BAUER BG 45
Rotary Drilling Rig
Base Carrier BS 95
Experience for you!

“Technology market leader and pioneer for innovations, at the same time down-to-earth with responsibility towards society and environment - that's our goal.”

Prof. Dr. Sebastian Bauer

We could start by telling you about Sebastian Bauer, who founded a copper forge in the German town of Schrobenhausen some 200 years ago. We could then move on to how his workshop prospered and developed to a leading construction company for specialist foundation engineering. The story would continue to the mid 20th century, when innovation and the drive for perfection prompted Bauer to develop and build their own high-quality and high-performance machinery.

And it still wouldn’t end in the 21st century, Bauer now family-run in the seventh generation and meanwhile a globally operating group with more than 100 branches and subsidiaries operating in the fields of special foundation engineering (Bauer Spezialtiefbau), in manufacturing of foundation equipment (Bauer Maschinen) and focusing on products and services in the fields of water, energy, mineral resources and environmental technology (Bauer Resources).

But we think what really matters about us and to our customers is this: We are a strong partner with face and values, we are down to earth, and we are dedicated to perfection in everything we touch.
More than machines: Competent consulting

Quality is not an act, it is a habit.

Of the thousands of machines Bauer Maschinen has built since production started in the 1970’s with the first rotary drill rig BG 7, many of them are still in operation all over the world – in Siberia as well as in the desert. State of the art technology developed end-to-end by our inhouse engineers and full machine tests prior to delivery are one side of the coin. Bauer Maschinen can serve any customer need with the most comprehensive product portfolio.

The other side is project-specific consulting by highly trained experts, with a focus on your special requirements.

- Quality and experience in specialist foundation engineering
- Global operation – local contacts in over 70 countries
- Reliability in technology, service
- Customized solutions
- On-site support over entire machine service life

1980’s
Start of international equipment sales

2001
Bauer Maschinen established as independent company within the Bauer Group

2006
Stock market launch of BAUER AG, directed by Prof. Thomas Bauer

2011
Introduction of BG ValueLine and BG PremiumLine

2014
With EEP Bauer sets new standards for efficiency
The BG PremiumLine stands for multifunction equipment for a variety of foundation construction systems. The selection between two model ranges allows an optimum choice for differing project or transportation requirements.

Specific highlights of the BG PremiumLine are:
- High safety standards
- Environmental sustainability, economic efficiency and performance
- Easy to transport and short rigging time
- High quality standard
- Long lifetime and excellent resale value

The H-model line

Special features of the H-model line are:
- Fast loading onto transport vehicles
- Easy rigging on-site due to compact design
- Rapid shifting to new working positions at construction sites with underpasses or below low bridges

The V-model line

Special features of the V-model line are:
- Big borehole diameters
- Large drilling depths
- Extended service intervals and power transmission with low vibrations due to the robust design of the kinematic system
The Rotary Drilling Rig
BG 45 PremiumLine (BS 95)

Max. drilling diameter: 3,700 mm
Max. drilling depth: 100.0 m
Torque (nominal): 461 kNm
Max. height: 42.0 m
Engine: CAT C 15 – Stage III A/Tier 3
– Stage V/Tier 4 final
433 kW @ 1,850 U/min

1 Under carriage
2 Upper carriage
3 Main winch
4 Auxiliary winch
5 Crowd winch
6 Kinematic system
7 Mast
8 Mast head
9 Upper Kelly guide
10 Kelly bar
11 Rotary drive (KDK)
12 Drilling tool

BG 45 PremiumLine | © BAUER Maschinen GmbH 3/2019
Spotlights

Remote control for rigging the machine
- The remote control can be used to perform numerous rigging functions outside the danger zone, such as moving the drilling rig, telescoping the under carriage, etc.
  - Operation within sight of the controlled rigging functions
  - Rugged and compact wireless remote control Multi with LCD screen
  - Lockable storage box for the remote control can be accessed from the ground

Modern, ergonomic operator’s cab
- FOPS compliant with additional protective roof guard
- Premium operator seat, air-sprung and heatable
- Joystick controls with high functionality
- B-Drive combines adjustable potentiometer values on one display

Flexible mast concept
- Vario-mast head
  - Mast head for drill axis distance 1,300 / 1,550 mm, expandable to 1,700 / 2,000 mm
  - Increased stroke for Kelly bars when using an upper Kelly guide
- Vario-crowd winch system
  - Transport possible with built-in crowd ropes (Kelly method)
  - Reduced headroom version, min. rig height of 18.6 m possible by means of integrated Vario-mast section
- Mast extension 3 m or 5 m
  - Mast erection without auxiliary crane
  - Mast extensions can be combined with all drill axes
- Mast extension 5 + 5 m and 5 + 5 + 3 m for CFA, FDP drilling as well as SCM mixing

