BAUER BG 28 H
Rotary Drilling Rig
Base Carrier BT 75
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.
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
The BAUER BG PremiumLine

The BG Premium Line 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 28 H PremiumLine (BT 75)

Max. drilling diameter: 2,500 mm
Max. drilling depth: 65.7 m
Max. torque: 277 kNm
Max. height: 24.9 m
Engine:

CAT C 9 – Stage III A
280 kW @ 1,850 U/min

CAT C 9.3 – Stage IV
298 kW @ 1,850 U/min

BG 28 H
BT 75

BG 55
BS 115

BG 28 H
BT 85

BG 28 H
BT 85

BG 33 H
BT 85

BG 36 H
BS 95

BG 72
BT 180

1 Undercarriage
2 Upper carriage
3 Main winch
4 Auxiliary winch
5 Crowd winch
6 Kinematik system
7 Mast
8 Mast head
9 Kelly bar
10 Rotary drive (KDK)
11 Drilling tool
Flexible mast concept
- Three-sectional mast
  - Low-Head version
  - Giant Drill version
  - Optimized transport length
- Upper mast extension 2 m or 3 m (hydraulically foldable and lockable)
  - Simple and secure attachment, no working at heights unsecured
  - Reduced transport length
- Lattice mast extension for max. 20.5 m interlocking length
- Vario-masthead
  - Masthead for drill axis 1,000 expandable to 1,400 mm
  - Increased stroke for Kelly bars when using an upper kelly guide
  - Tiltable main jib for for single-pass processes and for optimized transport

Modern, ergonomic operator cab
- FOPS compliant with additional protective roof guard
- Premium operator seat, air-sprung and heatable
- Joystick controls with high functionality
- B-Drive for multi-functional potentiometer input

Powerful CAT engines
- C 9 (280 kW, Tier 3) or C 9.3 (298 kW, Tier 4 final)
- Diesel particulate filter in Exhaust Emission Standard Tier 4 final
- Automatic idling mode
- Modern engine diagnostic system
- Low noise emission
- Low fuel consumption due to individual consumer control
- Worldwide CAT-service partners

Spotlights
- 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
**Variable stackable counterweight elements**
- Constant tail radius (irrespective of number of counterweights)
- Low weight of individual elements (4.9 t or 2.5 t)
- Flexible arrangement for various applications
- Mounting and demounting possible with the drilling rig
- Transport of the machine possible without removing counterweights

**Safety equipment**
- Integrated service platforms in the upper carriage for easy and safe maintenance work
- Retractable grating on side of cab
- Guardrails on the upper level (foldable for transport)
- 2 rear view cameras

**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 undercarriage, 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
Rotary Drive

Rotary drive KDK 280
- Optional single gear drive KDK 280 K or multi gear drive KDK 280 S
- Max. torque 277 kNm
- Max. speed 55 rpm

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

KDK 280 K

![Graph of KDK 280 K showing M nom. (kNm) vs rpm]

KDK 280 S

![Graph of KDK 280 S showing M nom. (kNm) vs rpm]
Kelly Drilling
Cased Kelly Drilling
Casing installation with BTM
Cased Kelly Drilling
Cading installation with oscillator

CFA
Continuous Flight Auger Method

CCFA
Cased CFA with KDK + BTM / Double Rotary System

SCM
Single-Column-Mixing

CSM
Cutter-Soil-Mixing

HDI
Jet Grouting

FDP
Full Displacement Piling (Standard or Lost Bit)

Pile Driving
with Hydraulic Hammer or Pileco Diesel Hammer

TR
Vibrator
Dimensions - Basis Version

Operating weight 82.2 t
(as shown)

* depending on equipment
### Rotary drive

<table>
<thead>
<tr>
<th>KDK 280 K</th>
<th>KDK 280 S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torque (nominal) for casing operation at 350 bar</td>
<td>277 kNm</td>
</tr>
<tr>
<td>Torque (nominal) for drilling at 350 bar</td>
<td>250 kNm</td>
</tr>
<tr>
<td>Max. speed of rotation</td>
<td>30 rpm</td>
</tr>
</tbody>
</table>

