Beissbarth Workshop Equipment for OEM garages

- Wheel Alignment and Lifts
- Wheel Service: Mounting Tyres and Balancing Wheels
- Brake Testing, Test Lanes and Headlight Testing
- AC Service Units
A workforce of over 200 produces modern testing and service equipment for automotive workshops in compliance with the increasingly strict demands of the automotive industry. For decades, we have been focusing on wheel alignment, brake testers, test lanes, and tyre service equipment.

**Tradition**
Beissbarth has been based in Munich for over 115 years. At the end of the 19th Century, merchants Daniel and Hermann Beissbarth were automotive pioneers in Bavaria. From 1951, the sons of the company founder developed the first automotive service equipment.

**Innovation**
Beissbarth service equipment included in this brochure has been approved and recommended by many OEMs. Their extreme precision and measurement accuracy in conjunction with correspondingly efficient test procedures are valued in particular. A high level of research and development continues to create innovative products for the market.
<table>
<thead>
<tr>
<th>Equipment</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Alignment</td>
<td>4-13</td>
</tr>
<tr>
<td>Lifts</td>
<td>14-21</td>
</tr>
<tr>
<td>Wheel Balancers</td>
<td>22-29</td>
</tr>
<tr>
<td>Tyre Changers</td>
<td>30-43</td>
</tr>
<tr>
<td>Brake Testers</td>
<td>44-49</td>
</tr>
<tr>
<td>Vehicle Testing</td>
<td>50-55</td>
</tr>
<tr>
<td>Headlight Testing</td>
<td></td>
</tr>
<tr>
<td>AC Service Units</td>
<td>56-59</td>
</tr>
</tbody>
</table>
Wheel Alignment

Non-contact
- Highly accurate, simultaneous on 4 wheels
- High-speed diagnosis of camber, individual and total toe
- Touching neither wheels nor the vehicle

3D
- Fast and highly accurate 3D-technology
- Wireless version for higher flexibility
- Mobile application of sensor heads at different bays

CCD
- Economical entry-level solution
- Wireless or cable measurement
- Mature technology
Get in touch with Touchless

Touchless: Easy, fast and profitable

Innovative non-contact technology

• No time-consuming installation of wheel clamps or plates
• No damaging of rims
• No setup-driven measurement errors

Touchless 4 wheels live measurement

• Time-saving wheel-alignment check within seconds
• Faster and more precise than systems with multi-stage 2-wheel measurement thanks to simultaneous live measurement of all 4 wheels

Smart Test

• Measuring results for camber and toe within seconds
• Touchless Smart Test at the reception generates additional jobs for the workshop
Smart Align Software
- New intuitive graphics and new GUI (Graphical User Interface) are self-explanatory
- Flexibar: Process steps of the measurement routine are arranged neatly. They can be selected flexibly in terms of order.

New features
- Live caster adjustment
- Additional measurement values
- Significant speedup during the initialization
- 10° steering lock routine (on-the-fly)
- ASA-network-compatibility

Measurement values

<table>
<thead>
<tr>
<th></th>
<th>±18°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total toe (front axle + rear axle)</td>
<td></td>
</tr>
<tr>
<td>Individual toe (front axle + rear axle)</td>
<td>±9°</td>
</tr>
<tr>
<td>Camber (front axle + rear axle)</td>
<td>±10°</td>
</tr>
<tr>
<td>Geometrical driving axis</td>
<td>±9°</td>
</tr>
<tr>
<td>Caster</td>
<td>±22°</td>
</tr>
<tr>
<td>Toe-out on turns</td>
<td>±20°</td>
</tr>
</tbody>
</table>

Wheel bases: passenger cars and light commercial vehicles (LCVs) 1,800 to 4,650 mm

Touchless Excellence

- Trolley with PC, Windows 7, keyboard, mouse, printer ✓
- 4 Touchless sensor heads ✓
- Touchless Smart Align software ✓
- Nominal values ✓
- Control box ✓
- Cable set lift, connection cable trolley-lift 10m ✓
- Brake tensioner and steering-wheel lock ✓
- 27" screen ✓
- High-precision aluminum turning plates with aluminum filling pieces and rubber covers ✓
- Remote control ✓
- Covers for trolley and sensor heads ✓
- Smart Link adapter optional accessory

Easy 3D+
Future-proof wheel alignment

• Fast 3D technology with 12 cameras for efficient wheel alignment
• Automatic measurement with the accuracy of 3D measurement technology
• High reproducibility of results – safety and competence even at repeated measurements
• Reduced set-up times thanks to easy fitting of measurement boards and sensor heads – without having to recalibrate again
• Includes rolling runout compensation without having to lift the vehicle
• Clear working area at the vehicle front – allowing the use of headlight testers and calibration sets for driver assistance systems (DAS)

New software with functional plus:
• Intuitive user interface for easy and quick operation
• Fully automated test procedures (Smart Test)
• Measurement program automatically updates itself after each step of the wheel alignment

Variants:
Easy 3D+
Wired data transfer to the PC
Easy 3D+ WLAN
Wireless data transfer to the PC
• High mobility, fewer cable route, fewer obstacles

Easy 3D+ Scopes of delivery:
Flex
• Flexible solution including trolley
• Use of own PC and accessories
Standard
System with PC, trolley and monitor
Excellence
Complete system with PC, trolley, monitor and selected accessories

Easy 3D+ WLAN Scopes of delivery:
Kit
• Use of own hardware (PC, tablet or Notebook)
• Without trolley
• Economical entry-level solution

Accessories (see page 12-13):
• Magnetic holder for quick set-up times, within seconds
• Multi-Fit clamps for quick and precise installation
Easy CCD and ML Tech+ with proven CCD technology

- Economical entry-level solution
- Digital 20° CCD camera with mature sensor technology
- Highly precise adjustment results through measurement accuracy and repeatability of ± 2 minutes of arc
- Permanent 360° measuring field through 8 CCD measuring sensors
- High mobility through wireless communication
- Mobile, flexible use of the sensor heads at different working bays, e.g. platform and pit
- Display of toe and camber in the raised position for comfortable adjustment
- ASA network interface
- Beissbarth OEM vehicle database with target data for over 30,000 vehicle types
- Time savings during the run-out compensation thanks to the integrated sensor

Variants:

ML TECH+
System with special software for OEM measurement routines

Easy CCD
- Rolling runout compensation
- Innovative graphical user interface with intuitive operation

Easy CCD Scopes of delivery:

Kit
- Use of own hardware (PC, tablet or Notebook)
- Without trolley
- Economical entry-level solution

Flex
- Flexible solution including trolley
- Use of own PC and accessories

Excellence
Complete system with trolley, PC and selected accessories
Technical data 3D and CCD

Technical data 3D

- Two stereo camera measurement systems with triangulation for each sensor
- Integrated reference system with CCD cameras
- For wireless versions:
  - From WLAN box to PC: data transfer via WLAN (5 GHz) and Bluetooth (2.4 GHz)
  - From Sensor head to WLAN box: data transfer via cable

**Sensors**
- Dimensions (L x W x H): 650 x 150 x 370 mm
- Weight: 9.4 kg
- Colour: grey

**Measurement box**
- Power supply: 100 - 240 V AC (10A)
- Mains frequency: 50/60 Hz
- Power: 0.5 kW
- Dimensions (L x W x H): 647 x 250 x 131 mm

