# INNOVATION FOR YOUR SAFETY



# MA-HVH Points Setting Machine Family

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MA-HVH type point-setting machine serves for setting the point rails of the railway turnouts by electrically-operated hydraulic energy, their hydraulic and mechanical locking, checking their end-positions and checkback in an electrical way. The point setting mechanism is suitable for simultaneous synchronized setting of both simple and high radius turnouts, fixing the different lock assemblies, checking of end-positions and also suitable for check-back.

They are mechanically independent of each other and are always installed in the trough-bottom, enabling to perform the machine tamping.

The point machines can be made in "trailable" or "non-trailable" versions depending on orders.

The functional modules as construction elements of the setting machine can be matched to each other in several versions and, if necessary, in a multiplied way. In this way it can enable to fit the equipments made of unified modules in the railway system depending on the location of the installation, the features of points and the operational requirements.

The point-setting machine follows the natural movements of the track and turnouts (dilatation). The preset mechanical parameters are kept in a stable way; there is no need for readjustment. The closing of the point rails is ensured by means of a hydraulic and mechanical lock.

#### Operational data of the MA-HVH point machines:

Setting time: 2–2.5 s

Number of settings: unlimited

Setting force: adjustable between 0 and 6 kN for the values given by the

customer and preset by the manufacturer (lower than the trailing

resistance)

Trailing resistance: adjustable between 7 and 12 kN for the values given by the

customer and preset by the manufacturer

Nominal power consumption: 350 – 550 W (type-dependent)

Operating voltage: 400/230V 50Hz 3 phase (type-dependent)

Protection: IP 65

Lifetime: 10<sup>6</sup> settings without changing the main part

Operating temperature: -30 - +80°C

Relative humidity: 20–95%

### **Environment protection:**

The hermetic sealing is required by the operation of the hydraulic system; therefore, no oil-loss can occur during the proper operation. In case of failures or accidents the low amount of the hydraulic oil remains mainly in the trough-bottom, the compatibility with the environment is guaranteed by its mineral origin and low amount (3 l).

#### The quality of point setting machine is guaranteed by the following items:

- Construction elements used in the setting machine
- Manufacturing technology
- Procedural controls during the manufacture several times
- Final check

## Advantages of the MA-HVH point machines:

- Modular construction
- Placed in the trough-bottom
- Environment-friendly operation
- Possibility of machine tamping
- Adaptable to the different interlocking systems
- Low maintenance demand
- The complete point machine can be built-in or out easily as one unit.
- The end-position checking unit can be replaced as an individual module.