### Crowd winch

| Max. sledge stroke with 3 m mast extension | 18,700 mm |
| Crowed force push and pull, effective / nominal | 330 / 423 kN |
| Rope diameter | 24 mm |
| Speed (down / up) | 6.5 m/min |
| Fast speed (down / up) | 25 m/min |

### Main winch

| M6 / L3 / T5 |
| Line pull (1st layer) effective / nominal | 200 / 250 kN |
| Rope diameter | 28 mm |
| Line speed (max.) | 85 m/min |

### Auxiliary winch (selectable)

| M6 / L3 / T5 |
| Line pull (1st layer) effective / nominal | 80 / 100 kN |
| Rope diameter | 20 mm |
| Line speed (max.) | 55 m/min |

### Base carrier (EEP)

| BT 75 |
| Engine | CAT C 9 |
| Rated output ISO 3046-1 | 280 kW @ 1,850 rpm |
| Exhaust emission EEC 97/68 EC | Stage III A |
| standard acc. to EPA/CARB | Tier 3 |
| Diesel tank capacity / AdBlue Tank | 730 / – l |
| Sound pressure level in the cabin (EN 16228, Annex B) | LP, 80 dB (A) |
| Sound power level (2000/14/EG u. EN 16228, Annex B) | LW₄, 112 dB (A) |
| Hydraulic pressure | 350 bar |
| Hydraulic oil tank capacity | 650 l |
| Flow rates | 2 x 250 + 1 x 400 + 1 x 135 l/min |

### Undercarriage

| UW 65 | UW 80 |
| Crawler type | B 6 |
| Traction force effective / nominal | 450 / 530 kN |

| UW 80 |
| Crawler type | B 7 |
| Traction force effective / nominal | 520 / 610 kN |
### Technical Equipment

#### Base carrier BT 75

**Standard**
- Removable counterweights
- Protective roof guard
- Radio with MP3, USB and Bluetooth hands-free kit
- Grating in front of cab
- Retractable grating on side of cab
- Electric refuelling pump
- Energy-Efficient Power (EEP)
- Premium operator seat
- 2 rear view cameras
- Integrated service platform
- Central lubrication system
- LED spotlights
- Climatronic

**Optional**
- Counterweight, variably adjustable
- Guardrails on the upper level (foldable for transport)
- Integrated service platform (electrically retractable / extendable)
- High-pressure cleaner with water tank
- Rear support unit, Fig. A
- Compressor 1,000 l/min
- Electric generator 13 kVA
- Bio-degradable hydraulic oil
- Arctic kit
- Cab space heater with automatic timer
- Additional camera (at customer specific location)
- Front screen guard
- Sun blind small or large
- Remote control Basic, Fig. B
- Remote control Multi

#### Drilling rig attachment

**Standard**
- Main winch with hydraulic free-fall control
- Swivel for main rope
- Masthead (foldable for transport)
- Pivoted anchor point for main and auxiliary rope

**Optional**
- Vario-masthead, Fig. C
- Upper Kelly guide
- Extension of drill axis to 1,400 mm
- Hydraulically operated pin connection on the crowd sledge for easy mounting and removal of the rotary drive
- Mast support unit
- Mast extension 2 m or 3 m, hydraulically foldable and lockable
- Three-sectional mast for Low Head and Giant Drill applications
- Lattice mast extension
- Swivel for auxiliary rope
- Additional auxiliary winch 20 kN
- Attachment of casing oscillator up to BV 1500, Fig. D
  - Powered by on-board hydraulics of the base carrier
  - Controlled from operator’s cab
  - Weight of drilling rig can be activated through mechanical fixing (UW 80)
- Attachment of automatic casing drive adapter
- Sling for counterweight handling
- Auger cleaner attachment for Kelly system
- Personnal hoist system with lift cage, Fig. E
# Rotary drive

