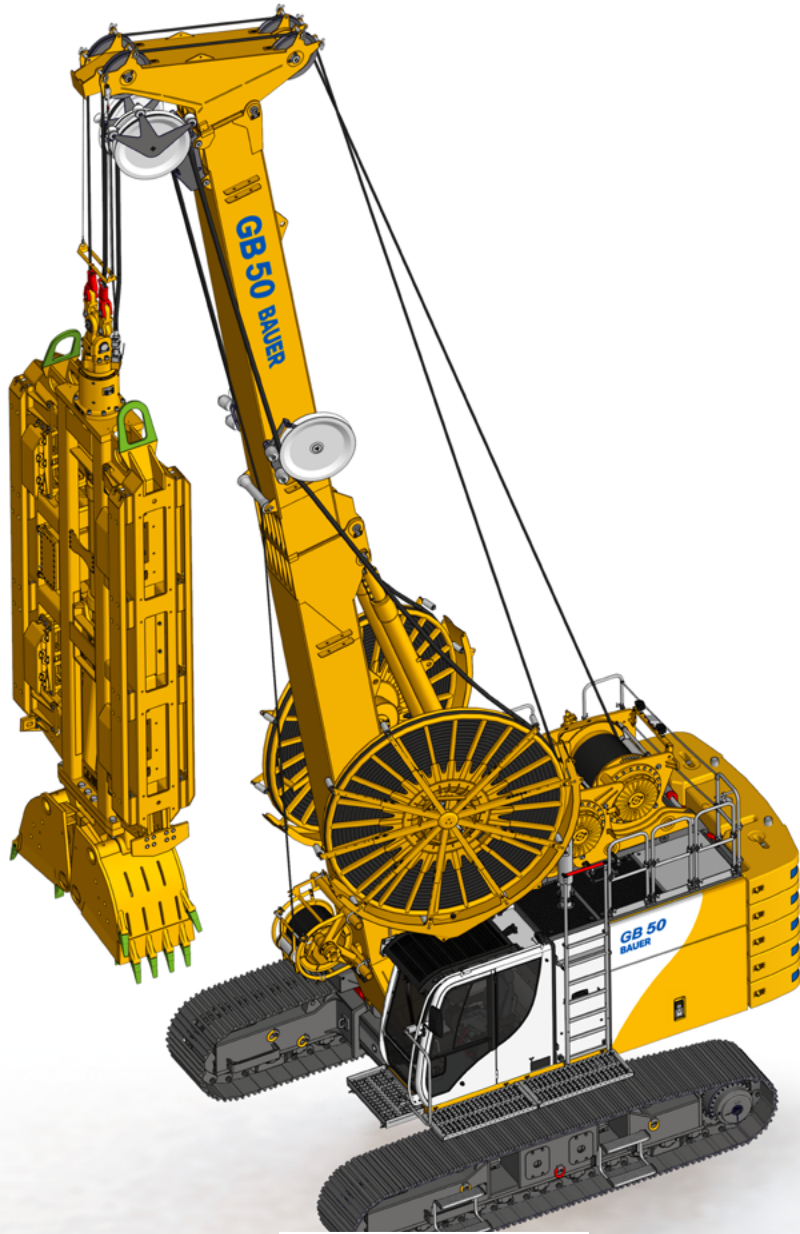


BAUER GB 50

Hydraulic Grab Carrier with GB 50 Low Headroom

Grab System

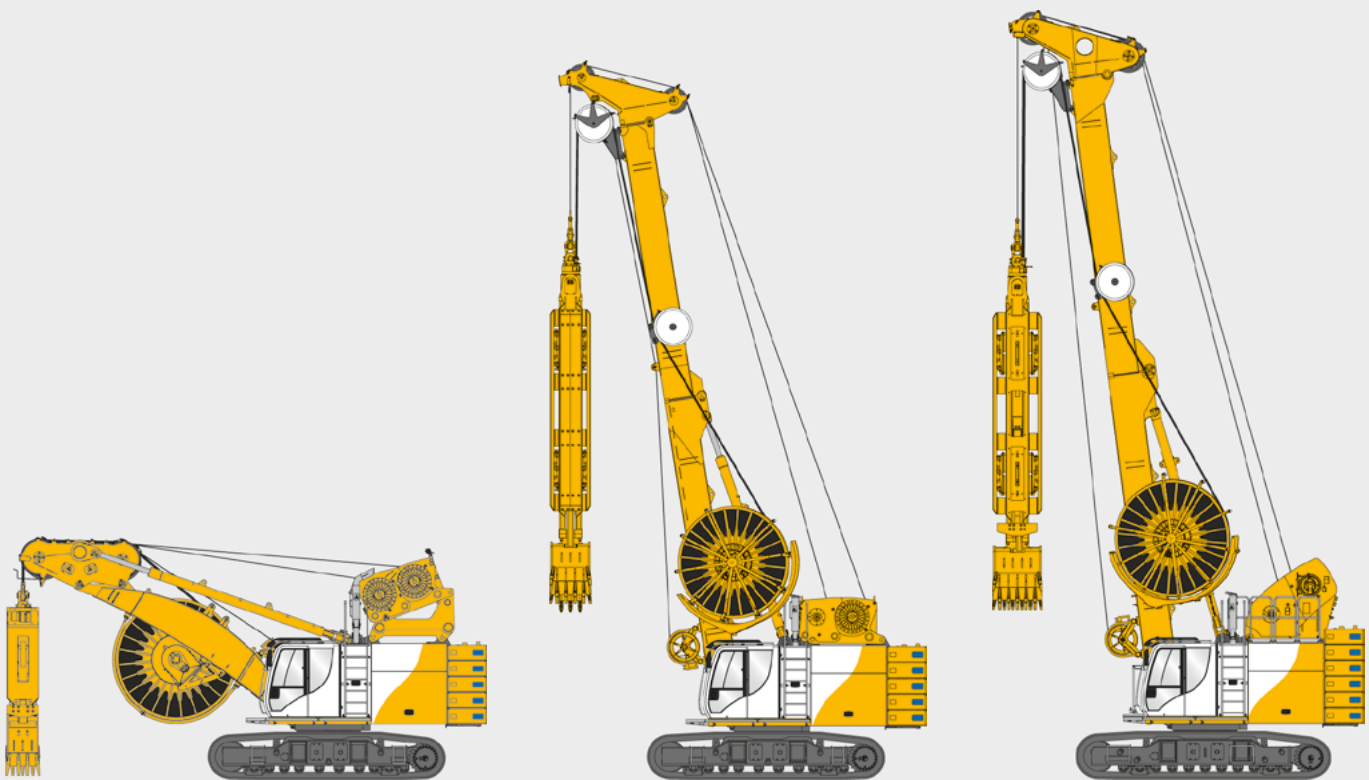


GB 50

The BAUER GB line is the ideal platform for hydraulic grab application, easy to operate, with maximum efficiency and minimum complexity. It convinces with its compact dimensions, simplicity on the one hand, on the other hand the modern B-Tronic system with the latest control and assistance systems. In combination with the proven and tested hydraulic grabs DHG/V and DHG/LT for low headroom applications, it is the perfect choice for complex diaphragm wall projects around the world.

The GB 50 has a maximum excavation depth of 80 m and is designed for hydraulic grabs up to 1500 mm panel width. For challenging soil conditions, it comes with an optional free fall winch. To guarantee a vertical panel, the TD4 turning device and the optional steering flaps of the grab are important tools for the operator.

A big benefit of the GB 50 is, that it can be converted to a low headroom machine in just a few steps. With the low headroom mast and the short DHG/LT hydraulic grab, the GB 50 Low Headroom can reduce its working height to 5.8 m minimum.



