



Vogel & Plötscher

Track and switch
measurement devices

MessReg CDM

Continuous track and switch inspection



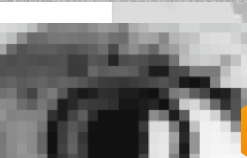
> Switch



> Track bed

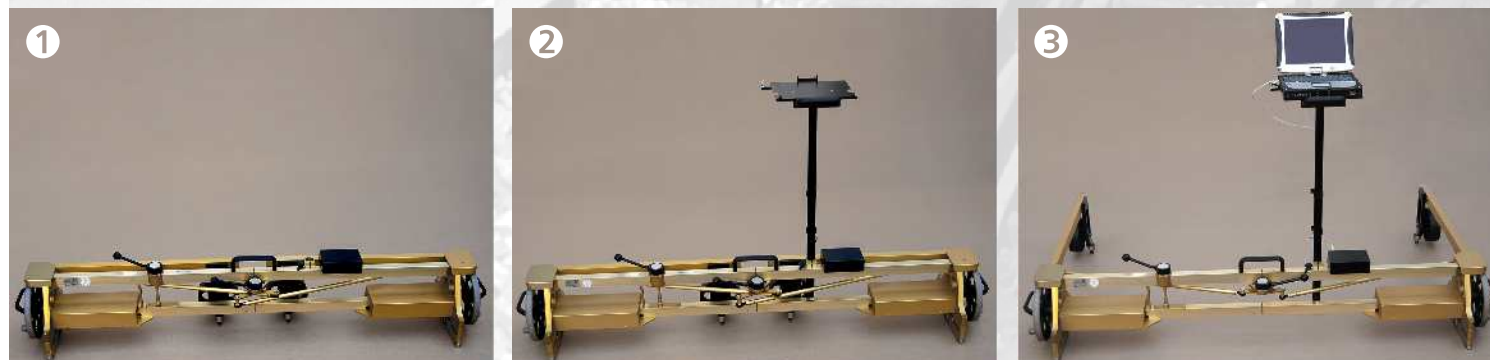


> Track gauge



> Digital





Ready to use within seconds

MessReg CDM: handy, intelligent, efficient



In the area of digital track and switch inspections, MessReg CDM is the measure of things.

MessReg CDM provides a continuous measurement, that is, the required track values are recorded automatically every 5 mm. Thus track and switch inspection is not limited just to single measuring points anymore. With MessReg CDM the entire track/switch is monitored from the very beginning to its end.



Measuring probe mechanism

The measuring device is easy to transport and can be operated by a single person. The superior design offers both, highest reliability and easy handling.

Construction, production and software development take place exclusively at Vogel & Plötscher (Breisach) in a close exchange with experienced practical users.

Attention to detail in developing smart solutions:

- measuring base with retraction mechanism: practical and space saving
- robust but lightweight design of aluminium making allows easy handling and transport
- slip-optimized wheels of high quality steel with special coating ensure reliable distance data
- constant pressurized measuring probes are continuously touching against the running edge.
- device insulation: no electrical connection can be made between the rails



Data capture and processing

The track gauge values are continuously captured by four measuring probes in accordance with the data from the inclination and distance sensors.

All information are recorded digitally and joined together in a specially designed electronic box. There the data are converted and sent to the MPC notebook for final saving. The MPC notebook is mounted on the top of the device and shows the incoming values in real-time.

SR	Measuring Point	Actual	Cont.	Position (m)	Information	Measuring mode	IL	RL
a		1436,1	-2,1	0,000	1 sleeper before wheel	Track gauge		
b		1435,6	-2,7	2,562	Tip of tongue	Track gauge		
d		1437,0	-9,1	3,603	End of tongue	Track gauge		
e		1436,6	-0,4	13,085	120 mm after frog	Track gauge		
f		1396,8	-0,4	13,085	Check rail gauge	Check rail gauge	>	0
h		39,8	-0,4	13,085	Flangeway guard rail	Flangeway clear	<	
i		42,4	-0,4	13,085	Flangeway wing rail	Flangeway clear	>	
r		1354,4	-0,4	13,085	Back-to-back distance	Back-to-back dist		
k		1440,8	3,0	15,781	welding joint	Track gauge		

Software CDMcatcher

The processing also includes:

- each value is assigned automatically to the belonging measuring point
- instant evaluation and coloured display of tolerance exceedings (up to 5 different levels)
- evaluation of check rail gauge, back-to-back distance and calculated values
- user can enter all kind of remarks (i.e. track defects) during measuring

All track gauge and cant measurements are carried out automatically

The measurement values are assigned automatically to the defined measuring points in accordance with the recorded distance travelled. Apart from the starting point, no other measurement point needs to be confirmed manually.

