Rerailing Systems Feel the power







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 the track it's important 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 dissambling can be done by one person.

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 to 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 and see Holmatro's Rerailing System into action!





Which Rerailing Systems 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. 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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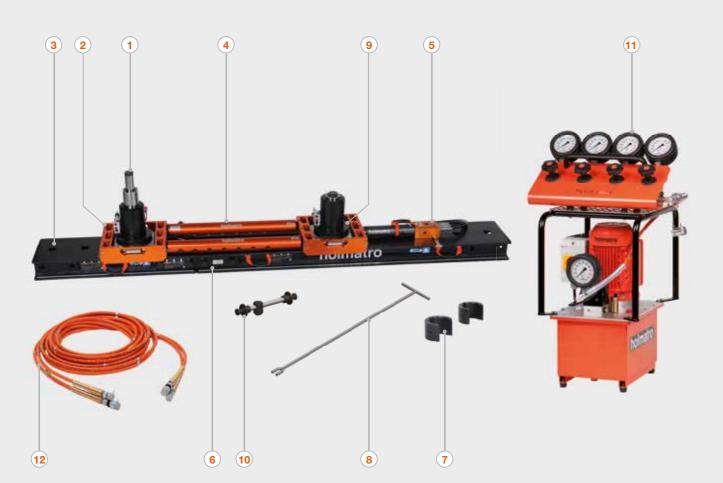


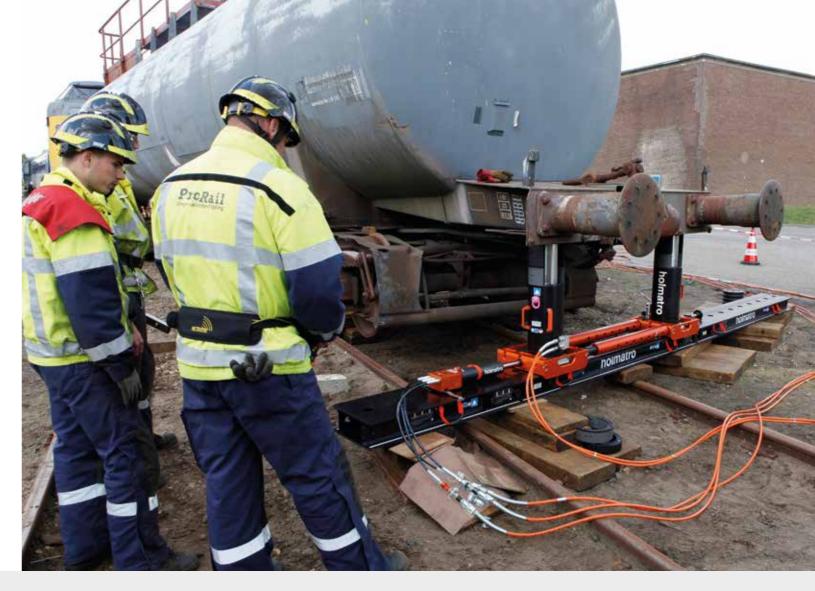
Basic set

Holmatro's Basic Rerailing System set is suitable for railway vehicles with a maximum weight of 181t in the first stage and 56t in the second stage. 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

 ${\color{gray}\mathbf{8}}$





| Lifting | | <u></u> | |
|----------|--|--------------------|-----|
| image | description | model | qty |
| holmatro | 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 | | | ↓ |
|-------------|---|---------------|----------|
| image | description | model | qty |
| | Long Beam to slide the Sleds on | B 30 - 2200 | 1 |
| nomatro 118 | 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 |
| 0 | Adapter Plate for the HJ 68/21 Cylinder to use with the Sled Fill Plate | AP 170x5 | 2 |
| 43 | Locking Device Rerailing | LDR 30 B | 1 |
| | Traverse Strut for connecting the Traverse Selds to each other | TST 1390-2090 | 2 |
| | Traverse Cylinder | RTC 12 H 32 | 1 |
| | Top Plate - Flat for not sliding on the cylinders, but on the Sled (only in combination with Sled Fill Plate) | STP 260x10 | 2 |

