## **BAUER BG 26**

# **Drilling Rig**Base Carrier BT 70





## **Bauer Drilling Rigs KellyLine**

### **Bauer Drilling Rigs KellyLine**

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 drilling rig KellyLine is our solution. The machines of the KellyLine 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.



- Long mast for more drilling depth
- Large drill axis for big diameters
- Well balanced concept for high productivity and economic operation
- Hydraulic system for high dynamic performance
- Easy handling, easy maintenance
- Variable transport concept

## The Drilling Rig BG 26 KellyLine (BT 70)

Maximal rig configuration

Drilling diameter: 2,500 mm

Drilling depth: 77.0 m

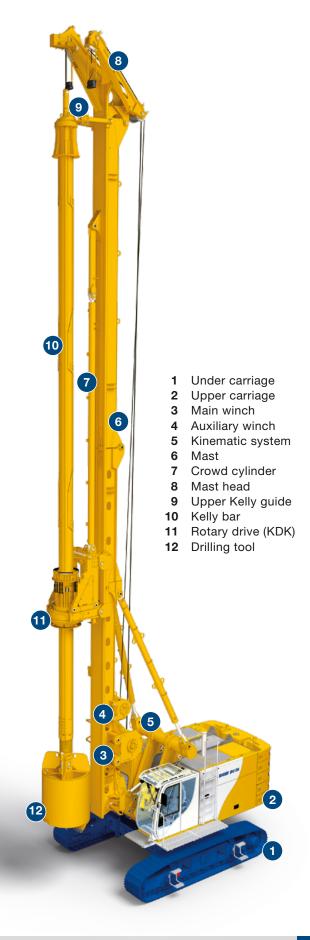
Torque: 264 kNm

Engine: CAT C9.3

280 kW @ 1,800 rpm

Height: 25.1 m





#### Kinematic system

- Proven Bauer kinematic system with support trestle and backstay cylinders for maximum stability
- Heavy-duty base frame optimized for attachment of frontend equipment
- Inverted backstay cylinders for fast rigging and derigging
- Graduated pins simplify rigging operations





#### **KDK** rotary drive

- High dynamic performance
- Single-gear drive with strong and robust design and high mechanical and hydraulic efficiency
- Adjustment to various soil conditions and Kelly bars with 3 selectable modes of operation
- Protection of the rotary drive by an integrated Kelly damping system
- User-friendly assembly of rotary drive

#### Winches

- High, measured effective line pull and line speed
- Load classification M6 / L3 / T5 for heavy-duty, continuous operation
- Single-layer winch operation with Kelly up to BK 260/394/3/30 (standard mast)
- A special grooving system on the drum and a rope pressure roller reduce wear on the wire rope
- Pinned connection for easy mounting and demounting of winches on mast
- Transparent ring for easy oil check





#### **Under carriage**

- Solid Bauer design for 360° working radius
- Hydraulically extendable tracks
- Large footprint to resist high overturning moments
- High traction forces



#### Modern, ergonomic cabin

- FOPS compliant
- Bauer comfort cab meets highest comfort standards
- High-resolution 7" color screen
- Clear layout of instruments and display screens
- Excellent view of drilling position
- Easy operation

#### **High-performance CAT engine**

- Conforming to exhaust emission standards Stage III A / Tier 3,
   China Stage III or Stage V / Tier 4 final
- Low fuel consumption due to optimized design of the hydraulic system
- Low noise emissions due to clever sound protection installation
- Worldwide CAT service partner network
- Entire exhaust gas treatment enclosed in upper carriage