- Reduction of fuel consumption by up to 30%
- Increased productivity through improved efficiency
- Significantly reduced noise levels
- Tried and proven suitability for practical application
- Optimized parallel operation of main and auxiliary consumers
Safe and easy transport
- Mobilization kit with hydraulically operated pin connection for fast and safe demounting of lower mast section
- Hydraulic locking of support trestle
- Activated by remote control multi

Main winch (on upper carriage)
- Single layer winch for minimized rope wear
- Constant line pull
- Service-friendly winch position
- Swing down mechanism for transport

Safety equipment
- Guardrails on upper level (foldable for transport)
- Walking platform with handrail (foldable for transport)
- Upward folding service doors
- Closed circuit cameras for rear area and main winch surveillance with display on integrated screen in operator’s cab

Powerful engine CAT C 15
- For Exhaust Emission Standards
  - Stage III A / Tier 3 or Stage V / Tier 4 final
- Diesel particulate filter in Exhaust Emission Standard Stage V / Tier 4 final
- Low noise emission
- Worldwide CAT service partners
- AdBlue level indicator is standard equipment for exhaust emission standard Stage V / Tier 4 final
Hydraulically operated pin connection on the crowd sledge

- Pin connection controlled via the remote control
- Simple and secure attachment of the rotary drive, no working at heights unsecured
- Various modes of operation, partially selectable speed of rotation and torque
Kelly Drilling

Cased Kelly Drilling
Installation with BTM

Cased Kelly Drilling
Installation with Oscillator

CFA
Continuous Flight Auger Method

CCFA
Cased CFA system
with KDK + BTM / Double Rotary System

SCM
Single Column Mixing

CSM
Cutter Soil Mixing

FDP
Full Displacement Piling
(Standard or Lost Bit)

BC
Trench Cutter

TR
Vibrator

BG 45 PremiumLine
Multi-function Equipment

Kelly Drilling

Cased Kelly Drilling
Installation with BTM

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Full Displacement Piling
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Trench Cutter

TR
Vibrator

BG 45 PremiumLine
Multi-function Equipment
Dimensions – Basic Version

Operating weight 150 t
(as shown)

* depending on equipment
## Technical Specifications

### Rotary drive

<table>
<thead>
<tr>
<th>KDK 460 S</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Torque casing (nominal) at 350 bar</td>
<td>461 kNm</td>
</tr>
<tr>
<td>Torque drilling (nominal) at 350 bar</td>
<td>422 kNm</td>
</tr>
<tr>
<td>Speed of rotation (max.)</td>
<td>42 rpm</td>
</tr>
</tbody>
</table>

### Crowd winch system

|  |
|---|---|
| Max. stroke of sledge | 32,500 mm |
| Max. stroke of Kelly | 13,500 mm |
| Crowd force push and pull, effective / nominal | 464 / 595 kN |
| Rope diameter | 28 mm |
| Speed (down/up) | 10.0 m/min |
| Fast speed (down/up) | 30.0 m/min |

### Main winch

<table>
<thead>
<tr>
<th>single-layer</th>
<th></th>
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<tbody>
<tr>
<td>Winch classification</td>
<td>M6 / L3 / T5</td>
</tr>
<tr>
<td>Line pull (1st layer) effective / nominal</td>
<td>380 / 480 kN</td>
</tr>
<tr>
<td>Rope diameter</td>
<td>40 mm</td>
</tr>
<tr>
<td>Line speed (max.)</td>
<td>63 m/min</td>
</tr>
</tbody>
</table>

### Auxiliary winch (selectable)

|  |
|---|---|
| Winch classification | M6 / L3 / T5 |
| Line pull (1st layer) effective / nominal | 100 / 127 kN / 140 / 177 kN |
| Rope diameter | 20 mm / 22 mm |
| Line speed (max.) | 55 m/min |

### Base carrier (EEP)

<table>
<thead>
<tr>
<th>BS 95</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Engine</td>
<td>CAT C 15</td>
</tr>
<tr>
<td>Rated output ISO 3046-1</td>
<td>433 kW / 1,850 rpm</td>
</tr>
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</table>

