual control valves (handles)
- Suitable for connecting 2 lifting cylinders and a traverse cylinder

#### • Quattro pump 2

- Operation is with electrical valves (push buttons on a wired remote control)
- Suitable for connecting 4 lifting cylinders and a traverse cylinder

#### • Quattro pump 3

- Operation is with electrical valves (push buttons on a wireless remote control)
- Suitable for connecting 4 lifting cylinders and a traverse cylinder



hand pumps		PA 04 H 2	PA 09 H 2
working pressure	bar/MPa	720 / 72	720 / 72
max. operating force	kg	32	33
output, 1 <sup>st</sup> stage	cm <sup>3</sup> / stroke	18.4	22
output, 2 <sup>nd</sup> stage	cm <sup>3</sup> / stroke	1.4	2.1
max. pressure, 1 <sup>st</sup> stage	bar	45	45
max. pressure, 2 <sup>nd</sup> stage	bar	720	720
effective tank capacity	cm <sup>3</sup>	400	900
weight incl. oil	kg	3.4	4.7
LxWxH	mm	434 x 135 x 165	619 x 135 x 170
maintenance set	art no	100.013.266	100.013.266

\* Also available: hand pumps with larger tank capacities.

### Additional information

- Ergonomic design
- Robust and compact construction
- Service- and maintenance-friendly
- High oil output
- Accurately controllable pressure release valve
- Pressure gauge connection on pump block
- Oil level glass in tank
- Integrated filler funnel.
- Push & Unlock pump handle lock

# OPERATION ACCESSORIES







The tool station is used to store all tools in an organized way.

operation accessories	description	model
	Tool station	2500 x 2000

## Connection components

# HOSES

Holmatro provides different hydraulic hoses needed for connecting the lifting cylinders and the traverse cylinder to the pump unit.


hose types	description	model	qty
	Double extension hose for connecting traverse cylinder to pump (black)	RVL 20 DU	1
	Single extension hose for connecting locking cylinder of traverse cylinder to pump (black)	RVL 20 SU	1
	Double extension hose for connecting lifting cylinders to pump (orange / black)	RVL 20 DOU	1
	Double extension hose for connecting lifting cylinders to pump (green / black)	RVL 20 DGU	1
	Double extension hose for connecting lifting cylinders to pump (red / black)	RVL 20 DRU	1
	Double extension hose for connecting lifting cylinders to pump (blue / black)	RVL 20 DBU	1

\* Also available: hoses with different colors and/or lengths.

## Also available






# AUXILLARY TOW DOLLY

The solution for the recovery of rail vehicles with blocked or defective wheels.

auxillary tow dolly	ATD 32		
	track gauge	mm	1435
	suitable for a wheel range	mm	Ø 750 - 1250 mm
	max. axle load depends on wheel diameter 750 mm	ton	22
	max. axle load depends on wheel diameter 1250 mm	mm	32,5
	dimensions (lxwxh)	mm	1082 x 1746 x 234
	weight, ready for use	kg	193

If your application needs customer specific requirements other than the standard as mentioned above please consult Holmatro to discuss the possibilities to implement your individual requirements.




# OPTIONAL PRODUCTS

products	description	model	dimensions (lxwxh)		weight, ready for use
			mm	kg	
	Rail hook for pushing the vehicle onto the rail track	HRH 5 S 22.5	832 x 495 x 186	22	
	Lifting bags HLB 2 up to HLB 96 and all sort of hoses and control units				
	Inclined cutter for precise cutting - battery-operated model	GCU 5050 i EVO 3			
	Spreader for spreading, squeezing and (with accessories) pulling - battery-operated model	GSP 5250 EVO 3			For more information and extended specifications, see our Holmatro website.
	Heavy duty combi tool for spreading, cutting, squeezing and pulling - battery-operated model	GCT 5160 EVO 3			

## Mechanical rerailing system

# MECHANICAL TOOLS

Holmatro's extensive range of mechanical tools is produced to withstand tough operating conditions over long periods. The sustainable cast iron construction makes the tools and jacks suitable for use during welding work and for use under water. Despite these rough conditions, the tools are extremely maintenance-friendly.