The starting point and the direction of measurement can be selected as required

In order to make the measuring process as flexible as possible, you can choose the measuring direction yourself.

Customized remarks can be entered while measuring

The user can enter any comment or note at any time during the measuring process. Each comment is automatically assigned to the travelled distance and will become part of the measuring report, too.

Main track and diverted track can be measured independently

Switch measurements are divided up into main and diverted track.

Different interfaces for sharing / reporting of measuring data

In general all measuring data can be exported to Excel. Additionally other interfaces for commercial or customized software (i.e. Access, SAP) are available upon request.



Outdoor notebook MPC, IP 65 protected, shock proofed



Key features

Electronic digital measuring

Track gauge and cant values are recorded automatically every 5 mm

Time and cost saving

Up to 10 different parameters are recorded in one single measurement

Real-Time-Monitoring

Measuring values and exceeding are always displayed

Lightweight and smart design

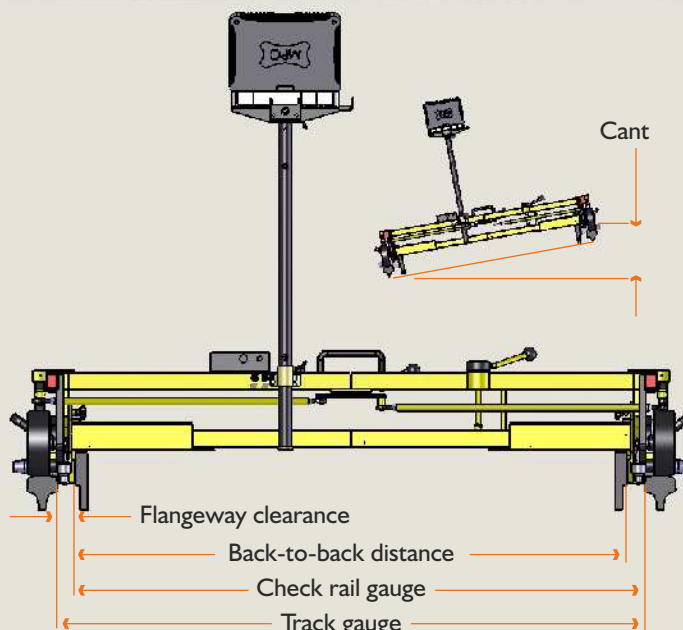
Only one person needed for build-up and operation

Suitable to any type of switches

Switches and crossings can be passed through from both directions without objectives

Comprehensive software package

- **MessProfi**, the tried-and-tested software offers measurement data management including track system management, switch editor and standardized measurement reports. By default an interface for data export to Excel is supplied.
- **CDMviewer**, a powerful software tool for graphic analyses and reporting of the measuring data
- **CDMcatcher**, data capture programme for displaying, evaluation and saving with switch inspections
- **CDMline**, data capture programme for displaying and saving with track measurements



Measuring parameters*

	Measurement range	Resolution
▶ Track gauge	1425 – 1475 mm	0,1 mm
▶ Check rail gauge	1392 – 1403 mm	0,1 mm
▶ Back-to-back distance	1349 – 1360 mm	0,1 mm
▶ Flangeway clearance	22 – 54 mm	0,1 mm
▶ Flangeway depth (option)	11 – 47 mm	0,1 mm
▶ Cant	± 170 mm	0,1 mm
▶ Distance	continuous	1 mm
▶ Twist		
▶ Calculated values		
▶ Blade checks		

Technical data*

MessReg CDM (ready to use)

Length x width x height	955 x 1674 x 950 mm
Weight	24,0 kg

Measuring device case

Length x width x height	1730 x 440 x 460 mm
Weight	35,0 kg

Outdoor-Notebook MPC

Depth x width x height	216 x 271 x 49 mm
Weight	2,3 kg
Display	Touchscreen, 10.1" (matte)
Power supply	Li-ion battery
Operating system	Microsoft Windows

* Note: All data are valid for nominal track gauge of 1435 mm.
Other track gauge sizes are available on request.

