

# BAUER BG 33

## Rotary Drilling Rig

Base Carrier BT 85

PremiumLine



## 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 20<sup>th</sup> 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 21<sup>st</sup> 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.



**1790**

Foundation as a copper forge in Schrobenhausen, Germany



**1928**

Well drilling in Bavaria, Germany



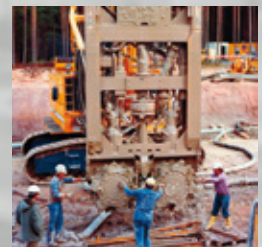
**1958**

Invention of the ground anchor by Dr.-Ing. K.H. Bauer



**1976**

First hydraulic rotary drill rig BAUER BG 7



**1984**

First diaphragm wall trench cutter BC 30

## 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



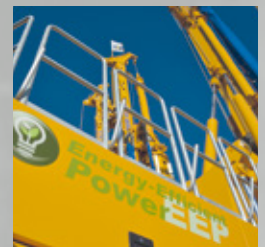
**2006**

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



**BG 23 H  
BT 65**



**BG 23 H  
BT 75**

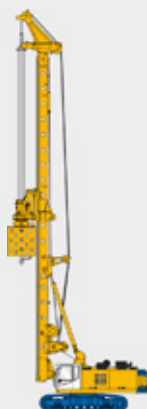
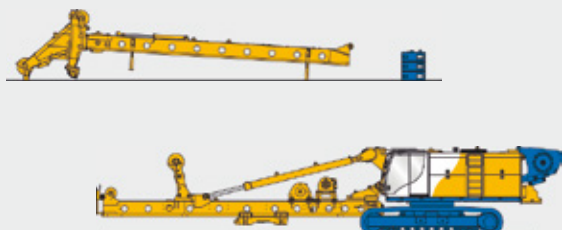


**BG 28 H  
BT 75**

## 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



**BG 28  
BS 80**



**BG 33  
BT 85**



**BG 36  
BS 95**



**BG 45  
BS 95**

## The Rotary Drilling Rig BG 33 PremiumLine (BT 85)

Max. drilling diameter: 2,500 mm  
 Max. drilling depth: 72.4 m  
 Torque (nominal): 342 kNm  
 Max. height: 30.3 m  
 Engine: CAT C 13 – Stage III A / Tier 3  
 – Stage V / Tier 4 final  
 354 kW @ 1,850 U/min



**BG 28 H  
BT 85**



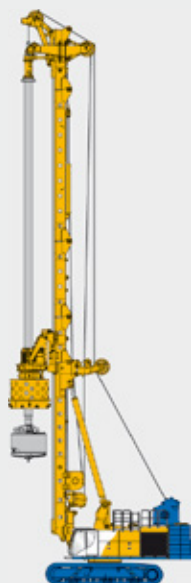
**BG 33 H  
BT 85**



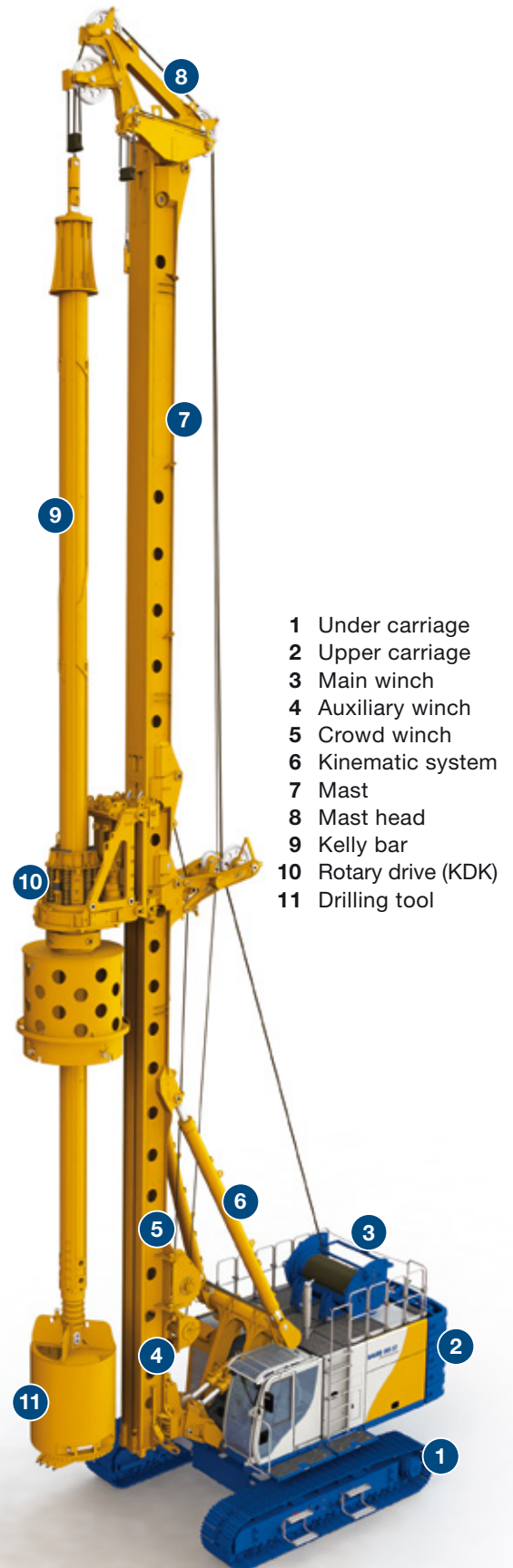
**BG 36 H  
BS 95**



**BG 55  
BS 115**



**BG 72  
BT 180**



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



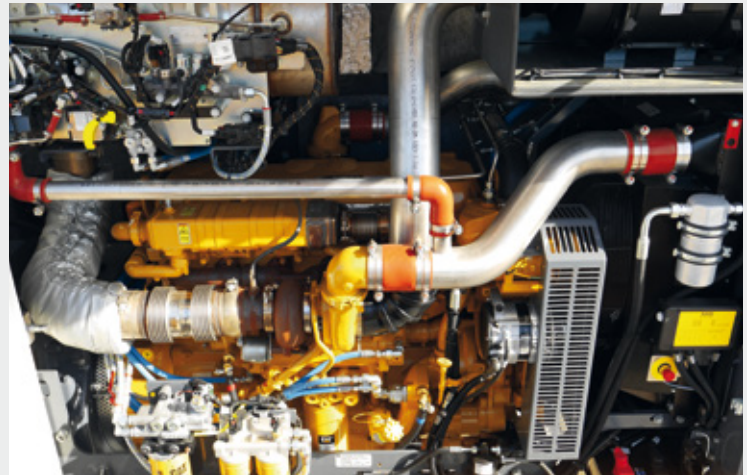
**Modern, ergonomic operator's cab**

- 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 1,100 expandable to 1,400 mm
  - Increased stroke for Kelly bars when using an upper Kelly guide
  - Tilttable main jib for single-pass processes and for optimized transport
- Vario-crowd system
  - Transport possible with built-in crowd ropes (Kelly method)
  - Reduced headroom version possible by means of integrated Vario-mast section
- Vario-mast section 2 m
- Vario-mast section 2m + mast extension 2 m (only Single-Pass)



**Powerful engine CAT**

- C 13 354 kW (Stage III / Tier 3, Stage V / Tier 4 final)
- Diesel particulate filter in Exhaust Emission Standard Stage V
- Low noise emission
- Worldwide CAT service partners

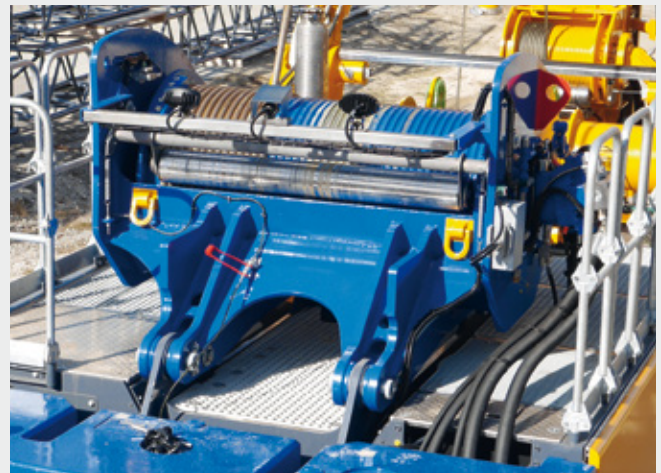


- Reduction of fuel consumption by up to 30%
- Increased productivity through improved efficiency
- Significantly reduced noise levels
- Tried and proven suitability for practical application
- Optimized parallel operation of main and auxiliary consumers