Rerailing System Basic Set

| Operation | Operation Uperation | | |
|-----------|--|------------------------|-----|
| image | 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 | | | 1 |
|------------|--|------------|-----|
| image | 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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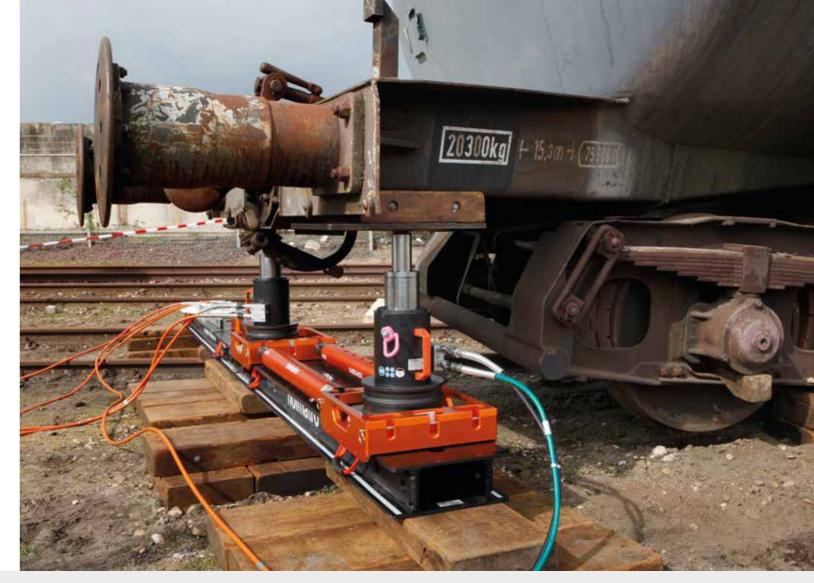
Advanced set

Holmatro's Advanced Rerailing System set is suitable for railway vehicles with a maximum weight of 181t in the first stage and 56t in the second stage. 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 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 stoke 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 | Lifting | | <u></u> |
|----------|--|--------------------|---------|
| image | description | model | qty |
| holmatro | Telescopic Cylinder | HJ 68/21 H 22 | 2 |
| holmatro | 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 |
| 3 | Stacking Ring 110 mm for cylinder HJ 68/21 H ** | SR 68/21 - 110 (1) | 2 |
| 3 | 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 Rerailing | LDR 30 B | 1 |
| Traverse Strut for connecting the Traverse Selds to each other | TST 1390-2090 | 2 |
| Traverse Cylinder | RTC 12 H 32 | 1 |
| | Long Beam to slide the Sleds on Short Beam to slide the Sleds on Connection Set for connecting two Beams to each other Traverse Sled Sled Fill Plate Adapter Plate for the HJ 68/21 Cylinder to use with the Sled Fill Plate Locking Device Rerailing Traverse Strut for connecting the Traverse Selds to each other | Long Beam to slide the Sleds on B 30 - 2200 Short Beam to slide the Sleds on B 30 - 1100 Connection Set for connecting two Beams to each other CPS 30 Traverse Sled TS 232 Sled Fill Plate SFP 260x50 Adapter Plate for the HJ 68/21 Cylinder to use with the Sled Fill Plate AP 170x5 Locking Device Rerailing LDR 30 B Traverse Strut for connecting the Traverse Selds to each other TST 1390-2090 |