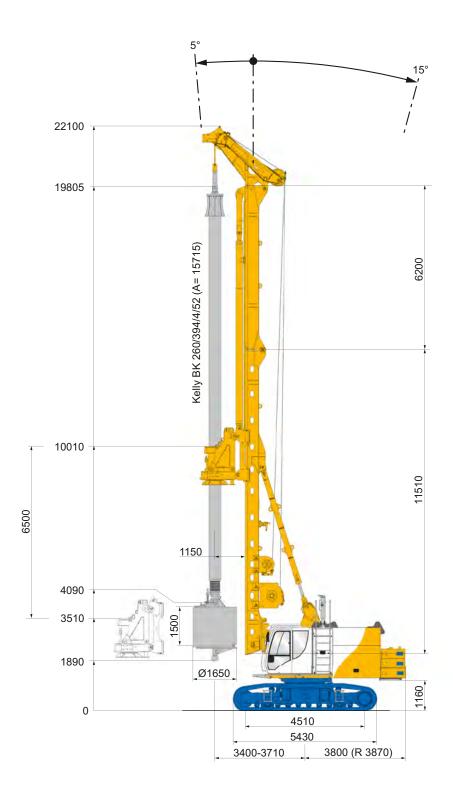
#### **HSE** safety features

- Integrated service platform for easy and safe maintenance work
- Maintenance work can be carried out from ground or platform level
- Hydraulic connections on rotary drive can be mounted from ground level
- Variably stackable counterweight elements
- Patented inclination monitoring system
- Continuous control of mast inclination for operator and banksman

#### Final inspection and test run

- Comprehensive Bauer test program
- Optimal adjustment and calibration of all main functions
- Heat transfer test
- Noise emission measurements
- Electromagnetic compatibility test







Operating weight approx. 81 t (as shown)

## **Technical Specifications**

Rotary drive			KDK 260 K	KDK 260 S
Torque (nominal) at 350 bar			264	264 kNm
Max. speed			24	54 rpm
KDK 260 K	standard mode	rpm reduced	$M_{\scriptscriptstyle D}$ reduced	
Not to scale	E	0 1 8	63 0 10 24	
KDK 260 S	1st gear	2nd gear	1st gear	2nd gear
	standard mode	rpm reduced	$M_D$ reduced	standard mode
Not to scale	M 0 40 40 40 40 40 40 40 40 40 40 40 40 4	0	70	121 32 0
Crowd cylinder	0 7 25 rpm	n n 08	0 10 25	0 14 54
	sh / pull (effective)			200 / 270 kN
Crowd force / line pull (measured at the casing drive adapter KI			(DK)	260 / 210 kN
Speed (down / up)				4.0 / 5.0 m/min
Fast speed (down / up)				20 / 20 m/min
Main winch				M6 / L3 / T5
Line pull (1st layer) effective / nominal				225 / 295 kN
Rope diameter				28 mm
Line speed (max.)				80 m/min
Auxiliary winch				M6 / L3 / T5
Line pull (1st layer) effective / nominal				80 / 100 kN
Rope diameter				20 mm
Line speed (max.)				55 m/min
Base carrier				BT 70
Engine			CAT C 9.3	CAT C 9.3
Rated output ISO 3046-1			280 kW	280 kW
			1,800 rpm	1,800 rpm
Engine conforms to EU 2016/1628			ORA *	Stage V
EPA/CARB				Tier 4 final
GB20891-2014			China Stage III	
Diesel tank capacity/AdBlue			730   / -	730   / 34.5
Ambient air temperature (at full power) up to				45° C
Sound pressure level in cabin (EN 16228, Annex B)				LPA 80 dB (A)
Sound pressure level (2000/14/EG and EN 16228, Annex B)				LWA 109 dB (A)
Hydraulic power output (measured at inlet to rotary drive)				195 kW
Hydraulic pressure				350 bar
Hydraulic oil tank capacity				650 I
Under carriage			UW 65	UW 80
Crawler type			B 6	B 7
Traction force effective / nominal			450 / 530 kN	520 / 440 kN

<sup>\*</sup> Exhaust emission equivalent Tier 3 / Stage III A emission standards

