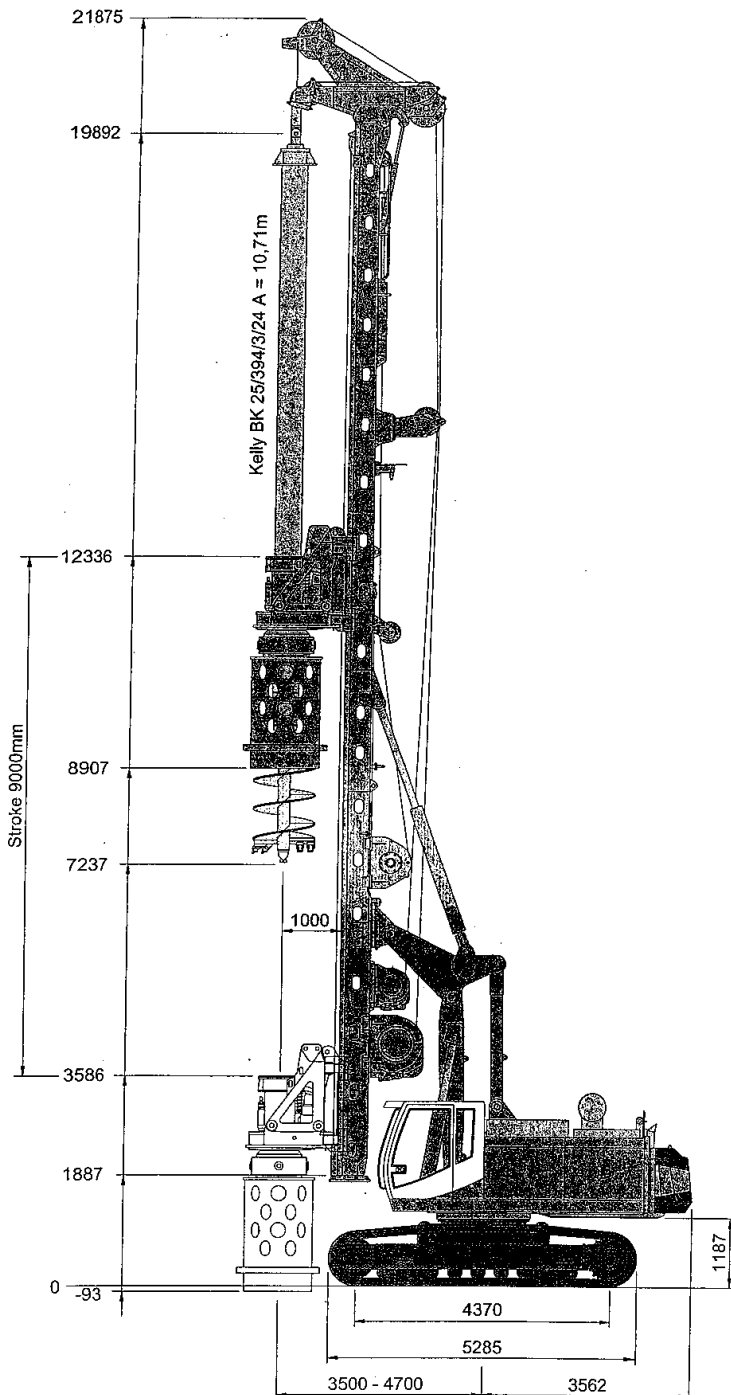


Bauer Rotary Drilling Rig BG24H



Dimensions



The rotary drilling rig **BG 24H** has an operating weight of approx. 77 to and a torque of 233 kNm. It is ideally suited for constructing:

- cased boreholes (installation of casing by rotary drive or optionally by hydraulic oscillator – both are powered by the drilling rig)
- uncased deep boreholes that are stabilized by drilling fluid
- boreholes with long hollow stem augers (CFA system), with or without Kelly extensions
- special drilling systems, such as FoW piles, displacement piles, soil-mixing-wall system (SMW)

The BG24H features the following equipment as **standard**:

- mast inclination measuring system x/y direction c/w automatic mast adjustment
- depth and load sensing device on main winch
- hydraulic rope tensioning cylinder for rope of crowd winch
- quick couplings for hydraulic hoses at the rotary drive
- mast head can be tilted automatically to reduce overall transport height

Technical Data

Base Carrier BS 70C

Power unit	CAT C9
Rated output ISO 3046-1	260 kW @ 1800 U/min (RPM)
Engine conforming to EEC 97/68EC Stage 2 and EPA/CARB TIER II	
Hydraulic system	
Hydraulic power (measured at fitting plate)	179 kW
Hydraulic pressure	300 bar
Flow rates (main circuits + auxiliary circuit)	2 x 250 l/min + 1 x 135 l/min
Tank capacity	600 l
Undercarriage	UW 70
Retractable crawlers	Typ B 6
Track width	2.300 / 3.700 mm
Overall width of crawlers	3.000 / 4.400 mm
Tripe bar track shoes	700 mm
Overall length of crawler units	5.285 mm
Traction force	473 kN
Travel speed	1,6 km/h

Optional equipment:

- Connections for casing oscillator (BV 1300-06)
- Rotary drive with spin-off facility
- Central lubrication
- Main winch and auxiliary winch with free-fall facility
- Line pull indicator for auxiliary winch
- Depth control on crowd winch
- Hydraulic mast support module
- Auger cleaner
- Automatic casing drive adapter
- Air compressor
- Electric generator
- Kelly guide to mast
- Mast access ladder and walkway at rotary drive
- Mast extension 2m
- B-TRONIC electronic monitoring and control system for
 - Monitoring and control of drilling operations
 - Acquisition of operating data
 - Visualisation of Kelly position

CFA – Drilling System

BG 24H BS 70C

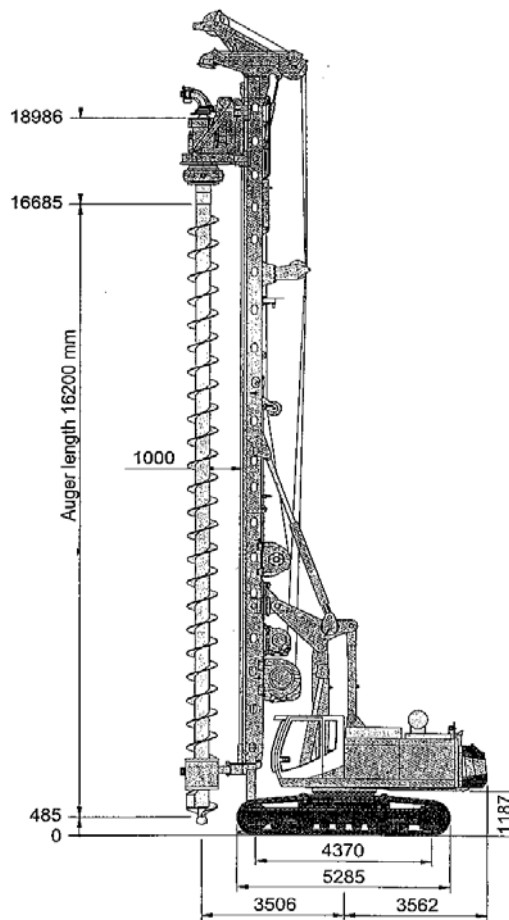
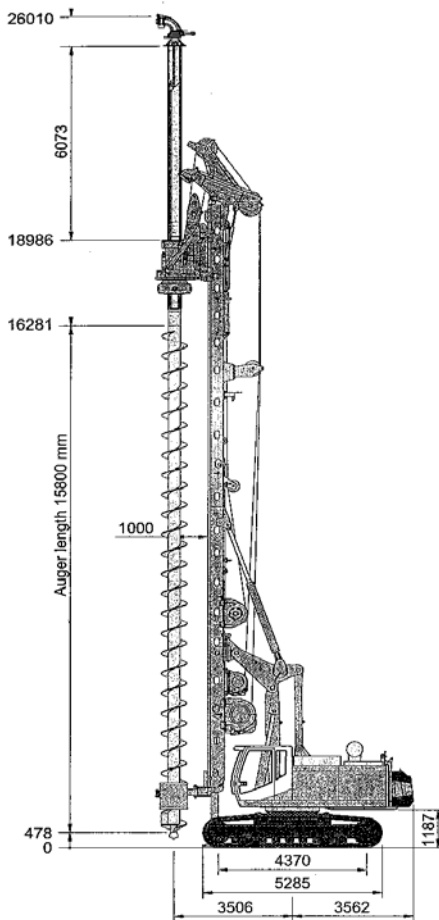
Options

