

# BAUER GB 50

## Hydraulic Grab Carrier

*Grab System*

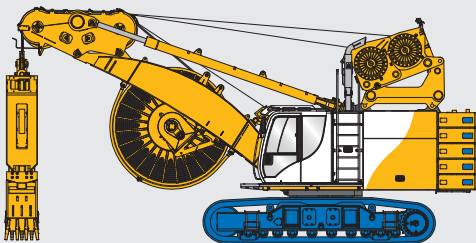


### *“Digging profits out of your projects”*

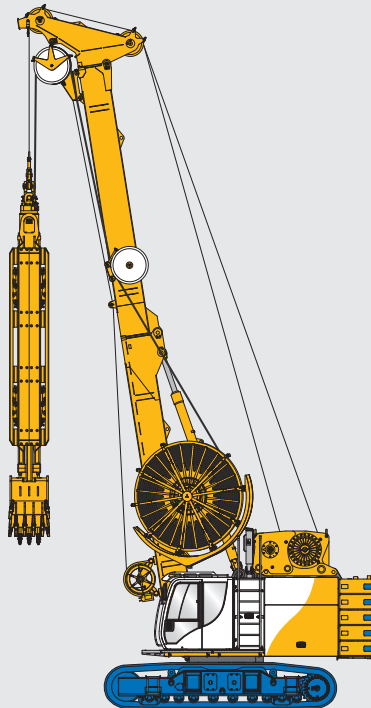
Bauer's line of GB rigs is a perfect marriage between our proven and tested base machines with our state-of-the-art DHG V grab body. The new generation GB 50 is our latest offering to help our customers work in the increasingly complex diaphragm wall jobsite conditions around the world.

Bauer's team of world-class mechanical engineers worked closely with our customers and partners to improve this classic machine, giving you maximum efficiency with minimum complexity. The new GB 50 has the reliable mechanical, electronic and hydraulic systems that Bauer is known for, operating together in a perfect balance, without any additional bells and whistles to bog down your productivity. The easy-to-operate equipment makes it the perfect choice for creating the high-quality diaphragm walls that your customers require. On top of all this, service and maintenance are easier than ever, thanks to our brand new BT 70 base carrier.

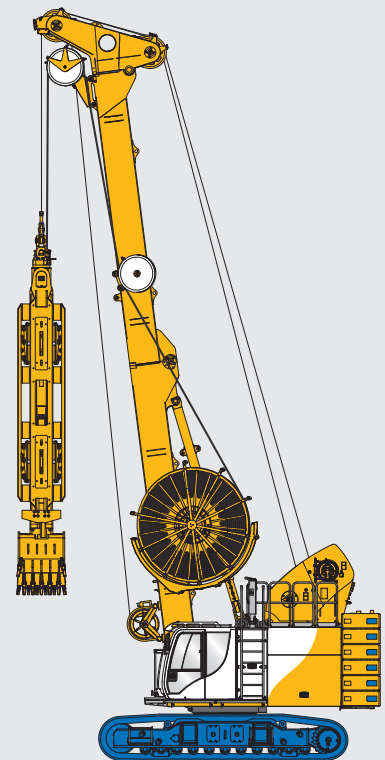
With additional components like the B-tronic control system, and options like our patented free-fall winch and TD4 Turning Device, you'll be able to deliver on time, even in challenging soil conditions.