#### Base carrier

#### Standard

- Removable counterweights 7.5 t, Fig. A
- Engine diagnostic system
- Gratings on side and in front of operator's cab
- Integrated service platform
- Camera system for rear area surveillance
- Multigrade hydraulic oil
- Bauer comfort operator's cab (FOPS Standard), Fig. B
- On-board lighting set
- Air-conditioning system
- Radio with CD, MP3, USB and Bluetooth c/w hands-free kit
- Transport securing lugs on crawler unit
- On-board tool kit

#### Optional

- Counterweight variably adjustable (max. 14.9 t)
- Air compressor 1,000 l/min
- Central lubrication system
- Bauer service kit
- Arctic kit
- Cab space heater with automatic timer
- Bio-degradable oil for hydraulic system
- Protective roof guard
- Protective front windscreen guard
- Under carriage UW 80
- Triple grouser track shoes 800 mm
- Quick-release couplings for removable crawler side frames
- Service tool kit

#### **BG** attachment

#### **Standard**

- Bauer V-type kinematic system
- Mast head, for optional use with drill axis 1,150 or 1,350 mm, Fig. C
- Inverted crowd cylinder
- Crowd speed fast and slow mode
- Swivel for main rope
- Pivoted anchor point for main and auxiliary rope
- Transport supports for upper and lower mast section
- Centering device for rapid pin handling
- Graduated pins used on all mast joints
- Hydraulically controlled freewheeling

#### **Optional**

- Swivel for auxiliary rope
- Upper Kelly guide
- Drill axis 1,350 mm
- Attachment of casing oscillator up to BV 1500 HD-07 (with UW 80), Fig. D
- Thrust rods up to 1,900 mm







#### Rotary drive (KDK)

#### Standard

- Integrated Kelly damping system
- Exchangeable Kelly drive adapter assembly KA 500/394
- Exchangeable Kelly drive keys
- Quick-release couplers on hydraulic hoses
- 3 selectable modes of operation
- Easy assembly of rotary drive
- Wear pads exchangeable without removal of rotary drive
- Transport supports
- Trigger plate
- Lifting gear for rotary drive

#### **Optional**

- Rotary drive KDK 260 S (multi-gear)
- Cardanic joint
- Brake kit for automatic casing drive adapter, Fig. E
- Kelly drive adapter assembly KA 500/419

#### Measuring and control equipment

#### Standard

- Bauer extended monitor incl. integrated diagnostic function, Fig. F
- Display of faulty messages as plain text
- Digital display of pump pressure
- Mast inclination measurements on x/y axis (digital / analog display)
- Automatic vertical alignment of mast
- Optical mast inclination monitoring system
- Hydraulic load sensing on auxiliary winch
- Speed sensing device on KDK
- Hoist limit switch on main and auxiliary winch
- Defined torque setting for KDK
- Kelly drilling assistant
- Automatic crowd control
- One-directional spoil discharge assistant
- Bi-directional spoil discharge assistant
- Casing extraction assistant
- Automatic swivel alignment
- Electronic load sensing

#### **Optional**

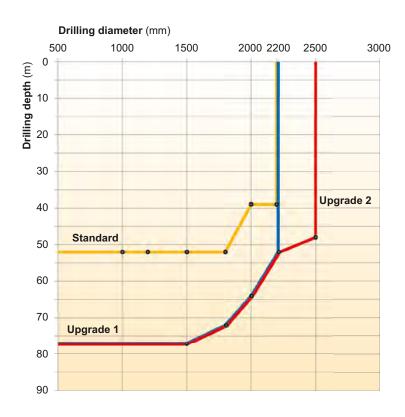
- Remote transmission of machine data (DTR module)
- Slewing angle display for upper carriage







