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>Section</th>
<th>Page Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel Alignment</td>
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</tr>
<tr>
<td>Lifts</td>
<td>14-21</td>
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<tr>
<td>Wheel Balancers</td>
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<td>Tyre Changers</td>
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<tr>
<td>Brake Testers</td>
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<tr>
<td>Vehicle Testing</td>
<td>46-51</td>
</tr>
<tr>
<td>Headlight Testing</td>
<td></td>
</tr>
<tr>
<td>AC Service Units</td>
<td>52-55</td>
</tr>
</tbody>
</table>
Wheel Alignment

**Touchless**
- 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 Precision
Top repeating accuracy through laser and 3D stereo cameras.

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
Wheel Alignment

**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.

### Measuring values

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total toe (front axle + rear axle)</td>
<td>±18°</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>
<tr>
<td>Wheel bases passenger cars and light commercial vehicles (LCVs)</td>
<td>1,800 to 4,650 mm</td>
</tr>
</tbody>
</table>

**Touchless Excellence**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trolley with PC, Windows 7, keyboard, mouse, printer</td>
<td>✔</td>
</tr>
<tr>
<td>4 Touchless sensor heads</td>
<td>✔</td>
</tr>
<tr>
<td>Touchless Smart Align software</td>
<td>✔</td>
</tr>
<tr>
<td>Nominal values</td>
<td>✔</td>
</tr>
<tr>
<td>Control box</td>
<td>✔</td>
</tr>
<tr>
<td>Cable set lift, connection cable trolley-lift 10m</td>
<td>✔</td>
</tr>
<tr>
<td>Brake tensioner and steering-wheel lock</td>
<td>✔</td>
</tr>
<tr>
<td>27” screen</td>
<td>✔</td>
</tr>
<tr>
<td>High-precision aluminum turning plates with aluminum filling pieces and rubber covers</td>
<td>✔</td>
</tr>
<tr>
<td>Remote control</td>
<td>✔</td>
</tr>
<tr>
<td>Covers for trolley and sensor heads</td>
<td>✔</td>
</tr>
<tr>
<td>Smart Link adapter</td>
<td>✔</td>
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accessory

<table>
<thead>
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<th>Feature</th>
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<tbody>
<tr>
<td>4 Touchless sensor heads</td>
<td>✔</td>
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accessory

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</tr>
<tr>
<td>Covers for trolley and sensor heads</td>
<td>✔</td>
</tr>
</tbody>
</table>

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Optional accessory
Easy 3D – Future-proof wheel alignment with 3D technology

- Fast 3D technology with 12 cameras for efficient wheel alignment
- Free space in front of the vehicle can be used, e.g. for headlight testing or calibration of driver assistance systems
- Highly precise adjustment results through measurement accuracy and repeatability of ± 2 minutes of arc
- Dynamic, integrated reference system enables height-independent measurement and adjustment work
- Rolling and moving run-out compensation saves time and effort of lifting
- Mobile, flexible use of the measurement heads at different workstations, e.g. platform and pit
- Easy replacement of the measurement boards, as no calibration is required
- ASA network interface
- Beissbarth OEM vehicle database with target data for over 30,000 vehicle types

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

Versions:

**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

Accessories:

- Magnetic holder for quick set-up times, within seconds
- Multi-Fit clamps for quick and precise installation

see page 12-13
Beissbarth 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 Versions:**

**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

Easy CCD Excellence

Easy CCD Kit
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

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

**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

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 XP Professional
- Embedded Windows POS Ready 2009
- Windows 7 Professional (64-bit)
- Windows 7 Ultimate (64-bit)
- Embedded Windows POS Ready 7 (64-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 and CCD

<table>
<thead>
<tr>
<th>Measurement</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>± 4°</td>
<td>± 50°</td>
<td>± 60°</td>
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<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>± 2°</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

### Versions for 3D and CCD

<table>
<thead>
<tr>
<th></th>
<th>Easy 3D</th>
<th>Easy 3D WLAN</th>
<th>Easy CCD</th>
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<tbody>
<tr>
<td></td>
<td>Flex</td>
<td>Excellence</td>
<td>Upgrade</td>
</tr>
<tr>
<td>Charging adapter</td>
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<tr>
<td>Sensors</td>
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<tr>
<td>Target data</td>
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<tr>
<td>Software</td>
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<td>Measurement box</td>
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<td>Bluetooth USB stick</td>
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<tr>
<td>WLAN USB stick</td>
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<td>Targets</td>
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<td>Cabinet</td>
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<tr>
<td>Brake clamp</td>
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<td>Steering wheel lock</td>
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<tr>
<td>PC</td>
<td>✓✓</td>
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<td>Monitor 27&quot;</td>
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<tr>
<td>Printer</td>
<td>✓</td>
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<td></td>
</tr>
<tr>
<td>Multi-Fit clamps</td>
<td>✓</td>
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</tr>
<tr>
<td>Special jaws</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Turntable</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Filling bar</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Optional 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)**
Wheel Alignment