**Standard**
- Rotary drive KDK 280 K (single-gear drive)
- Selectable modes of operation
- Kelly drive adapter for outer Kelly tube 394 mm
- Integrated Kelly damping system
- Exchangeable Kelly drive adapter
- Cardanic joint
- Quick-release hydraulic couplers
- Transport supports
- Lifting gear

**Optional**
- Rotary drive KDK 280 S (multi-gear)
- Kelly equipment for outer Kelly tube 419 mm
- Torque multiplier BTM 720 K for Kelly drilling
  - Torque 400 kNm (nominal)
  - Increase of torque for casing installation
  - Easy attachment
  - Separate sledge
  - Connection to rotary drive with cardanic joint
- Torque multiplier BTM 200 for CCFA

# 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
- Electronic mast reach limiter
- 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 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
One-directional and bi-directional spoil discharge assistant
Automatic emptying of spoil via an alternating or shocking slewing rotation of the rotary drive. Infinitely variable adjustment of the shaking or shocking frequency via joystick.

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.

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.

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.

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

**PremiumLine**

<table>
<thead>
<tr>
<th></th>
<th>Basic version</th>
<th>Upgraded version</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Undercarriage</strong></td>
<td>UW 65</td>
<td>UW 80</td>
</tr>
<tr>
<td><strong>Mast extension</strong></td>
<td>without</td>
<td>2 m</td>
</tr>
<tr>
<td><strong>Upper Kelly guide</strong></td>
<td>without</td>
<td>with</td>
</tr>
<tr>
<td><strong>Drill axis</strong></td>
<td>1,000 mm</td>
<td>1,400 mm</td>
</tr>
<tr>
<td><strong>Max. drilling diameter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>uncased</td>
<td>1,700 mm</td>
<td>2,500 mm</td>
</tr>
<tr>
<td>cased</td>
<td>1,400 mm</td>
<td>2,200 mm</td>
</tr>
<tr>
<td><strong>Operating weight, approx.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with Kelly</td>
<td>82.2 t</td>
<td>100.2 t</td>
</tr>
<tr>
<td>with casing drive adapter</td>
<td>3/24</td>
<td>4/56</td>
</tr>
<tr>
<td>with bucket</td>
<td>Ø 1,300 mm</td>
<td>Ø 2,000 mm</td>
</tr>
<tr>
<td>with counterweight *</td>
<td>9.9 t</td>
<td>12.3 t</td>
</tr>
</tbody>
</table>

* depending on equipment
Drilling depth – uncased Kelly drilling, drill axis 1,000 mm