#### Overview drilling capabilities (uncased)

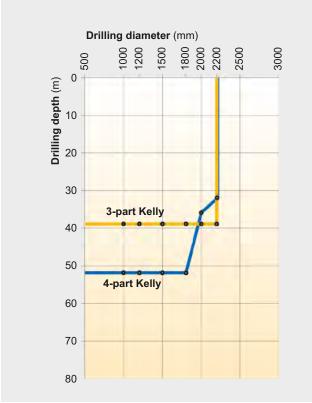


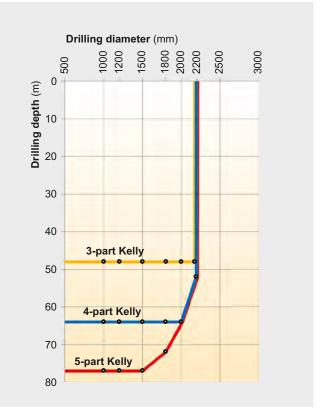
#### Rig configurations Standard Upgrade 1 Upgrade 2 1,150 mm 1,150 mm 1,350 mm Drilling axis Counterweight 7.5 t 12.5 t 14.9 t UW 65 UW 65 **UW 80** Under carriage Overall height 22.1 m 25.1 m 25.1 m for for cased Basic model for fluid-supported Kelly drilling (also with all-round use deep Kelly drilling casing oscillator)

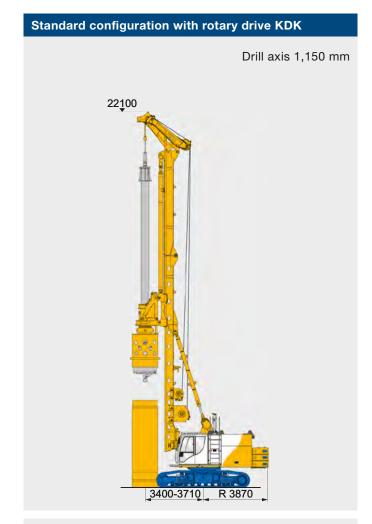
Data shown are valid for minimum horizontal mast reach and using BAUER attachment. For more information, please contact the BAUER Sales Department. Other configurations possible on request.