#### Main winch (on upper carriage)

- Single layer winch for minimized rope wear
- Constant line pull
- Designed for heavy continuous operation (M6 / L3 / T5)
- Service-friendly winch position
- Swing down mechanism for transport



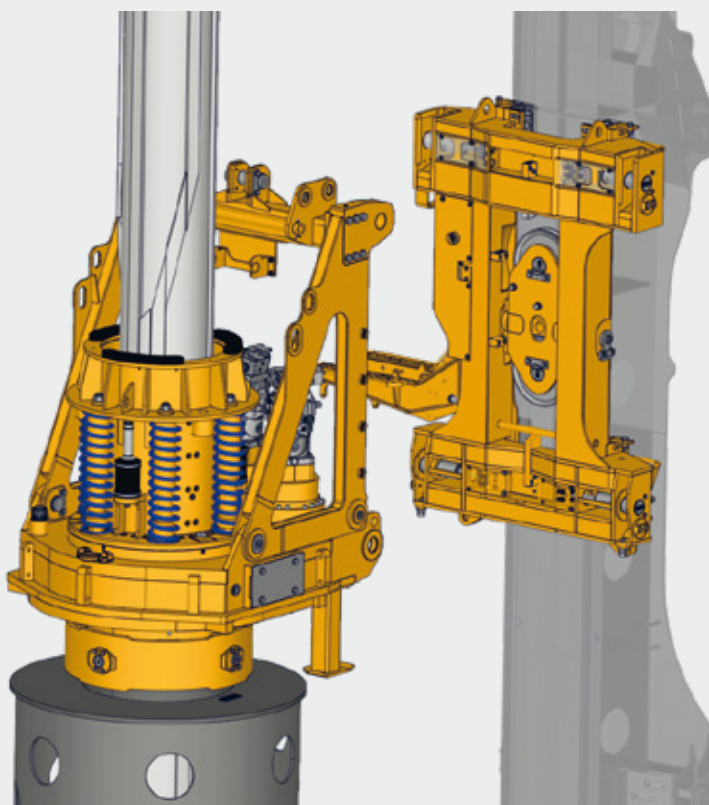
#### Safety equipment

- Guardrails on upper level (foldable for transport)
- Upward folding service doors
- Walking platform with handrail (foldable for transport)
- Rear view cameras
- Variable stackable counterweight elements with low weight of individual elements (4.9 t or 2.5 t)



#### 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 ground level



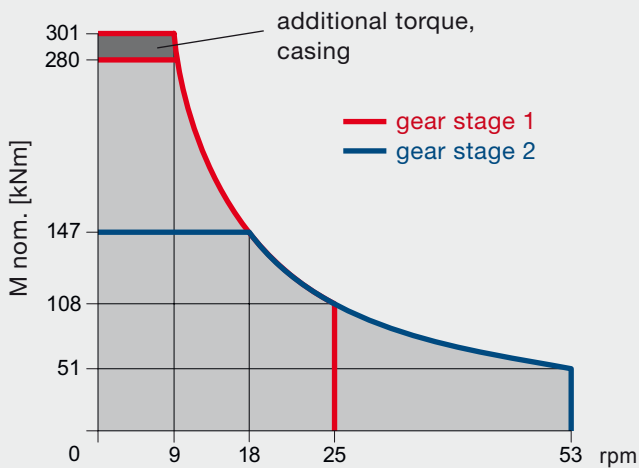
#### Rotary drive

- Optional KDK 300 K and 340 K (single gear drive) or KDK 300 S (multi gear drive)
- Max. torque casing 342 kNm
- Max. speed of rotation 50 rpm
- Various modes of operation, partially selectable speed of rotation and torque

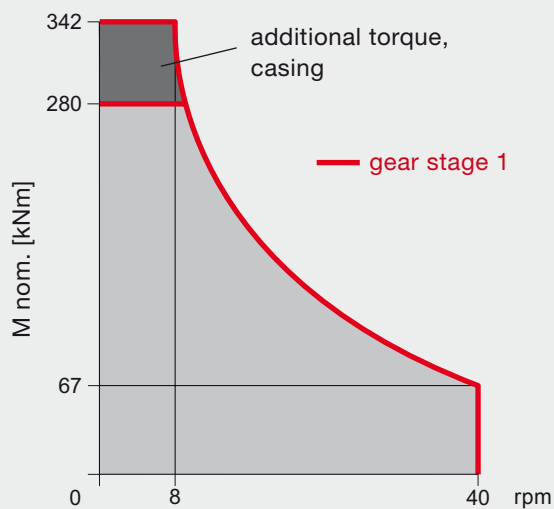
#### Hydraulically operated pin connection on the crowd sledge

- Pin connection controlled via remote control
- Simple and secure attachment of rotary drive, no working at heights unsecured

#### KDK 300 S



#### KDK 340 K



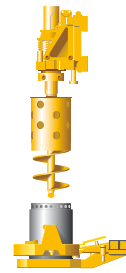




**Kelly Drilling**



**Cased Kelly Drilling**  
Installation with BTM



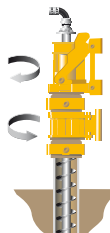
**Cased Kelly Drilling**  
Installation with Oscillator



**CFA**  
Continuous Flight  
Auger Method



**FDP**  
Full Displacement Piling  
(Standard or Lost Bit)



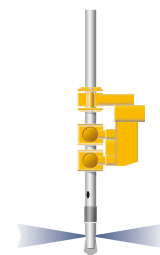
**CCFA**  
Cased CFA system with KDK +  
BTM / Double Rotary System