Optional accessories for wheel alignment

- Multi-Fit clamp (incl. 16 standard claws)
- Multi-Quick clamp
- Quick clamp (BMW)
- Quick clamp (Mercedes-Benz)
- Mercedes-Benz toe spread bar
- Romess inclinometer
- Romess charging station
- Soiler adapter (different versions available)
- Storage trolley for accessories
- Storage trolley for 3D accessories (clamps & target boards)
- Wall mount for CCD Kit
- Wall hook for 3D accessories (clamps & target boards)
- Filling bars
- Turntable steel, standard, mechanical incl. vernier scale
- Turntable aluminium, standard (mechanical or electronic)
- Turntable aluminium, precision (mechanical or electronic)
- Turntable aluminium, precision, electronic with weight system
- Protective cover for aluminum turntable
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

Noise insulation: Hydraulic unit is integrated into fluid reservoir

Protective sheathing for hoses and cables

Lifting height up to 450 mm (off-road vehicles)

Provided with opening for wheel alignment turntables as standard feature

Adjustable fillers of various lengths

L = Wheel-free scissor Lift

3.5 t

4.5 t
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)
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- 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

Platforms:
- Corrosion-proof

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

A = Alignment

Long platform: 5070 mm

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

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

**Technical data:**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>6,351 x 3,623 x 2,324 mm</td>
</tr>
<tr>
<td>Power supply</td>
<td>3 x 400 V / 50 Hz, E+N / 16 A</td>
</tr>
<tr>
<td>Loadbearing capacity</td>
<td>4,000 kg</td>
</tr>
<tr>
<td>Max. lifting height</td>
<td>1,920 mm</td>
</tr>
<tr>
<td>Lifting time</td>
<td>45 Sek</td>
</tr>
<tr>
<td>Runway length</td>
<td>4,700 mm</td>
</tr>
<tr>
<td>Longitudinal column spacing</td>
<td>4,285 mm</td>
</tr>
<tr>
<td>Runway width</td>
<td>630 mm</td>
</tr>
<tr>
<td>Clear width</td>
<td>2,940 mm</td>
</tr>
<tr>
<td>Distance between runways</td>
<td>925 mm</td>
</tr>
</tbody>
</table>

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

**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

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

**Milled runway surface for high precision:**

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

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

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

**High-quality powder coating:**

**4,285 mm**

**2,940 mm**

**925 mm**
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)

Variable lowering speeds for
exact vehicle positioning

Two maintenance-free,
suspended lifting cylinders

Automatically activated locking
pawls (each post)
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)

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 868 / 867 and MT 848 / 847 wheel balancers

- Self-diagnostic and self-calibration function
- 11 programs for car wheels
- 5 specific programs for alloy rims
- 5 programs for motorcycle wheels
- Weight separation program
- Optimisation of wheel imbalance (Matching)
- Multi-operator program
- Software available in 27 languages
- Stop on top function
- QSP program function, recognition of top 3 programmes
- Connectivity: USB charging / printer connection

Wide weight bearing surface fitted with various compartments for weights, cones and grippers

Keyboard with programmable keys for easy and quick access to the menus

Control panel

External sensor for automatic width measurement: new design, lighter and more functional

Pneumatic flange for fast and equalized locking

Illuminator with laser pointer, makes weight application easier avoiding mistakes

Easyfix® internal feeler with locking system to make it easier to position the weights in the alloy rims with new auto detect system for balancing program, clip weights and adhesive weights

Electromagnetic brake for a reliable and quick stop
MT 857, MT 837 and MT 825 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

Large protection guard for wheels with a maximum diameter of 1,150 mm

Large 19” TFT monitor with simple and intuitive GUI

Large weight tray equipped with several compartments for weights, cones, and clamps

Elevated keyboard with 5 keys for higher tactile quality and larger features when selecting various menus

External sensor to automatically obtain width, it allows greater productivity by making the machine fully automatic (optional)

Easyfit inner arm allows quick and easy positioning of adhesive weights in alloy wheels automatically obtaining diameter and distance measurements

Mechanical brake pedal
# Technical data

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<tr>
<th>Variants</th>
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## Technical data

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<tr>
<td>Weight scraper</td>
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<td>1,260 x 1,830 x 1,270</td>
<td>1,140 x 1,380 x 1,100</td>
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</table>
Optional accessories and flanges

- Lightring with three laser pointers
- Tyre elevator
- Moto monolever wheels centering kit and shaft (19 mm)
- Printer kit
- Moto quick fix for 19 mm shaft
- 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 14 mm shaft
- Variable specific clamping plate (Quickplate) for 4/5/6-hole rims
- 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
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 650 and MS 630 tyre changers bead breaking with your fingertips

Pneumatic locking of the mounting head

Special shape movement of the TLL allows to perfectly follow the rim profile giving easier access of the tools and allowing perfect bead removal.

For all wheel sizes and high volumes workshops
Big space for wheel seating, outside clamping 28 inch and wheel width up to 15 inch without any special accessories.

Time saver
The redesigned jaw protectors allow steel rims internal clamping without time-consuming conversion.

Speedy
The two-speed turntable is easily operated using a pedal.

User-friendly
Control switches are placed to be 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.

