BAUER BG 20 H

Rotary Drilling Rig Base Carrier BT 50





The BG ValueLine

Perfection is achieved when there is nothing left to take away.

Drilling uncased deep boreholes stabilized by drilling fluid, or drilling cased boreholes with installing casings by the rotary drive or by a hydraulic casing oscillator. If Kelly drilling is your task, then the BG ValueLine is our solution. The machines of the ValueLine are specifically adapted to no other purpose than Kelly drilling – and that perfectly.

You can expect superior Bauer performance and customary Bauer durability at affordable costs for acquisition and operation. How we do it? By applying cutting-edge technology, reduced to nothing less than the essentials.



- The whole system is optimized for economic Kelly drilling
- Increased efficiency leads to higher productivity and lower fuel consumption at the same time
- The integrated service platform for easy and safe maintenance is a key factor with regard to safety and service
- With the streamline concept, our modern and ergonomic operator cab is tailored to the rig operators
- Our assistance systems support the efficient and comfortable work every day
 - The easy, safe and fast assembling process enables lower unproductive times of the machine

The Rotary Drilling Rig BG 20 H BT 50

Maximum rig configuration

Drilling diameter: 1,500 mm | 59.05 in

Drilling depth: 40.0 m | 131.23 ft

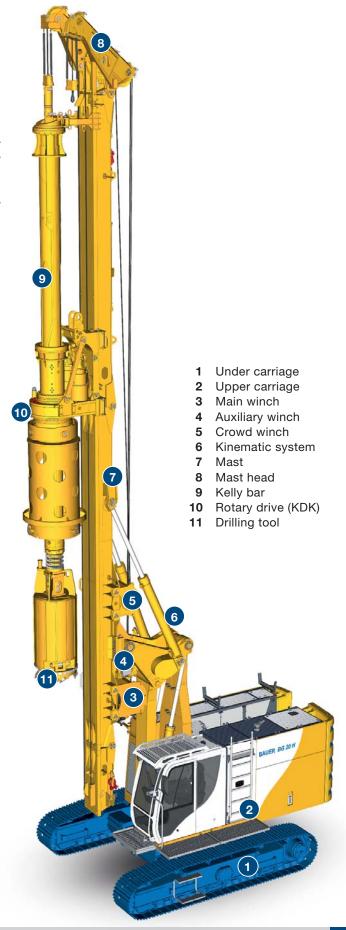
Torque: 200 kNm | 147,510 lbf ft

Engine: CAT C7.1: 186 kW @ 1,800 rpm

250 HP / @ 1,800 rpm

Height: 18.0 m | 59.1 ft







Efficiency

- CAT-engine
- 4 m | 13.1 ft casing string
- High-performance hydraulic system
- Single-layer winch operation



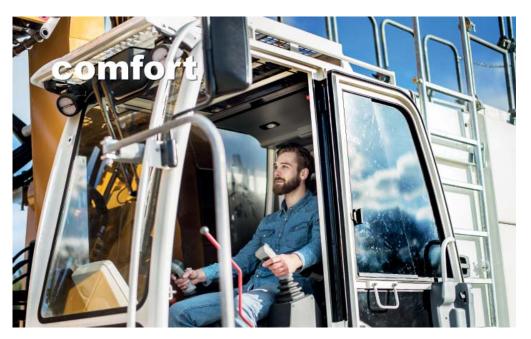
Mobility

- Transportation width 2.5 m | 8.2 ft
- Transportation height 3.3 m | 10.8 ft
- Transportation length 17.2 m | 56.43 ft
- Transportation weight 51 t | 112,435 lb, incl. Kelly bar
- Fast mobilisation
- Remote control basic