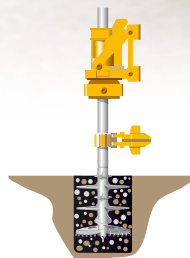
**TR**  
Vibrator



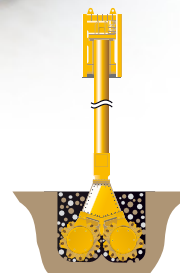
**FoW**  
Front of wall



**HDI**  
Jet Grouting

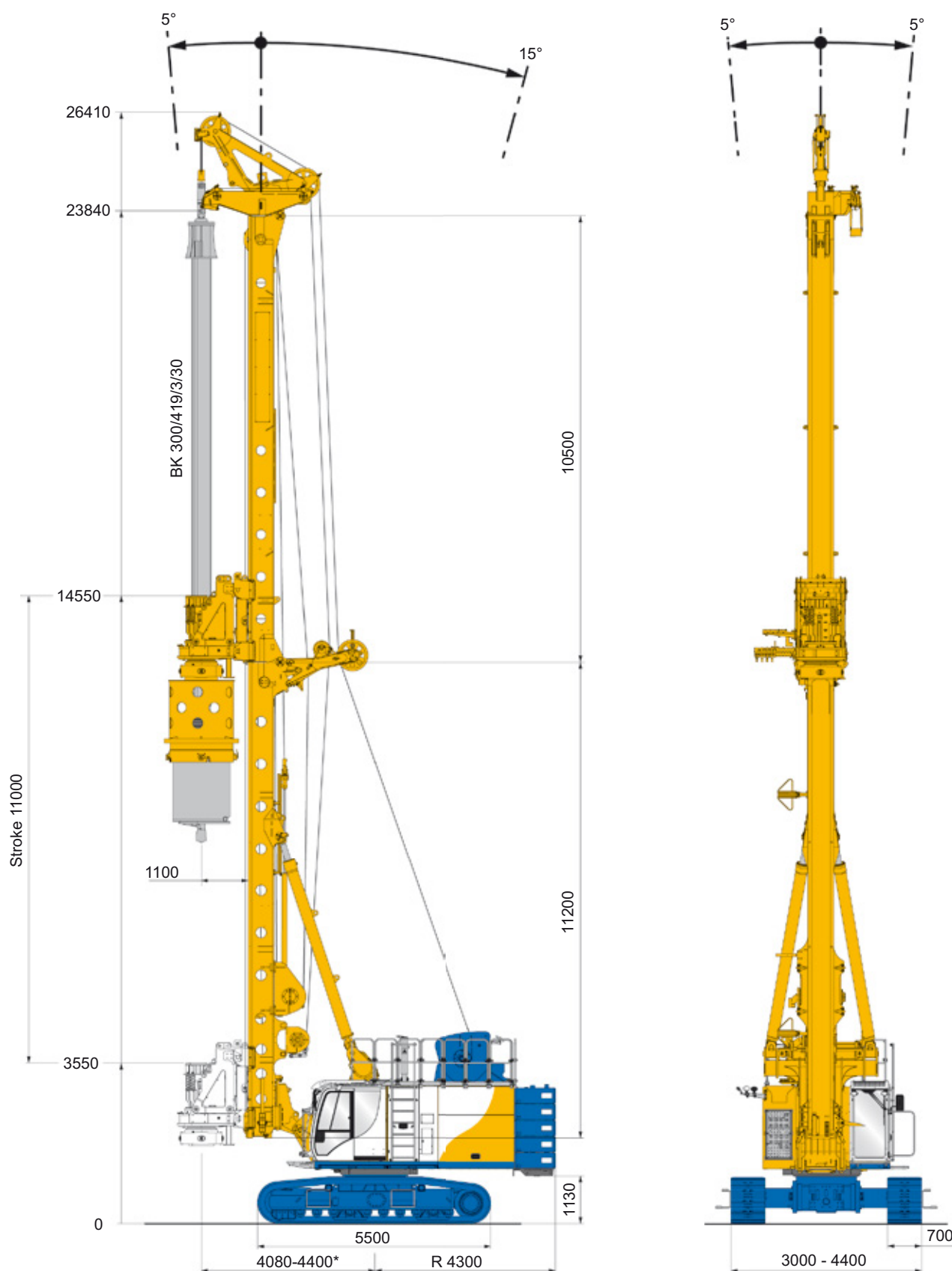


**SCM**  
Single Column Mixing



**CSM**  
Cutter Soil Mixing





**Operating weight 102.0 t**  
(as shown)

\* depending on equipment

Rotary drive	KDK 300 K	KDK 300 S	KDK 340 K
Torque casing (nominal) at 350 bar	294 kNm	301 kNm	342 kNm
Torque drilling (nominal) at 350 bar	281 kNm	280 kNm	280 kNm
Speed of rotation (max.)	30 rpm	53rpm	40rpm
Crowd winch system			
Max. sledge stroke with 2 m Vario + 2 m mast extension	23,000 mm		
Crowded force push and pull, effective / nominal	330 / 423 kN		
Rope diameter	24 mm		
Speed (down / up)	9.0 m/min		
Fast speed (down / up)	32.5 m/min		
Main winch (selectable)	single-layer	multi-layer	
Winch classification	M6 / L3 / T5		
Line pull (1st layer) effective / nominal	265 / 335 kN	274 / 350 kN	
Rope diameter	32 mm		
Line speed (max.)	80 m/min	75 m/min	
Auxiliary winch (selectable)			
Winch classification	M6 / L3 / T5		
Line pull (1st layer) effective / nominal	80 / 100 kN	100 / 125 kN	
Rope diameter	20 mm		
Line speed (max.)	55 m/min		
Base carrier (EEP)		BT 85	
Engine	CAT C 13		
Rated output ISO 3046-1	354 kW @ 1,850 rpm		
Exhaust emission EEC 97/68 EC standard acc. to EPA/CARB	Stage III A / Tier 3		Stage V / Tier 4 final
Diesel tank capacity / AdBlue Tank	730 / – l	730 / 34.5 l	
Sound pressure level in the cabin (EN 16228, Annex B)	LP <sub>A</sub> 80 dB (A)		
Sound power level (2000/14/EC u. EN 16228, Annex B)	LW <sub>A</sub> 112 dB (A)		
Hydraulic pressure	350 bar		
Hydraulic oil tank capacity	650 l		
Flow rates	2 x 320 + 1 x 565 + 1 x 215 l/min		
Under carriage		UW 80 UW 100	
Crawler type	B 7		
Traction force effective / nominal	520 / 630 kN	730 / 860 kN	



**Base carrier BT 85**

**Standard**

- Removable counterweight elements
- Protective roof guard
- Radio with MP3, USB and Bluetooth hands-free kit
- Grating in front of cab
- Retractable grating on side of cab
- Electric refueling pump
- Energy-Efficient Power (EEP)
- Premium operator seat
- Cameras for rear area and main winch surveillance
- Integrated service platforms
- Central lubrication system
- LED spotlights
- Climatronic
- Guard rails on the upper level (foldable for transport)

**Optional**

- Counterweight, variably adjustable
- Integrated service platform (electrically retractable / extendable)
- High-pressure cleaner with water tank
- Compressor 1,000 l/min
- Electric generator 13 kVA
- Bio-degradable hydraulic oil
- Arctic kit / Arctic kit plus
- Cab space heater incl. time switch
- Additional camera (at customized location)
- Rear support unit, **Fig. A**
- Front screen guard
- Weather protection
- Remote control Basic, **Fig. B**
- Remote control Multi

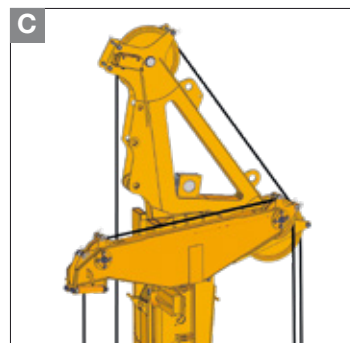
**Drilling rig attachment**

**Standard**

- Sturdy V-type mast kinematic system
- Main winch with hydraulic free-fall control
- Hydraulic locking for support trestle
- Swivel for main rope
- Vario-mast head, **Fig. C**
- Pivoted anchor point for auxiliary rope

**Optional**

- Upper Kelly guide
- Extension of drill axis to 1,400 mm
- Hydraulic bolt connection on rotary sledge for easy mounting and demounting of rotary drive
- Mast support unit
- Mast extension 2 m (only Single-Pass)
- Vario-crowd system with Vario-mast section 2 m
  - Transport possible with built-in crowd ropes (Kelly operation)
  - Reduced headroom version, possible with integrated Vario-mast section 2 m, **Fig. D**
- Lattice mast extension
- Swivel for auxiliary rope
- Attachment of casing oscillator up to BV 1500 with UW 80 or up to BV 2000 with UW 100, **Fig. E**
  - Powered by on-board hydraulics of the base carrier
  - Controlled from operator's cab
  - Weight of drilling rig can be activated by mechanical coupling
- Attachment of automatic casing drive adapter
- Attachment of Kelly auger cleaner
- Concrete line attachment
- Air line attachment



## Rotary drive

### Standard

- Rotary drive KDK 300 K (single-gear drive)
- Selectable modes of operation
- Kelly drive adapter for outer Kelly tube 419 mm
- Integrated Kelly damping system
- Exchangeable Kelly drive keys
- Cardanic joint
- Quick-release hydraulic couplers
- Transport supports
- Lifting gear

### Optional

- Rotary drive KDK 300 S (multi-gear drive)
- Rotary drive KDK 340 K (single-gear drive)
- Kelly drive adapter for outer Kelly tube 394 / 470 mm
- Torque multiplier BTM 720 K Kelly drilling
  - Torque 420 kNm (nominal)
  - Increase of torque for casing installation
  - Easy attachment
  - Separate sledge
  - Connection to rotary drive with cardanic joint
- Torque multiplier BTM 400 for CCFA

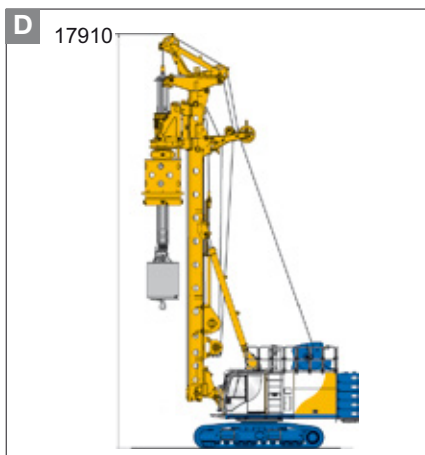
## Measuring and control system

### Standard

- PLC processor for all electrically actuated functions
- Automatic mast alignment with memory function
- 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
- Automatic drilling and extraction control for Single-Pass processes
- Preliminary set-up for BAUER Concrete Link



### 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



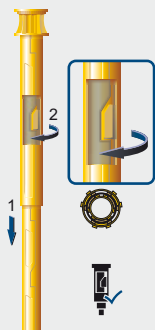


## Adaptive Kelly speed assistant

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.