**GB 50 Low Headroom**



**GB 50**

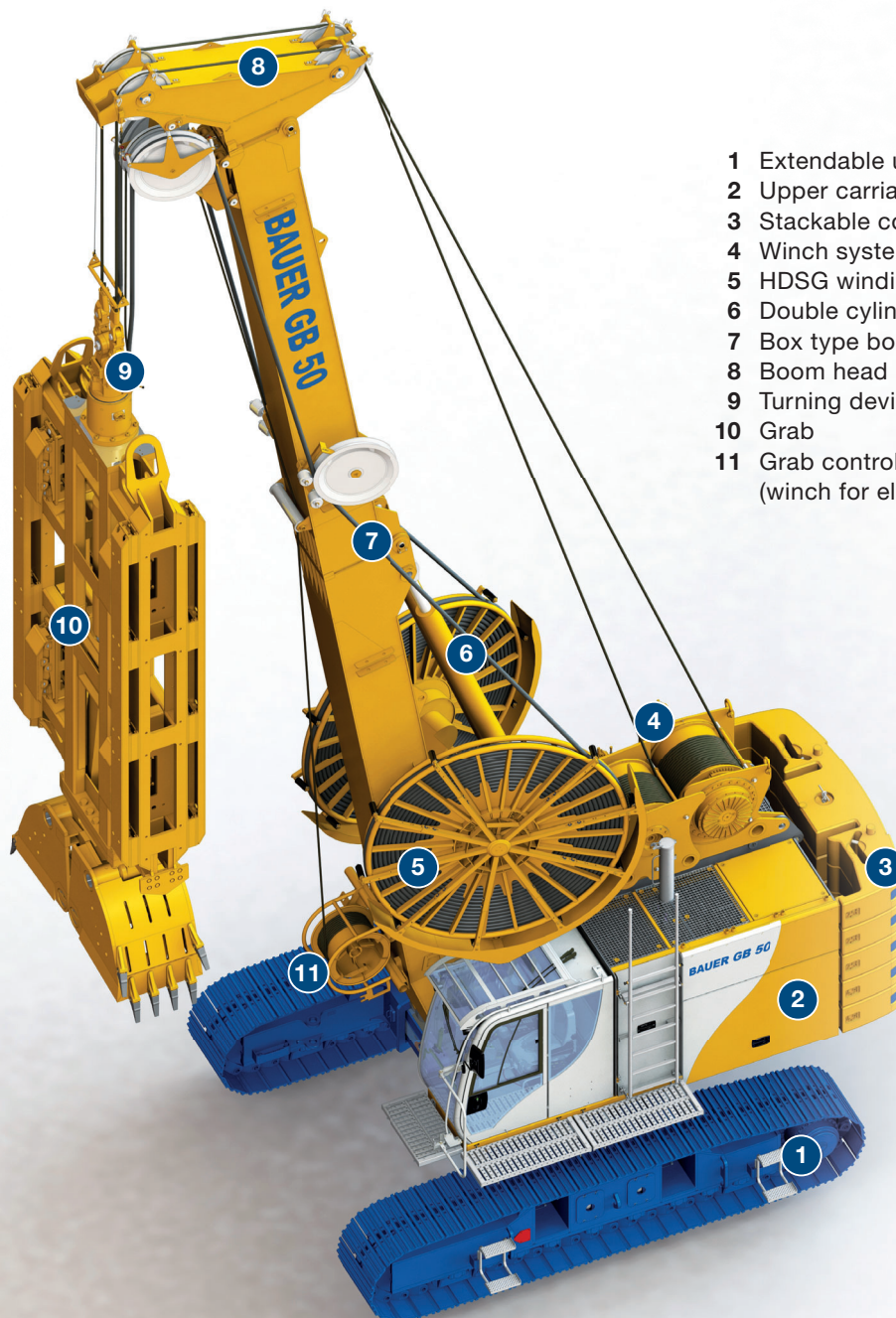


**GB 80 S**

- New generation base carrier BT 70 with optimized hydraulic system
- Optimized service & maintenance with patented service platform
- First GB with Tier 4 engine option for CE Certification
- Compact swing radius

## GB 50 Hydraulic Grab Carrier

Wall thickness:	0.4 – 1.5 m
Wall depth:	80 m
Maximum hoisting force:	500 kN (2 x 250 kN)*
Max. hook load (incl. soil filling):	28 t
Weight (without grab):	71 t – 83 t
Engine:	261 kW (Tier 3 – CAT C9) 261 kW (Tier 4f – CAT C9.3) 310 kW (Stage V – CAT C9.3B)



- 1 Extendable undercarriage UW 95
- 2 Upper carriage BT 70
- 3 Stackable counterweights
- 4 Winch system
- 5 HDSG winding system
- 6 Double cylinder kinematic system
- 7 Box type boom
- 8 Boom head
- 9 Turning device
- 10 Grab
- 11 Grab control system (winch for electric cable)

\* 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

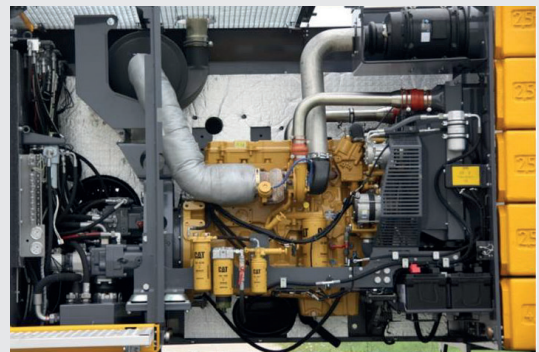


## Under carriage

- Solid Bauer design for 360° working radius
- Hydraulically extendable tracks
- Large footprint for a stable operation
- High traction forces

## High-performance CAT engine

- Conforming to exhaust emission standards: Stage III A / Tier 3 Stage IV or Stage V / Tief 4 final
- Low fuel consumption due to optimized design of hydraulic system
- Low noise emission due to intelligent sound protected installation
- Worldwide CAT service partner network