**Vehicle size range**
- Cars and light trucks; wheelbases between 1,800 mm and 3,400 mm with standard targets; up to 4,300 mm with larger targets (optional) on rear axle

**Working location**
- For use on wheel alignment lifts and in pits
- Approx. 600 mm clearance per side in addition to runway exterior dimension

Technical data CCD

- 8 CCD measurement system
- For wireless versions:
  - multi channel system (433 MHz)
  - Measurement box with Bluetooth interface

**Sensors**
- Dimensions (L x W x H): 760 x 300 x 200 mm
- Weight: 5.8 kg
- Colour: grey / black

**Measurement box**
- Power supply: 100 - 240 V AC (10A)
- Mains frequency: 50/60 Hz
- Power: 0.05 kW
- Dimensions (L x W x H): 250 x 160 x 90 mm

**Vehicle size range**
- Wheelbase: up to 6,500 mm

**PC trolley incl. 19” TFT monitor (optionally 27”)**
- Dimensions (L x W x H): ca. 980 x 800 x 1,600 mm
- Weight: 80 kg
- Colour: grey

Accessories 3D and CCD

**Turn tables**
- Loadbearing capacity for cars: 1,000 kg
- Angle of rotation: up to 360°
- Dimensions (L x W x H): 450 x 450 x 50 mm
- Slide range: ± 50 mm
- Weight: 14 kg

**Sliding plates**
- Loadbearing capacity for cars: 1,000 kg
- Angle of rotation: ±10°
- Dimensions (L x W x H): 450 x 450 x 50 mm
- Slide range: +65 <-> -50 mm
- Weight: 15 kg

Required PC specifications for Kit and Flex versions

**Operating system**
- Windows 7 Professional (64-bit / 32-bit)
- Windows 7 Ultimate (64-bit / 32-bit)
- Embedded Windows POS Ready 7 (64-bit / 32-bit)
- Windows 8.1 Professional (64-bit / 32-bit)
- Windows 10 Professional (64-bit / 32-bit)

**CPU**
- Intel (recommended) or AMD Celeron Dual Core (min 2 x 2.4 GHz)

**RAM Main memory**
- Min. 2 GB

**Hard disk capacity**
- 64 GB total (required: 15 GB)

**Optical drive**
- DVD (for installation only)

**COM port**
- 1 port, just if remote control receiver is required

**USB 2.0 ports**
- For 3D: 3 (software key, Bluetooth stick, WLAN stick)
- For CCD: 2 (software key, Bluetooth stick)
## Measuring values for 3D / CCD

<table>
<thead>
<tr>
<th></th>
<th>Precision</th>
<th>Measuring range</th>
<th>Total range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total toe (front + rear axle)</td>
<td>± 4°</td>
<td>± 6°</td>
<td>± 18°</td>
</tr>
<tr>
<td>2. Individual toe (front + rear)</td>
<td>± 2°</td>
<td>± 3°</td>
<td>± 9°</td>
</tr>
<tr>
<td>3. Camber (front + rear)</td>
<td>± 2°</td>
<td>± 5°</td>
<td>± 10°</td>
</tr>
<tr>
<td>4. Setback (front + rear)</td>
<td>± 2°</td>
<td>± 2°</td>
<td>± 9°</td>
</tr>
<tr>
<td>5. Geometrical driving axis</td>
<td>± 2°</td>
<td>± 2°</td>
<td>± 9°</td>
</tr>
<tr>
<td>6. Caster</td>
<td>± 4°</td>
<td>± 18°</td>
<td>± 22°</td>
</tr>
<tr>
<td>7. Steering axis inclination</td>
<td>± 4°</td>
<td>± 18°</td>
<td>± 22°</td>
</tr>
<tr>
<td>8. Toe-out on turns</td>
<td>± 4°</td>
<td>± 20°</td>
<td>± 20°</td>
</tr>
<tr>
<td>9. Caster correction range (front)</td>
<td>± 4°</td>
<td>± 7°</td>
<td>± 10°</td>
</tr>
<tr>
<td>10. Max. steering angle (front + rear)</td>
<td></td>
<td>± 50°</td>
<td>± 60°</td>
</tr>
<tr>
<td>11. Setback (rear)</td>
<td>± 2°</td>
<td>± 2°</td>
<td>± 2°</td>
</tr>
<tr>
<td>12. Wheelbase difference</td>
<td>± 2°</td>
<td>± 2°</td>
<td>± 2°</td>
</tr>
<tr>
<td>13. Side offset left/right</td>
<td>± 2°</td>
<td>± 2°</td>
<td>± 9°</td>
</tr>
<tr>
<td>14. Track width difference</td>
<td>± 3°</td>
<td>± 2°</td>
<td>± 18°</td>
</tr>
<tr>
<td>15. Axle offset</td>
<td>± 3°</td>
<td>± 2°</td>
<td>± 9°</td>
</tr>
</tbody>
</table>

1) For CCD wheel alignment units: only in combination with electronic turntables; 2) For 3D 12cam wheel alignment units: not possible for all vehicles

## Scope of delivery

<table>
<thead>
<tr>
<th>Easy 3D+</th>
<th>Easy 3D+</th>
<th>Easy CCD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flex</strong></td>
<td><strong>Standard</strong></td>
<td><strong>Excellence</strong></td>
</tr>
<tr>
<td>Charging adapter</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sensors</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Target data</td>
<td>Europe</td>
<td>Europe</td>
</tr>
<tr>
<td>Software</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Measurement box</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bluetooth USB stick</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WLAN USB stick</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Targets</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cabinet</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Brake clamp</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Steering wheel lock</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>PC</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Monitor 27&quot;</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Printer</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Multi-Fit clamps</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Special jaws</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Turntable</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Filling bar</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Lift adapter</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cable (15 m)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Magnetic clamps</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Protective cover cabinet</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Remote control</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Accessories for wheel alignment

- Ballast bag (5, 10 or 20 kg)
- Brake lock
- Steering wheel lock
- Remote control
- Drive-on ramps for turntables and short sliding plates
- Drive-on ramps set for 2 turntables
- Sliding plate short (45 x 45 x 5 cm)
- Sliding plate long (105 x 45 x 5 cm)
- 3D cable kit (different lengths available)
- Step protection for 3D sensor head
- Lift adaption for Easy 3D (different versions available depending on lift)
- Target board for long wheel base (> 340 cm)
- Magnetic holder
- Extension set 28” (for Multi-Fit clamp)
- Special claws (for Multi-Fit clamp)
- Truck claws (for Multi-Fit clamp)
Multi-Fit clamp (incl. 16 standard claws)

Mercedes-Benz toe spread bar

Storage trolley for 3D accessories (clamps & target boards)

Filling bars

Turntable steel, standard, mechanical incl. Nonius

Protective cover for aluminum turntable

Turntable aluminium, precision, electronic with weight system

Multi-Quick clamp

Romess inclinometer

Wall mount for CCD Kit

Soiler adapter (different versions available)

Storage trolley for accessories

Wall hook for 3D accessories (clamps & target boards)

Turntable aluminium, standard (mechanical or electronic)