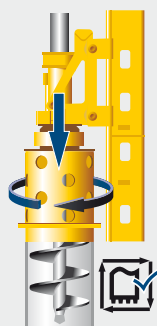
This provides maximum safety with minimum wear.

The permanent monitoring of the parameters prevents a locked Kelly bar from being raised or lowered accidentally and thus causing damage.



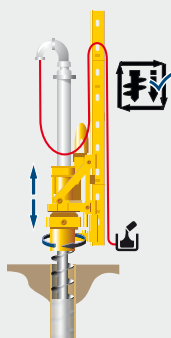
## Kelly visualization

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.



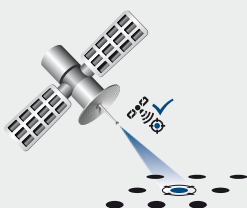
## Kelly drilling assistant

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

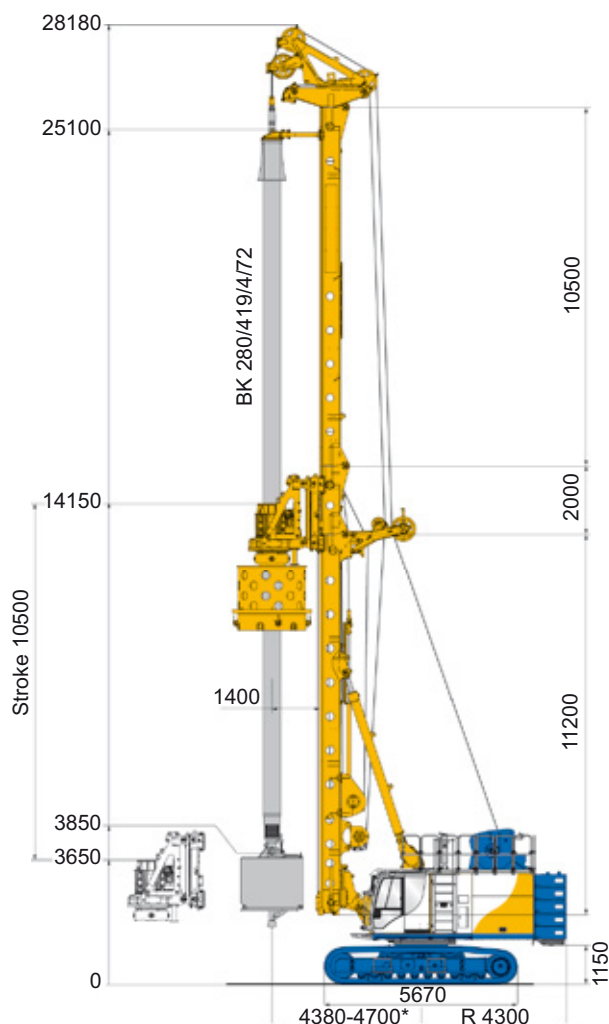
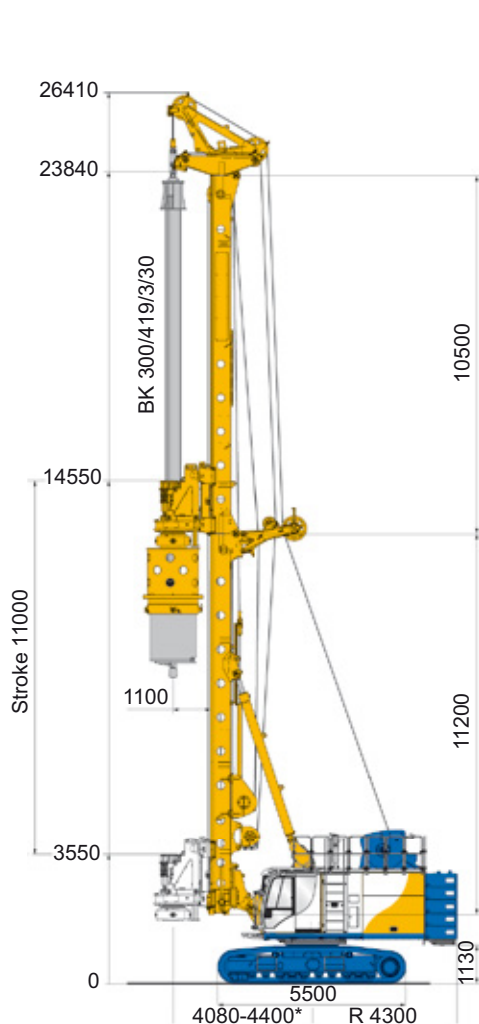
The system controls the drilling and/or extraction speed of the crowd system and enables hands-free operation. This ensures the production of a high-quality pile while simultaneously minimizing the amount of concrete.



## Satellite-based positioning

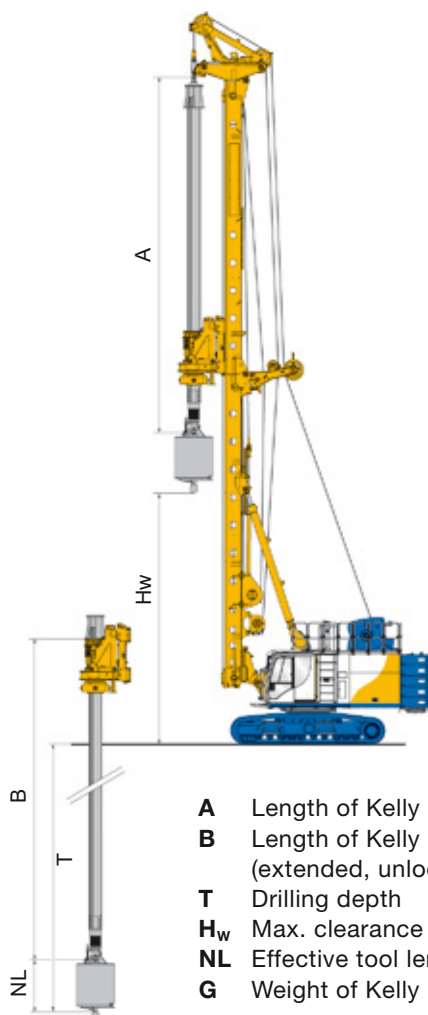
The BAUER Assistant Positioning System (B-APS) allows the position of a bored pile to be located extremely accurately. Documentation is provided for the nominal and actual coordinates, as well as the corresponding accuracy of each bored pile. Manual marking of the piles is no longer required.

Numerous other assistance systems are available in our portfolio.