Rerailing System Advanced Set

| Sliding | | | 1 |
|---------|---|------------|-----|
| image | description | model | qty |
| | Wheel Set Rerailing | WSR 30 B | 1 |
| 6 | Top Plate - Flat for not sliding on the cylinders, but on the Sled (only in combination with Sled Fill Plate) | STP 260x10 | 2 |

| Operation | | | ↓ |
|-----------|--|--------------------|----------|
| image | 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 | | | ↓ |
|------------|--|------------|----------|
| image | 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 System set is suitable for railway vehicles with a maximum weight of 339t in the first stage and 168t in the second stage. 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 stoke 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



| Lifting | | | |
|----------|--|---------------------|-----|
| image | description | model | qty |
| hoimatro | Telescopic Cylinder | HJ 68/21 H 22 | 2 |
| holmatro | Telescopic Cylinder | HJ 68/21 H 55 | 2 |
| holmatro | 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 |

holmatro mastering power

| Sliding | | | |
|--------------|---|-------------|-----|
| image | description | model | qty |
| | Long Beam to slide the Sleds on | B 30 - 2200 | 1 |
| nomality (4) | 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 |
| 0 | Adapter Plate for the HJ 68/21 Cylinder to use with the Sled Fill Plate | AP 170x5 | 2 |

Rerailing System

| Р | remium | Set |
|---|------------|-----|
| | IGITIIGITI | OCL |

| Sliding | | | ↓ |
|---------|---|---------------|----------|
| image | description | model | qty |
| 48 | Locking Device Rerailing | LDR 30 B | 1 |
| | Traverse Strut for connecting the Traverse Selds to each other | TST 1390-2090 | 2 |
| H | Traverse Strut for connecting the Traverse Selds to each other | TST 1990-3090 | 2 |
| | Traverse Cylinder | RTC 12 H 32 | 1 |
| 0 | Wheel Set Rerailing | WSR 30 B | 1 |
| 6 | Top Plate - Flat for not sliding on the cylinders, but on the Sled (only in combination with Sled Fill Plate) | STP 260x10 | 2 |

| Operation | | | <u> </u> |
|-----------|--|------------------------|----------|
| image | 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 + 6EVWLRC | 1 |
| | Tool Station, 2500 x 2000 mm PVC coated polyester canvas basis to position tools on | 2500 x 2000 | 1 |

| Connection | | | ↓ |
|--|--|------------|----------|
| image | 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 |

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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.



| Cylinders | | | | |
|-----------------------|-----------|---------------|---------------|----------------|
| model | | 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 |

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 ring | | | | | <u> </u> |
|---------------|---|---------------------|--------------------------|-------------------|--------------------------|
| image | description | model | suitable for cylinder | filling height | weight, ready for use |
| | | | | mm | kg |
| 7 | Stacking Ring 50 mm | SR 68/21 - 50 (1) | HJ 68/21 H ** | 50 | 1.6 |
| 2 | Stacking Ring 50 mm | SR 68/21 - 50 (2) | HJ 68/21 H ** | 50 | 0.9 |
| 7 | Stacking Ring 110 mm | SR 68/21 - 110 (1) | HJ 68/21 H ** | 110 | 3.1 |
| 2 | Stacking Ring 110 mm | SR 68/21 - 110 (2) | HJ 68/21 H ** | 110 | 2.9 |
| 7 | Stacking Ring 50 mm | SR 127/63 - 50 (1) | HJ 127/63 H ** | 50 | 2.9 |
| 2 | Stacking Ring 50 mm | SR 127/63 - 50 (2) | HJ 127/63 H ** | 50 | 2.4 |
| 7 | Stacking Ring 100 mm | SR 127/63 - 100 (1) | HJ 127/63 H ** | 100 | 4.8 |
| 2 | 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 |

| description | model | Basic set | Advanced set | Premium set |
|---------------------|---------------------|-----------|--------------|-------------|
| 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 |
| 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 |

 $^{^{\}star}$ The cylinders in the Basic set do not have the lowering valves with an integrated hose rupture security feature.