GB 50 Low Headroom

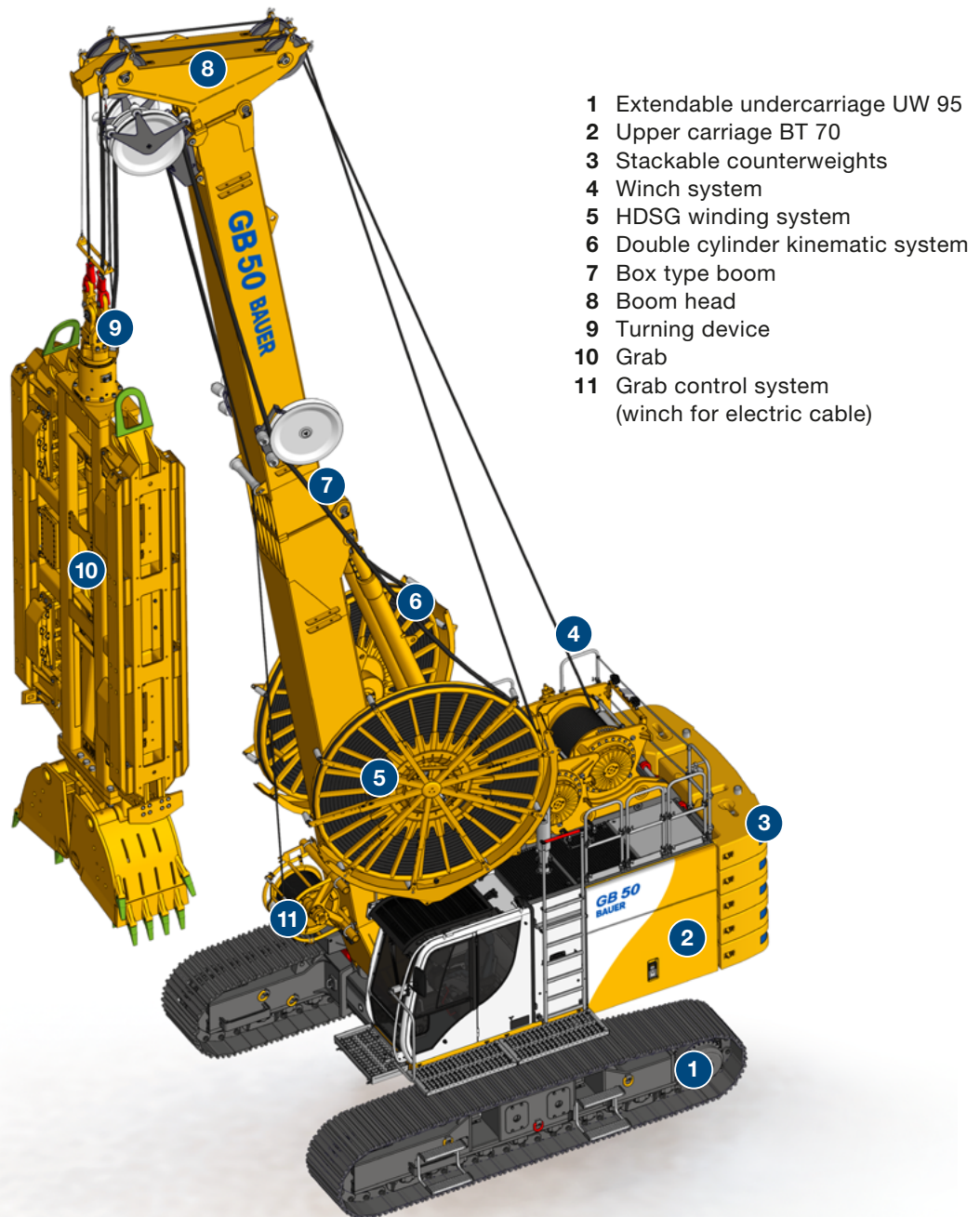
GB 50

GB 80 S

- New generation base carrier BT 70 with optimized hydraulic system
- Optimized service & maintenance with patented service platform
- With EU Stage V engine option for CE Certification
- Compact swing radius

GB 50 Hydraulic Grab Carrier

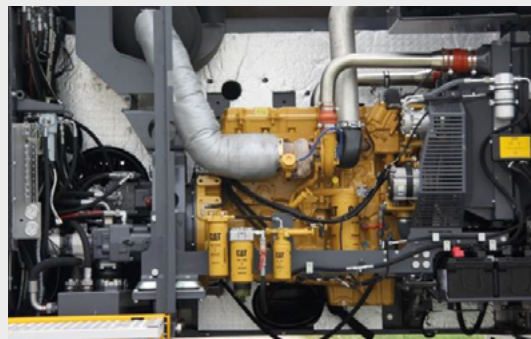
Wall thickness:	0.6 m – 1.5 m
Wall depth:	80 m
Maximum hoisting force:	500 kN (2 x 250 kN)*
Max. hook load (incl. soil filling):	29 t
Weight (without grab):	80 t – 85 t
Engine:	CAT C 9.3 B 280 / 310 kW