<table>
<thead>
<tr>
<th>3-part Kelly</th>
<th>A (m)</th>
<th>B (m)</th>
<th>G (kg)</th>
<th>H_w (m)</th>
<th>T (m)</th>
<th>H_w (m)</th>
<th>T (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BK/260/394/3/24</td>
<td>10.72</td>
<td>26.60</td>
<td>4.800</td>
<td>6.9</td>
<td>25.4</td>
<td>7.9</td>
<td>25.4</td>
</tr>
<tr>
<td>BK/260/394/3/30</td>
<td>12.72</td>
<td>32.60</td>
<td>5.550</td>
<td>4.9</td>
<td>31.4</td>
<td>6.9</td>
<td>31.4</td>
</tr>
<tr>
<td>BK/260/394/3/33</td>
<td>13.72</td>
<td>35.60</td>
<td>5.920</td>
<td>3.9</td>
<td>34.4</td>
<td>5.9</td>
<td>34.4</td>
</tr>
<tr>
<td>BK/260/394/3/36</td>
<td>14.72</td>
<td>38.60</td>
<td>6.300</td>
<td>2.9</td>
<td>37.4</td>
<td>4.9</td>
<td>37.4</td>
</tr>
<tr>
<td>BK/260/394/3/42</td>
<td>16.72</td>
<td>44.61</td>
<td>7.100</td>
<td>0.9</td>
<td>43.3</td>
<td>2.9</td>
<td>43.4</td>
</tr>
<tr>
<td>BK/260/394/3/48</td>
<td>18.72</td>
<td>50.60</td>
<td>7.900</td>
<td>-</td>
<td></td>
<td>0.9</td>
<td>49.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4-part Kelly</th>
<th>A (m)</th>
<th>B (m)</th>
<th>G (kg)</th>
<th>H_w (m)</th>
<th>T (m)</th>
<th>H_w (m)</th>
<th>T (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BK/250/394/4/32</td>
<td>10.72</td>
<td>34.94</td>
<td>6.600</td>
<td>6.9</td>
<td>33.7</td>
<td>7.9</td>
<td>33.7</td>
</tr>
<tr>
<td>BK/250/394/4/40</td>
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<td>42.94</td>
<td>7.750</td>
<td>4.9</td>
<td>41.7</td>
<td>6.9</td>
<td>41.7</td>
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<tr>
<td>BK/250/394/4/44</td>
<td>13.72</td>
<td>46.94</td>
<td>8.350</td>
<td>3.9</td>
<td>45.7</td>
<td>5.9</td>
<td>45.7</td>
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<tr>
<td>BK/250/394/4/48</td>
<td>14.72</td>
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<td>49.7</td>
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<tr>
<td>BK/250/394/4/56</td>
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<td>58.98</td>
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<tr>
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<td>66.94</td>
<td>11.200</td>
<td>-</td>
<td></td>
<td>0.9</td>
<td>65.7</td>
</tr>
</tbody>
</table>

Drilling data have been determined with an effective tool length of NL = 1.9 m and with the mast at a minimum operating radius. These data only apply for the use of Bauer tools.

Other drilling depths, drilling diameters and Kelly versions are available on request.

Torque multiplier BTM 720

Kelly drilling with casing oscillator up to BV 1500

Casing length
without BV = H_w - 0.5 m
with BV = H_w - 1.6 m
### Application – CFA Drilling

**BG 28 H PremiumLine**

<table>
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<tr>
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<th>Upgraded version</th>
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<td>Undercarriage</td>
<td>UW 65</td>
</tr>
<tr>
<td>Mast extension</td>
<td>without</td>
</tr>
<tr>
<td>Kelly extension</td>
<td>without</td>
</tr>
<tr>
<td>Max. drilling diameter</td>
<td>900 mm</td>
</tr>
<tr>
<td>Drilling depth with auger cleaner</td>
<td>14.1 m</td>
</tr>
<tr>
<td>Max. extraction forth with main- and crowd winch (effective)</td>
<td>730 kN</td>
</tr>
<tr>
<td>with counterweight</td>
<td>9.9 t</td>
</tr>
</tbody>
</table>

* depending on equipment
### Further Applications

**BG 28 H**

**PremiumLine**

**FoW drilling**
- DKS 50 / 140
  - Torque auger / casing: 50/140 kNm
  - Mast extension: 2 m
  - Max. drilling diameter: 610 mm
  - Max. drilling depth: 17.3 m
  - Max. extraction force with main- and crowd winch (effective): 500 kN
  - with counterweight: 12.3 t
  - Ejection system: without

**CCFA drilling**
- mit BTM 200
  - Torque auger / casing: 100/200 kNm
  - Mast extension: 2 m
  - Max. drilling diameter: 750 mm
  - Max. drilling depth: 16.4 m
  - Max. extraction force with main- and crowd winch (effective): 730 kN
  - with counterweight: 12.3 t
  - Ejection system: standard

