TELESCOPIC HANDLING GANTRY

Model **PEM XL U - 1000 / 1067**

The ***Telescopic Handling Gantry model PEM XL*** has been designed ***switch laying*** **in conjunction** with the trolley LEM460. Multiple PEM XL's can be used simultaneously with the equivalent number of LEM460's ***to handle particularly long switches and crossings***.

The Telescopic Handling Gantry model PEM XL can also be used with the Motorized Lifting and Transportation Caterpillar Trolley model LMC4611B, the LEM460 trolley and the P2PV beam, together they constitute ***the elements of the S2PV method***.

SOMMAIRE

1. DESCRIPTION AND OPERATION

1.1. Introduction

The main feature of the PEM XL is its ability to adapt to the stresses involved in handling switches and track panels with concrete sleepers. The PEM XL minimizes lateral and longitudinal deformation during transportation, maintains switch geometry and optimizes slewing capacity.

The frame is composed of an enclosure and two sliding beams. Each beam supports one hydraulic lifting leg and move independently of each other.

Lifting legs are made of sliding squared section tubes and are actuated by hydraulic rams incorporated in the frame.

PEM XL is equipped with a load clamping system using hydraulic clamps which can slide laterally for positioning on different catch points (rail, frog), supporting under the rail foot. This clamping method allows longitudinal slewing of the load for perfect positioning of the switch.

The Telescopic Handling Gantry model PEM XL is equipped with a soundproofed Diesel engine, hydraulic motors for site traveling and a braking safety system. It is also equipped with a manually operated emergency pump in order to off-track the machine in case of breakdown.

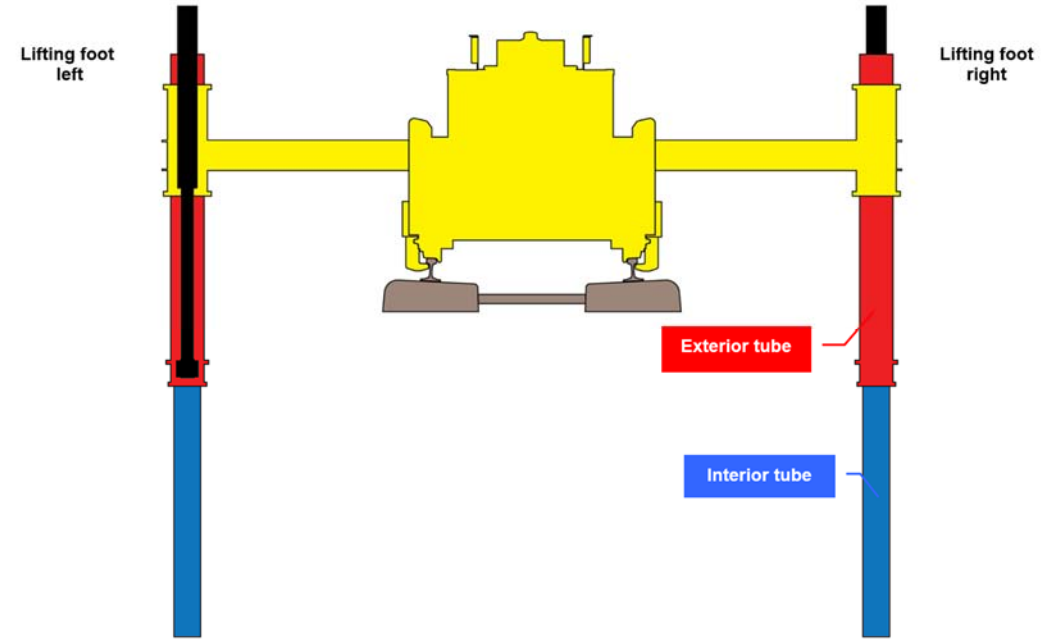
To fully synchronize lifting and lowering operations, the Telescopic Handling Gantry model PEM XL is controlled by a radio remote control system. Standard equipment includes a transmitter that will control between one and eight gantries depending on the site requirements (S2PV method). Gantries can be positioned in any order.