### Exhaust Emission Standard acc. to EEC 97/68EC

<table>
<thead>
<tr>
<th>EPA/CARB</th>
<th>Stage III A</th>
<th>Stage V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 3</td>
<td>Tier 4 final</td>
<td></td>
</tr>
<tr>
<td>Diesel tank capacity / AdBlue tank</td>
<td>1,000 / – l</td>
<td>840 / 35 l</td>
</tr>
<tr>
<td>Sound pressure level in cabin (EN 16228, Annex B)</td>
<td>L_{PA} 80 dB(A)</td>
<td></td>
</tr>
<tr>
<td>Sound power level (2000/14/EC and EN 16228, Annex B)</td>
<td>L_{WA} 112 dB(A)</td>
<td></td>
</tr>
<tr>
<td>Hydraulic pressure</td>
<td>350 bar</td>
<td></td>
</tr>
<tr>
<td>Hydraulic oil tank capacity</td>
<td>1,000 l</td>
<td></td>
</tr>
<tr>
<td>Flow rates</td>
<td>2 x 430 + 1 x 565 + 1 x 215 l/min</td>
<td></td>
</tr>
</tbody>
</table>

### Under carriage

<table>
<thead>
<tr>
<th>UW 130</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Crawler type</td>
<td>B8B</td>
</tr>
<tr>
<td>Traction force effective / nominal</td>
<td>880 / 1,030 kN</td>
</tr>
<tr>
<td>Track shoes</td>
<td>1,000 mm</td>
</tr>
</tbody>
</table>
### Technical Equipment

#### Base carrier BS 95, Fig. A

**Standard**
- Removable counterweight side elements
- Removable crawler side frames
- Protective roof guard
- Radio with MP3, USB and Bluetooth c/w hands-free kit
- Platforms with handrail (on both sides and at the cabin)
- Guardsrails upper level (foldable for transport)
- Cameras for rear area and main winch surveillance
- Central lubrication system
- Premium comfort seat
- Electric refueling pump
- LED spotlights
- Climatronic
- Hydraulic system with quick-release hydraulic couplers (socket bank)

**Optional**
- Counterweight variably adjustable
- Walking platform with handrail (continuous on both sides, at cabin level, optional foldable for transport, Fig. A)
- Compressor 1,000 l/min
- Electric generator 13 kVA
- Bio-degradable hydraulic oil
- Arctic kit
- Hydraulic system with quick-release hydraulic couplers (under carriage)
- Cab space heater
- Flat track shoes
- Additional camera (at customer-specific location)
- Front screen guard
- Weather protection
- Remote control basic, Fig. C
- Remote control multi

#### Drilling rig attachment

**Standard**
- Sturdy V-type mast kinematic system
- Main winch with hydraulically operated freewheeling
- Swivel for main rope
- Pivoted anchor points for main and auxiliary rope
- Boom with hydraulic cylinders for vertical and horizontal mast alignment
- Hydraulic locking for support trestle
- Flexible mast concept (Vario-mast, Vario-mast head)
- Reduced headroom version possible by means of Vario-mast section, Fig. B

**Optional**
- Upper Kelly guide
- Extension of drill axis to 1,550 / 1,700 / 2,000 mm
- Mast support unit
- Mast extension 3 m / 5 m (Kelly method)
- Mast extension 5 / 5 / 5 + 3 m (CFA, FDP, SCM method)
- Swivel for auxiliary rope
- Attachment of casing oscillator possible up to 2,500 mm drilling diameter
- Concrete line
- Air line attachment
- Mobilization kit
- Hydraulically operated pin connection on the crowd sledge
Rotary drive

**Standard**
- Rotary drive KDK 460 S (multi-gear)
- Selectable modes of operation
- Kelly equipment for outer Kelly tube 470 mm
- Integrated Kelly damping system
- Exchangeable Kelly drive adapter
- Exchangeable Kelly drive keys
- Cardanic joint
- Quick-release hydraulic couplers
- Transport supports
- Lifting gear

**Optional**
- Kelly equipment for outer Kelly tube 559 mm
- Torque multiplier BTM 720 K
  - Torque 600 kNm
  - Increasing of torque for casing installation
  - Easy attachment
  - Separate sledge
  - Connection to rotary drive with cardanic joint