	Basic version	Upgraded version
Under carriage	UW 80	UW 100
Rotary drive	KDK 300 K/S	KDK 340 K
Mast extension	without	2 m Vario
Upper Kelly guide	without	with
Drilling axis	1,100 mm	1,400 mm
Max. drilling diameter		
uncased	1,900 mm	2,500 mm
cased	1,600 mm	2,200 mm
Operating weight approx.	102 t	132 t
with Kelly	BK300/419/3/30	BK280/419/4/72
with casing drive adapter	Ø 1,500 mm	Ø 2,000 mm
with bucket	Ø 1,350 mm	Ø 1,830 mm
with counterweight *	14.9 t	29.4 t

\* depending on equipment



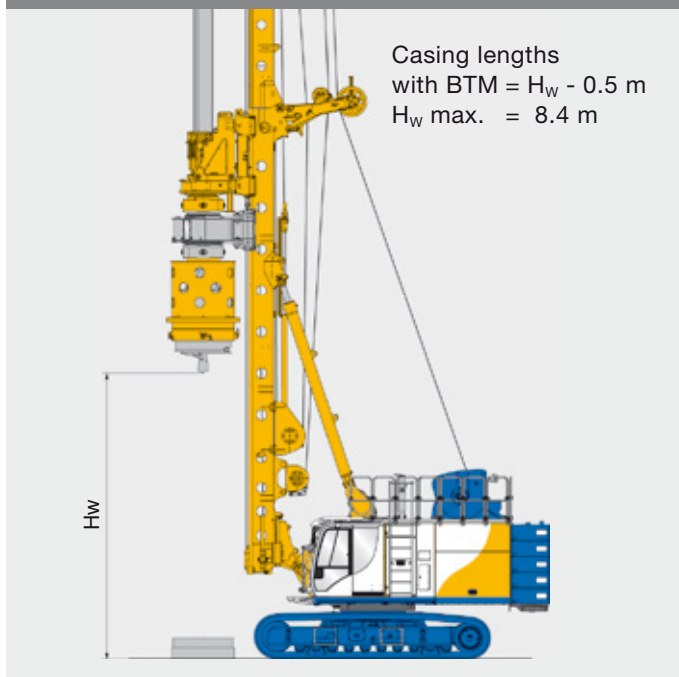
#### Drilling depths – uncased Kelly drilling

				Basic version		Upgraded version	
3-part Kelly	A (m)	B (m)	G (kg)	H <sub>w</sub> (m)	T (m)	H <sub>w</sub> (m)	T (m)
BK300/419/3/27	11.7	29.4	5,850	9.6	27.5	9.6	27.6
BK300/419/3/30	12.7	32.4	6,300	9.0	30.5	9.6	30.6
BK300/419/3/33	13.7	35.4	6,700	8.0	33.5	9.3	33.6
BK300/419/3/36	14.7	38.4	7,100	7.0	36.5	8.3	36.6
BK300/419/3/39	15.7	41.4	7,550	6.0	39.5	7.3	39.6
BK300/419/3/42	16.7	44.4	8,150	5.0	42.5	6.3	42.6
4-part Kelly							
BK280/419/4/36	12.3	38.2	8,300	9.4	36.3	9.6	36.4
BK280/419/4/40	13.3	42.2	8,900	8.4	40.3	9.6	40.4
BK280/419/4/44	14.3	46.2	9,550	7.4	44.3	8.6	44.4
BK280/419/4/48	15.3	50.2	10,200	-	-	7.6	48.4
BK280/419/4/56	17.3	58.2	11,400	-	-	5.6	56.4
BK280/419/4/64	19.3	66.2	12,650	-	-	3.6	64.4
BK280/419/4/68	20.3	70.2	13,300	-	-	2.6	68.4
BK280/419/4/72	21.3	74.2	14,000	-	-	1.6	72.4

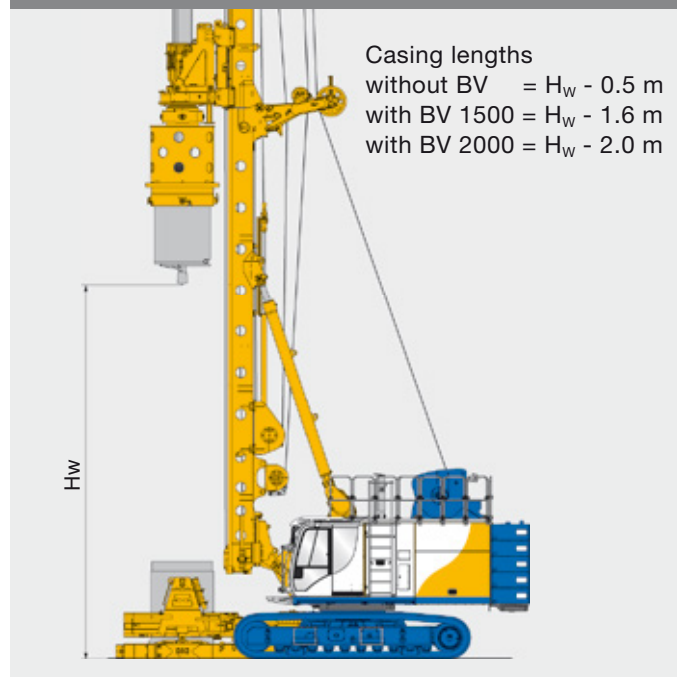
Drilling data as shown are based on tool length NL = 1.9 m, minimum horizontal mast reach and using Bauer attachment. Drilling depth is increased by 0.32 m when using maximum horizontal mast reach.

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

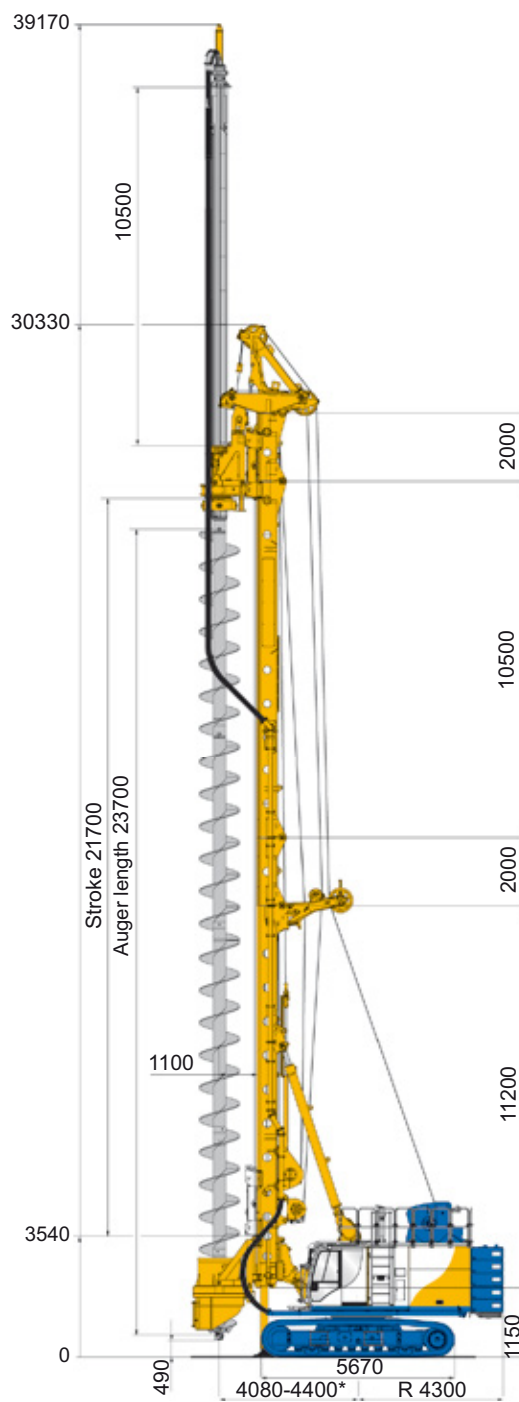
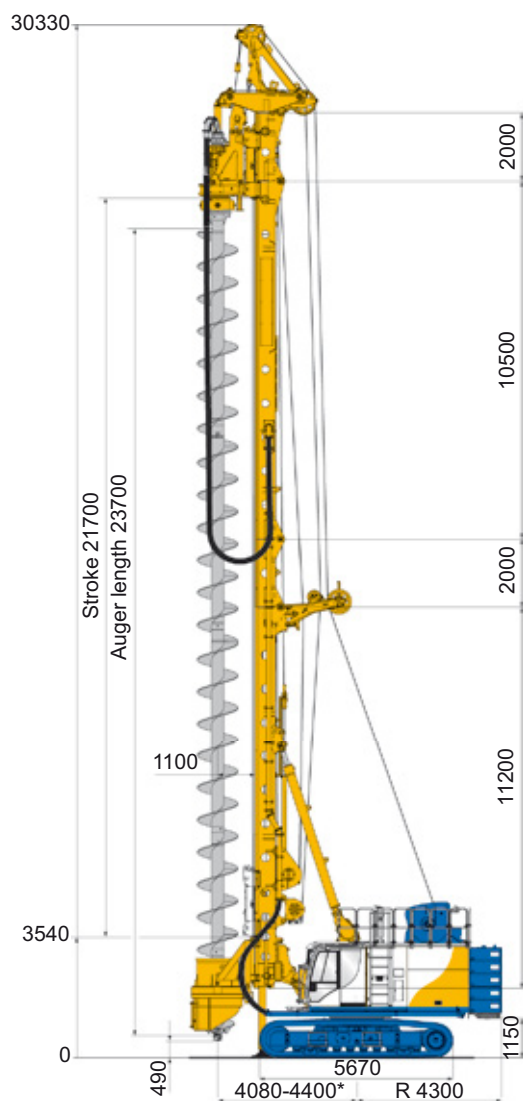
#### Torque multiplier BTM 720 for a torque of 420 kNm for casing