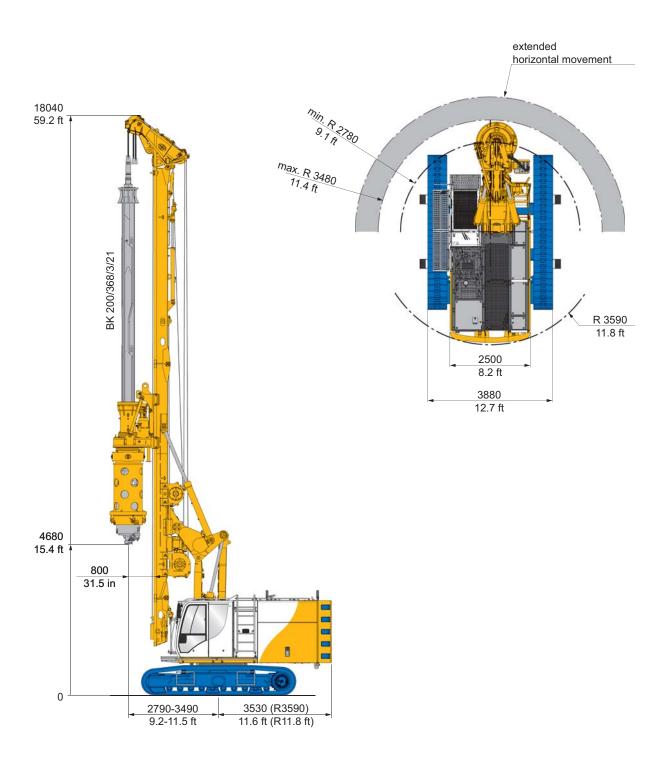
Flexibility

- Drilling power dataCFA option



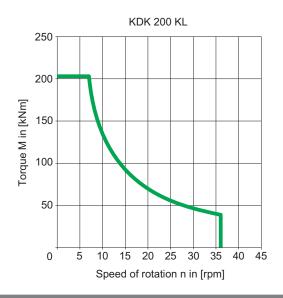
Comfort

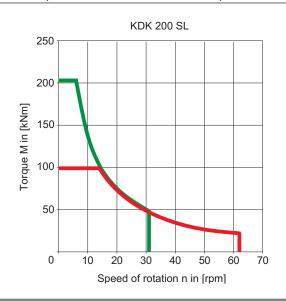
- Comfortable cabin
- Air-suspended driver's seat
- Simplified operating concept
- B-Control screen
- Integrated service platform
- No working @ height
- Easy access to service points



Operating weight approx. 53.0 t | 116,845 lb (as shown)

Rotary drive	KDK 200 KL	KDK 200 SL
Torque (nominal) at 330 bar	200 kNm 147,510 lbf ft	200 kNm 147,510 lbf ft
Speed of rotation (max.)	35 rpm	60 rpm





Crowd		Winch
Crowd force push / pull (effective)		110 / 260 kN 24,730 / 58,450 lbf
Crowd force push / pull *		150 / 210 kN <i>33,720 / 47,210 lbf</i>
Speed (down / up)		9 / 5 m/min 30 / 16 ft/min
Fast speed (down / up)		27 / 23 m/min 89 / 75 ft/min
Main winch		M6 / L3 / T5
Line pull (1st layer) effective / nominal		136 / 175 kN <i>30,575 / 39,340 lbf</i>
Rope diameter		22 mm 0.87 in
Line speed (max.)		80 m/min 260 ft/min
Auxiliary winch		M6 / L3 / T5
Line pull (1st layer) effective / nominal		43 / 54 kN 9,670 / 12,140 lbf
Rope diameter		16 mm <i>0.63 in</i>
Line speed (max.)		28 m/min 92 ft/min
Base carrier		BT 50
Engine	CAT C 7.1	CAT C 7.1
Rated output ISO 3046-1	186 kW <i>250 HP</i>	186 kW <i>250 HP</i>
	1,800 rpm	1,800 rpm
Engine conforms to EEC 97/68 EC	Stage III A	Stage V
EPA/CARB	Tier 3	Tier 4 final
GB20891-2014	Stage 3	
Diesel tank capacity/AdBlue	540 I / - I <i>145 Gal.</i>	540 I / 32 I <i>145 / 8.5 Gal</i>
Ambient air temperature (at full power) up to		45° C 113 ° F
Sound pressure level in cabin (EN 16228, Annex B)		LP _A 80 dB (A)
Sound pressure level (2000/14/EG and EN 16228, Annex B)		LW _A 105 dB (A)
Hydraulic power output (measured at inlet to rotary drive)		150 kW <i>200 HP</i>
Hydraulic pressure		350 bar <i>35 MPa</i>
Undercarriage		UW 50
Crawler type		B 60
Traction force effective / nominal		340 / 400 kN 76,435 / 89,925 lbf

^{*} measured at the casing drive adapter

Base Carrier

Standard

- Removable counterweight 5.0 t | 11,023 lb
- Engine diagnostic system
- Gratings on side and in front of operator's cab
- Camera system for rear area surveillance
- Multi-grade hydraulic oil
- Bauer comfort operator's cab with streamline concept,
 Fig. A
 - On-board lighting system LED
 - Air-conditioning system
 - Radio with CD, MP3, USB and Bluetooth c/w hands-free kit
 - · Air-cushioned operator's seat with seat heating
 - Protective roof guard
- Integrated service platform, Fig. B