Measuring and control system

**Standard**
- PLC processor for all electrically actuated functions
- Automatic mast alignment with memory recall
- Depth measuring device on main winch
- Distance measuring device on crowd winch
- Main winch with electronic load sensing
- Slack rope prevention
- Automatic swivel alignment function
- Hoist limit switch for main and auxiliary winch
- Auxiliary winch with hydraulic load sensing
- Crowd stroke monitoring
- Crowd speed control
- Speed measuring control for rotary drive (KDK)
- Hold-back control
- Casing length monitoring

**Optional**
- Electronic load sensing for auxiliary winch
- Recording of concrete pressure and volume for Single-Pass processes
- Software modules for further applications
- Adaptive Kelly speed assistant
B-Tronic
The BAUER B-Tronic system allows completion of construction tasks in a reliable and accurate manner, even under extreme operating conditions
- The high-resolution touchscreen display ensures excellent user-friendliness
- The display can be optimally adapted to the operating situation and the amount of light present by changing the brightness level, the color scheme and the day/night mode
- The main parameters such as pump pressure, torque and drilling depths can be viewed at a glance

B-Drive
The B-Drive is a central operating and visualization system
- B-Drive combines adjustable potentiometer values on one display
- Ergonomic positioning of the display on the right column of the operator’s cab

Tablet
The tablet is the multi-functional tool for the Bauer machine
- Online access to the customer portal, handbooks, equipment management systems and much more
- Standard internet connection via the DTR module, which is located in the machine
- The operator’s screen can be mirrored live on the tablet to track the operating process

Device networking
DTR module
- The DTR module allows equipment and production data to be made available to a wide variety of users
WEB-BGM
- WEB-BGM is a software used to retrieve equipment data and establish the locations of various machines, even if you are not on site
B-Report
- Standardized reports for the documentation of drilling progress and verification of performance and quality
**Adaptive Kelly speed assistant**
The assistant raises and lowers the Kelly bar safely and quickly and allows an easy operation. The automatic control of the speed of the main winch reduces the speed at the transition points of the Kelly sections. This provides maximum safety with minimum wear. The permanent monitoring of the parameters prevents a locked Kelly bar from being raised or lowered accidentally and thus causing damage.

**Kelly visualization**
Display of the locking recesses, as well as representation of the controlled extension and retraction of the Kelly bar on the B-Tronic system. The rapid approach of the locking position results in a considerably enhanced drilling performance. In addition, the level of wear that the Kelly bar and drive keys are subject to is significantly reduced.

**Kelly drilling assistant**
Saves the current crowd speed and the speed of the rotary drive. It enhances drilling performance with simultaneous hands-free operation. Drilling parameters can be adjusted during the automated drilling procedure.

**Automatic drilling and extraction control for Single-Pass processes**
The system controls the drilling and/or extraction speed of the crowd system and enables hands-free operation. This ensures the production of a high-quality pile while simultaneously minimizing the amount of concrete.

**Satellite-based positioning**
The BAUER Assistant Positioning System (B-APS) allows the position of a bored pile to be located extremely accurately. Documentation is provided for the nominal and actual coordinates, as well as the corresponding accuracy of each bored pile. Manual marking of the piles is no longer required.

Numerous other assistance systems are available in our portfolio.
Application – Kelly Drilling

<table>
<thead>
<tr>
<th>Mast extension</th>
<th>Basic version</th>
<th>Upgraded version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without</td>
<td></td>
<td>5 m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper Kelly guide</th>
<th>Basic version</th>
<th>Upgraded version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without</td>
<td></td>
<td>With</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drilling axis</th>
<th>Basic version</th>
<th>Upgraded version</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,300 mm</td>
<td></td>
<td>1,550 mm</td>
</tr>
<tr>
<td>1,700 mm</td>
<td></td>
<td>2,000 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Max. drilling diameter</th>
<th>Basic version</th>
<th>Upgraded version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncased</td>
<td>2,300 mm</td>
<td>2,800 mm</td>
</tr>
<tr>
<td></td>
<td>2,000 mm</td>
<td>2,500 mm</td>
</tr>
<tr>
<td>Cased</td>
<td>2,000 mm</td>
<td>2,500 mm</td>
</tr>
<tr>
<td></td>
<td>2,800 mm</td>
<td>3,400 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating weight approx.</th>
<th>Basic version</th>
<th>Upgraded version</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Kelly BK 420/470/3/36</td>
<td>150 t</td>
<td>180 t</td>
</tr>
<tr>
<td>...3/36</td>
<td></td>
<td>...4/94</td>
</tr>
<tr>
<td>With bucket</td>
<td>Ø 1,500 mm</td>
<td>Ø 1,800 mm</td>
</tr>
<tr>
<td>With counterweight *</td>
<td>19.7 t</td>
<td>29.4 t</td>
</tr>
</tbody>
</table>

