BM20200 MOBILE BRAKE TESTER
- for Heavy Vehicles

- For vehicles with axle loads up to 20 T.
- Proven quality from more than 500 units delivered.
- 10 minutes setup by one person.
BM20200 Mobile Roller Brake Tester

BM20200 is a mobile roller brake tester, MRBT, for test of all vehicles up to a maximum axle load of 20,000 kg. As standard the BM20200 can be powered by only 3 x 400 VAC + N + G at 25 Amps, which in practice equals a 25 KVA generator.

The BM20200 is approved by several international authorities (such as BIVV Belgium), complies with the ISO standard, and holds a NATO number.

The BM20200 MRBT is equipped with the same electronics and software as the BM in-ground RBT’s BM12200, BM14200 and BM17200 and therefore the BM20200 offers the same high test standard and data processing as these in-ground models.

The BM20200 can optionally be supplied with a long range of features which allows for a customisation, that meets the exact customer requirements:

- Infrared remote control system.
- Android/Windows phone or tablet display and remote control.
- Radio air pressure system (RTS).
- Diagnostic printout with and without link to PC with BM FlexCheck software.
- Automatic axle weighing and vehicle total weight.
- Tachograph calibration on BM brake tester (11 kW gear motors 2.0 km/h).
- Test of 4x4, 4x6 and 6x8 drive vehicles.
- Test vehicles with a high variation of wheel bases up to 4000 mm.
- Conventional axle load simulation.
- Can be placed directly on the floor indoor or outdoor without need of civil work.

Approvals
BM Autoteknik A/S is proud to have obtained approvals for the BM20200 mobile roller brake tester in the following countries:

- BIVV Belgium
- GEA England
- NZTA New Zealand
- Russia and Kazakhstan

BM20200 is in compliance with ISO21069
Unique Features

Compared to other mobile roller brake testers, the BM20200 has the following unique features:

**Extremely Low Clearance**
The roller set height is only 160 mm, which ensures against bottom out when passing with very low vehicles such as coaches and cars.

**Low Floor Space Requirement**
Due to the low height of the rollers, the length of the ramps are only 1.25 meter on each side i.e. a total setup length of only 3.5 meter.

**Insensitive to Testing Area Surface**

The BM20200 design is simple with strong and flexible mechanical solutions. The benefit is that there are no particular requirements to the testing area surface. The BM20200 can be placed on asphalt or concrete floor, but also on uneven gravel ground, sand and dirt.
Axle Load Simulation

The BM20200 can optionally be supplied with an Axle Load Simulation system, which can simulate up to 8 ton. The system can be supplied with a compressed air powered foot pump or an integrated electrical power unit.

Display on Trolley

The display can be delivered on a trolley with a robust network cable of up to 100 meters. Hereby the display can be placed in a convenient long distance from the roller bed and hereby be monitored even when the last axle of a vehicle combination is tested.

Expanding BM20200 into an On-ground Test Line

The additional on-ground test equipment has the same height (approx. 160 mm) as BM20200 and they can therefore share the drive on and off ramps. This equipment can optionally be supplied with integrated wheels and the operator can therefore move this equipment around as easy as the BM20200. Complete setup time for one person is less than 15 minutes.
Smartphone or Tablet Remote Control

The BM20200 can be supplied with a PC Windows program, BM FlexCheck.

The BM20200 can also be supplied with a handheld Android/Windows Phone or tablet unit which communicates wirelessly with the roller brake tester. The units have a virtual display which shows all the readings of the brake test and a touch screen based remote control.

Advantages of the Handheld Units

In many applications, the location of the traditional physical display or traditional PC console prevents an optimal use of the brake tester by the operator. One reason can be that the vehicle cabin passes the display or PC console when testing the last axles of the vehicle and trailer - a problem which has increased due to introduction of long modular vehicle combinations. Another reason can be that vehicles needs to be reversed over the brake tester in non-drive through lanes, and then the operator cannot see the display or PC console.