Turntable aluminium, precision (mechanical or electronic)
Lifts

4-post lifts
- The perfect lifting and measurement station
- With or without integrated wheel-free scissor lift
- Various platform lengths

2-post lifts
- With electrohydraulic drive
- Designed for heavy-duty service
- Baseless

Scissors lifts
- Compact and effective for tyre and rapid repair workshops
- For customer reception, repairs and wheel alignment
VLH 4345 LA

Electrohydraulic 4-post lift:
Precision lift for small motor vehicles and vans

- High-precision mechanical and hydraulic systems
- Integrated wheel-free scissor lift
- Ideal work station for wheel alignment
- Low access height of only 185 mm
  (including fillers for wheel alignment)
- Option: Additional 2 t or 2.6 t jacking beam
- Option: Play detector
- High-precision locking bars

Versions:
- VLH 4245 with medium platforms 4.80 m
- VLH 4145 with extra-short platforms 4.40 m
VLH 4345 LA
Electrohydraulic 4-post lift:
- Precision lift for small motor vehicles and vans
- High-precision mechanical and hydraulic systems
- Integrated wheel-free scissor lift
- Ideal work station for wheel alignment
- Low access height of only 185 mm (including fillers for wheel alignment)
- Option: Additional 2 t or 2.6 t jacking beam
- Option: Play detector
- High-precision locking bars
- Versions:
  - VLH 4245 with medium platforms 4.80 m
  - VLH 4145 with extra-short platforms 4.40 m

Extending wheel-free lift (1400-1900 mm)
Option:
- Mounting for Beissbarth Easy 3D
- Non-slip surface Power Grip

Platforms:
- Corrosion-proof

XXL sliding plates at rear (with versions A and LA)

Post spacing: 2780 mm also for commercial vehicles

Standard: Pneumatic release of platforms (locking pawls), automatically controlled

The turntable can be positioned as required and fillers are placed in the gaps.
The covers (at top of illustration on left) are included as standard.
VLH 4440 4-post lift: The ideal measurement bay for wheel alignment

4-post lift with electrohydraulic drive with loadbearing capacity up to 4,000 kg for elevated installation:
- Heavy-duty design (net weight 2,600 kg) for guaranteed stability and outstanding accuracy
- Extra-wide cross member for 3 m column spacing
- Locking mechanism for wheel alignment as standard
- Fine adjustment of runways with respect to cross member
- Specific drilling pattern in runways for mounting fillers or pinning turntables

Optional accessories:
Turntables and axle lift with loadbearing capacity of 2,600 kg.
Lifts

VLH 4440 4-post lift: The ideal measurement bay for wheel alignment

**Technical data:**
- 4-post lift with electrohydraulic drive
- Dimensions: $6,351 \times 3,623 \times 2,324 \text{ mm}$
- Power supply: $3 \times 400 \text{ V} / 50 \text{ Hz}, \ E+N / 16 \text{ A}$
- Loadbearing capacity: 4,000 kg
- Max. lifting height: 1,920 mm
- Lifting time: 45 Sek
- Runway length: 4,700 mm
- Longitudinal column spacing: 4,285 mm
- Runway width: 630 mm
- Clear width: 2,940 mm
- Distance between runways: 925 mm

**Heavy-duty design**
- (net weight 2,600 kg) for outstanding wheel alignment accuracy.

**Milled runway surface for high precision**

**Extremely shallow design:**
- min. height only 170 mm (without comfort-kit)

**8x adjustable rest for lower calibration position**

**Holes for fixing turntable bases or fillers in position**
- (with comfort-kit)

**The VLH 4440 „comfort-kit“**

Guarantees the level of precision and efficiency required for wheel alignment

- Flat runways with integrated turntables for front and rear wheels

**Configuration for 2,000 - 3,600 mm wheelbases possible**
- Fillers of different lengths for flexible use

**Convenient drive-on – maximum safety and no noise nuisance**
- Fillers with integrated grip
- Fillers pinned to runway and with additional groove on one side

**Drive-on ramps, two-piece, for gentler drive-on angle**

**High-quality powder coating**
VLH 2140 and VLH 2155

Electrohydraulic 2-post lifts:
Versatile, top-quality vehicle lifts with no frame

- Also suitable for lifting small vans up to 4 t or 5.5 t
- All components reinforced
- 4-piece, symmetrical lifting arms

Low maintenance and wear:
- High-grade, hardwearing hydraulic system
- Metal high-pressure pipes throughout
- No vulnerable loadbearing nuts

Automatic limit switch (roof protection)
Two maintenance-free, suspended lifting cylinders
Variable lowering speeds for exact vehicle positioning
Automatically activated locking pawls (each post)

VLH 2155
VLS 3132 H

Double scissor lift: Extra-high – also suitable for underbody work

- Outstanding lifting height of 1,945 mm
- Platform length between 1,470 and 1,990 mm
- Ultra low profile: Height of only 105 mm
- Short lifting/lowering time: 45 seconds
- Hydraulic fluid included
- 4 elastomer lifting pads included

Variant:
- Under-floor installation (optional foundation trough)

H = High

VLS 3130

Short-stroke lift: Versatile for working on tyres, bodywork and brakes

- Ultra low profile: Minimum height just 100 mm
- Quick and easy to move
- Hot-dip galvanised baseplates
- Lifting height up to 930 mm
- Platform length between 1,400 and 1,932 mm
- No compressed air
- Pre-assembled (no additional on-site assembly work)
- Hydraulic fluid included
- 4 elastomer lifting pads included

Option:
Mobility kit for easy moving
Wheel Balancers

- Balanced in 6 seconds
- Easyfix® data arm
- Laser positioning
- Internal illumination of rim
- QSP function saves selection of programs

Guide to product names:
Key
A = With Outer Arm
D = Inner Data Arm
P = Pneumatic Clamping Flange
T = TFT Screen
MT 849 and MT 869 wheel balancers

- Automatic contactless width measurement
- QSP to select the top 3 balancing programs by using the Easy Fix lever
- 6 seconds for the balancing cycle
- Electronic brake
- Pneumatic locking system (MT 849 ADP / MT 869 ADPT)
- Stop on Top function to stop the wheel in the right position
- Connectivity: USB charging / printer connection
- Customizable screen saver
- Print Report: possibility to print a balancing report

19” TFT Monitor
- Intuitive GUI
- Easy to read
- At the right height

Design
- Small footprint
- Many holders for weight
- Tools and accessories

USB connection
- Printer report
- Easy sw updates
- Charging function for your devices

Pneumatic locking system
- Pneumatic locking system, just press the pedal to lock the wheel

Wheel cover
- Big capacity, 1200 mm (47”) wheel diameter.
- Space saving configuration

Contactless width measurement
- Save time
- Intelligent reading

Easyfix® arm
- The internal gauge is locked in position for a precise weight positioning
- Distance diameter measurement

Light ring + 3 laser pointers
- 360º Light Ring (Patented) for a perfect view
- 3 laser line pointers for manual weight positioning

Electro brake
- Hold pedal brake to place the weight
- The wheel is stopped in position
MT 857, MT 837 and MT 826 wheel balancers