mechanical tools	description	model	tonnage tons	stroke mm	closed height mm
	Mechanical jacks with a lifting capacity of 10 to 100 tonnes and a stroke varying from 125 to 350 mm. The jacks are made of cast iron and are resistant to continuous heavy operating conditions like rerailing	JJ	10 - 100	105 - 350	255 - 555
	Mechanical traversing beds for mechanical jacks. Suitable for smooth horizontal movement of heavy loads	TB	suitable for jack: JJ 1015, JJ 1513, JJ 25**, JJ 30**, JJ 35**, JJ 50**		
	Base plates for mechanical jacks, suitable in case of unstable work settings to stabilize mechanical jacks	SB	suitable for jack: JJ 1015, JJ 1513, JJ 25**, JJ 30**, JJ 35**, JJ 50**		

## Custom made rerailing solutions

# THOSE WHO HAVE CHALLENGED US ALREADY



Amsterdam-Amstelland Fire Department, consisting of 1,100 people, effectively acts in fires and accidents, but is also prepared for disaster management and the management of large-scale crisis situations. For lifting subways after incidents they were looking for a lightweight and fast lifting system that could be connected to the existing equipment on the fire truck. In addition, they wanted a reliable supplier who offers the possibility of tool inspection on location, in which all parts of the hydraulic sets are included. Holmatro developed 6 lifting systems, consisting of Vari pumps, 40 ton telescopic cylinders, filler pieces, operating sets and extension hoses. Our comprehensive service program matches their maintenance needs.

Commissioned by  
**Fire department Amsterdam - Amstelland**  
Project  
**Subway lifting**

With the arrival of low-floor trams in Antwerp, which improve tram access for wheelchairs, prams and buggies, it became more difficult for the Antwerp Fire Department to jack up the trams quickly and safely after an incident. Holmatro developed a lifting system that can be connected to existing equipment on the fire truck. With the aid of a rotatable control on a special operating valve, the telescopic cylinders are controlled remotely. The aluminum telescopic cylinders each have a capacity of 40 tons and a stroke of 20 mm and 55 mm. The saddle of the plunger is finished with a special anti-slip coating to protect the base of the tram. In addition, this coating provides extra stability during the lifting and lowering of the vehicle.

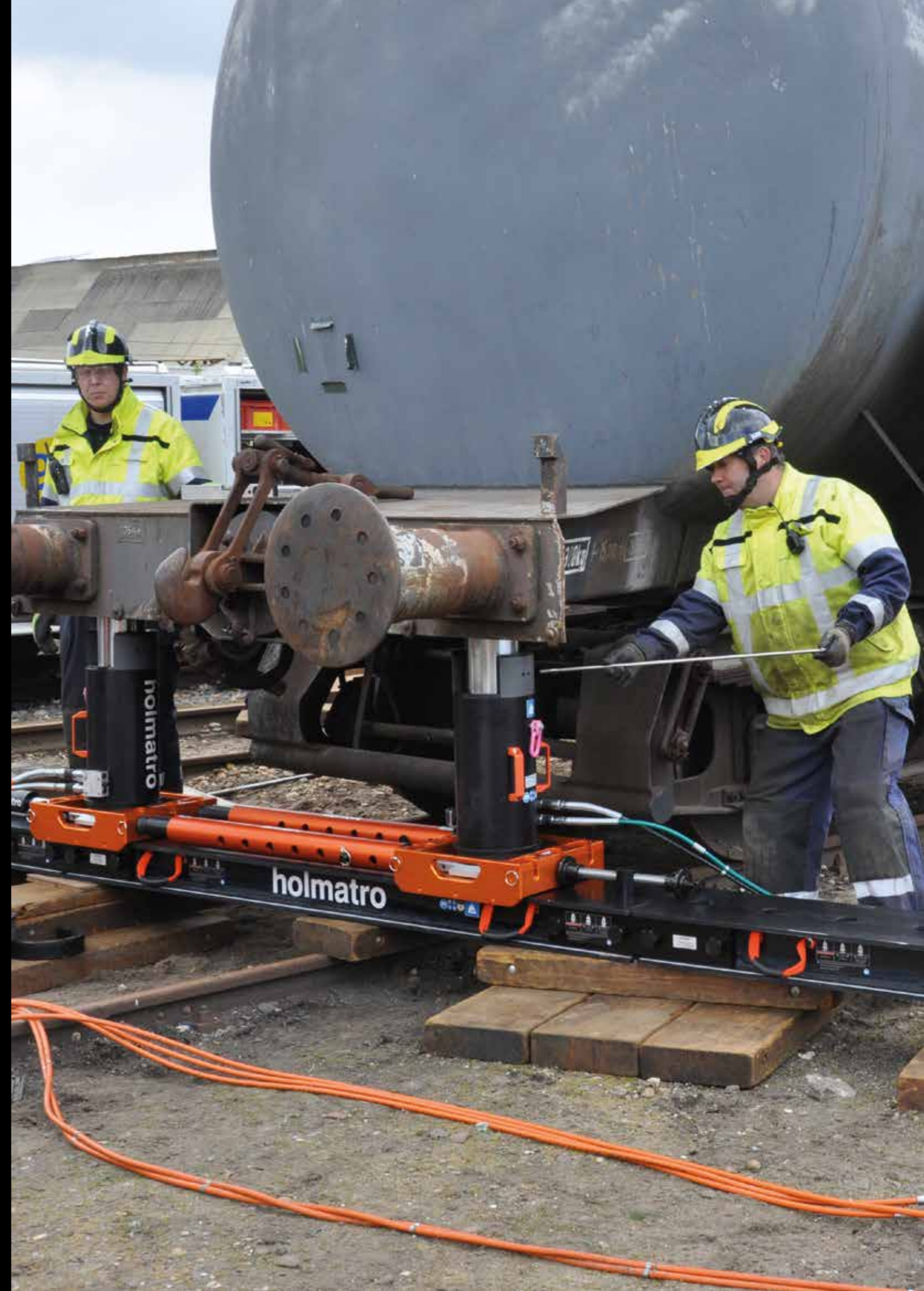
Commissioned by  
**Fire department Antwerp**  
Project  
**Low-floor tram lifting**