* 250 kN available for short-term operation only
230 kN for regular operation

BT 70 Upper carriage

- Integrated service platform for easy and safe maintenance work, which can be carried out from the ground or platform level
- Access ladder to upper structure for HSE compliance
- FOPS compliant, modern cabin with rear-view camera, winch camera, flashing warning light and audible reverse warning system meets all HSE requirements
- Bauer cabin for highest comfort
- Intelligent layout of instruments and screens for easy operation and exact display of grab position
- Variably stackable counterweights for HSE compliance
- Decreased swing radius for increased mobility



High-performance CAT engine

- Conforming to exhaust emission standards: EU Stage V / EPA/CARB Tier 4 final / China Nonroad Stage IV / UN/ECE R96
- Low fuel consumption due to optimized design of hydraulic system
- Low noise emission due to intelligent sound protected installation
- Worldwide CAT service partner network

Winch system

- High effective line pull and line speed
- Load classification M6 / L3 / T5 for heavy-duty, continuous operation
- Special grooving system on the drum and rope pressure roller reducing wear on the wire rope
- Pinned connection for easy transportation
- Transparent ring for easy oil check
- Available with 2 free-fall or 2 lifting winches
- Optional free-fall automatic mode in combination with 2 free-fall winches



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

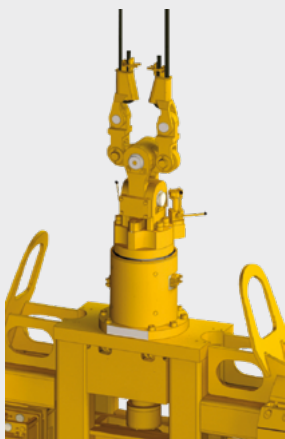
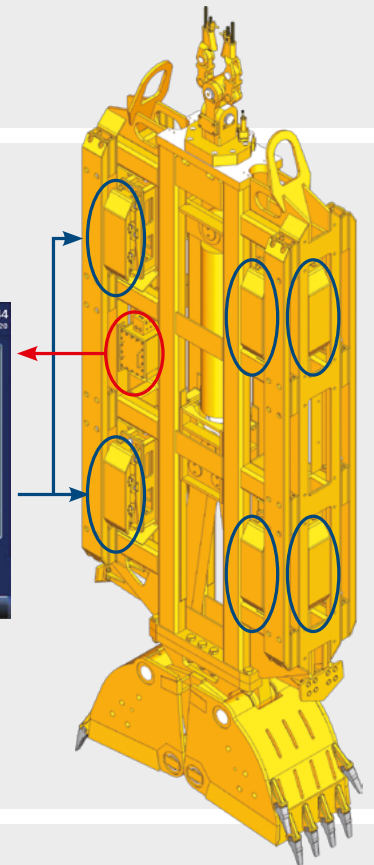


HDSG Hose Winding System for Hydraulic Grab

- Proven spooling system for hydraulic hoses for hydraulic diaphragm grab operation to a maximum excavation depth of 80 m
- Winch for heavy-duty hybrid (electric and data) cable for online data transfer between DHG/V and base machine

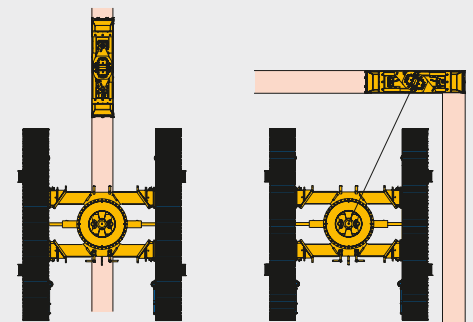
Grab control system

- Online data transfer from grab to the operators' cabin by heavy-duty electrical cable
- Continuous monitoring and adjustment of verticality of wall trench during excavation
- Collection, processing and visualization of relevant data
- Failure diagnostics and maintenance service
- B-Tronic system with high resolution 10.4" color screen
- A final measurement of deviation of the trench is carried out by a separate survey after completion of the excavation



Turning device TD 4

- GB 50 allows turning device operation on grabs down to a minimum trench width of 600 mm
- Easy operation of turning function with control levers of GB 50
- Increased maneuverability when working on corner panels or in confined areas
- Compensates negative influence of asymmetric teeth arrangement
- Improved productivity in hard soil