- Self-diagnostic and self-calibration function
- Balancing program with automatic recognition function of the spring-clip weight and/or adhesive weight
- 11 programs for car wheels
- 5 programs for alloy rims
- 5 programs for motorcycle wheels
- Program for weights hidden behind spokes
- Optimisation of wheel imbalance (Matching)
- Multi operator program
- Software available in 25 languages
- Customisable screensaver
- QSP program function, recognition of top 3 programs

Wheel cover
- Big capacity, 1150 mm wheel diameter

19" TFT Monitor
- Simple and intuitive GUI

Weight tray
- Equipped with several compartments for weights, cones, and clamps

Elevated Keyboard
- With 5 keys for higher tactile quality
- Larger features when selecting various menus

External sensor (optional)
- Automatically width measurement

Easyfit inner arm
- Quick and easy positioning of adhesive weights in alloy wheels
- Diameter and distance measurement

Mechanical brake pedal

MT 857 DT
## Technical data

<table>
<thead>
<tr>
<th>Variants</th>
<th>MT 885</th>
<th>MT 869</th>
<th>MT 849</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADP</td>
<td>ADPT</td>
<td>ADT</td>
</tr>
<tr>
<td>Data entry</td>
<td>3D w / Laser</td>
<td>3D w / Arm</td>
<td>3D w / Arm</td>
</tr>
<tr>
<td>Internal arm</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>External arm</td>
<td></td>
<td>Laser</td>
<td></td>
</tr>
<tr>
<td>Display</td>
<td>Monitor</td>
<td>Monitor</td>
<td>Digital LED</td>
</tr>
<tr>
<td>Rim width (Aut/Man)</td>
<td>1&quot;-14&quot;/1&quot;-24&quot;</td>
<td>1&quot;-15&quot;/1&quot;-24&quot;</td>
<td>1&quot;-15&quot;/1&quot;-24&quot;</td>
</tr>
<tr>
<td>Rim diameter (Aut/Man)</td>
<td>10&quot;-26&quot;/6&quot;-40&quot;</td>
<td>10&quot;-30&quot;/6&quot;-40&quot;</td>
<td>10&quot;-30&quot;/6&quot;-40&quot;</td>
</tr>
<tr>
<td>Max wheel width</td>
<td>495 mm</td>
<td>500 mm</td>
<td>500 mm</td>
</tr>
<tr>
<td>Max wheel diameter</td>
<td>1,000 mm</td>
<td>1,200 mm</td>
<td>1,200 mm</td>
</tr>
<tr>
<td>Max wheel weight</td>
<td>70 kg</td>
<td>80 kg</td>
<td>80 kg</td>
</tr>
<tr>
<td>Cycle time</td>
<td>10 sec</td>
<td>6 sec</td>
<td>6 sec</td>
</tr>
<tr>
<td>Brake</td>
<td>Electromagnetic</td>
<td>Electromagnetic</td>
<td>Electromagnetic</td>
</tr>
<tr>
<td>Light ring / Laser pointers</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Easyfix® function</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic function</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QSP SW function</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Automatic wheel positioning</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stop on top function</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Split weight function</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of cones</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Weight scraper</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminium rim protection</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lift Integrated</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (WxDxH)</td>
<td>2,040 x 1,350 x 1,930 mm</td>
<td>1,730 x 1,380 x 1,915 mm</td>
<td>1,730 x 1,380 x 1,915 mm</td>
</tr>
<tr>
<td>Variants</td>
<td>MT 857</td>
<td>MT 837</td>
<td>MT 826</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Data entry</td>
<td>2D w / Arm</td>
<td>2D w / Arm</td>
<td>2D w / Arm</td>
</tr>
<tr>
<td>Internal arm</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>External arm</td>
<td>optional</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td>Display</td>
<td>Monitor</td>
<td>Digital LED</td>
<td>Monitor</td>
</tr>
<tr>
<td>Rim width (Aut/Man)</td>
<td>1&quot; - 18&quot;/1&quot; -24&quot;</td>
<td>1&quot; - 18&quot;/1&quot; -24&quot;</td>
<td>1&quot; -16&quot;/1&quot; -24&quot;</td>
</tr>
<tr>
<td>Rim diameter (Aut/Man)</td>
<td>10&quot; -26&quot;/6&quot; -40&quot;</td>
<td>10&quot; -26&quot;/6&quot; -40&quot;</td>
<td>10&quot; -26&quot;/6&quot; -40&quot;</td>
</tr>
<tr>
<td>Max wheel width</td>
<td>500 mm</td>
<td>500 mm</td>
<td>420 mm</td>
</tr>
<tr>
<td>Max wheel diameter</td>
<td>1,200 mm</td>
<td>1,200 mm</td>
<td>820 mm</td>
</tr>
<tr>
<td>Max wheel weight</td>
<td>70 kg</td>
<td>70 kg</td>
<td>65 kg</td>
</tr>
<tr>
<td>Cycle time</td>
<td>8 sec</td>
<td>8 sec</td>
<td>10 sec</td>
</tr>
<tr>
<td>Brake</td>
<td>Mechanic</td>
<td>Mechanic</td>
<td>Mechanic</td>
</tr>
<tr>
<td>Easyfit function</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>QSP SW Function</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Split weight function</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Number of cones</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Weight scraper</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Aluminium rim protection</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dimensions (mm)</td>
<td>1,260 x 1,820 x 1,270</td>
<td>1,260 x 1,830 x 1,270</td>
<td>1,140 x 1,380 x 1,100</td>
</tr>
</tbody>
</table>
Optional accessories and flanges

Lightring with three laserpointers

Tyre elevator

Moto monolever wheels centering kit and shaft (19 mm)

Printer kit

Kit demo box for passenger car

3-4-5-hole flange

Quick bolt kit for 3-4-5- hole flange

Moto fast bike flange (Ø 14 mm)

Duo expert system (3 collets in a case 54-78 mm)

Spacer (Ø 218 mm)

Moto quick fix for 19 / 14 mm shaft

Variable specific clamping plate (Quickplate) for 4/5/6-hole rims
Wheel Alignment Brake Testers
Vehicle Testing Tyre Changers Wheel Balancers
AC Service Units Lifts Headlight Testing DAS-Tools Networking

Fourth cone (Ø 88-132 mm)
Fourth cone (Ø 120-174 mm)
Large diameter clamping hood
Kit for Off-Road

Cone spacer
Centering Kit BMW
Set of light truck cones (88 - 174 mm)
Adaptor plate + pivot

Accessories Storage for cones
Tyre Changers

- Pneumatic Tecnoroller NG for precise fitting
- New bead breaker with Ergo Control System
- Benchmark for robustness and solidity
- Adaptive rotation speed and torque control

Guide to abbreviations:
TLL = Tyre Lever Less
wdk = wdk approved
certified for RunFlat and UHP-tyres
MS 900: Effortless & simple tyre changing

- 30” automatic leverless tyre changer
- Easy and precise locking system
- Unique tooling system
- Inverter solution
- 2 laser pointers
- Intuitive control panel
- Side lift
- Completely electromechanic

**Bead pressing arm**
- Moves ALONE in sleep mode
- Supports the tyre mounting

**Center post clamping system**
- Easy and precise locking system
- Faster than any other automatic locking system
- Completely mechanical and easy maintainability
- Color code to highlight the locking stage

**Two laser pointers for wheel set up**
- 2 color code to make it intuitive
- 2 buttons to make it easy
- Green to set wheel diameter
- Red to set the wheel width