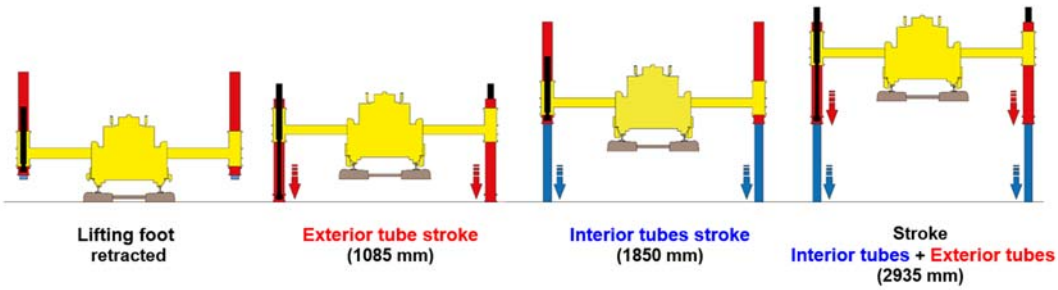
1.2. Double lifting system

PEM XL is composed of two square section tubes each equipped with one hydraulic ram. The external ram has a stroke of 1085 mm in addition to the internal ram which has a stroke of 1850 mm ,Total stroke of PEM XL is 2935 mm .

Lifting rams can be operated manually or by the remote-control system.

Each ram can be controlled individually or in combination with the others.





1.3. Parking brake

PEM XL is equipped with a hydraulic parking brake.

In case of failure it is possible to mechanically unlock parking brakes, to tow the machine for example (see on the right).

1.4. Lifting clamps

Lifting clamps catch the rail from underneath the foot.

They are equipped with anti-return valves.

2. TECHNICAL DATA

- ***Diesel*** engine:
  - Power: ..... 17.7 hp at 2,300 rpm
  - Cooling: ..... Liquid
  - Starter type: ..... Electric
- Acoustic level: ..... 75 dB(A)
- Track gauge: ..... 1000/1067 mm
- Lifting capacity: ..... 20,000 daN (*ie ≈ 20 tonnes*)
  24,000 daN for extension limitation (S2PV method)
- Hydraulic pump: ..... 2 x 11 cm^3 *(double pump)*
- Oil tank capacity: ..... 70 L
- Lighting: ..... 4 LED projectors of 3500 Lumens
- Rams stroke (*double lifting system*):
  - Internal: ..... 1850 mm
  - External: ..... 1085 mm
- Traveling: ..... Manual (remote controlled in option)
- Braking system: ..... Negative
- Rail clamps: ..... Manual (remote controlled in option)