New revolutionary Ergo Control:
Full control & comfort.
The new hand bead breaker allows this to be carried out in the most ergonomic way giving the operator direct control and great sensitivity.
# Tyre Changers

## Technical data

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### Scope of delivery:

| Beef Chasers                  | ✓      | ✓      |
| Bead lever                    | ✓      | ✓      |
| Jaws plastic protection kit   | ✓      | ✓      |
| Tongue protection kit for demounting head | ✓      | ✓      |
| Wing side protection for demounting head | ✓      | ✓      |
| Bead breaker plastic protection | ✓      | ✓      |
| Bead pressing device          | ✓      | ✓      |
| Roller board for bead breaker | ✓      | ✓      |
MS 530 and MS 500 tyre changers

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

Outstanding stability with G-Frame

Round turntable shape

Pneumatic locking of the mounting head

User-friendly
Control switches are placed to be accessible from any working area

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

New Tecnoroller NG
Helper arm device ergonomic and powerful

Adjustable bucket holder for lubricants

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

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<td>✔</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wing side protection for demounting head</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bead breaker plastic protection</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bead pressing device</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roller board for bead breaker</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
New bead breaker
Ergo Control

Hand bead breaker
Especially designed for tyre specialists and high volume workshops.

Unique benefits for the operator:
- Ergonomic working position; the back is less stressed with respect to the traditional system, just stand in front of the wheel:
  - No need to bend down and check like on traditional roller-bead breakers
  - No “sit-down-step” like on conventional bead-breaking machines
- Increase of safety; the use of the main bead breaker lever (patented) avoids shock to the operators arm making bead breaking a safe operation
- Intuitive, easy to use: the movement of the blade can be driven by only a finger
- The two working range positions are easily selectable
- Fast with less effort

Benefits for the business:
- Reduce Time of Operation; reduction of operation time due to the possibility to stop the bead breaker instantly (no need to open or close the cylinder completely)
- Reduction to the risk of wheel damage: the control of the bead breaker gives the operator maximum feel and sensitivity.
- Reduction of air consumption

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

Intuitive, easy to use: the movement of the paddle blade can be driven by only a finger
Helper arm
Tecnoroller NG

- Pneumatic device to assist during mounting operations
- Especially recommended for UHP and RFT tyres
- Roller close to the duck-head, allowing it to push the bead into the rim drop center or to pull it out during demounting operation
- Second pressing point mounted on a movable arm positioned overhead; it follows the tyre during rotation, keeping the bead in the drop center. Separate movements of the pressing tools, press or release only in one specific point where needed
- Possibility to upgrade with a 3rd pressing point (accessory operating on the right side of the wheel 3 o’clock)

**Technical specifications**

<table>
<thead>
<tr>
<th>Operating pressure</th>
<th>8 – 10 bar</th>
</tr>
</thead>
<tbody>
<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.
Optional accessories

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 + MS 650

| Jaws plastic protection for MS 630 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 all tyre changers

Demounting head tongue protection (5 Pcs)

Mounting tool cover

Plastic mounting head kit

Kit storage

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
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
Brake Testers

AC Service Units  Lifts  Headlight Testing  DAS-Tools  Networking

Brake Testers
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 a 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.

<table>
<thead>
<tr>
<th>Models</th>
<th>Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>MB 8100, roller length 1,000 mm with electromagnetic brake</td>
<td>16 t</td>
</tr>
<tr>
<td>MB 8100, roller length 1,100 mm with electromagnetic brake</td>
<td></td>
</tr>
<tr>
<td>MB 8200, roller length 1,100 mm load simulation</td>
<td></td>
</tr>
<tr>
<td>MB 8815, 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, roller length 1,000 mm with electromagnetic brake, test speed 2.2 km/h</td>
<td></td>
</tr>
<tr>
<td>MB 8815, roller length 1,000 mm test speed 2.2 km/h</td>
<td></td>
</tr>
<tr>
<td>BD 740, 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
**BD 640 PC**

**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 SA680)

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

LCD color display with touch-screen function
CMOS camera
The alignment laser on the upper part of the column helps aligning the light box with the vehicle
Integrated printer (back panel)
Levelable 3-wheel trolley
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

TÜV NORD Mobilität GmbH & Co. KG
Baumusterfreigabe TPN100106936
Scheinwerfer-Einstell-Prüfgerät
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
AC Service Units

For R1234yf and R134a refrigerant
- Fully-automatic, premium accuracy
- Maximum safety
- Easy to use
BAC 5000yf for R1234yf: With integrated refrigerant identifier

BAC 4000a for R134a: Maximum precision – easy to operate

**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></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>
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<tr>
<td>Manual valves</td>
<td>No</td>
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<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></td>
<td></td>
<td></td>
<td></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></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>USB port</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>SD card slot</td>
<td></td>
<td></td>
<td>Yes</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>
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<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>
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<td></td>
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<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>
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</tr>
<tr>
<td>Voltage supply</td>
<td>230 V, 50/60 Hz</td>
<td></td>
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<tr>
<td>Certificates</td>
<td>CE, TÜV Rheinland</td>
<td></td>
<td>CE</td>
<td></td>
</tr>
</tbody>
</table>

### Flushing 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.

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