

# Rail Stressor TR75

Rail Welding Equipment



The Rail Stressor TR75 has been designed for the stress relief or replacement of continuous welded rails (CWRs). It is used during maintenance works to stretch long welded rails before aluminothermic welding and to secure the tensioned rail while cutting. It is capable of joining and maintaining a constant gap between the two rail ends.

Fitted with a hydraulic power unit and an integrated hand pump, the Rail Stressor TR75 is flexible enough for use in any rail setting, including tunnels and urban areas. It has gained SNCF homologation (Nr DEO 19280).

## → TECHNICAL FEATURES

### **Powerful engine**

The Rail Stressor TR75 is fitted with a four-stroke engine that produces power of 2.2 kw at 3,600 rpm. The engine's petrol tank has a capacity of 1.2 litres and the oil tank capacity is 0.4 litres.

### **Hydraulic system**

Two-speed pumps adjust the flow and pressure automatically, depending on the required force. The hydraulic unit has an oil tank capacity of 15 litres.

### **Hand pump**

A hand pump is integrated into the hydraulic power unit. This acts as a backup system and is useful for accurate adjustment of the rail over the last few centimetres and releasing the hydraulic pressure in the hoses. It also enables the Rail Stressor TR75 to be used in environments where zero gas emissions or noise limitations are needed. The Rail Stressor TR75 can be powered by a gas powered hydraulic unit with integrated hand pump or a separate hand pump unit.

### **Clamping arrangement**

Four clamps are positioned on the web of the rail. During the tension phase, the clamps gradually increase the grip on the rail.

### **Designed for ease of use**

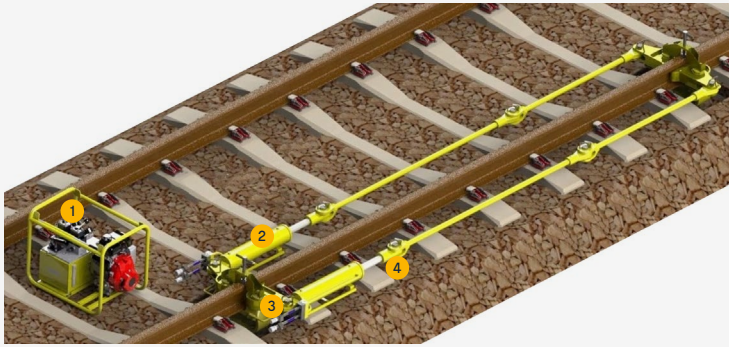
The Rail Stressor can be set up by two people and has a yoke and pin assembly for ease of installation. Only two operators are needed to use the equipment.

### **Adjustable stroke**

The length of the rail stressor is adjustable thanks to its 3 different rods which come in a range of sizes: 1.80 metres, 1.20 meters, insulated and adjustable tie rods at 1.20 meters, which can be quickly mounted and changed to adapt the machine to any kind of situation.

## → ADVANTAGES

- The Rail Stressor TR75 can be set up under the rail without obstructing the rolling surface. As a result, trains and vehicles can keep circulating, significantly reducing track downtime.
- The equipment can also be installed more quickly, depending on the type of rail, above the rail head, providing versatility where speed of set-up is the priority.
- Designed for ease of use, the Rail Stressor can be installed and operated by just two people, making it resource efficient.
- The hydraulic pumps increase the stretching force gradually, helping to ensure safe operations.
- The addition of the hand pump allows for accurate and safe adjustment of the rail over the last few centimetres.
- The hand pump provides flexibility for using the Rail Stressor TR75 in environments that require zero gas emission or noise limitations, for example tunnels and urban areas.



## → COMPONENTS

1. 2 in 1 hydraulic pump (petrol engine and manual)
2. Powerful and ergonomic cylinders
3. Quick hydraulic couplings
4. Various set of rods to adjust the length

## → SPECIFICATIONS

### Technical data - Rail stressor

Description	TR75 - Rail Stressor with Parker ball connectors
Item number	21121066
Excluding	Hydraulic power source, hoses, tie rods
Traction / pushing force	700 kN / 400 kN
Cylinders stroke	380 mm

### Technical data - Power hydraulic unit

Description	Hydraulic unit 580 bar, with Parker ball connectors
Item number	21121065
Engine	4 strokes engine HONDA GX100
Power	2.2 Kw (3 cv) at 3600 rpm
Petrol / oil tank capacity	1.2 l / 0.4 l
Oil hydraulic tank capacity	15 l
Motorized pump flow	6 l / min. and 0.5 l / min (point of reverse 50 bar)
Hand pump flow	0,120 cm <sup>3</sup> and 4,6 cm <sup>3</sup> (point of reverse 22 bar)
Flow/pressure adjustment	Automatic
Dimensions (L x H x W)	650 x 460 x 540 mm
Weight	64 kg

### Technical data - Hydraulic hand pump

Description	Hydraulic hand pump, with Parker ball connectors
Item number	21121069
Flow	120 cm <sup>3</sup> per stroke (maximum pressure 14 bar) 46 cm <sup>3</sup> per stroke (maximum pressure 560 bar)
Flow/pressure adjustment	Automatic
Oil hydraulic tank capacity	7 l
Dimensions (L x H x W)	743 x 289 x 242 mm
Weight	22 kg

### Accessories :

- 11121003: Set of tie rods, length 1.20 m
- 11121002: Set of tie rods, length 1.80 m
- 11121004: Set of adjustable tie rods, length 1.20 m
- 11121005: Set of insulated tie rods, length 1.80 m
- 21121068: Set of hoses, with ball connectors Parker

### Standard compliance :

Machinery directive 2006/42/CE  
European norm NF EN 13977

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