**Side lift**
- Allows to work always in an ergonomic position without stressing the back
- Improves productivity
- Lifting capacity up to 80 kg

**LED bar:**
- Light up the lower bead

**Bead Breaker Disks**
- Strongest, market benchmark
- Double arm bead breaker system
- Inverter technology
- Hump shape pre-set
- Folding structure to save the wheel

**Control console**
- Joysticks, buttons and switches in an intuitive layout that supports the tyre changing process

**Inflating control box**
- Pressure gauge
- Air supply and oiler
- Inflating cable

**Mirror:**
- Operation of the lower bead

**Pedals**
- To control the rotation (motor inverter) and inflating process
- In a comfort setup

**Inflating control box**
- Pressure gauge
- Air supply and oiler
- Inflating cable
Technical data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air connection</td>
<td>8 – 10 bar</td>
</tr>
<tr>
<td>Rim Diameter</td>
<td>12” – 30”</td>
</tr>
<tr>
<td>Rim width</td>
<td>Up to 16”</td>
</tr>
<tr>
<td>Max. wheel diameter</td>
<td>1,200 mm</td>
</tr>
<tr>
<td>Bead breaker range</td>
<td>406 mm/ 16” (depending on the wheel of set)</td>
</tr>
<tr>
<td>Bead breaking force</td>
<td>16,406 N</td>
</tr>
<tr>
<td>Power supply 230V 1PH</td>
<td>Yes</td>
</tr>
<tr>
<td>N. turntable speed</td>
<td>2 speed</td>
</tr>
<tr>
<td>Speed of rotation</td>
<td>7 – 16 rpm</td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>1.800 x 1.850 x 1.750 mm</td>
</tr>
</tbody>
</table>

Scope of delivery:

- 2 x Centre locking protection
- 2 x Cone protection tool locking system
- 2 x Pin protection locking system
- Cone Ø70 mm
- Bead locking plier
- 3 x Rim protection kit
- 3 x Mounting tools protection
- Flange reduction
- Weight scarper
- Brush
- Grease pot holder

Tooling System

Keep your tyre and wheel save.
MS 670 Center post tyre changer

- 30” center post tyre changer
- G-Frame rigidity
- Simple and reliable
- Side Lift NG
- Tyre leverless system
- Ergo Control
- Helper Device

**Side storage**
- Storage for tools, valves etc.

**Inflating tubeless**
- Faster bead seating of the tyre on the rim

**Tyre leverless system (TLL)**
- Without any efforts
- Easy access of the tool
- Perfect bead extraction

**Central clamping**
- Maximum wheel protection
- Faster and easier locking process with less efforts

**Turning pedal**
- Wheel rotation control
- Proportional control of turntable speed/force

**Bead breaker:**
- Ergo control (patent pending)
- Fast & Easy To Use
- Safety
- Ergonomic
- Full Control
- Protection for tyre/rim

**Double rollers function**
- Possibility to work with all wheel size
- Faster positioning
- Memory ring to save time and to have the arm always in position

**Helper arm**
- Separate movements of tools
- Precise control
- Press and/or release where needed

**Side Lift NG**
- Ergonomic
- Time saving being in right position
- Lifting capacity up to 80 kg
- Integrated roller board

**MS 670 IT**

- Tested according to매키의 규정
- Enduser training included
- W10 (wheel balancer)
- W20 (wheel changer)
# Technical data

<table>
<thead>
<tr>
<th>Variants</th>
<th>MS 670</th>
<th>MS 670 IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tecnoroller NG</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ergo Control</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Integrated inflation technology (IT)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>wdk approved</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Side storage</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Helper Arm with double horizontal arm</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Side Lift NG</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>TLL system</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Inflating system</td>
<td></td>
<td>Pedal</td>
</tr>
<tr>
<td>Air connection</td>
<td>8 – 10 bar</td>
<td></td>
</tr>
<tr>
<td>Rim Diameter</td>
<td>13” – 30”</td>
<td></td>
</tr>
<tr>
<td>Rim width</td>
<td>Up to 15”</td>
<td></td>
</tr>
<tr>
<td>Max. wheel diameter</td>
<td>1,200 mm</td>
<td></td>
</tr>
<tr>
<td>Bead breaker range</td>
<td>75 – 401 mm / Ergo Control</td>
<td></td>
</tr>
<tr>
<td>Bead breaking force</td>
<td>11,000 N</td>
<td></td>
</tr>
<tr>
<td>Power supply 230V 1PH</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>N. turntable speed</td>
<td>2 speed</td>
<td></td>
</tr>
<tr>
<td>Speed of rotation</td>
<td>7 – 15 rpm</td>
<td></td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>1450 x 2295 x 2060 mm</td>
<td></td>
</tr>
</tbody>
</table>

## Scope of delivery:

<table>
<thead>
<tr>
<th>Item</th>
<th>MS 670</th>
<th>MS 670 IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLL protection kit</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Wing side protection kit for TLL</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bead breaker plastic protection</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Beadpressing device</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Center locking protection</td>
<td>2x</td>
<td>2x</td>
</tr>
<tr>
<td>Cone protection tool locking system</td>
<td>2x</td>
<td>2x</td>
</tr>
<tr>
<td>Pin protection locking system</td>
<td>2x</td>
<td>2x</td>
</tr>
<tr>
<td>Cone Ø 70mm</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Memory ring for horizontal arms</td>
<td>2x</td>
<td>2x</td>
</tr>
<tr>
<td>Lubricant brush</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
MS 650 and MS 630-24 tyre changers
bead breaking with your fingertips

Pneumatic locking of the mounting head

Tyre leverless system (TLL)
- Without any efforts
- Easy access of the tool
- Perfect bead extraction

For all wheel sizes and high volumes workshops
- Big space for wheel seating
- Outside clamping 28 inch
- Wheel width up to 15 inch without any special accessories

Time saver
- Redesigned jaw protectors
- Steel rims internal clamping without time-consuming conversion

Speedy
- Two-speed turntable
- Operated using a pedal

User-friendly
- Control switches accessible from any working area

Extreme precision
Helping arms allow a precise and smooth control:
- Follower arm
- Horizontal arm

New Tecnoroller NG
- Equipped with helper arm device
- Ergonomic and powerful

Bead breaker:
Ergo control (patent pending)
- Fast & Easy To Use
- Safety
- Ergonomic
- Full Control
- Protection for tyre/rim