* depending on equipment
Further Applications

BG 28 H
PremiumLine

<table>
<thead>
<tr>
<th></th>
<th>FDP drilling Basic version</th>
<th>FDP drilling Upgraded version</th>
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<tbody>
<tr>
<td>Undercarriage</td>
<td>UW 65</td>
<td>UW 80</td>
</tr>
<tr>
<td>Mast extension</td>
<td>without</td>
<td>-</td>
</tr>
<tr>
<td>Kelly extension</td>
<td>8 m</td>
<td>20.5 m</td>
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<tr>
<td>Max. drilling diameter FDP</td>
<td>620 mm</td>
<td>620 mm</td>
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<tr>
<td>Max. drilling depth FDP</td>
<td>23.0 m</td>
<td>35.0 m</td>
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<tr>
<td>Max. extraction force with main- and crowd winch (effective)</td>
<td>730 kN</td>
<td>730 kN</td>
</tr>
<tr>
<td>with counterweight *</td>
<td>9.9 t</td>
<td>12.3 t</td>
</tr>
</tbody>
</table>

* depending on equipment
<table>
<thead>
<tr>
<th></th>
<th><strong>FDP Lost-bit drilling</strong></th>
<th><strong>SCM mixing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Upgraded version</strong></td>
<td><strong>Upgraded version</strong></td>
</tr>
<tr>
<td>Undercarriage</td>
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<td>UW 80</td>
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<tr>
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<td>2 m</td>
<td>-</td>
</tr>
<tr>
<td>Kelly extension</td>
<td>13 m</td>
<td>20.5 m</td>
</tr>
<tr>
<td>Max. drilling diameter FDP</td>
<td>620 mm</td>
<td>-</td>
</tr>
<tr>
<td>Max. mixing diameter SCM</td>
<td>-</td>
<td>2,500 mm **</td>
</tr>
<tr>
<td>Max. drilling depth FDP</td>
<td>29.9 m</td>
<td>-</td>
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<tr>
<td>Max. mixing depth SCM</td>
<td>-</td>
<td>35.0 m</td>
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<tr>
<td>Max. extraction force with main- and crowd winch (effective)</td>
<td>730 kN</td>
<td>730 kN</td>
</tr>
<tr>
<td>counterweight *</td>
<td>12.3 t</td>
<td>12.3 t</td>
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* depending on equipment
** operation only possible with restrictions
FDP Lost-Bit drilling
Handling Package

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
<tr>
<td>Max. drilling diameter</td>
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<tr>
<td>Max. drilling depth</td>
<td>17 m</td>
</tr>
<tr>
<td>Max. extraction force with main- and crowd winch (effective)</td>
<td>730 kN</td>
</tr>
<tr>
<td>with counterweight *</td>
<td>12.3 t</td>
</tr>
</tbody>
</table>

* depending on equipment
**Vibro Displacement (VD)**

**Vibrator TR 17**

- Max. penetration depth: 15.3 m
- Pressure with crowd winch (effective): 110 kN
- Max. extraction force with crowd winch (effective): 330 kN
- with counterweight*: 9.9 t

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**Upgraded version**

**Jet Grouting**

- Length of lattice mast: 24.5 m
- Max. rod diameter: 89 - 133 mm
- Max. jetting depth: 35.3 m
- Rotary drive: KDK 10 S
- Max. extraction force with crowd winch (effective): 330 kN
- with counterweight*: 12.3 t

* depending on equipment
**Special Applications**

**Giant Drill - Basic version**

<table>
<thead>
<tr>
<th>Undercarriage</th>
<th>UW 65 / UW 80</th>
<th>UW 65 / UW 80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower mast extension</td>
<td>without</td>
<td>-</td>
</tr>
<tr>
<td>Drill axis</td>
<td>1,000 mm</td>
<td>1,000 / 1,400 mm</td>
</tr>
<tr>
<td>Max. drilling diameter</td>
<td>3,000 mm</td>
<td>1,700 / 2,500 mm</td>
</tr>
<tr>
<td>Max. drilling depth</td>
<td>-</td>
<td>19.5 m</td>
</tr>
</tbody>
</table>

* depending on equipment
Low Headroom System for large drilling depths:

- The BG 28 H low headroom drilling rig can also be configured for large drilling depths in limited headroom conditions.