## 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

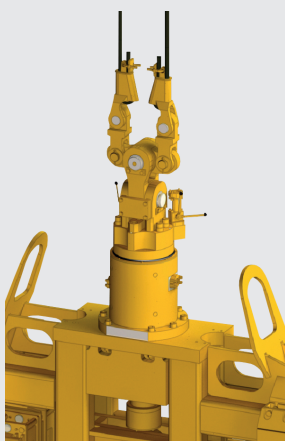
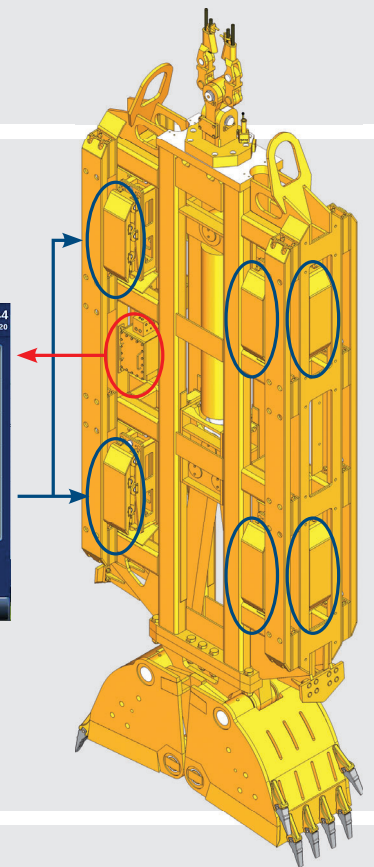