#### Kelly drilling with casing oscillator up to BV 1500 (UW 80) or up to BV 2000 (UW 100)

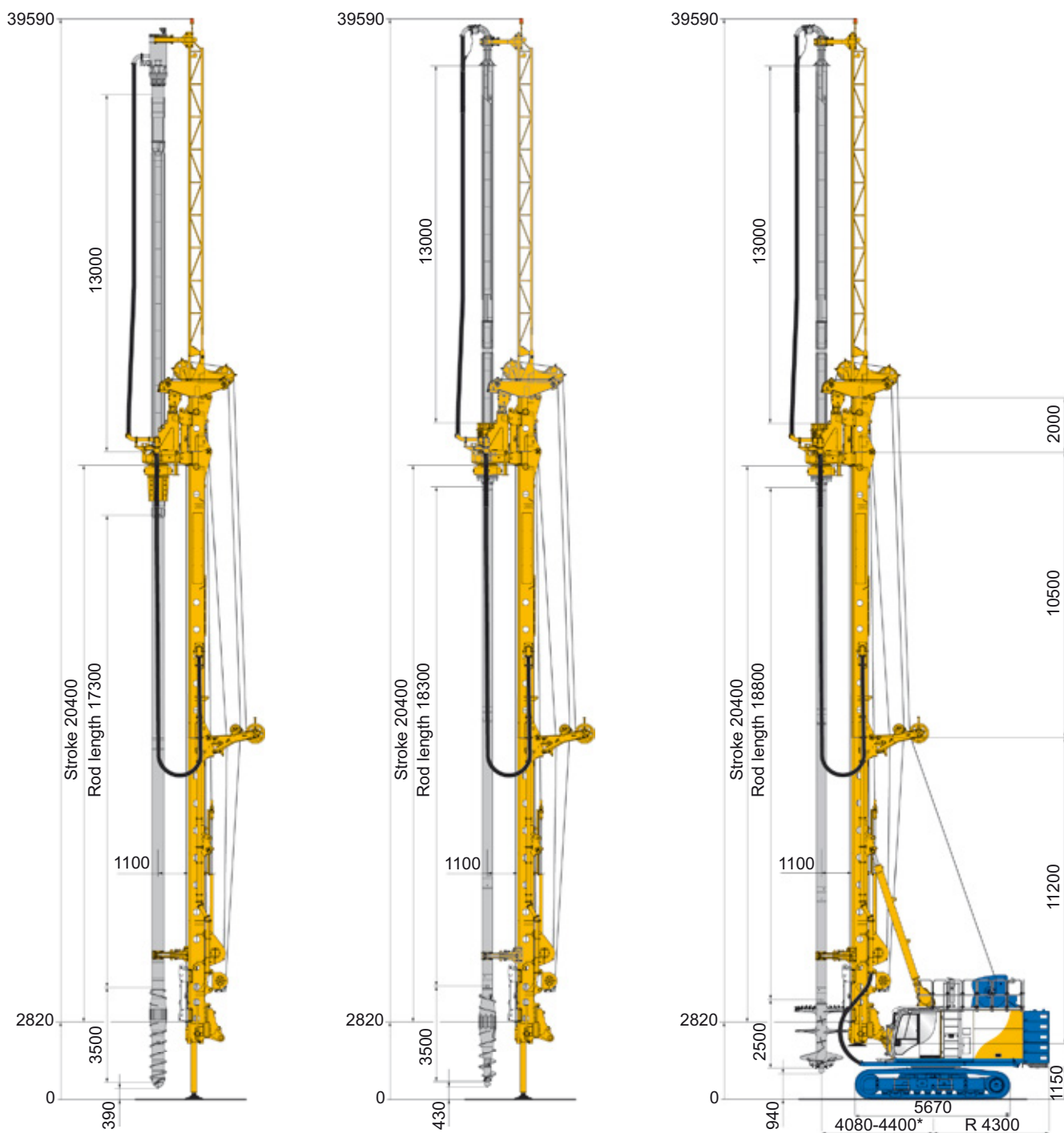






	Basic version	Upgraded version
Under carriage	UW 100	UW 100
Mast extension	2 m + 2 m Vario	2 m + 2 m Vario
Kelly extension	without	10.5 m
Max. drilling diameter	1,180 mm	1,180 mm
Max. drilling depth (with auger cleaner)	21.3 m	31.8 m
Max. extraction force with main and crowd winch (effective)	830 kN	830 kN
With counterweight *	14.9 t	19.7 t

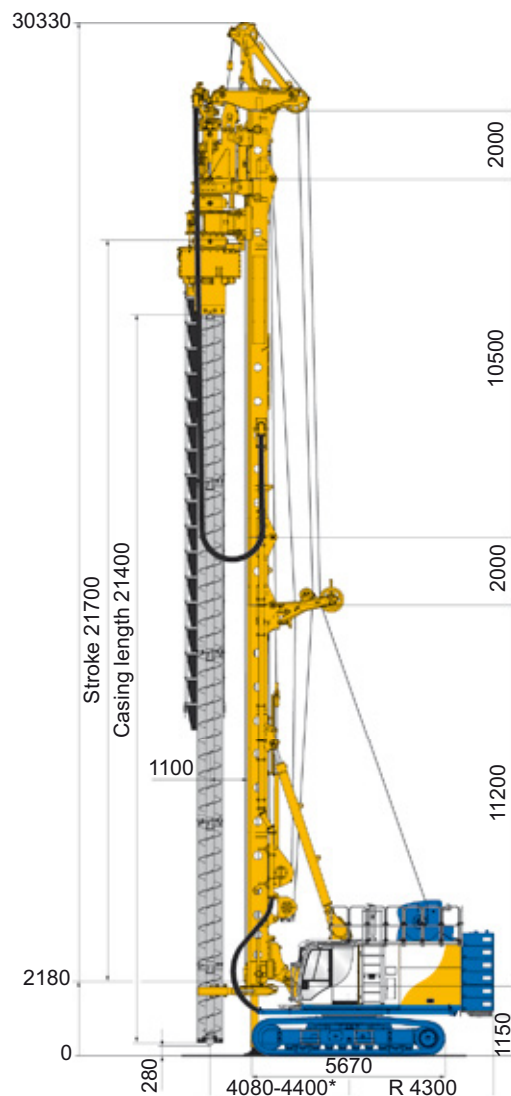
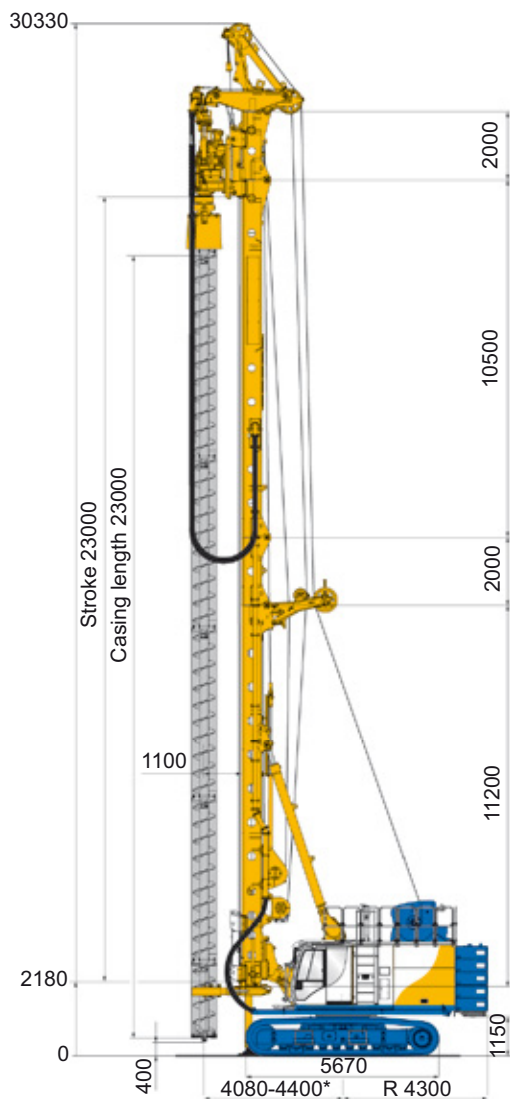
\* depending on equipment