* depending on equipment
Drilling depth – uncased Kelly drilling

<table>
<thead>
<tr>
<th>3-part Kelly bar</th>
<th>DA 1,300 mm</th>
<th>DA 1,550 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A (m)</td>
<td>B (m)</td>
</tr>
<tr>
<td>BK420/470/3/36</td>
<td>15.2</td>
<td>38.2</td>
</tr>
<tr>
<td>BK420/470/3/42</td>
<td>17.2</td>
<td>44.2</td>
</tr>
<tr>
<td>BK420/470/3/48</td>
<td>19.2</td>
<td>50.2</td>
</tr>
<tr>
<td>BK420/470/3/52</td>
<td>20.6</td>
<td>54.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4-part Kelly bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>BK420/470/4/56</td>
</tr>
<tr>
<td>BK420/470/4/64</td>
</tr>
<tr>
<td>BK420/470/4/72</td>
</tr>
<tr>
<td>BK420/470/4/80</td>
</tr>
<tr>
<td>BK420/470/4/84</td>
</tr>
<tr>
<td>BK420/470/4/88</td>
</tr>
<tr>
<td>BK420/470/4/92</td>
</tr>
<tr>
<td>BK420/470/4/94</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5-part Kelly bar*</th>
</tr>
</thead>
<tbody>
<tr>
<td>BK210/470/5/80</td>
</tr>
<tr>
<td>BK210/470/5/90</td>
</tr>
<tr>
<td>BK210/470/5/95</td>
</tr>
</tbody>
</table>

**A** Length of Kelly bar (retracted)  
**B** Length of Kelly bar (extended, unlocked)  
**T** Drilling depth  
**H_w** Max. clearance to drilling tool  
**NL** Effective tool length  
**G** Weight of Kelly bar  

Drilling data as shown are based on tool length NL = 1.9 m, minimum horizontal mast reach and using Bauer attachment. Drilling depth is increased by 0.39 m when using maximum horizontal mast reach.

Further drilling depths, diameters and other Kelly types on request.

**Torque multiplier BTM 720 K**

Casing lengths  
with BTM = H_w - 0.5 m  
H_w max. = 11.0 m

**Kelly drilling with casing oscillator BV 2000**

Casing lengths  
without BV = H_w - 0.5 m  
with BV = H_w - 2.4 m

* Reduction of torque to 210 kNm for Kelly type BK 210
BG 45

Application – CFA-Drilling

<table>
<thead>
<tr>
<th></th>
<th>Basic version</th>
<th>Upgraded version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelly extension</td>
<td>without</td>
<td>10.5 m</td>
</tr>
<tr>
<td>Max. drilling depth (with auger cleaner)</td>
<td>18.0 m</td>
<td>38.5 m</td>
</tr>
<tr>
<td>Max. drilling diameter</td>
<td>1,200 mm</td>
<td>1,200 mm</td>
</tr>
<tr>
<td>Max. extraction force with main and crowd winch (effective)</td>
<td>1,160 kN</td>
<td>1,160 kN</td>
</tr>
<tr>
<td>Mast extension</td>
<td>without</td>
<td>5 + 5 m</td>
</tr>
<tr>
<td>Counterweight *</td>
<td>19.7 t</td>
<td>34.3 t</td>
</tr>
</tbody>
</table>

* depending on equipment
### BG 45 PremiumLine

#### Application – FDP-Drilling

<table>
<thead>
<tr>
<th></th>
<th>FDP Lost-Bit *</th>
<th>FDP with lattice mast extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelly extension</td>
<td>not applicable</td>
<td>16.5 m</td>
</tr>
<tr>
<td>Max. drilling depth</td>
<td>31.5 m</td>
<td>40.2 m</td>
</tr>
<tr>
<td>Max. drilling diameter</td>
<td>710 mm</td>
<td>710 mm</td>
</tr>
<tr>
<td>Max. extraction force with main and crowd winch (effective)</td>
<td>1,160 kN</td>
<td>1,160 kN</td>
</tr>
<tr>
<td>Mast extension</td>
<td>5 + 5 + 3 m</td>
<td>5 m</td>
</tr>
<tr>
<td>Counterweight **</td>
<td>34.3 t</td>
<td>29.4 t</td>
</tr>
</tbody>
</table>

* Optional: Rear support unit, high-pressure cleaner with water tank
** depending on equipment
## Upgraded version with DKS 100 / 200