TD 4 in 90°

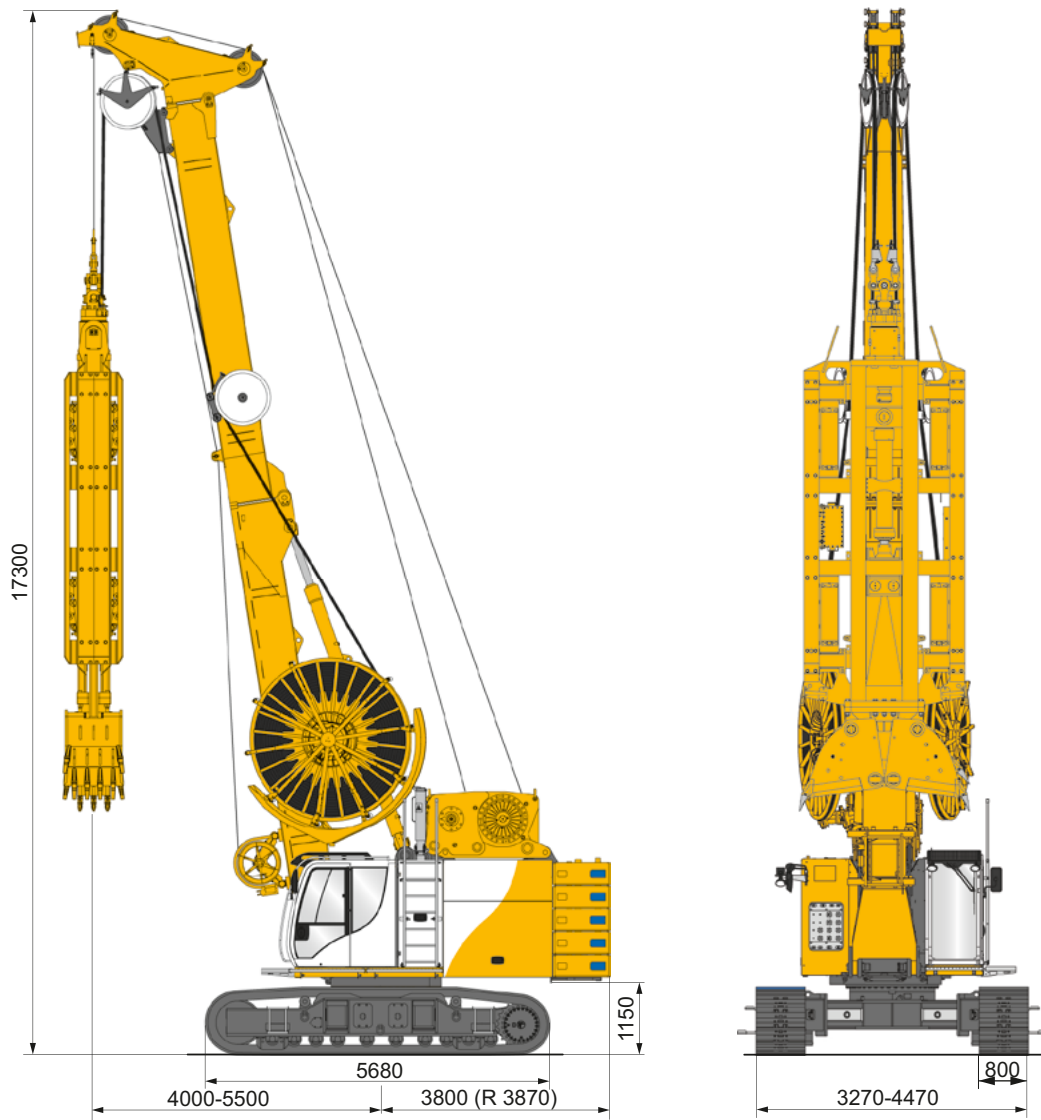
TD 4 in 25°

Technical Specifications

GB 50			
Max. hook load	29 t		
Max. hoisting force	500 kN		
System pressure	350 bar		
Main pump max. flow	2 x 210 l/min + 130 l/min		
Max. wall depth	80 m		
Base carrier			
Engine	CAT C 9.3 B		
Rated output ISO 3046-1	280 kW @ 1,800 rpm	310 kW @ 1,800 rpm	310 kW @ 1,800 rpm
Engine conforms to	UN/ECE R96*	China Nonroad Stage IV	EU Stage V EPA/ CARB Tier 4 final
Diesel tank / AdBlue tank capacity	730 l / -	730 l / 65 l	730 l / 65 l
Ambient air temperature (at full power) up to	45 °C		
Sound pressure level in cabin (EN 16228, Annex B)	L _P A 76 dB(A)		
Sound power level (2000/147EC and EN 16228, Annex B) guaranteed (measured)	L _W A 109 (107) dB(A)		
Main winch			