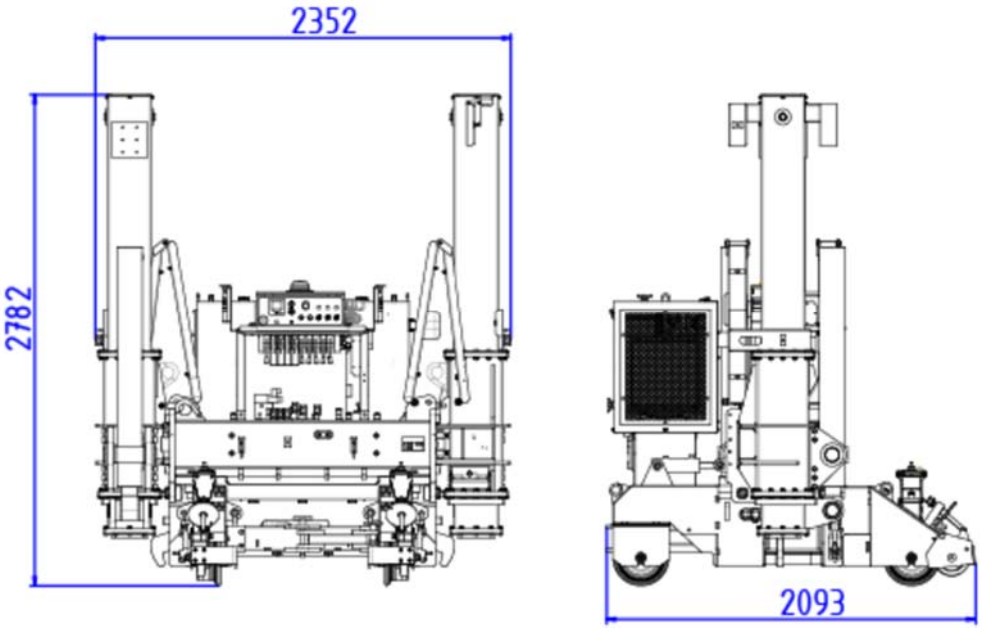
- Lifting hook: 2
- Driving post: ..... With platform for the driver
- Dimensions (*footprint during traveling*):
  - Length: ..... ≈ 2093 mm
  - Width: ..... ≈ 2352 mm
  - Height:..... ≈ 2782 mm
- Dimensions (*unfolded*):
  - Length: ..... ≈ 2093 mm
  - Width: ..... ≈ 4381 mm
  - Height:..... ≈ 4582 mm
- Mass:..... 4300 kg

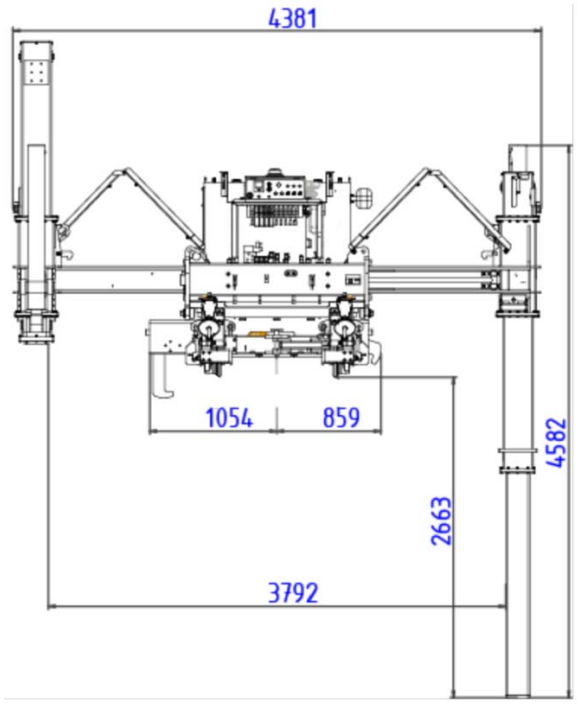
3. ACCESSORIES AND OPTIONS (at extra price)

3.1. Transmitter for remote control for PEM XL

If the customer has more than 8 PEM XL, 1 Transmitter per set of 8 PEM XL.

4. DRAWINGS





The technical specification of the equipment of the present offer strictly conforms to the Commercial/Financial quotation. The technical characteristics, including the conformity to the standards mentioned, the components, dimensions and access diagrams would have, prior to starting of execution and manufacturing of the equipment, to be approved by the customer as ''conforming to the particular specification and various track loading gauge(s)'' of the network(s) on which the equipment to be delivered is to be operated.

All modifications and/or eventual technical alteration arising after the date of the offer could result to a review of the commercial offer.

We reserve the right to modify any equipment specification of the present offer to take into account the latest technical improvements and working conditions at the date of manufacturing.

In case of any discrepancy between our offer and the attached documentation, the technical specification of our offer should be taken into consideration. Photographs may include options.

Masses and dimensions may vary ± 5%.