MS 650 IT V8
## Tyre Changers

### MS 650 and MS 630-24 Tyre Changers

<table>
<thead>
<tr>
<th>Variants</th>
<th>MS 650</th>
<th>MS 630-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tecnoroller NG</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Ergo Control</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Integrated inflation technology (IT)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>wdk approved</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>TLL system (ADH)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Automatic mounting head positioning</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Inflating system</td>
<td>Pedal</td>
<td>Pedal</td>
</tr>
<tr>
<td>Outside rim clamping</td>
<td>12&quot; - 28&quot;</td>
<td>10&quot; - 24&quot;</td>
</tr>
<tr>
<td>Inside rim clamping</td>
<td>13&quot; - 32&quot;</td>
<td>12&quot; - 28&quot;</td>
</tr>
<tr>
<td>Rim width</td>
<td>4-15&quot; 3-15&quot; 4-15&quot; 3-15&quot;</td>
<td>3-15&quot; 3-15&quot; 3-15&quot; 3-15&quot; 4-15&quot; 3-15&quot; 3-15&quot; 3-15&quot;</td>
</tr>
<tr>
<td>Max. wheel diameter</td>
<td>1,200 mm</td>
<td>1,200 mm</td>
</tr>
<tr>
<td>Bead breaker range</td>
<td>70 - 397 mm</td>
<td>70 - 397 mm</td>
</tr>
<tr>
<td>Power supply 230V 1PH</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Power supply 400V 3PH</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Speed of rotation</td>
<td>7/15 rpm</td>
<td>7/15 rpm</td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>1450 x 2350 x 2010 mm</td>
<td>1380 x 2110 x 1840 mm</td>
</tr>
<tr>
<td></td>
<td>1450 x 2295 x 2060 mm (V8)</td>
<td>1450 x 2295 x 2010 mm (V8)</td>
</tr>
</tbody>
</table>

### Scope of delivery:

<table>
<thead>
<tr>
<th>Item</th>
<th>MS 650</th>
<th>MS 630-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant brush</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bead lever</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Jaws plastic protection kit</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tongue protection kit for demounting head</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Wing side protection for demounting head</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bead breaker plastic protection</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bead pressing device</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Roller board for bead breaker</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
MS 530 and MS 500 tyre changers

Machine designed for medium volume workshops
- Outside clamping 22 inch
- Wheel width up to 11 inch without any special accessories

Round turntable shape

Pneumatic locking of the mounting head

Outstanding stability with G-Frame

User-friendly
- Control switches accessible from any working area

Machine designed for medium volume workshops
- Outside clamping 22 inch
- Wheel width up to 11 inch without any special accessories

Round turntable shape

Pneumatic locking of the mounting head

Outstanding stability with G-Frame

Machine designed for medium volume workshops
- Outside clamping 22 inch
- Wheel width up to 11 inch without any special accessories

Round turntable shape

Pneumatic locking of the mounting head

Outstanding stability with G-Frame

Machine designed for medium volume workshops
- Outside clamping 22 inch
- Wheel width up to 11 inch without any special accessories

Round turntable shape

Pneumatic locking of the mounting head

Outstanding stability with G-Frame

User-friendly
- Control switches accessible from any working area

Extreme precision
Helping arms allow a precise and smooth control:
- Follower arm
- Horizontal arm

New Tecnoroller NG
- Equipped with helper arm device
- Ergonomic and powerful

Adjustable bucket holder for lubricants

“Throw-in” Bead lever holder (easy and fast to reach)
**Technical data**

<table>
<thead>
<tr>
<th>Variants</th>
<th>MS 530</th>
<th>MS 500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tecnoroller NG</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Integrated inflation technology (IT)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>wdk approved</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Inflating system</td>
<td>Gun</td>
<td>Gun</td>
</tr>
<tr>
<td>Outside rim clamping</td>
<td>10&quot; - 22&quot;</td>
<td>10&quot; - 20&quot;</td>
</tr>
<tr>
<td>Inside rim clamping</td>
<td>12&quot; - 25&quot;</td>
<td>12&quot; - 23&quot;</td>
</tr>
<tr>
<td>Rim width</td>
<td>3&quot; - 11&quot;</td>
<td>3&quot; - 11&quot;</td>
</tr>
<tr>
<td>Max. wheel diameter</td>
<td>1,000 mm</td>
<td>1,000 mm</td>
</tr>
<tr>
<td>Bead breaker range</td>
<td>65 - 300 mm</td>
<td>65 - 300 mm</td>
</tr>
<tr>
<td>Power supply 230V 1PH</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Power supply 400V 3PH</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Speed of rotation</td>
<td>7 - 15 rpm</td>
<td>7,5 rpm</td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>1,950 x 1,860 x 1,660 mm</td>
<td>1,350 x 1,860 x 1,660 mm</td>
</tr>
</tbody>
</table>

**Scope of delivery:**

<table>
<thead>
<tr>
<th></th>
<th>MS 530</th>
<th>MS 500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricant brush</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bead lever</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Jaws plastic protection kit</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tongue protection kit for demounting head</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Wing side protection for demounting head</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bead breaker plastic protection</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bead pressing device</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Roller board for bead breaker</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
New bead breaker
Ergo Control

Ergonomic working position
No shock to the operators arm
Full Direct Control
Working range positions easily selectable

Technical specifications:
Bead breaker range  75 – 397 mm
Bead breaking force  11,500 N

Revolutionary bead breaker system

Ergo Control is a hand bead breaker system that allows you to execute the operation of tyre-beading always in an ergonomic working position, reducing the time with less effort while always being in a safe position.

**Ergonomic working position:** you stand in front of the wheel, not in front of the pedals.

**Increase of safety:** the use of the bead breaker lever (patented) guards the operator’s arm.

**Protection of wheel/rim and TPMS:** the control by using the lever gives the operator a maximum of sensitivity.

**Intuitive, easy to use:** the movement of the blade can be driven by only a finger

Paddle blade ‘in action’
Helper arm
Tecnoroller NG

TECNOROLLER NG is a pneumatic device to assist during mounting and demounting operations of any type of passenger car and light commercial vehicle tyre. It is especially recommended to mount and demount UHP and RFT tyres. It is designed to offer a great user experience, control switches are accessible from any working position and the high positioning of the follower arm facilitates all operations on the tyre bead.

Technical specifications

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating pressure</td>
<td>8 – 10 bar</td>
</tr>
<tr>
<td>Working range*</td>
<td>up to 30”</td>
</tr>
<tr>
<td>Max. wheel diameter*</td>
<td>1,200 mm</td>
</tr>
<tr>
<td>Min. wheel width*</td>
<td></td>
</tr>
<tr>
<td>Horizontal arm</td>
<td>3”</td>
</tr>
<tr>
<td>Follower arm</td>
<td>5”</td>
</tr>
<tr>
<td>Max. wheel width*</td>
<td>15”</td>
</tr>
<tr>
<td>Max. press force</td>
<td></td>
</tr>
<tr>
<td>Horizontal arm</td>
<td>5,500 N</td>
</tr>
<tr>
<td>Follower arm</td>
<td>2,500 N</td>
</tr>
</tbody>
</table>

* Maximum values might change according to technical specification of the machine where Tecnoroller NG is applied.

Side Lift NG

Side Lift NG – Simple and easy to use

All new tyre changer platforms can be upgraded with the Side Lift NG which allows the operator to always work in an ergonomic position. The Side Lift NG is mounted on the right side of the machine next to the bead breaker which allows for improved productivity. The Lift is also equipped with an integrated roller board which leads to an easier and faster bead breaking operation.
Optional accessories

Optional accessories for all tyre changers

Demounting head tongue protection (5 Pcs)
Mounting tool cover
Plastic mounting head kit
Kit storage (except MS 900)

Bead breaking pad motorbike wheel
Plastic protection for bead breaker
Plastic rim protection
Roller board

Mounting lever (wdk-Model)
Bead pressing device (lower profile)
Bead pressing device (higher profile)
Tecnoroller NG – optional helper arm

External IT kit
Motorbike mounting head kit
Side Lift NG (included in MS 670)
Optional accessories for MS 500

- Jaws plastic protection for MS 500
- Motorbike/scooter adaptors (4 pcs.)
- Scooter adaptors (4 pcs.)

