

Our references include:

France: KEOLIS (VAL de Rennes), RATP (Paris Metro, Orly VAL, Roissy VAL), Projet Port 2000 - Industrial Site - Le Havre, TISSEO (Toulouse VAL), TRANSPOLE (Lille VAL)

Italy: TRANSIFIMA (Turin VAL)

United States: OATS (O'Hare VAL, Chicago), JTA (Jacksonville VAL)

Chile: METRO S.A (Santiago Metro, Chile)

Taiwan: TRCC (Taipei VAL)

South Korea: SIEMENS (VAL de Uijeongbu, Seoul)



MTEH58 on ballasted track – Paris, France



MTEH58 Trailable point machine

"The electro-hydraulic solution for metros and railway depots..."

Vossloh Cogifer SA
21, avenue de Colmar
92 500 Rueil-Malmaison - FRANCE
Tel.: +33 (0) 1 55 47 73 00
Fax: +33 (0) 1 41 29 19 18
info@vossloh.com

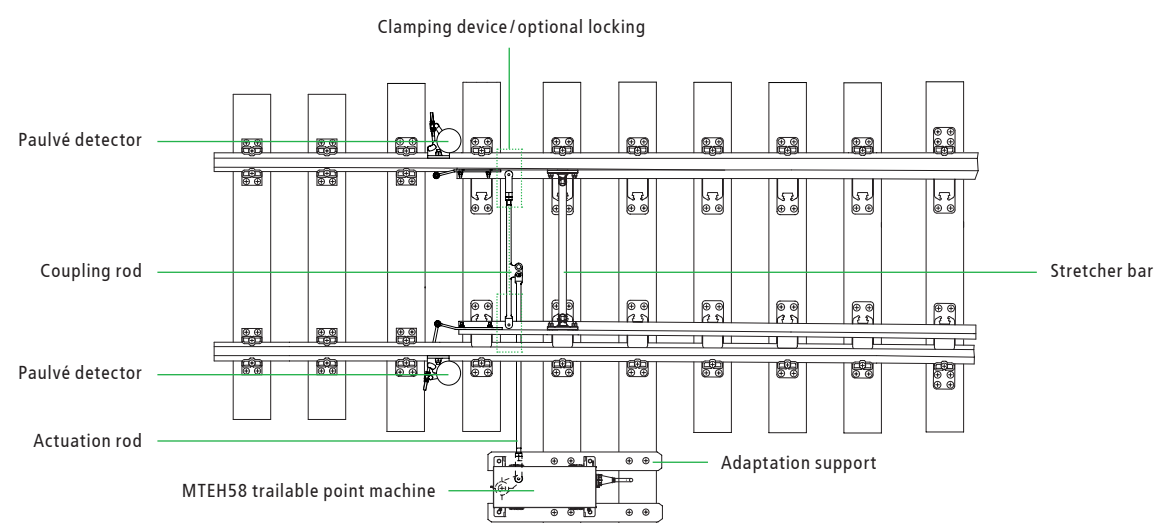
www.vossloh.com



'Born out of a unique collaboration, the MTEH58 point machine combines new features and proven systems for optimal use in urban networks.'

The MTEH58 point machine draws its strength from a unique collaboration with the RATP. This is an innovation in the range of switch drives. This solution inherits from sub-assemblies of the MTEH50 point machines, which have proven themselves worldwide for over 30 years

Its adaptability to various mechanical and electrical interfaces makes it an ideal drive for metro and railway depots applications.



Installed at the track side, the MTEH58 point machine drives the turnout using a single rod, which is coupled directly to the switch rails or is connected to an optional clamping device.

In case of trailing, the point machine allows switch trailing to preserve the integrity of the equipment.

Description

The MTEH58 point machine drive consists of the following elements:

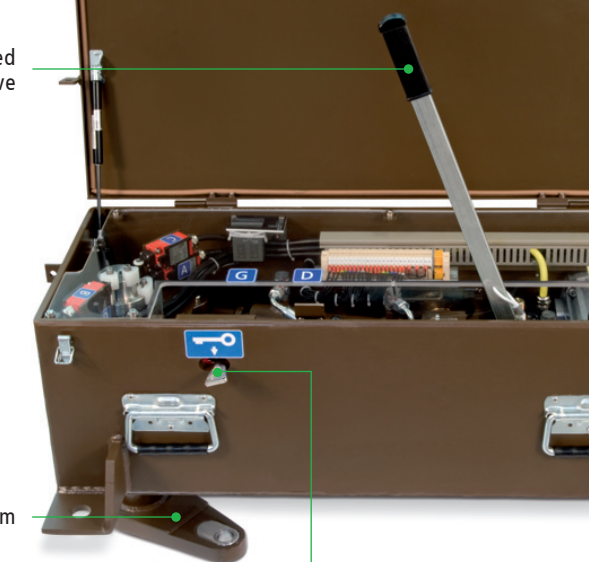
- One reversible hydraulic unit with external coupling
- One hydraulic jack, which is dampened at end of stroke
- One driving arm, which is protected under the mechanism casing
- One spring assembly with adjustable load for retention force holding in end position
- One hydraulically assisted manual drive
- One manual mode selector
- Precise, adjustable position detection
- Mechanical failure detection
- One anti-vandalism Hand / Drive lock
- One terminal board for electrical connections
- One main connector (optional)
- One safety locking device for operator safety during installation and maintenance
- One protection glass, which is transparent for visual diagnosis

During a reversal, the pendulum movement of the driving arm is supplemented by the expansion of the end of stroke retention spring. This spring compresses during trailing until the switch has been completely switched in opposite position.

Hydraulically assisted manual drive

Driving arm

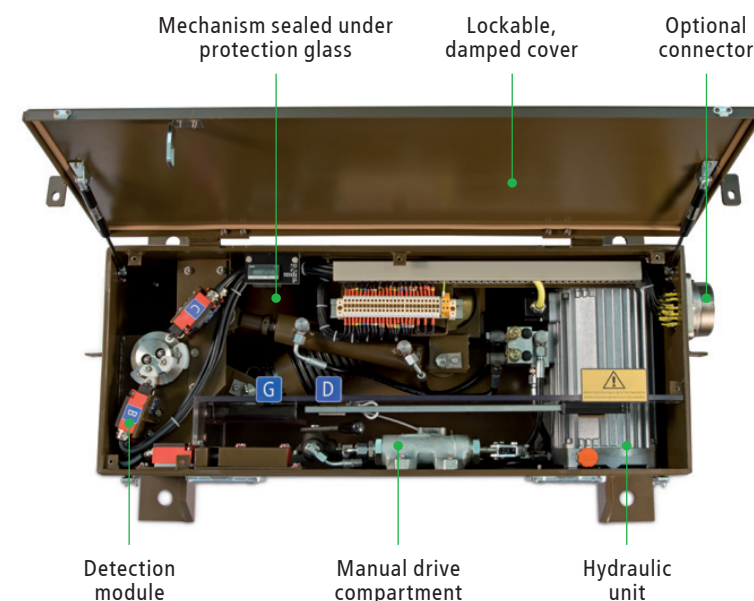
Anti-vandalism lock



Installation and application

The MTEH58 point machine drive provides unprecedented adaptability:

- The single drive rod design facilitates its integration on metro and railway tracks
- The casing can be screwed on bearer or installed using an intermediate support
- Its reversible hydraulic unit facilitates its integration into modern signalling systems
- The electro-hydraulic technology is both powerful for handling throw loads and gentle for quiet operation in urban areas
- The hydraulically assisted manual drive makes it accessible to all
- Its speed and robustness are ideal for intensive use on frequently operated switches
- Its modular design allows for fast and easy maintenance for maximum availability and reduced maintenance costs



Technical specifications

- Adjustable stroke: 110 à 170 mm
- Adjustable retention force up to 300 daN
- Switch time: < 1,2 s
- Detection accuracy adjustable down to the millimetre
- Electrical voltage: 230/400V AC
- Operation counter
- Integrated hydraulic dampening: smooth switch application
- Compatible with biodegradable oils
- Detection of mechanical failure: rod, axles, loosening, etc.
- Weight: 160 Kg
- Operating temperature: -30°C to +70°C
- IP55 sealing
- Silent
- MTBF: > 1.4 million drives
- SIL 4 certification, in combination with Paulvé switch position detectors

Safety

Vossloh is proud to offer a point machine that has a high level of safety:

- Work on the safety aspect has made it possible to achieve SIL4 certification
- Digital simulations, laboratory and track tests – every effort has been made to make a product that is designed to last
- Combined detection accuracy and mechanical failure detection offer a better overview of the failure modes for increased safety
- Operator protection is a key point of the MTEH58 point machine, the separation of spaces and the mid-stroke locking device ensure that installation and maintenance operations take place in complete safety