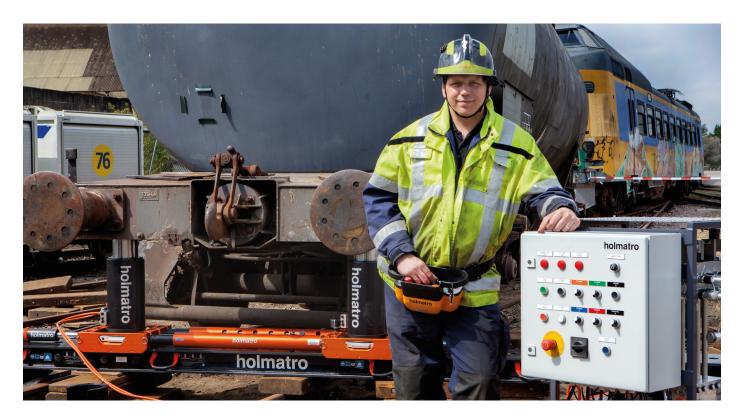


**Track & Infrastructure** 

# Holmatro



We are worth over 55+ years of experience in designing, developing & producing high-pressure hydraulic tools & systems for both the industrial and rescue market. With this experience, we challenge ourselves every day to deliver safe, reliable, durable and innovative solutions to our customers.

#### "We help make the world move forward"

When developing a system with these parameters, you want to make sure you understand your customer needs. So we teamed up with ProRail, the leading Dutch rail infrastructure manager, which is responsible for recovery of all derailed trains within the Netherlands.

Johan Knuivers, ProRail: "The result of our close

collaboration was astounding. We have 3 sets of Holmatro rerailing systems in use and together they are deployed 50–60 times per year. Due to the lower weight, safety features and ergonomics of the components, the system enables us to work faster and safer. This has resulted in the fact that we could do our job in 2 hours less per deployment. This time reduction and more ergonomic and safer deployment has also led to less absenteeism of our employees."

## Telescopic Cylinders

Holmatro Telescopic Rerailing Cylinders can reach long lifting distances while maintaining a compact closed height. Holmatro operates with a maximum working pressure of 550 bar, allowing us to design compact, and lighter cylinders that maintain the same capacity. The cylinders are constructed entirely of anodized aluminium, making them significantly lighter and easier to carry around.



A key feature of OUR cylinder is the load-lowering valve, ensuring the vehicle/load can be lowered in a controlled manner without being affected by the weight of the load. Additionally, these telescopic cylinders are equipped with a hose rupture security mechanism, which ensures that the system halts immediately if a hose breaks, for any reason.

# Stacking Rings

The stacking rings are used for mechanical locking of the vehicle, allowing operators to work safely underneath an elevated load.

Installation of the stacking rings is done using a fork, maintaining a safe distance from the vehicle during the process.

#### **Beams**

The rerailing beam or bridge is essential for every rerailing system.

Holmatro chooses to manufacture the beams entirely from black anodized aluminium, significantly reducing weight and optimising operational processes in the field. Furthermore, extrusion as a production method prevents warping of the metal during welding.

Using the connecting set, you can easily connect different lengths of beams to each other without the use of special or additional tools.

#### Traverse Sleds

Traverse sleds, also known as carriages, facilitate the side movement required for rerailing the derailed vehicle and are used underneath the lifting point. Holmatro traverse sleds are equipped with a Teflon-like sliding bearing underneath, ensuring smooth sliding and reducing the risk of beam damage. Advantages of this material include reduced maintenance, lower friction and weight reduction, making the sleds easy to manage and carry.

Inside the sled, there is an additional internal sled with the same sliding bearings underneath. This internal sled compensates for the radius made by the railway vehicle when putting it back on track. It also includes an indicator, visually signalling the end of the stroke when using the internal sled. This feature alerts the operator



Rerailing system

to the traverse limits, preventing instability of the railway vehicle and the equipment.