- Hydraulically operated auger guide
- Fixed concrete pipe on the mast
- Concrete pipe connection on rotary drive

	Standard model	With Kelly extension
Kelly extension	-	6,0 m
Drilling depth with auger cleaner ¹	13,9 m	19,9 m
Drilling depth without auger cleaner ¹	14,9 m	20,9 m
Max. drilling diameter	1.000 mm	1.000 mm
Crowd force	330 kN (730 kN) ²	
Max. extraction force (sheaved)	200 kN + self weight	
Continuous flight auger length L	16,2 m	15,8 m

¹ Drilling depth w/o walkway

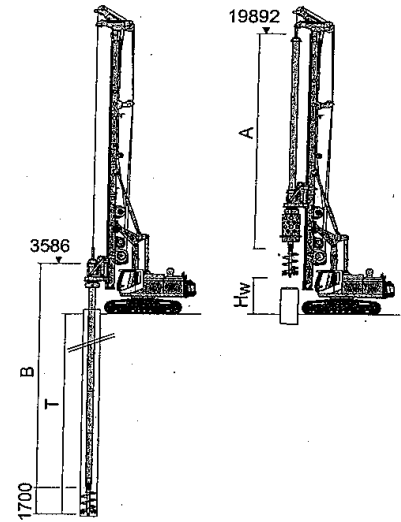
² Crowd winch + main winch (sheaved)