	FDP Lost-Bit drilling	FDP drilling	SCM mixing
Under carriage	UW 100	UW 100	UW 100
Mast extension	2 m Vario	2 m Vario	2 m Vario
Kelly extension	13.0 m	13.0 m	13.0 m
Max. drilling and mixing diameter	620 mm	620 mm	1,900 mm (2,500 mm**)
Max. drilling and mixing depth	33.0 m	33.0 m	32.5 m
Max. extraction force with main and crowd winch (effective)	830 kN	830 kN	830 kN
With counterweight *	17.3 t	14.9 t	14.9 t

\* depending on equipment

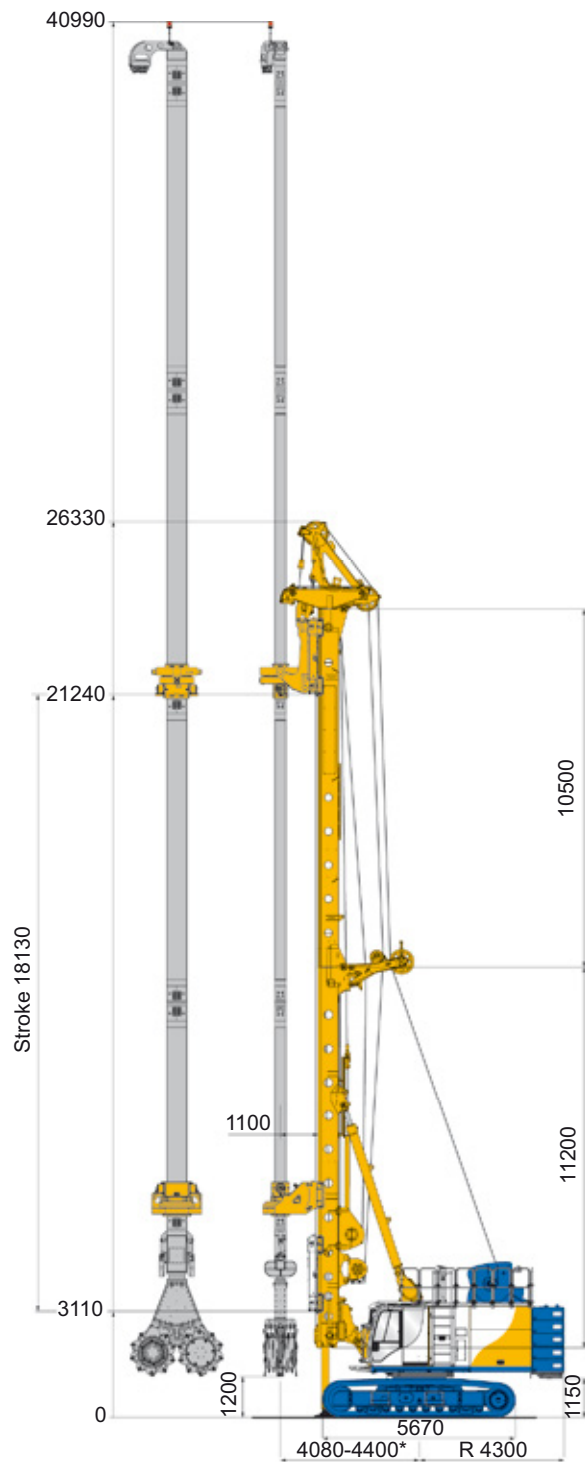
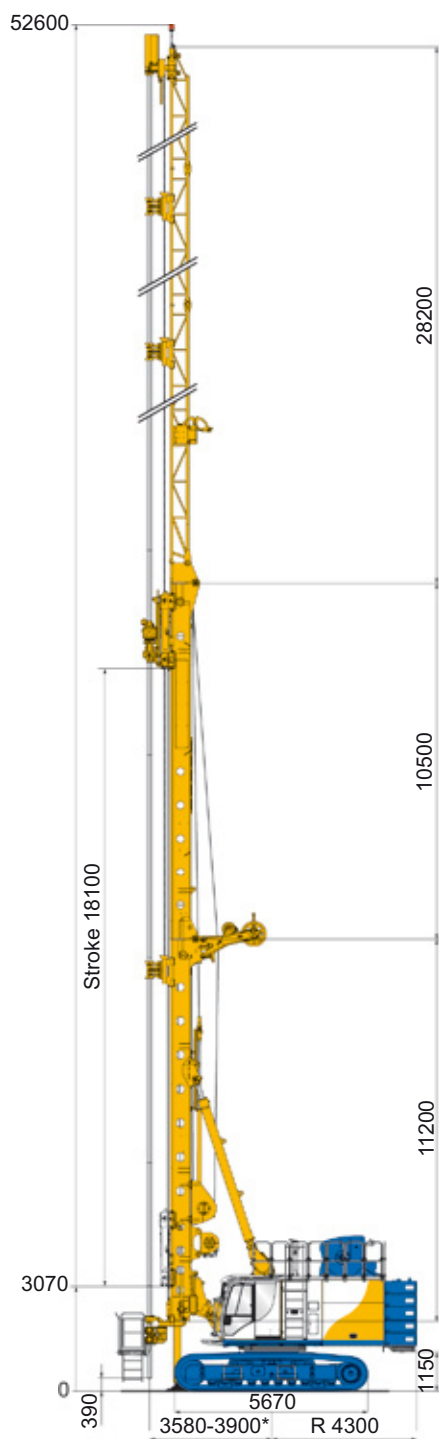
\*\* operation only with special equipment



	FoW drilling		CCFA drilling	
	DKS 50 / 140	DKS 100 / 200	with BTM 400	
Mast extension	2 m + 2 m Vario	2 m + 2 m Vario	2 m + 2 m Vario	not possible
Under carriage	UW 100	UW 100	UW 100	UW 100
Max. drilling diameter	610 mm	750 mm	750 mm	880 mm
Max. drilling depth	22.5 m	22.5 m	21.3 m	17.3 m
Max. extraction force with main and crowd winch (effective)	500 kN	530 kN	830 kN	830 kN
Max. torque:				
Auger (right-hand rotation)	50 kNm	100 kNm	200 kNm	200 kNm
Casing (left-hand rotation)	140 kNm	200 kNm	400 kNm	400 kNm
Ejection system	without	optional	Standard	Standard
With counterweight *	14.9 t	24.5 t	29.4 t	24.5 t

\* depending on equipment





Jet Grouting	
Lattice mast	28.2 m
Rod diameter	89 - 133 mm
Max. jetting depth	43.3 m
Rotary drive	KDK 14 S
Max. extraction force with crowd winch (effective)	330 kN
With counterweight *	24.5 t