Optional accessories for MS 630-24 + MS 650

- Jaws plastic protection for MS 630-24 and MS 530
- Jaws plastic protection for MS 650
- Motorbike/scooter adaptors
- Kit wdk for run flat and ultra high performance tyres (to be used together with Tecnoroller NG)

Optional accessories for MS 900 + MS 670

- Cone Ø 75 – 120 mm for steel rims
- Light truck cone Ø 190 – 223 mm + spacer
- Light truck cone Ø 110 – 190 mm + spacer
- Wheel clamping adaptor kit for reverse mounted wheels
- Cone Ø 70 mm
- Cone Lamborghini
- Cone Porsche
- Cone BMW
- Bead locking plier
- Centre locking protection
- Only MS 900: Wheel clamping adaptor kit for clad wheels
- Only MS 900: Light truck kit: cones Ø 120 - 190 mm / Ø 190 - 223 mm + spacer
Brake Testers

Brake Testers for cars and trucks

- Automatic mode operation for improved workflow efficiency
- Test load between 2.5 t and 16.0 t per axle
- Precision mechanics designed for high thru-put rates
- Standard with BNet networking technology
Beissbarth brake testers

The brake test performed during the periodical technical inspection (PTI) helps to check the actual status of the service and parking brake. In this process, the system determines the braking force difference between the left and the right wheel of each axle.

The total brake force efficiency of the vehicle is evaluated in relation to the measured vehicle weight. The test results are compared with the PTI limit values for the corresponding vehicle category. Brake testers integrated in a reception lane concept, can be easily expanded to a complete test lane.

The optional suspension tester and side slip plate allows workshops to identify issues related to the suspension system and chassis of the vehicle.
**BD 640 Series**

**Passenger car brake tester - Test load up to 2,5t/Axle**

**The all-rounder for repair work, dialogue reception, and periodical technical inspection:**
Sturdy brake tester designed for an over-drive load of four tons and for vehicles with a track width of up to 2,200 mm.
Test speeds of 5.2 km/h, compatible with state-of-the-art ESP and all-wheel drive systems. The completely hot-galvanized base unit is equipped with brake rollers coated in a plastic and corundum composite (700 mm in length), whereby the rear test roller has been installed 25 mm higher. This ensures optimum traction while keeping tyre wear to a minimum.
The display unit or the optional PC cabinet or suspension tester are connected via a BNET device field bus using the Plug&Play function. The clearly arranged universal LCD display shows the braking force difference, braking force per wheel, and, if using axle load scales (optional), the total deceleration based on the actual measured axle weight.

**Advantages**
- Roller set with electromagnetic brake to exit with care
- Convenient super automatic mode for service and parking brake
- Automatic 4-wheel-drive detection
- Can be enhanced by a suspension tester and side-slip plate for workshop reception concepts
- Approved for PTI inspections

**Versions:**

**Model BD 600**
Without:
- Automatic 4-Wheel Detection
- Electromagnetic engine brake for easy drive-out of the roller set
- Integrated LCD display for measuring value specification

**Model BD 660**
- Like BD 640, but with vehicle width up to 2,800 mm
The Beissbarth truck brake tester MB 8100 combines robust and durable basic components with state-of-the-art PC technology. Measurement data are quickly collected and shown on an analog scale or digitally on a screen.

Three different variant of test loads are available: 5 t, 13 t and 16 t.

Optionally it is extendable into a complete test lane.

### Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Details</th>
<th>Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>MB 8100</td>
<td>roller length 1,000 mm with electromagnetic brake</td>
<td>16 t</td>
</tr>
<tr>
<td>MB 8100</td>
<td>roller length 1,100 mm with electromagnetic brake</td>
<td></td>
</tr>
<tr>
<td>MB 8200</td>
<td>roller length 1,100 mm load simulation</td>
<td></td>
</tr>
<tr>
<td>MB 8815</td>
<td>roller length 1,000 mm with electromagnetic brake, 2 test speeds 2.2 / 4.4 km/h</td>
<td>13 t</td>
</tr>
<tr>
<td>MB 8815</td>
<td>roller length 1,000 mm with electromagnetic brake, test speed 2.2 km/h</td>
<td></td>
</tr>
<tr>
<td>MB 8815</td>
<td>roller length 1,000 mm test speed 2.2 km/h</td>
<td></td>
</tr>
<tr>
<td>BD 740</td>
<td>roller length 970 mm with 4-wheel set, electromagnetic brake, test speed 2.3 km/h</td>
<td>5 t</td>
</tr>
</tbody>
</table>
Advantages at a glance

- Fully automatic test procedures without any input required prior to testing
- Bench is designed for one-man operation, i.e. from the driver’s seat via remote control
- Brake rollers with synthetic corundum coating ensure excellent friction coefficients
- Rear brake roller raised by 50 mm for street conform testing of 3-axle trucks
- Hot-dipped galvanised floor components and assembling cases for long value-retention
- All test results can be read from the display unit or monitor, even before printing
- Automatic recording of cylinder pressures wirelessly or via cable
- Special pneumatic program with graphical display of the actual LSV configuration during brake testing
- Static test of LSV function, independently of test bench operation
- Special program for tractor/trailer synchronisation and extrapolation of brake performance based on TGW (safety test)
- Printout with graphics in accordance with statutory regulations for the inspection record and tractor/trailer synchronisation (axle graphics)
- Tachograph and mileage recorder testing can be integrated into the test procedure
- Additional analysis possible under parallel operation with monitor and tablet PC
- Modular technology enables connection and display via your own monitor
- Networking capability with existing workshop organisation systems via Bnet and ASA interface
- Integration of SP program with test bench database possible
- Optional: Hydraulic lifting device for load simulation (installed in pit)
Vehicle Testing

Passenger car test lanes
- Automated testing of brake, suspension and side slip
- BNet technology with order manager and vehicle history database
- Possibility for connectivity with workshop network and customer PC

Headlight testing
- Intelligent, fast and precise
- Optimized image processing
- High-quality optic and laser
Brake tester for cars – with PC
Maximum convenience with a 19” TFT monitor that shows the test results and illustrates them, as well as a comprehensive database – this test lane series offers all you need with regard to PC convenience. As a result you can uncover additional economic benefits, such as a link to customers’ PC technology. Consequently, recording orders, invoicing, statistics, and customer history maintenance all become faster and more efficient.