Operator Brake Test Guide - BMAssist

Another distinct feature of the handheld units compared to a traditional infrared remote control is the integrated BM Assist, which is a menu based software that guides the operator safely and correctly through the complete brake test.

PC Table

The BM20200 can be supplied with an integrated PC table and power connectors, so a PC notebook can be placed directly next to the brake tester.

Together with a printer placed inside the integrated printer cabinet, the operator has a full “office” environment onboard.
Flexible Means of Transportation

Since the BM20200 can be completely folded up and minimised sizewise several means of customised transport options can be offered.

BM Trailer Solution
BM has developed a unique transport frame system, which can be mounted onto a standard trailer with tilt function. The transport system is modularly designed and covers means of transportation of generator, BM20200 brake tester, BM53000 wheel play detector and BM901 side slip meter including electrical winches and battery.
Container Solution
BM can supply a 20’ container solution with purpose built rails for load/unload and special storage design inside the container. Following shows the management and setup of BM20200 when transported in a 10’ container. Note the special rails used for rolling the BM20200 in and out of the container.


The transport system has a number of important benefits including ensuring equal distribution of weight onto the full area of the trailer bed, fixation of equipment during transport and correct angle for avoiding bottom out when loading and unloading the equipment.
## Technical Data

<table>
<thead>
<tr>
<th>BM20200 DESCRIPTION</th>
<th>L x W x H</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Roller bed (1000 mm rollers)</td>
<td>3465 x 4240 x 505 mm</td>
<td></td>
</tr>
<tr>
<td>Roller bed (1250 mm rollers)</td>
<td>3465 x 4740 x 505 mm</td>
<td></td>
</tr>
<tr>
<td>Roller bed (1600 mm rollers)</td>
<td>3465 x 5440 x 505 mm</td>
<td></td>
</tr>
<tr>
<td>Roller diameter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roller length</td>
<td>1000/1250/1600 mm</td>
<td></td>
</tr>
<tr>
<td>Friction coefficient of roller from factory dry/wet</td>
<td>Min. 0.7/0.6</td>
<td></td>
</tr>
<tr>
<td>Wheel span (can be customised on split bed model)</td>
<td>800 to 2800/3300/4000 mm</td>
<td></td>
</tr>
<tr>
<td>Distance between roller centers</td>
<td>430 mm (530 mm on agro)</td>
<td></td>
</tr>
<tr>
<td>Maximum test axle weight</td>
<td>1600 / 20000 kg</td>
<td></td>
</tr>
<tr>
<td>Gear motor size</td>
<td>2.2/4.8/11/15 kW</td>
<td></td>
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<tr>
<td>Max. brake force measurement</td>
<td>4000/6000 daN</td>
<td></td>
</tr>
<tr>
<td>Test speed</td>
<td>0.5/1.0/2.0/3.0 km/h</td>
<td></td>
</tr>
<tr>
<td>Display L x W x H</td>
<td>930 x 820 x 100 mm</td>
<td></td>
</tr>
<tr>
<td>Control box L x W x H</td>
<td>600 x 600 x 210 mm</td>
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</tr>
<tr>
<td>Display brake force scale</td>
<td>0 - 800 daN</td>
<td>0 - 4000 daN</td>
</tr>
<tr>
<td>Brake force measuring accuracy</td>
<td>0 - 100 daN: ± 2 daN</td>
<td>-&gt; 100 daN: ± 2% FS</td>
</tr>
<tr>
<td>Pedal force measurement accuracy</td>
<td>0 - 100 daN: ± 1 daN</td>
<td></td>
</tr>
<tr>
<td>Power and fuses</td>
<td>3 x 400 Vac + N + PE Min. 16/25/50/80 Amp</td>
<td>3 x 230 Vac + PE Min. 20/50/80/125 Amp</td>
</tr>
</tbody>
</table>