Sliding components

Sliding components

Beams

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

| Beams 🗸 | | | | |
|-----------------------------|---|-------------|-----------------------|--------------------------|
| image | description | model | dimensions (lxwxh) | weight, ready for use |
| | | | mm | kg |
| Opposite Contraction (1981) | 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 |

Traverse Sleds

The Traverse Set 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 Sled | | | | |
|---------------|---|------------|-----------------------|--------------------------|
| image | description | model | dimensions (lxwxh) | weight, ready for use |
| | | | mm | kg |
| | Traverse Sleds | TS 232 | 450 x 400 x 120 | 24.0 |
| 0 | Sled Fill Plate | SFP 260x50 | Ø260 x 50 | 2.7 |
| 0 | Adapter Plate for the HJ 68/21 Cylinder to use with the Sled Fill Plate | AP 170x5 | Ø170 x 5 | 23.2 |
| - | Locking Device Rerailing | LDR 30 B | - | 5.0 |
| 1 | Max. Horizontal displacement: 230 mm | | | |

Traverse Struts

Rerailing System

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 | | | |
|-----------------|--|---------------|--------------------------|
| image | description | model | weight, ready for use |
| | | | kg |
| | Traverse Strut for connecting the Traverse Selds to each other | TST 1390-2090 | 15.0 |
| | Traverse Strut for connecting the Traverse Selds to each other | TST 1990-3090 | 33.0 |

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 Cylinde | Traverse Cylinder | | |
|-----------------------|-------------------|-------------|--|
| model | | RTC 12 H 32 | |
| 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 | |



Sliding Accessories

The Wheel set is used for easy movement of the Beams to their location.

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

The Top Plate is used on each Traverse Sled to ensure there is no sliding on the lifting cylinders, but only on the Traverse Sleds (only in combination with the Sled Fill Plates).

| Sliding Accessories $igsplace$ | | | | | |
|--------------------------------|---|------------|--------------------------|--------------------------|--|
| image | description | model | suitable for cylinder | weight, ready for use | |
| | | | | kg | |
| | Wheel Set Rerailing | WSR 30 B | | 12 | |
| | Base Plate for Lifting Cylinders | BP 68/21 | HJ 68/21 H ** | 4.7 | |
| | Base Plate for Lifting Cylinders | BP 127-63 | HJ 127/63 H 50 | 4.4 | |
| | Top Plate - Flat for not sliding on the cylinders, but on the Sled (only in combination with Sled Fill Plate) | STP 260x10 | - | 3.3 | |
| | Dimensions (lxwxh): Ø260x50 mm | | | | |

| description | model | Basic set | Advanced set | Premium set |
|----------------------------------|---------------|-----------|--------------|-------------|
| 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 32 | 1 | 1 | 1 |
| Wheel Set Rerailing | WSR 30 B | | 1 | 1 |
| Base Plate for Lifting Cylinders | BP 68/21 | | 4 | 4 |
| Base Plate for Lifting Cylinder | BP 127/63 | | | 2 |
| Top Plate | STP 260x10 | 2 | 2 | 2 |

Connection components

Hoses

Rerailing System

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

| Hose types | | | 1 |
|------------|--|------------|-----|
| image | 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 |

| description | model | Basic set | Advanced set | Premium set |
|-----------------------|------------|-----------|--------------|-------------|
| 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 |



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.







| Pumps | | | | | |
|----------------------------|-----------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| model | | 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 | 6 | 6 |
| number of stages | | 2 | 2 | 2 | 2 |
| first stage output / min. | CC | 3200 (x1) | 1100 (x4) | 1100 (x4) | 1100 (x4) |
| second 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 |

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)
- With a synchronization possibility
- 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)
- With a synchronization possibility
- 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)
- With a synchronization possibility
- Suitable for connecting 4 Lifting Cylinders and a Traverse Cylinder

Rerailing System

Operation components

Operation Accessories

The Tool Station is used to store all tools in an organized way.