- With the special Kelly bar BK-F 110/610/10 / 47.5 drilling depths of up to 47.8 m can be achieved with a maximum drilling diameter of 2,500 mm.

- Equipped with the low headroom masthead, the rig has a minimum height of just 8.8 m. Alternatively, the height of the rig with the Kelly masthead is 10.8 m.

- The KDK 280 WP (max. 250 kNm for drilling) automatically reduces the torque to 110 kNm when the special Kelly bar BK-F 110/610/10 / 47.5 is used. The full torque of 280 kNm is provided for cased drilling.

<table>
<thead>
<tr>
<th>Low Headroom System for large drilling depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undercarriage</td>
</tr>
<tr>
<td>Rotary drive</td>
</tr>
<tr>
<td>Drill axis</td>
</tr>
<tr>
<td>Max. drilling diameter</td>
</tr>
<tr>
<td>Max. drilling depth (BK-F 110/610/10/47,5)</td>
</tr>
</tbody>
</table>

* depending on equipment
Transport Data - Dimensions and Weights

<table>
<thead>
<tr>
<th>Transport with undercarriage UW 65</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Without mast extension</strong> *</td>
</tr>
<tr>
<td>G = 58.6 t</td>
</tr>
<tr>
<td>G = 68.5 t with 9.9 t counterweight</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport with undercarriage UW 65</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>With mast extension</strong> *</td>
</tr>
<tr>
<td>G = 59.7 t</td>
</tr>
<tr>
<td>G = 69.6 t with 9.9 t counterweight</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower mast section with rotary drive and folded mast extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>G = 64.8 t</td>
</tr>
<tr>
<td>G = 74.7 t with 9.9 t counterweight</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Base carrier with UW 65 (Basic version)</th>
<th>Counterweight **</th>
<th>Rotary drive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>G = 1 x 4.9 t + 2 x 2.5 t</td>
<td>G = 5.2 t (KDK 280 K)</td>
</tr>
<tr>
<td></td>
<td>B = 3,000 mm</td>
<td>G = 5.5 t (KDK 280 S)</td>
</tr>
</tbody>
</table>

* More weight with three-sectional mast approx. 500 kg
** depending on application

Weights shown are approximate values; optional equipment may change the overall weight and dimensions.
Transport with undercarriage UW 80

**Without mast extension * **

| G = 62.9 t | G = 75.2 t with 12.3 t counterweight |

![Diagram of transport without mast extension]

**With mast extension * **

| G = 64.0 t | G = 76.3 t with 12.3 t counterweight |

![Diagram of transport with mast extension]

**Lower mast section with rotary drive and folded mast extension**

| G = 69.1 t | G = 81.4 t with 12.3 t counterweight |

![Diagram of lower mast section]

**Base carrier with UW 80 (Upgraded version)**

**Counterweight **

G = 2 x 4.9 t + 1 x 2.5 t  
B = 3,000 mm

**Rotary drive**

G = 5.2 t (KDK 280 K)  
G = 5.5 t (KDK 280 S)

### UW 65  UW 80

<table>
<thead>
<tr>
<th>Track shoes</th>
<th>Overall width of crawlers retracted / extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>700 mm</td>
<td>3,000 - 4,400 mm</td>
</tr>
<tr>
<td>800 mm</td>
<td>-</td>
</tr>
<tr>
<td>900 mm</td>
<td>3,400 - 4,600 mm</td>
</tr>
</tbody>
</table>

* More weight with three-sectional mast approx. 500 kg  
** depending on application
International Service Hotline
+800 1000 1200 *(freecall)*
+49 8252 97-2888
BMA-Service@bauer.de

* Where available