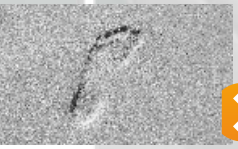
Vogel & Plötscher

Track geometry measurement devices

# MessReg CLS

## Continuous track bed measuring

Track bed



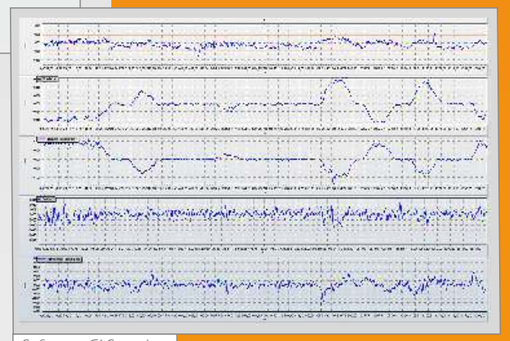
Track gauge

Digital

www.vogelundploetscher.de

*Messreg CLS with 4-meter chord*



*Software CLScatcher*

# MessReg **CLS**

**Unique**
Measurement based on a genuine 10-metre chord

**Exact**
Continuous data acquisition every 2 mm

**Efficient**
Simultaneous measurement of 6 track parameters

Checking the track geometry is key when installing new track and repairing existing track. A number of different track parameters need to be measured and evaluated.

MessReg CLS meets that requirement in a highly efficient and precise way – thanks to its innovative measuring technology. A highlight of it is the modular carbon chord with up to 10 m length.

The length of the measuring chord is a key factor particularly for the measurement of versines and gradients. They are track parameters which mostly have to be measured on the basis of a length of 10 or 20 metres. So that means: the longer the measuring chord used, the more reliable the measurement result will be.

**Uniquely modular**
The length and pitch of the chord are custom-configurable. This enables MessReg CLS to be operated with different chord pitches. For example at a 2-to-2 metres or 6-to-4 metres chord ratio (equivalent to the working base of a track tamping machine).

**Uniquely light**
MessReg CLS can be operated by just one person – even when installed at the maximum chord length. The reason: carbon. The chord elements are 80% carbon, which is extremely torsionally rigid yet light.

## Digital measurement of:

+ Track gauge
+ Cant
+ Twist
+ Alignment (versine)
+ Longitudinal level (gradient)
+ Distance

Text can also be entered at any time to log the state of the track and saved with precise position data.

## Software CLScatcher

Functional software for data acquisition and evaluation. The measurement data is displayed in real time, both graphically and numerically.

Once the measurement is complete, auxiliary functions are provided for detailed analysis and assessment of the data.

It is also possible to export the measurement data to Excel.

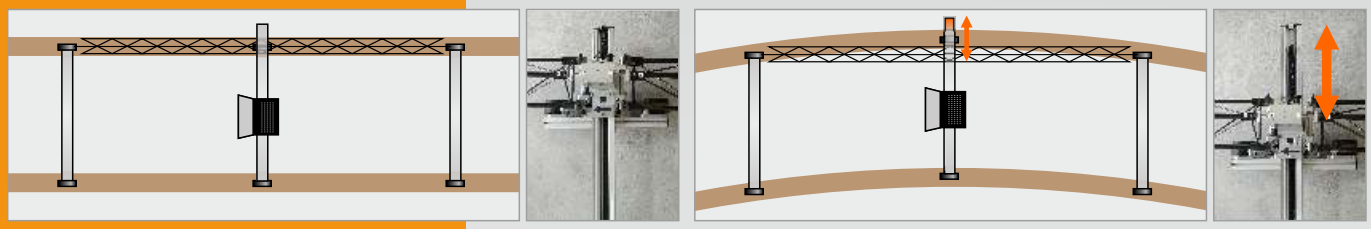
## MPC outdoor notebook

Data is recorded and saved on a notebook tailored to the special demands in the track bed.

Equipped with IP65 and MILSTD-810G protection, and featuring an anti-glare touch-screen LED display, it ensures maximum functionality and operational reliability even in the rain, in dusty conditions and in sunlight.

Other plus-points are its full-grade Windows operating system and its support for standard interfaces such as USB, LAN, WiFi and Bluetooth

Messreg CLS with 10 m chord



Measurement method schematics

## Key features

+ **Efficient measurement and evaluation of track geometry parameters**
+ **Modular carbon chord, configurable to maximum 10 m length**
+ **Continuous data acquisition with 2 mm measuring point resolution (variable)**
+ **Ergonomic unit design for ease of transport and set-up**
+ **Set-up and operation by one person possible**
+ **MPC outdoor notebook**

## Technical data*

| Measurement parameters | Measuring range | Measurement uncertainty |
|---|---|---|
| Track gauge | 1410-1490 mm | ± 0,25 mm |
| Cant | ± 200 mm | ± 0,5 mm |
| Twist | calculated | ± 0,5 mm |
| Longitudinal level (gradients) | ± 100 mm | ± 1,0 mm |
| Alignment (versines) | ± 215 mm | ± 3,0 mm |
| Sampling rate | 2 mm | |

** Data referred to nominal track width 1435 mm*

**Dimensions and weights**

| | |
|---|---|
| Measuring device (L x W x H) @ 4 m chord approx. | 4500 x 1920 x 380 mm |
| Measuring device (L x W x H) @ 10 m chord approx. | 10500 x 1920 x 380 mm |
| Transport box 1 (L x W x H) | 2135 x 570 x 395 mm |
| Transport box 2 (L x W x H) | 2070 x 845 x 372 mm |
| Weight of measuring device approx. | 65 kg |

**Notes**

The measuring device is insulated.

The measuring device is also available for other track widths on request.



Vogel & Plötscher
*Maß nehmen.*

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