Hoisting winch - 2 units			
Line pull (1st layer) effective	250 kN**		
Rope diameter	28 mm		
Line speed (max.)	80 m/min		
Free-fall winch - 2 units			
Line pull (1st layer) effective	250 kN**		
Rope diameter	28 mm		
Line speed (max.)	77 m/min		
Under carriage			
Crawler type	B 7		
Traction force	730 kN		

* Exhaust emission equivalent to EPA Tier 3 and EU Stage IIIA

** 250 kN available for short-term operation only, 230 kN for regular operation



Dimensions

Total height	17,300 mm
Overall crawler length	5,680 mm
Overall crawler width	3,270 – 4,470 mm
Center line of grab to swing center	4,000 – 5,500 mm
Swing radius of rear end	3,870 mm

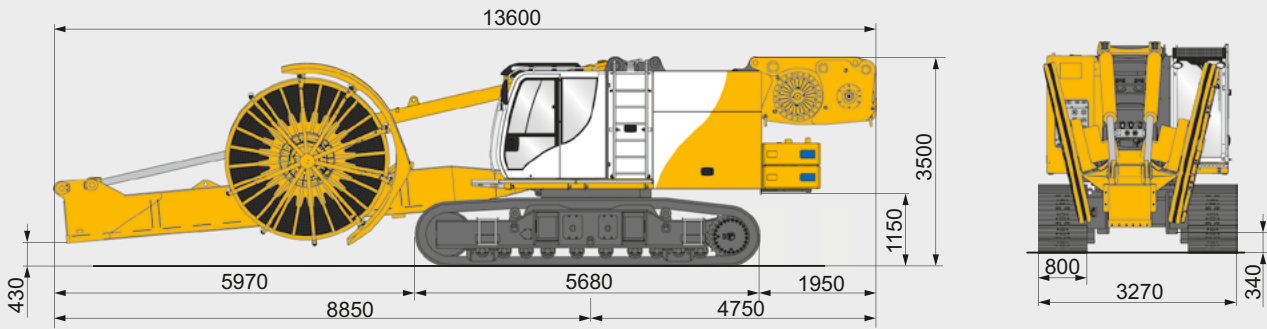
Transport Dimensions and Weights

G = Weight (t)
B = Width, overall (mm)