Optional

- Comfort handling kit
 - Camera system for winch surveillance
 - · Central lubrication system
 - · Electric refueling pump
 - · Swivel for auxiliary rope
 - Test ports in upper carriage
 - Tool tray in front of operator's cabin
 - Service tool kit
- Air compressor 1,000 l/min | 220 gal/min
- Park heating with timer





BG Attachment

Standard

- H-type kinematic system, Fig. C
- Mast head foldable for transportation
- Crowd cylinder
- Main winch with hydraulic freewheeling control, Fig. D
- Swivel for main rope

C

Optional

- CFA kit
- Mast support



KDK Rotary Drive

Standard

- Rotary drive 200 KL (single gear drive)
- Selectable modes of operation
- Kelly drive adapter for outer casings 368 mm | 14.5 in
- Exchangeable Kelly drive keys
- Quick release couplers on hydraulic hoses

Optional

- Rotary Drive KDK 200 SL (multi gear drive)
- Cardanic joint

Measuring and Control Equipment

Serial Equipment, Fig. E and F

- B-Control monitor with integrated diagnostic function
- Display of fault messages as plain text
- Digital display of loads and torque
- Mast inclination measurement on x/y axes (digital / analogous display)
- Automatic vertical alignment of mast
- Electric load sensing on main and auxiliary rope
- Speed sensing device on KDK
- Electronic limitation of horizontal displacement
- Defined torque setting for KDK
- Crowd stroke measurement
- Kelly drilling assistant
- Automatic crowd control
- One-directional spoil discharge assistant
- Bi-directional spoil discharge assistant
- Casing extraction assistant
- Slewing angle display for upper carriage

Additional Equipment

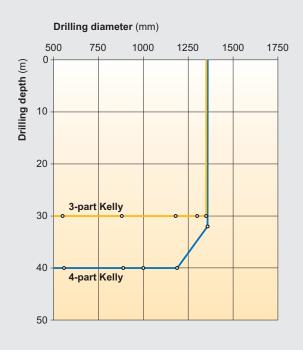
- Remote transmission of machine data (DTR-module)
- Additional camera with monitor for rear area surveillance
- Active mast support

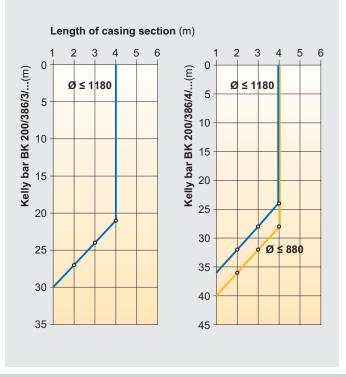


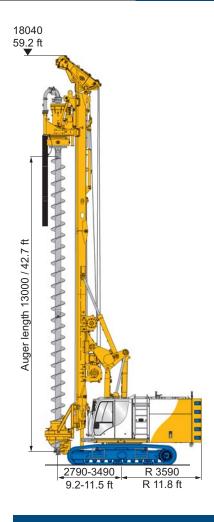


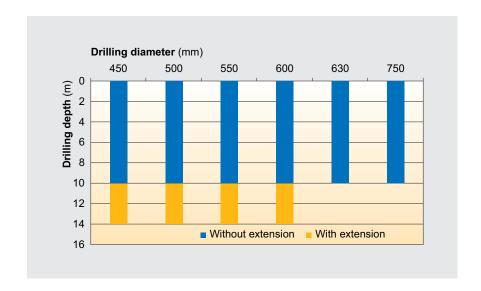








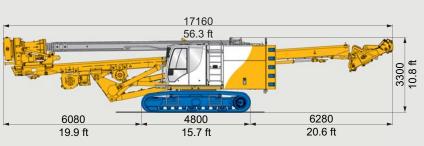




Transport dimensions and weights

Side view

G = 48.0 t | *105,822 lb* (+ Weight of Kelly bar) B = 2,500 mm | *98.4 in*

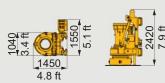


Front view



Rotary Drive

G = 4,5 t | 9,921 lb B = 1,550 mm | 5.1 ft









Global Network

Service





Equipment

Training

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