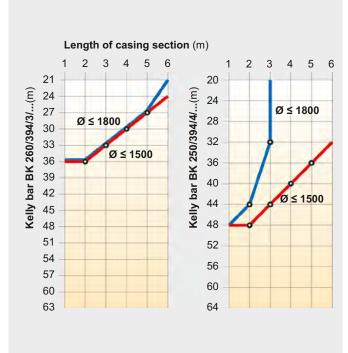


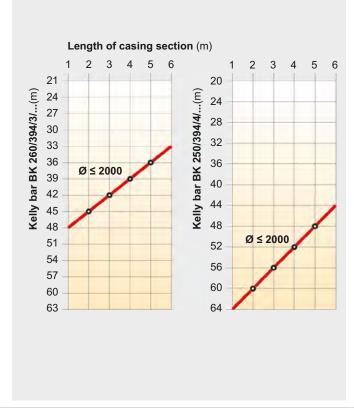


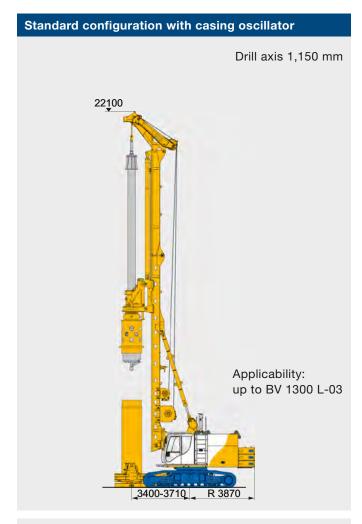




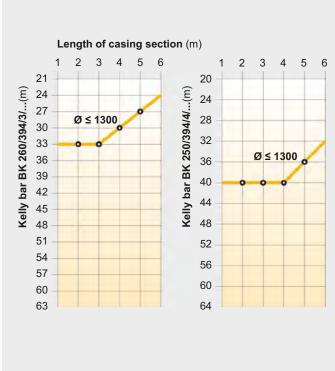


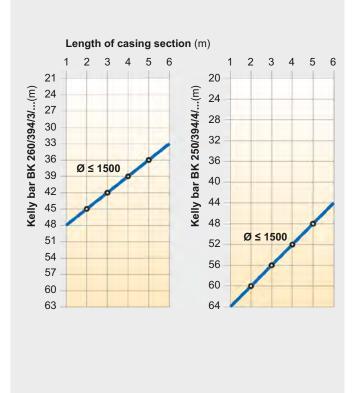










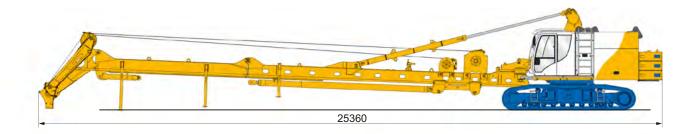




Rigging position for connecting of hydraulic hoses

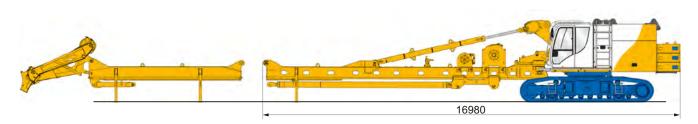
#### Health and safety features

- All hydraulic hoses of the KDK can be attached from ground level
- No overflow of hydraulic oil
- Applicable with all thrust rods



#### Transport weight (without upper mast section)

G = 59.5 t



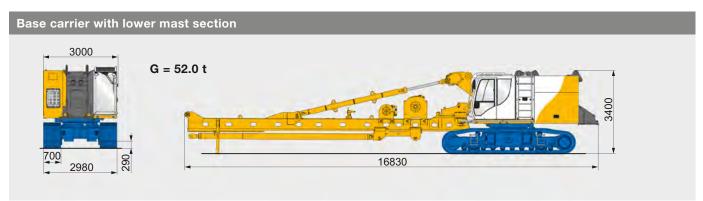
## Safe and simple disassembly of inverted crowd cylinder system

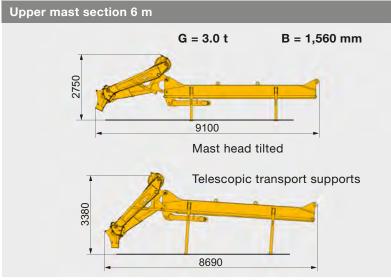
- Easy disassembly by removing one pin only
- No disconnection of hydraulic lines
- No hydraulic line in upper mast section
- Hydraulic hoses remain connected (minimized risk of leakages developing at couplings)

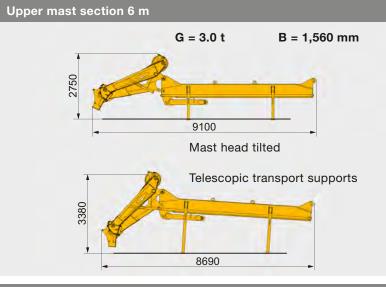
## **Transport – dimensions and weights**

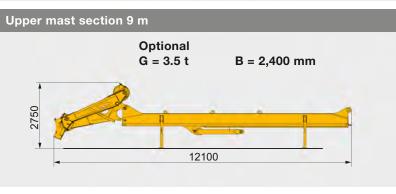
**G** = weight  $\mathbf{B} = \text{width}$ 

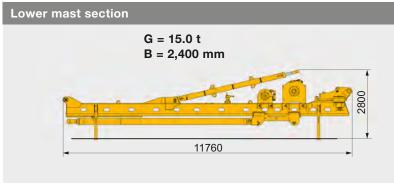
Weights shown are approximate values; optional equipment may change the overall weight and dimensions.



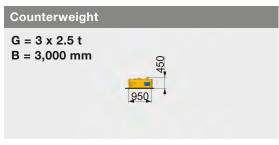


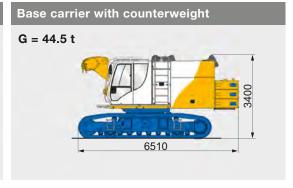


















BAUER Maschinen GmbH BAUER-Strasse 1 86529 Schrobenhausen Germany Phone: +49 8252 97-0 bma@bauer.de www.bauer.de

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.