



## Maintenance Inspection Vehicle for Monorail

# MIV 1-25



L & S Luddeneit und Scherf GmbH  
Wimmlerstraße 25  
D-07806 Neustadt an der Orla  
GERMANY

[www.l-und-s.de](http://www.l-und-s.de)  
Tel.: +49-36481-5645-0  
Fax: +49-36481-5645-19



The Maintenance Inspection Vehicle MIV 1-25 is designed for use on monorail system for track inspection and maintenance work. The Maintenance Inspection Vehicle is applied for

- flexible and direct transport of maintenance personnel, equipment and tools to and from the guideway beam maintenance locations
- efficient inspection of guide beam and power rail fault
- recovery of failed trains to the depot
- maintenance of all network installations

The MIV provides a vertical support work platform and horizontal work decks equipped with lifting and jib devices. The electric power needed for operation is produced by a power generation set. In order to reduce exhaust gas emissions, especially during operation in tunnels and viaducts, the power generation set diesel engine has an exhaust gas cleaning system.

The MIV can be driven from two driver consoles for each driving direction. The movement data are displayed on the gauges on the control consoles. The Maintenance Inspection Vehicle provides a radio system that can be used in trains. An intercom system is also provided for communication between the driver cabins. VATC - vehicle automated train according with customer network is also provided.

# Technical data of the Maintenance Inspection Vehicle for Monorail MIV 1-25

## Movable work deck platforms

**Vertical movable work platforms** are installed between the bogies on both sides of the vehicle. Platforms are vertically adjustable and offer additional storage space for work material.

**Horizontal work decks** with guard rails are provided on both ends of the MIV. A jib crane is installed on one end, adjustable for both sides of the vehicle. A Cherry picker is installed on the other end. There are longitudinal gangways on both sides of the vehicle.



## Crane with Bucket (Cherry Picker)

Cherry Picker with bucket and lifting capacity 200 kg (incl. one person plus toolbox and site working equipment) is installed on the machine. The cherry picker crane clamps onto beam for lift stability and safety harness attachment points. When working the MEWP, the vehicle is fixed to the track by outriggers.



## Jib Crane

Jib Crane with lift capacity 500 kg can be operated with 5m boom length and in range of 360° around the vehicle. Additionally the crane is fitted with crane wire rope able to lift material in heights at 20m.



Length at couplers .....	14.320 mm
Width .....	2.940 mm
Height above the track .....	2.860 mm
Tare Weight .....	24.000 kg
Electrical connection .....	1x 400 V 32 A CEE connection; 2 x 230 V AC socket
Power supply .....	40kW generator set, 40 kW power output, 74 dBA
Lighting of working place .....	4 x 24V/70W halogen travel lights, 4 x 24V 20W LED Head lights; 10 x LED work lights
Fail safe system .....	monitored by PLC
Water cleaning system .....	2 sets high pressure water guns for cleaning the network installations
Track detection system .....	- 7 cameras for track observation: 3 left, 3 right, 1 on beam top - detecting and recording of failures
Safety provisions .....	- couplers / anticlimbers with incorporated shock absorbers - guard rails provided on working platforms - safety harness attachment points included on all working platforms - hydraulic locking devices provided for stabilizing the machine during use of cherry picker - fire extinguishers on each platform and in the cabin - backup lighting for emergency usage

## DEVELOPMENT – DESIGN – MANUFACTURING – SALE – SERVICE

L&S Luddeneit und Scherf GmbH  
Wimmlerstraße 25  
D- 07806 Neustadt an der Orla - Germany

Tel.: +49 (0) 36481-5645-0  
Fax: +49 (0) 36481-5645-19

LUDDENEIT UND SCHERF GMBH