- Automatic operator control – no need for a remote control or to key in commands
- Reference database, vehicle history, and standard values
- Graphically illustrated print-out of vehicle defects
- Flexible cable length for easy installation in dialogue reception (even with suspension tester)

Advantages
- Illustration of limit values to qualify brake and suspension components and provide corresponding recommendations for replacements
- Automatically determines axle and vehicle weight
- Potential vehicle defects can be graphically illustrated on the print-out
- Reference database with vehicle history and generally defined standard values

BD 640 kit
All-wheel drive brake tester with drive-out (3 x 400V / 50Hz) support, remote control, and ASA livestream (required in Germany)

PC station consisting of:
Trolley, PC, 19” monitor, printer, IR receiver, BNet/USB kit
Modular test lane concept for reception lane use

Upgradability with suspension testing technology:

SA 680
EUSAMA suspension tester, noise detector included
- The hot-galvanized suspension tester with integrated power electronics determines the relative grip in % in accordance with the EUSAMA measuring principle
- Measuring range: 0-30 Hz, 0-100% grip
- Maximum axle load suitable for testing: 2.2 t

Test lane TL 680:
- Brake tester BD 640
- Suspension tester SA 680
- Side Slip tester ST 600

Intuitive test lane visualization:

Practical advantages: Software Order Manager
Intuitive management of test devices
The result of the sideslip test in mm / m with coloured measured values
The measuring value display of the suspension test
Measuring phase in the noise detection diagnosis (available for SA 680)
The measuring value display during the testing in super automatic mode
**MLD 815 / LTB 100: Intelligent and digital headlight testing**

**MLD 815**
Digital measurement and adjustment

**Precise test results**
- CMOS camera with high resolution and frame rate
- Test results in real time

**Easy to use:**
- Comparison between measured and limit values and unambiguous red/green evaluation
- Precise definition of the cut-off line
- Serial interfaces for PC connection and software updates
- Integrated printer for issuing the test report
- Optional PC connection via Bluetooth
- Limit values and test results appear in real time

**Universal application**
- All types of light sources (xenon, bi-xenon, LED, bi-LED, halogen)
- All types of vehicles (passenger cars, trucks, motorcycles)

TÜV-certified (German Road Traffic Type-Approval Law StVZO §50 paragraph 5)

**Optional accessory:**
- Levelable rail system (3m) for above and in-ground installation

**Features:**
- The alignment laser on the upper part of the column helps aligning the light box with the vehicle
- LCD color display with touch-screen function
- CMOS camera
- The cross laser eases alignment with the headlight particularly in case of LED and Xenon lighting systems
- The height-measurement sensor (optional) automatically measures the installation height of the headlight
- Integrated printer (back panel)

**Bluetoot**

**Easy to use:**
- Comparison between measured and limit values and unambiguous red/green evaluation
- Precise definition of the cut-off line
- Serial interfaces for PC connection and software updates
- Integrated printer for issuing the test report
- Optional PC connection via Bluetooth
- Limit values and test results appear in real time

**Universal application**
- All types of light sources (xenon, bi-xenon, LED, bi-LED, halogen)
- All types of vehicles (passenger cars, trucks, motorcycles)

TÜV-certified (German Road Traffic Type-Approval Law StVZO §50 paragraph 5)
MLD 815 / LTB 100:
Intelligent and digital headlight testing

LTB 100:
Levelable test bay
Workshop floors often feature a significant slope and unevenness. The LTB 100 levelable test bay meets PTI and OE requirements for a levelled testing area. The platform can be used to install a levelled area in the workshop for adjustment of intelligent headlight systems and calibration of driver assistance systems.

LTB 100 at a glance:
- Suitable for subsequent installation onto the workshop floor (min. installation height: 54 mm)
- Suitable for installation onto workshop pits (in combination with the optional pit drive-in protection)
- Modular construction (4 m, optionally extendable to 6 m)
- Extendable for drive-through solution (optional)
- Compensation and fine adjustment by means of 4 wheel set-up elements (4-meter version)
- Maximum allowed axle load: 2.5 t
- Test-system length above ground: 4,269 mm (4 m version incl. drive-on ramps)
- Adjustable height compensation: 0 to 40 mm

LTB 100:
Patented design for the 0 to 40 mm height adjustment or axle loads of up to 2.5 t
For R1234yf and R134a refrigerant

- Fully-automatic, premium accuracy
- Maximum safety
- Easy to use

AC Service Units
Top quality:
- Precision rate of ±15 gram for filling and recovering functions achieved by integrated pressure and temperature control of refrigerant
- 2 separate lubrication circuits prevent a cross contamination of PAG and POE oil
- Separate injection of UV dye and lubricants

Fully automatic service unit:
- Recovery function
- Vacuum function
- Leak test
- Purging of non condensable gases
- Clean oil injection
- UV dye injection
- Refrigerant charge function

Additional features:
- Hose clearing function
- LAN connection for workshop network connectivity
- Internal air flow control
- Software Windows Embedded CE
- Flushing function (optional flushing kit)
Technical data

<table>
<thead>
<tr>
<th></th>
<th>BAC 4000a</th>
<th>BAC 5000yf</th>
<th>BAC 3000a</th>
<th>BAC 3000yf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerant</td>
<td>R134a</td>
<td>R1234yf</td>
<td>R134a</td>
<td>R1234yf</td>
</tr>
<tr>
<td>Refrigerant identifier</td>
<td>integrated</td>
<td>optional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recovery accuracy / performance</td>
<td>15 gr, 99 %</td>
<td>&lt; 95 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display</td>
<td>5.7 inch TFT, 320 x 240 pixel</td>
<td>160 x 120 Monocromatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keypad</td>
<td>Alphanumeric with function keys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manometers</td>
<td>EN837-1, 100 mm</td>
<td>EN837-1, 68 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual valves</td>
<td>No</td>
<td>Yes, 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service hoses</td>
<td></td>
<td>2.50 m</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Couplings</td>
<td>SAE J2196</td>
<td>SAE J2888</td>
<td>SAE J2196</td>
<td>SAE J2888</td>
</tr>
<tr>
<td>Hybrid a/c system compatibility</td>
<td>Yes, hoses flush and POE/PAG oil injection</td>
<td>Yes, hoses flush</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USB port</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD card slot</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hermetic compressor</td>
<td>3/8 HP</td>
<td>1/4 HP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vacuum pump</td>
<td>170 l/min (50 Hz)</td>
<td>198 l/min (60 Hz)</td>
<td>71 l/min</td>
<td></td>
</tr>
<tr>
<td>Internal storage vessel</td>
<td>9.09 kg</td>
<td>8 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filter for dryer</td>
<td>700 cc</td>
<td>300 cc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil bottles</td>
<td>3 x 250 ml</td>
<td>2 x 250 ml</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UV dye bottle</td>
<td>1 x 250 ml</td>
<td>no UV dye injection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>107 x 61 x 76 cm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>107 kg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage supply</td>
<td>230 V, 50/60 Hz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificates</td>
<td>CE, TÜV Rheinland</td>
<td>CE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Flushig accessories
(for R134a and R1234yf)

- ACT2502-104 Adapters kit
- ACT1234 Installation kit
- ACT1234-SFK: Installation kit ACT1234 and adapters kit ACT 2502-104
Service from Beissbarth Munich:
- Immediate telephone support
- Rapid replacement parts deliveries
- Individual maintenance contracts

Factory customer service:
Beissbarth and certified partner companies provide on-site assistance with installation, instruction, equipment assembly and maintenance – with partners in more than 90 countries around the world.

Training Centre:
Instruction and training at STC of Robert Bosch GmbH, 73207 Plochingen

Software Centre:
Technical documentation, specified vehicle data and marketing material for immediate download: www.beissbarth.com

Subject to technical modification and changes to scope of delivery. Pictures may sometimes show special accessories or similar versions. Please contact your Beissbarth dealer for a binding up-to-date quotation.