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

Base Carrier

G = 65

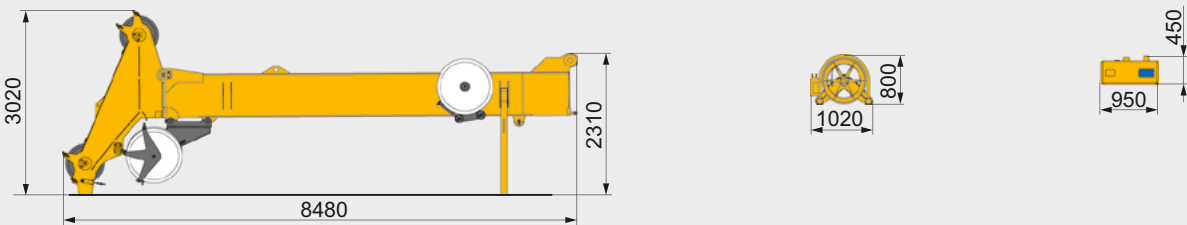


Mast and Counterweight

G = 4.4 B = 850

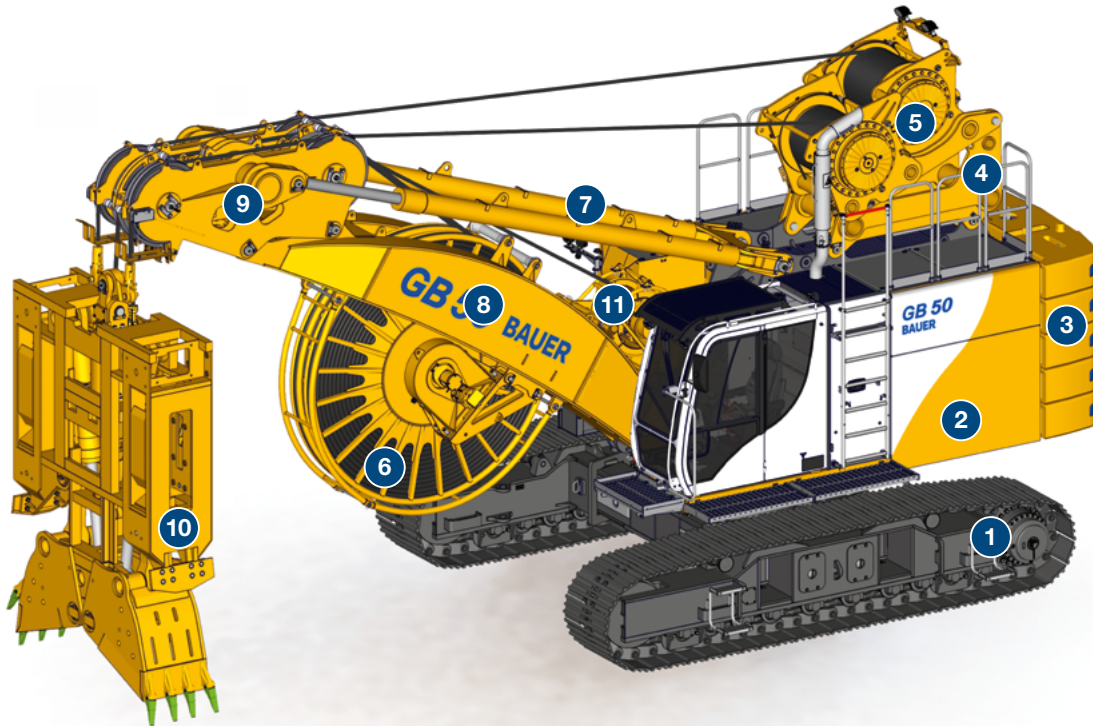
**G = 0.25
 B = 1100**

**G = 5 x 4.9
 B = 3000**



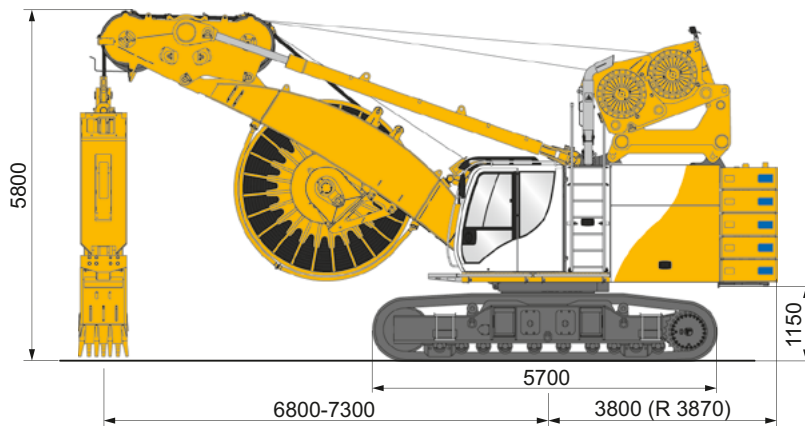
GB 50 Low Headroom

Wall thickness:	800 mm – 1,500 mm
Wall depth:	50 m (60 m upon request)
Maximum hoisting force:	360 kN
Max. hook load (incl. soil filling):	22 t
Total height:	5,800 mm – 6,500 mm



- 1 Extendable undercarriage UW 95
- 2 Upper carriage BT 70
- 3 Stackable counterweights
- 4 Winch system
- 5 Winch adapter
- 6 HDSG winding system
- 7 Double cylinder kinematic system
- 8 Boom with integrated HDSG
- 9 Boom head
- 10 DHG LT Grab
- 11 Grab control system
(winch for electric cable)

* Only 4, 8, 9 and 10 are specific for low headroom application.