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. drilling depth</td>
<td>23.6 m</td>
</tr>
<tr>
<td>Max. drilling diameter</td>
<td>750 mm</td>
</tr>
<tr>
<td>Max. extraction force with main and crowd winch (effective)</td>
<td>530 kN</td>
</tr>
<tr>
<td>Mast extension</td>
<td>5 m</td>
</tr>
<tr>
<td>Counterweight *</td>
<td>29.4 t</td>
</tr>
<tr>
<td>Spoil discharge system</td>
<td>Optional</td>
</tr>
<tr>
<td>Max. torque:</td>
<td></td>
</tr>
<tr>
<td>Auger (right-hand rotation)</td>
<td>100 kNm</td>
</tr>
<tr>
<td>Casing (left-hand rotation)</td>
<td>200 kNm</td>
</tr>
</tbody>
</table>

## Upgraded version with KDK / BTM 400

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Max. drilling depth</td>
<td>22.9 m</td>
</tr>
<tr>
<td>Max. drilling diameter</td>
<td>880 mm</td>
</tr>
<tr>
<td>Max. extraction force with main and crowd winch (effective)</td>
<td>1,160 kN</td>
</tr>
<tr>
<td>Mast extension</td>
<td>5 m</td>
</tr>
<tr>
<td>Counterweight *</td>
<td>29.4 t</td>
</tr>
<tr>
<td>Spoil discharge system</td>
<td>Standard</td>
</tr>
<tr>
<td>Max. torque:</td>
<td></td>
</tr>
<tr>
<td>Auger (right-hand rotation)</td>
<td>200 kNm</td>
</tr>
<tr>
<td>Casing (left-hand rotation)</td>
<td>400 kNm</td>
</tr>
</tbody>
</table>

* depending on equipment
### BG 45 Further Applications

<table>
<thead>
<tr>
<th>CSM – Cutter Soil Mixing</th>
<th>Trench Cutter System</th>
</tr>
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<tr>
<td>Cutting/Mixing head</td>
<td>BCM 5</td>
</tr>
<tr>
<td>Panel width</td>
<td>1,000 mm</td>
</tr>
<tr>
<td>Panel length</td>
<td>2,400 mm</td>
</tr>
<tr>
<td>Max. panel depth</td>
<td>42.8 m</td>
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<tr>
<td>Counterweight</td>
<td>29.4 t</td>
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<tr>
<td>Trench cutter</td>
<td>BC 35 / BC 40</td>
</tr>
<tr>
<td>Max. cutting width</td>
<td>1,200 mm</td>
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<td>Max. cutting depth</td>
<td>48 m</td>
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<td>Hose handling system</td>
<td>HSS 48</td>
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</table>
Transport – Dimensions and Weights

G = Weight
B = Width, overall

Weights shown are approximate values; optional equipment may change the overall weight and dimensions.

Base carrier

G = 67.0 t (without main winch)
B = 3,720 mm

Base carrier with lower mast section

G = 91.0 t (without main winch)
B = 3,720 mm

Base carrier without crawlers

G = 2 x 15.5 t

G = 36.0 t
B = 3,000 mm
**Upper mast section with mast head**

- **G** = 7.2 t  
  **B** = 2,100 mm

- **G** = 2.4 t  
  **B** = 1,700 mm

- **G** = 4.8 t  
  **B** = 1,650 mm

**Lower mast section with Vario-mast system**

- **G** = 22.6 t  
  **B** = 2,480 mm

- **G** = 2.6 t  
  **B** = 1,100 mm

- **G** = 20.0 t  
  **B** = 2,480 mm

**Counterweight**

- **G** = 3 * 4.9 t  
  + 2 * 2.5 t  
  **B** = 3,000 mm

**Main winch 380 kN**

- **G** = 7.8 t  
  (with 140 m rope)  
  **B** = 2,500 mm

**Rotary drive**

- **KDK 460 S:**  
  **G** = 9.5 t

**Mast extension 3 m**

- **G** = 1.9 t  
  **B** = 1,150 mm

**Mast extension 5 m**

- **G** = 2.6 t  
  **B** = 1,150 mm

**Backstay cylinders**

- **G** = 2 x 2.0 t  
  **B** = 400 mm
Design developments and process improvements may require the specification and materials to be updated and changed without prior notice or liability. Illustrations may include optional equipment and not show all possible configurations. These and the technical data are provided as indicative information only, with any errors and misprints reserved.