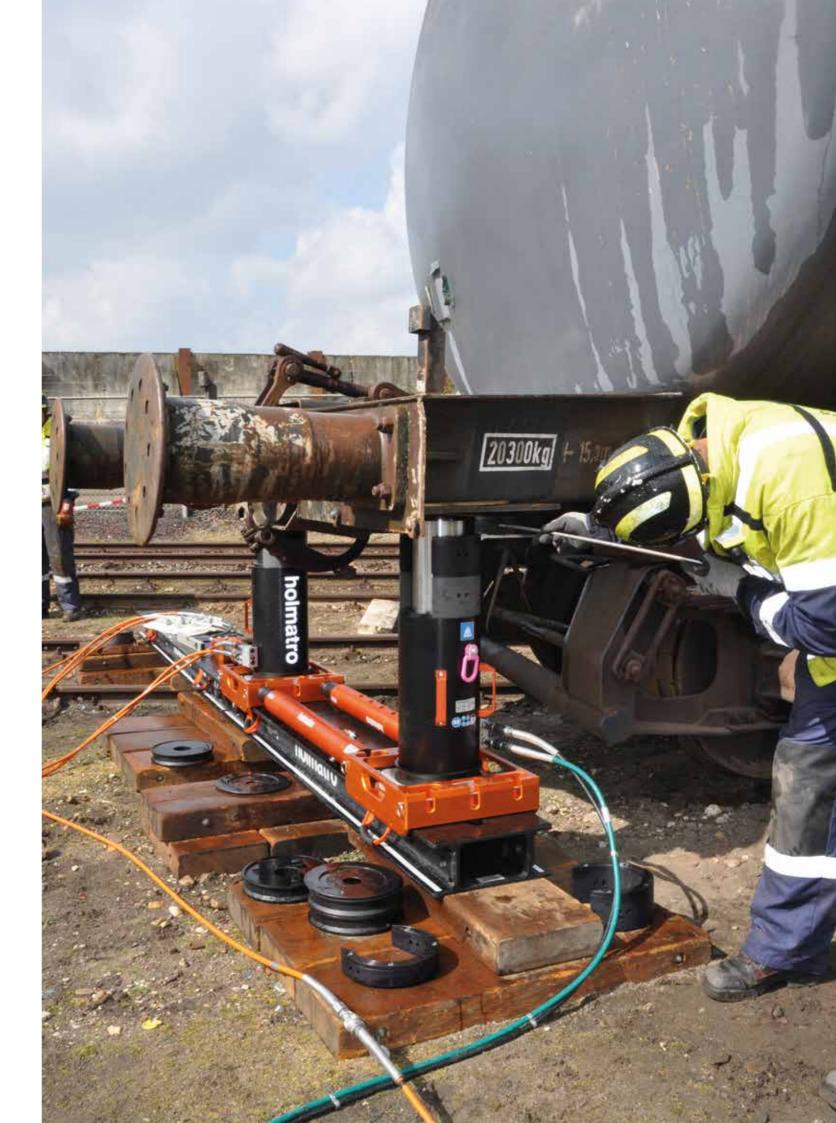
| Operation Accessories | | | |
|-----------------------|--------------|-------------|--|
| image | description | model | |
| | Tool Station | 2500 x 2000 | |

| description | model | Basic set | Advanced set | Premium set |
|-----------------------|---------------------|-----------|--------------|-------------|
| 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 |



Also available

| Optional product | ts | ↓ |
|--|--|----------|
| image | description | |
| holmatro | Lifting cylinder with different capacities and/or stroke lengths | |
| | Traverse Cylinders with other capacities | |
| The second second | Pumps with different engines (petrol/diesel) and/or flow speeds | |
| | Hoses with different colors and/or lengths | |
| | Rail hook for pushing the vehicle onto the rail track | |
| Continuoro de Continuor de Continuoro de Continuoro de Continuoro de Continuor de Continuoro de Cont | Aluminium cylinders | |
| 111 | Mechanical Jacks | |
| | Lifting bags | |
| | Chocks & blocks | |
| 9 menuing | Hand and foot pumps | |
| | Hose reels (manual & electric) | |







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