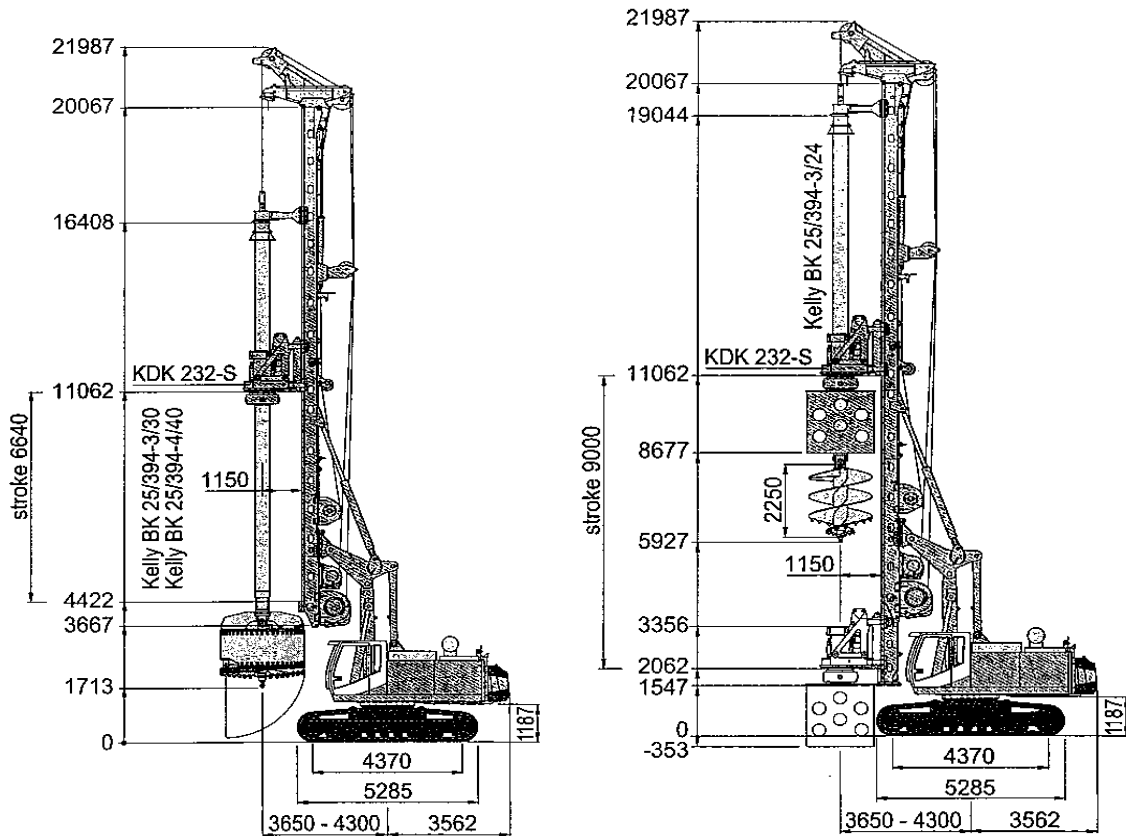
Drilling Data

Kellytyp Type of kelly bar	A (m)	B (m)	Gewicht Weight (kg)	Hw (m)	T (m)
BK25/394/3/24	10,71	27,20	4.700	7,10	25,50
BK25/394/3/27	11,71	30,20	5.120	6,10	28,50
BK25/394/3/30	12,71	33,20	5.530	5,10	31,50
BK25/394/3/36	14,71	39,20	6.350	3,10	37,50
BK25/394/4/32	10,71	35,47	6.850	7,10	33,80
BK25/394/4/36	11,71	39,47	7.150	6,10	37,80
BK25/394/4/40	12,71	43,47	7.730	5,10	41,80
BK25/394/4/48	14,71	51,47	8.850	3,10	49,80
BK25/394/4/52	15,71	55,47	9.450	2,10	53,80

Kelly System



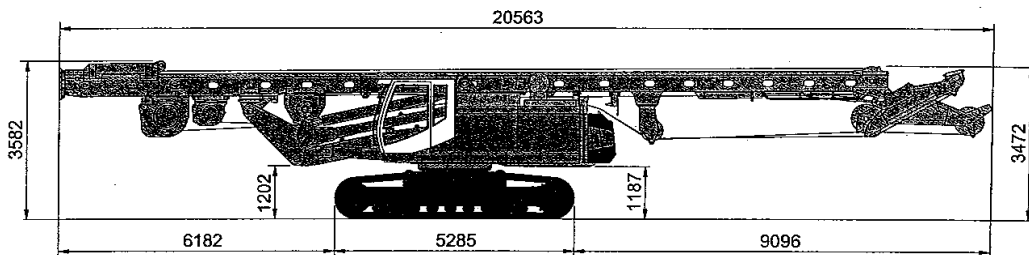
Alternative Mast System



Transport Data

Rig (without rotary drive, with counterweight)	66.500
Rotary drive	5.000
Counterweight	8.000 + 2.000 + 2.000
Transport width	3.000 mm
Transport height	3.600 mm

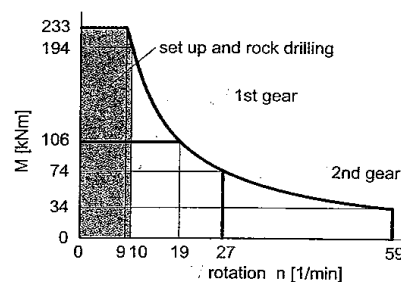
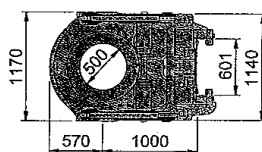
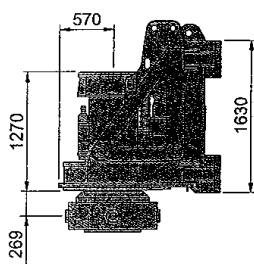
- Weights shown are approximate values only and given in kg.
- Optional equipment may change the overall weight.



