



SLMT Range Side Level Measuring Trolley

The Side Level Measuring Trolley (SLMT) is a lightweight, self-contained instrument that measures variation in the height of material surrounding embedded rails in urban transport systems and rail / road crossings. It facilitates recording of rail height and Keeper rail height compared to the surrounding infill material for maintenance and safety monitoring purposes.

All data acquired by the SLMT is stored in the chart recorder or computer system depending upon the option chosen.



Features

- 1 x Keeper Rail Measurement
- 5 x Height Measurement
- Distance Recording
- Position Setup for Rollers
- Laser Point Facility
- 3 x Events and INC Mode
- Portable
- Chart Recorder or PC Options
- Download Data to a PC

For more information, please contact the Railway Sales Department at Donfabs & Consillia

Email: sales@consillia.com

Measurement

The SLMT employs mechanical measuring techniques incorporating oscillating wheel technology measurement to ensure reliable and accurate readings. The unit measures the height of the keeper rail and then 5 individual surface heights with respect to the keeper rail, providing a cross sectional interpretation of the rail structure.

Recording System

As standard the SLMT is supplied with a proven chart recorder system. This can be replaced with a data logging system and wireless tablet PC. The recorded data of 5 side level and 1 Keeper rail measurements are produced in either a hard copy profile or in real time, in graphical, tabular or error log formats on the PC display with an associated data file. All data can be transferred to a PC for further analysis in Microsoft Excel.

Laser Positioning

The rotating laser on the front of the unit allows accurate start positions and markers to be recorded. This is activated from the button mounted on the push handle.

Distance

All measurements are recorded with reference to distance travelled. Additionally, an "INC" mode button is provided to annotate the recording with a auto incrementing number count.

Battery Powered

Power is derived from the on board battery supply. The batteries are charged using the supplied charger unit.

Portable

The unit folds into a convenient size for either storage or transportation by small van or estate car.

Technical Specification

Measurement Type

Oscillating roller measurement using Linear Potentiometer Technology

Measurement Details

6 x Measurements comprising:	1 x Keeper Rail 4 x Level Measurement Inside Rail (5 indexed positions) 4 x Level Measurements Outside Rail (5 indexed positions)
Total Measurement Range:	650mm
Measurement Range per Roller:	50mm
Roller Width:	23mm
Measurement Resolution:	0.5mm
Measurement Range (Indexing):	5 indexed measurements: -20mm, -10mm, 0, 10mm, 20mm automatically sensed and stored to chart display. Variable settings possible but no sensing available

Identification Markers

Manual Post number input using push button increment / decrement function. Start position by rotating laser mounted on the front panel of the SLMT directly in line with the measurement datum

Recording System

Chart Recorder System with built in memory card for data storage

Type:	Digital Thermal Array printer producing analogue profile
Number of Printed Channels:	6 measurement channels and 2 distance channels (10m and 1m)
Grid:	5mm major grid superimposed onto 1mm fine grid
Paper Speed:	5mm/s time based mode 1mm chart advance for every 100, 200 or 400mm travelled
Event:	Push Button event producing event trace between grids

Ruggedised PC System with Folding Lid

Removable from the trolley for transportation and storage. Data is stored directly to the hard disc of the PC. All data is streamed through to the PC where it can be displayed real time in graphical, tabular or error log formats. All data can be reviewed using the replay software

PC Download

	Chart Recorder Model	Data Logger Model
Storage Device:	1Mbyte Memory Card	Wireless PC HDD
PC Download:	Via External Card Reader	Instantly stored on PC HDD
Software:	Windows Based Acquisition Software	Integrated Application Software

Power

Self contained rechargeable batteries providing 4 hours continuous operation (Chart Recorder Version)

Environmental

Dimensions Operation Mode	Dimensions Transport Mode	
Length:	1700mm	Length: 390mm
Width:	2060mm	Width: 2060mm
Height:	350mm	Height: 350mm
Weight:	<25kg	
Temperature:	0°C to 50°C	
Humidity Range:	5 to 95% non condensing	