# SET ASSEMBLY

description	model	basic set	advanced set	premium set
<b>Lifting components</b>				
Telescopic cylinder	HJ 68/21 H 22	2*	2	2
Telescopic cylinder	HJ 68/21 H 55		2	2
Telescopic cylinder	HJ 127/63 H 50			2
Base plate for lifting cylinders	BP 68/21		4	4
Base plate for lifting cylinders	BP 127/63			2
Stacking ring	SR 68/21 - 50 (1)	2	2	2
Stacking ring	SR 68/21 - 50 (2)	2	2	2
Stacking ring	SR 68/21 - 110 (1)	2	2	2
Stacking ring	SR 68/21 - 110 (2)	2	8	8
Stacking ring	SR 127/63 - 50 (1)			2
Stacking ring	SR 127/63 - 50 (2)			2
Stacking ring	SR 127/63 - 100 (1)			2
Stacking ring	SR 127/63 - 100 (2)			6
Fork stacking ring	FORK	2	2	2
<b>Sliding components</b>				
Long beam	B 30 - 2200	1	1	1
Short beam	B 30 - 1000	1	1	1
Connection set	CPS 30	1	1	1
Traverse sled	TS 232	2	2	2
Sled fill plate	SFP 260x50	2	4	4
Adapter plate	AP 170x5	2	2	2
Locking device rerailing	LDR 30 B	1	1	1
Traverse strut	TST 1390-2090	2	2	2
Traverse strut	TST 1990-3090			2
Traverse cylinder	RTC 12 H 23	1	1	1
Wheel set rerailing	WSR 30 B		1	1
Top plate	STP 260x10	2	2	2
<b>Operation components</b>				
Vari pump + FlowPanel	12 W 25 D + HMD 4 C	1		
Quattro pump 1	04 Q 50 D + 4MV		1	
Quattro pump 3	04 Q 50 D + 6EVWLRC			1
Tool station	2500 x 2000	1	1	1
<b>Connection components</b>				
Double extension hose	RVL 20 DU	1	1	1
Single extension hose	RVL 20 SU	1	1	1
Double extension hose	RVL 20 DOU	1	1	1
Double extension hose	RVL 20 DGU	1	1	1
Double extension hose	RVL 20 DRU			1
Double extension hose	RVL 20 DBU			1

\* The cylinders in the Basic set do not have the lowering valves, but have an integrated hose rupture security feature.



# HOLMATRO OFFICES AND DEALERS

All over the world

Thanks to our worldwide sales and service network there's always a Holmatro representative nearby, ready to assist you!

Find your nearest Holmatro representative on [holmatro.com](http://holmatro.com)



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# FEEL THE POWER

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