CSM mixing **		
Cutter / mixing head	BCM 5	BCM 10
Panel width	1,000 mm	1,200 mm
Panel length	2,400 mm	2,800 mm
Max. mixing depth	34.7 m	

\* depending on equipment

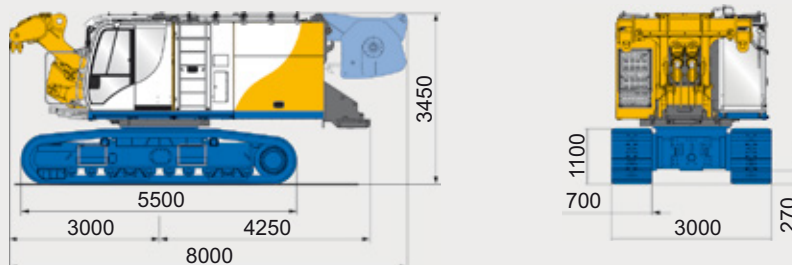
\*\* For detailed information see brochure "Cutter-Soil-Mixing - Process and Equipment" 905.656.2

**G** = Weight  
**B** = Width

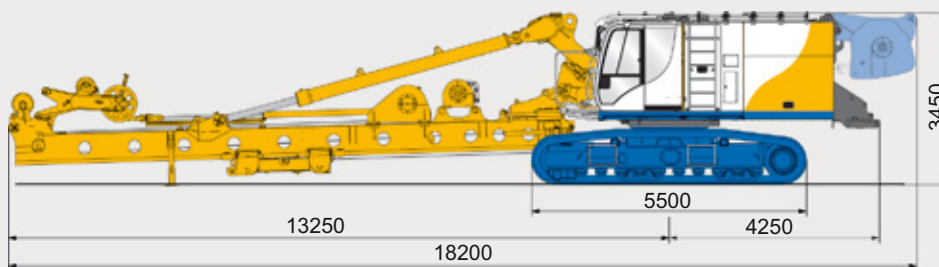
Weights shown are approximate values;  
optional equipment may change the overall  
weight and dimensions.

## Transport with UW 80

**G = 45.3 t**  
**G = 49.5 t (with main winch 265 kN)**

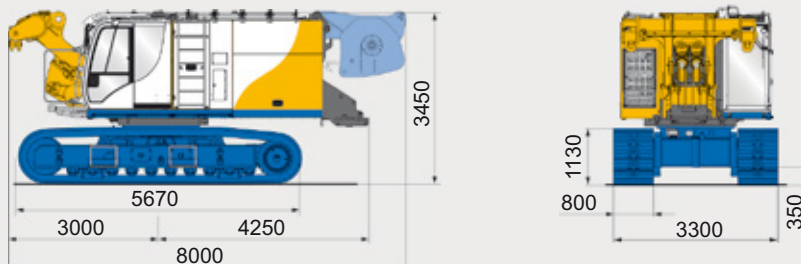


**G = 61.2 t**  
**G = 65.4 t (with main winch 265 kN)**

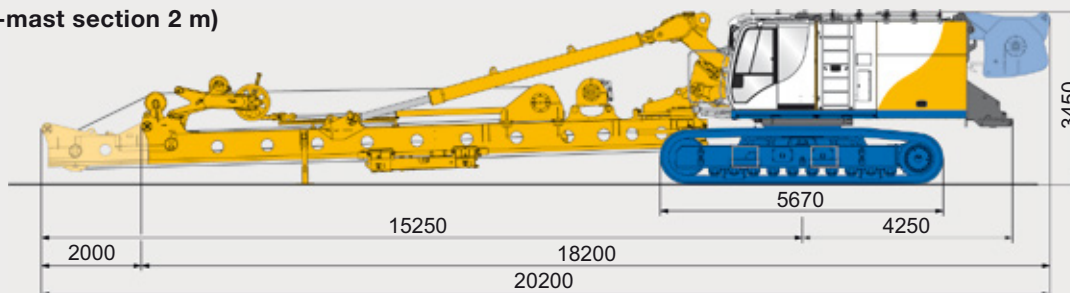


## Transport with UW 100

**G = 47.0 t**  
**G = 51.2 t (with main winch 265 kN)**



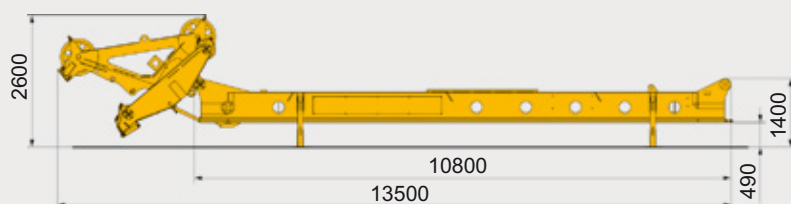
**G = 62.7 t**  
**G = 66.9 t (with main winch 265 kN)**  
**G = 68.2 t (with main winch 265 kN and Vario-mast section 2 m)**



Width of crawlers retracted / extended	UW 80	UW 100
Track shoes 700 mm	3,000 - 4,400 mm	-
Track shoes 800 mm	3,300 - 4,500 mm	3,300 - 4,500 mm
Track shoes 900 mm	3,400 - 4,600 mm	3,400 - 4,600 mm

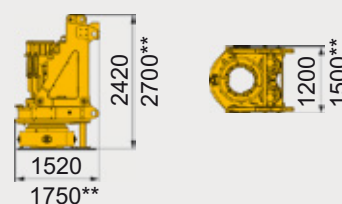
#### Upper mast section with mast head

**G = 4.8 t**  
**B = 1,700 mm**



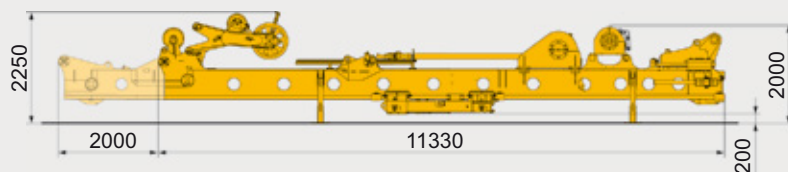
#### Rotary drive

**G = 5.2 t (KDK 300 K)**  
**G = 5.5 t (KDK 300 S)**  
**G = 6.7 t (KDK 340 K) \*\***



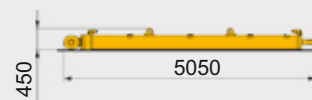
#### Lower mast section

**G = 13.5 t**  
**G = 14.8 t (with Vario-mast section 2 m)**  
**B = 2,100 mm**



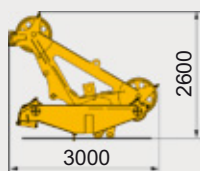
#### Backstay cylinder

**G = 2 x 1.2 t**  
**B = 300 mm**



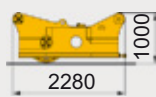
#### Mast head

**G = 1.4 t**  
**B = 1,300 mm**



#### Vario-mast section 2 m

**G = 1.3 t**  
**B = 900 mm**



#### Mast extension 2 m

**G = 1.0 t**  
**B = 900 mm**



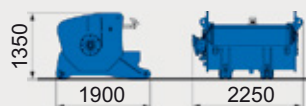
#### Counterweight \*

**G = 4 x 2.5 + 1 x 4.9 t**  
**B = 3,000 mm**



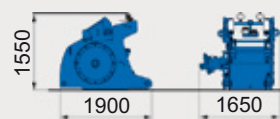
#### Main winch 265 kN

**G = 4.2 t (with 100 m rope)**



#### Main winch 274 kN

**G = 3.4 t (with 95 m rope)**



\* depending on application



# BAUER Service



Global Network



Service



Equipment



Training

## International Service Hotline

**+800 1000 1200\*** (freecall)

**+49 8252 97-2888**

**BMA-Service@bauer.de**

\* Where available

**24/7**



**BAUER Maschinen GmbH**  
**BAUER-Strasse 1**  
**86529 Schrobenhausen**  
**Germany**  
**Tel.: +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.

*PremiumLine*