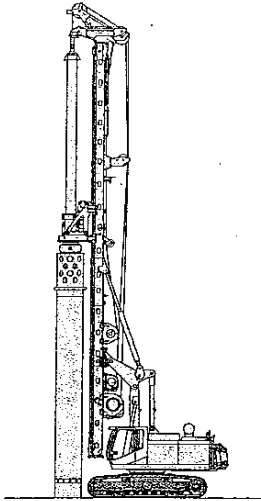
Technical Data

Overall height	21.875 mm
Operating weight approx. (with Kelly BK25/394/3/24)	77.500 kg
Rotary Drive	KDK 232 S
1 st gear: torque at 300 bar	233 kNm
1 st gear: speed of rotation max	27 U/min (RPM)
2 nd gear: torque at 300 bar	106 kNm
2 nd gear: speed of rotation max	59 U/min (RPM)
Crowd Winch	
Crowd pressure / pull	200 / 330 kN
Stroke height (Kelly system)	9.000 mm
Stroke height (CFA system)	15.400 mm
Crowd speed (down/up)	6,5 / 6,5 m/min
Fast crowd speed (down/up)	25 / 25m/min
Main Winch	
LDC winch (winch classification M6 / L3 / T5)	
Single line pull (1 st layer)	200 kN
Rope diameter / Length	28 mm / 66 m
Line speed max.	100 m/min
Auxiliary Winch	
No free-fall facility	
Single line pull (1 st layer)	80 kN
Rope diameter / Length	20 mm / 50 m
Line speed max.	57 m/min
Mast Inclination	
Backward / forward / lateral	15° / 5° / ± 8°

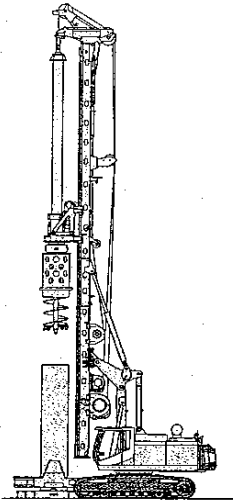
Rotary Drive KDK 232 S



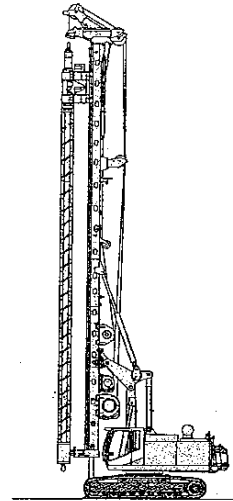
Drilling Systems



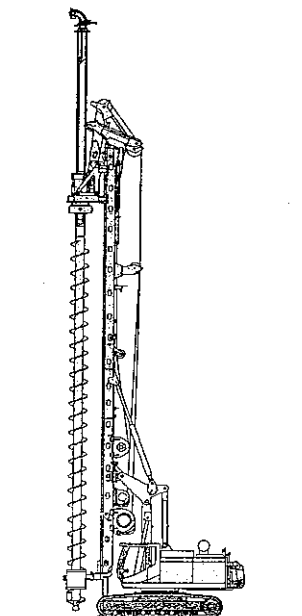
Drilling with Kelly, installation of casing by rotary drive



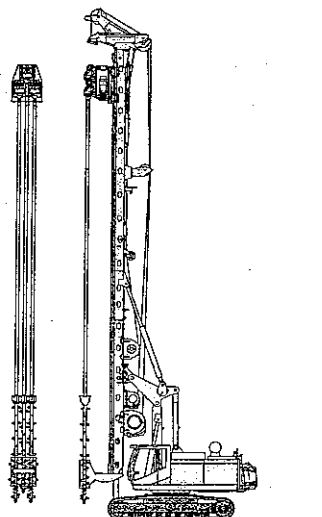
Drilling with Kelly, installation of casing by casing oscillator



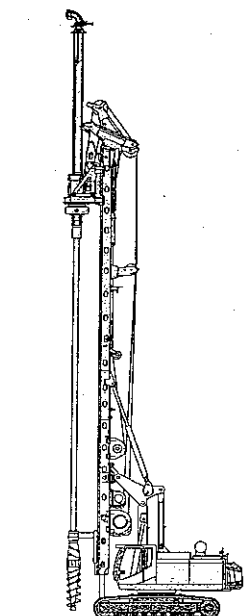
Drilling with twin rotary drive (FoW)



Drilling with continuous flight auger (CFA)



Soil Mixing System (SMW)



Displacement auger system