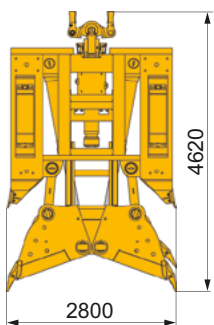
GB 50 Low Headroom

Max. hook load (rocker system)	22 t
Max. hoisting force	360 kN
System pressure	350 bar
Main pump max. flow	2 x 210 l/min + 130 l/min
Max. excavation depth	50 m (60 m upon request)

Base Carrier BT 70 and Under Carriage UW 95 (technical specifications see page 6)

Main Winch

Hoisting winch - 2 units	M6 / L3 / T5
Line pull (1st layer) effective	180 kN
Rope diameter	28 mm
Line speed (max.)	80 m/min
Freefall winch - 2 units	M6 / L3 / T5
Line pull (1st layer) effective	180 kN
Rope diameter	28 mm
Line speed (max.)	77 m/min



DHG LT (with TD 4 turning device option)

	800 mm	1,000 mm	1,200 mm	1,500 mm
Width	800 mm	1,000 mm	1,200 mm	1,500 mm
Volume	0.72 m ³	0.9 m ³	1.08 m ³	1.35 m ³
Weight of soil	1.44 t	1.8 t	2.16 t	2.7 t
Transport weight	13.53 t	16.6 t	16.94 t	19.38 t
Weight with filling	14.97 t	18.4 t	19.1 t	22.08 t

The DHG LT grab was designed for low headroom applications. A TD 4 turning device (optional) is included in the 4.62 m height and the grab cylinder force is 2 x 450 kN. As an option, 4 steering flaps can be integrated in the short grab body.

Highlights and Transport Data



Minimum working height 5.8 m

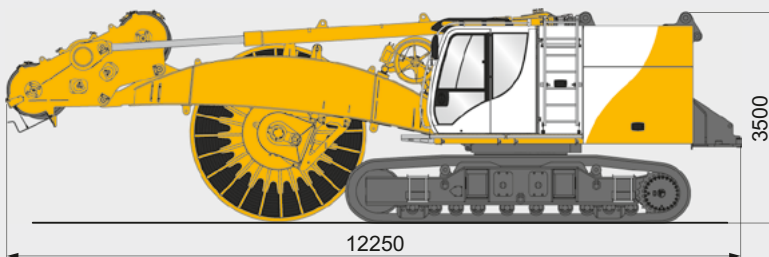
- the GB 50 Low Headroom conversion kit was designed for challenging projects where equipment with minimal height is required (e.g. underneath bridges or power lines) so the working height of the machine can be reduced to minimum 5.8 m
- thanks to its special kinematics, the DHG/LT low headroom hydraulic grab does not extend in length when closing the shovels and thus the limited height underneath the mast head can be fully utilized
- even with less than 6 m height, the system can still reach an excavation depth of 60 m

Easy and economical conversion

- with the DHG/LT hydraulic grab, the short mast and very few additional parts, the GB 50 can be easily converted to a low headroom machine (parts for low headroom at page 9)
- base carrier, winches and hose winding system of standard GB 50 can be utilized

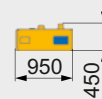
Base machine without counterweights

G = 51.5 B = 3,270



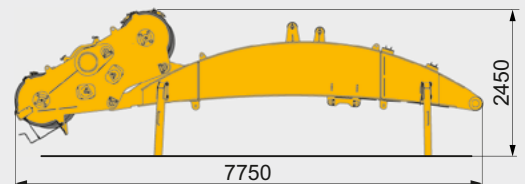
Counterweights

G = 5 x 4.9



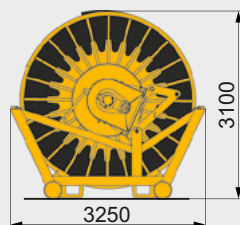
G = 7.5

B = 2,000



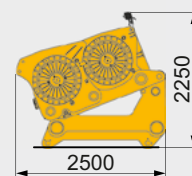
HDSG with transport rack

G = 4.1 B = 1,900



Winch and winch adapter

G = 4.6 B = 1,700



G = Weight (t)
B = Width, overall (mm)

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

International Service Hotline

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+49 8252 97-2888

BMA-Service@bauer.de

*toll-free number, where available

24/7



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