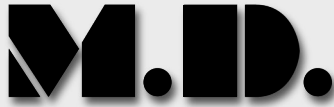


# Wheel Diameter Measurement



MDD-315  
MDD-350  
Wheel Diameter  
Measurement Devices



Front

## Operation

The MDD measures wheel diameter using a three-point system: two points are established using fixed rollers on opposite ends of the device with the third point established by an inductive position transducer located at the center of the unit

The measured diameter can be read directly from LCD displays, one on each side of the device.

Results can be stored in the MDD's memory along with the running ordinal number and the date. An eight-digit ID number allows for the identification of the loco, wagon or car and of the wheel.

The device's memory can store 1,800 measurements that can be transferred to a PC via serial or USB ports using the included cables. The data are transmitted in ASCII format to allow for easy integration into other third party software.

## Wheel Diameter Ranges

**MDD-315:** 590 – 1,050 mm (23.23 – 41.34")

**MDD-350:** 750 – 1,255 mm (29.53 – 49.41")

The total measurement range is divided into four subranges, individually customized for each customer. Each range is set on the calibration stand using the corresponding calibration insert.

The standard distance between the reference line, i.e. wheel inner side and the taping line is 70 mm though devices with different distances can be produced upon request.

## Accuracy

The reading accuracy as shown on the display is  $\pm 0.1$  mm. The true measurement accuracy is in the range of  $\pm 0.2$  mm, if the wheel is round and has a good reference plane and running surface.



Side



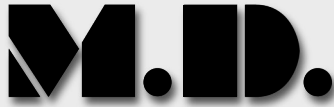
Rear

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# Wheel Diameter Measurement



MDD-315  
MDD-350  
Wheel Diameter  
Measurement Devices

## Dimensions

Model	Length	Depth	Height
MDD-315	345 mm (13.58")	106 mm (4.17")	151 mm (5.94")
MDD-350	380 mm (14.96")	106 mm (4.17")	151 mm (5.94")

## Operating Temperature

-5° – 45° C (23° – 113° F)

## Technical Specifications

The body of the MDD device is manufactured of black anodized aluminum.

The device is attached to the wheel being tested by two permanent magnets (holding strength of approximately 70 N each) and lies on two support rollers.

The distance between the center points of the rollers is measured with an accuracy of 0.002 mm.

Wheel measurements are taken using a transducer with a hardened r7 measurement point. The maximum linear error of the transducer is 0.1%.

The device is equipped with three rechargeable, removable batteries with a capacity of approximately 8 hours active operation.

The monochrome LCD screen displays two lines with 16 characters each. With its optional backlighting, the display provides high visibility in both daylight and dark environments.

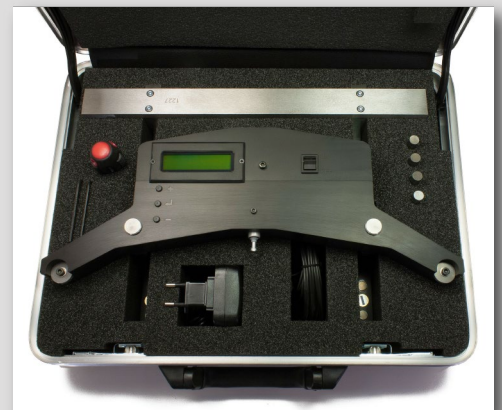
The calibration stand and individual calibration pieces are made of steel and precision cut on the calibration planes and are included with the device.



Calibration Stand



LCD Display



Complete Kit in Carry Case

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