Since the traverse sleds have sliding bearings, decreasing friction, you can work with a lower capacity traverse cylinder, resulting in a lighter cylinder. With the Holmatro system, only a 12-ton traverse cylinder is required.

## Locking Device

The mechanical locking device prevents your load from shifting, which comes in extra handy while working in a sloped position. This feature enables you to work safely and controlled in all circumstances.

#### Traverse Struts

The traverse struts, distance bars, are used to maintain a consistent distance between the two traversing sleds, ensuring safety & control during operations.

The Holmatro traversing struts come in different lengths to accommodate different applications and needs. Final adjustment can be done by simply removing a pin. For precise final adjustments, the operator can utilise the threaded section on the bar.

Additionally, the struts are made from aluminium, ensuring they are lightweight and easy to handle.

# Traverse Cylinder

The traverse cylinder is used for lateral movement of the load. Our double-acting traversing cylinder carries an equal capacity for both pushing and pulling; enabling you to both push and pull the vehicle into position, usable in any position & either direction. Thanks to the sliding bearings with reduced friction underneath the Holmatro traversing sled, less force is needed, resulting in a traversing cylinder requiring only 12 tons, where other available systems require at least 17 tons.



Another unique feature of the traversing cylinder is the unlocking cylinder, which can be remotely unlocked when moving to the next stroke. This eliminates the need for an operator to go underneath a lifted load to reposition the cylinder, allowing all operations to be conducted safely and controlled from a distance.

## Remote Controlled Pump

When working in demanding circumstances and time is of the essence, you want to ensure a safe work environment above all. Recognising that the pump is the heart of your rerailing operation, it is developed and designed with safety as a top priority.

This smart powerpack solution combines the functions of a pump unit and a control table into one integrated system.

All your cylinders are powered by a robust Quattro pump, which delivers four equal flows to four independently wirelessly operated control valves. When these control valves are activated simultaneously, they ensure uniform cylinder stroke speeds during both lifting and lowering, regardless of the load. Additionally, the valves can be controlled individually to operate each cylinder separately. The pressure on each cylinder is easily monitored via user-friendly pressure gauges.

The fact that the pump is wirelessly controlled eliminates the need to bring a heavy pump unit into the field, reducing noise disturbance during the operation and your operator can maintain a safe distance from the vehicle during the rerailing operation.

## Compact Rerailing Unit

The Holmatro Compact Rerailing Unit (CRU) combines our smart engineering & technology from our Rerailing systems in a compact solution ideal for smaller & lighter rail vehicles like trams and (depending on your application and needs) metros. A system with maximum performance at a minimum weight.

- Compact, lightweight and user-friendly: weight ready for use only 54kg, divisible into parts of <40kg</li>
- Easy transportation towards the accident
- Easy to install due to its compact dimensions
- Equal, split flow pump unit available

- Remote controlled valves give you an excellent overview of the situation
- Core hose technology: press and return oil in one single hose, including patented core couplers, enabling you to switch between control valves while the pump is running.

#### Good to Know!

Holmatro high-pressure hydraulic hoses for rerailing systems are available in different colours: matching colours on the outlets of either your remote-controlled pump unit or the control table & pump unit reduces the possibility of incorrect assembly and thus faulty operations.

The entire system is fitted with different types of couplers for the lifting and traversing parts, to avoid false connections.

## Quality & Reliability

We are proud that after all this time we are still a 'MADE in the Netherlands' company with inhouse research & development, engineering and production. Holmatro tools are developed, manufactured and maintained in conformity with the highest quality standards of durability, side load, mechanical distortion and overpressure.

Since the introduction of the Holmatro rerailing system we have built a proven track-record supplying to worldly known key players in the market including e.g. Irish Rail, Japanese Rail, MTR Hong Kong, Istanbul Metro, CAF, Dalian Tiefeng, SAR, RFI and many more.

We take tremendous pride in the feedback we receive from operators, confirming that our primary goals in developing these systems are effectively met while using the system.

Curious to learn more about what our systems can offer your operations?

Visit us during Innotrans Hall 23 | Stand 630 or go to holmatro.com for more information.