### Winch system

- 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

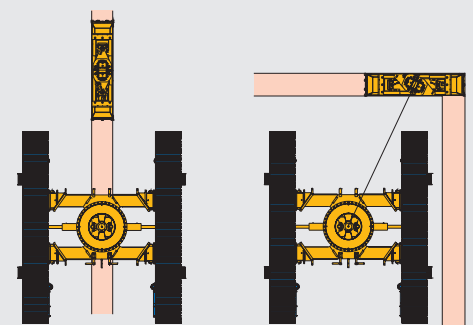
### Grab control system

- 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°

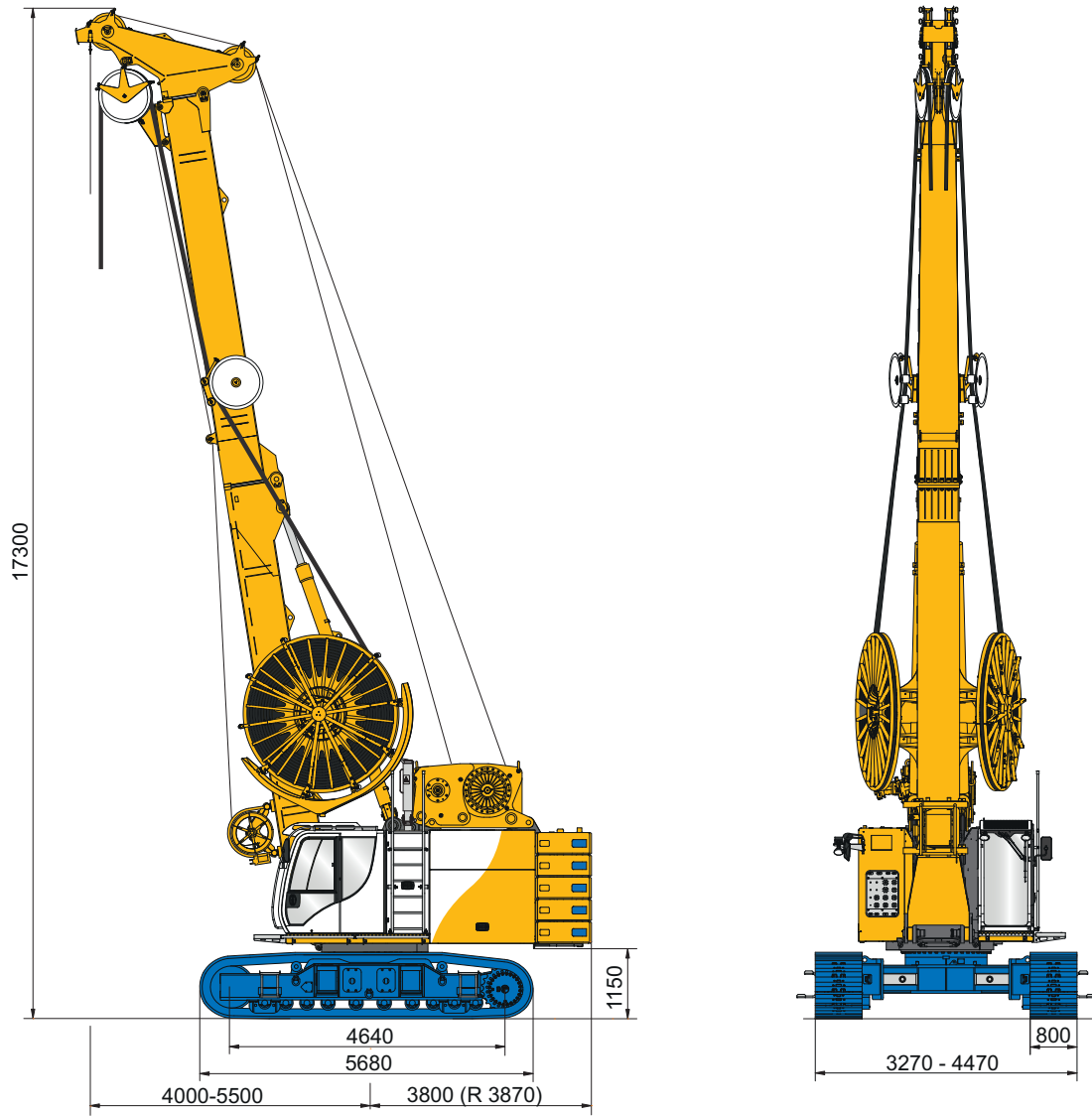
TD 4 in 25°

# Technical Specifications



GB 50				
Max. hook load		28 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		BT 70 D		
Engine		CAT C9	CAT C9.3	CAT C9.3B
Rated output ISO 3046-1		261 kW @ 1,800 rpm	261 kW @ 1,800 rpm	310 kW @ 1,800 rpm
Engine conforms to	EU 2016/1628	ORA	Stage IV	Stage V
	EPA/CARB		Tier 4 final	Tier 4 final
	GB20891-2014	China Stage III		
Diesel tank capacity		730 l		
Ambient air temperature (at full power) up to		45 °C		
Sound pressure level in cabin (EN 791, Annex A)		LPA 80 dB (A)		
Sound power level (2000/14/EG u. EN 791, Annex A)		LWA 110 dB (A)		
Main winch				
Hoisting winch - 2 units		M6 / L3 / T5		
Line pull (1st layer) effective		250 kN*		
Rope diameter		28 mm		
Line speed (max.)		80 m/min		
Free-fall winch - 2 units		M6 / L3 / T5		
Line pull (1st layer) effective		250 kN*		
Rope diameter		28 mm		
Line speed (max.)		77 m/min		
Crawler		UW 95		
Crawler type		B 7		
Traction force		730 kN		

\* 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

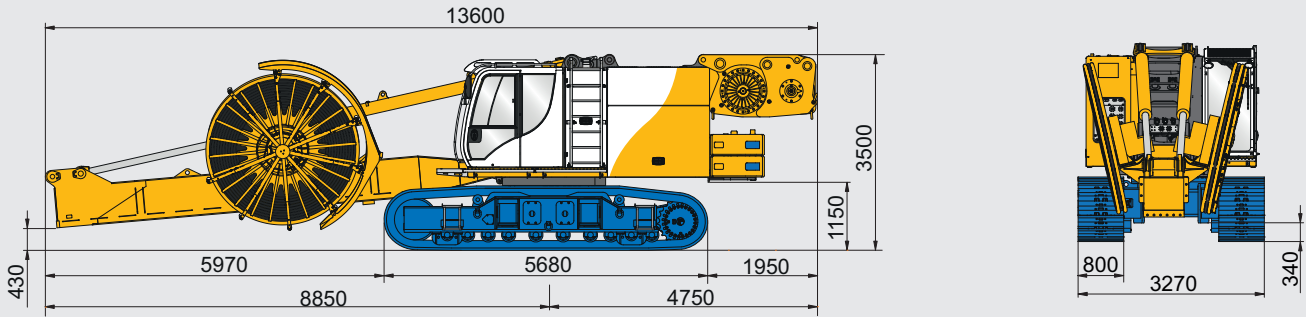
# Transport Dimensions and Weights

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

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

## Base Carrier

**G = 60 t**

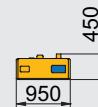
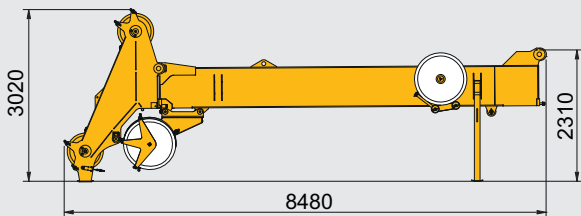


## Mast and Counterweight

**G = 4.4 t B = 850**

**G = 0.25 t  
 B = 1100**

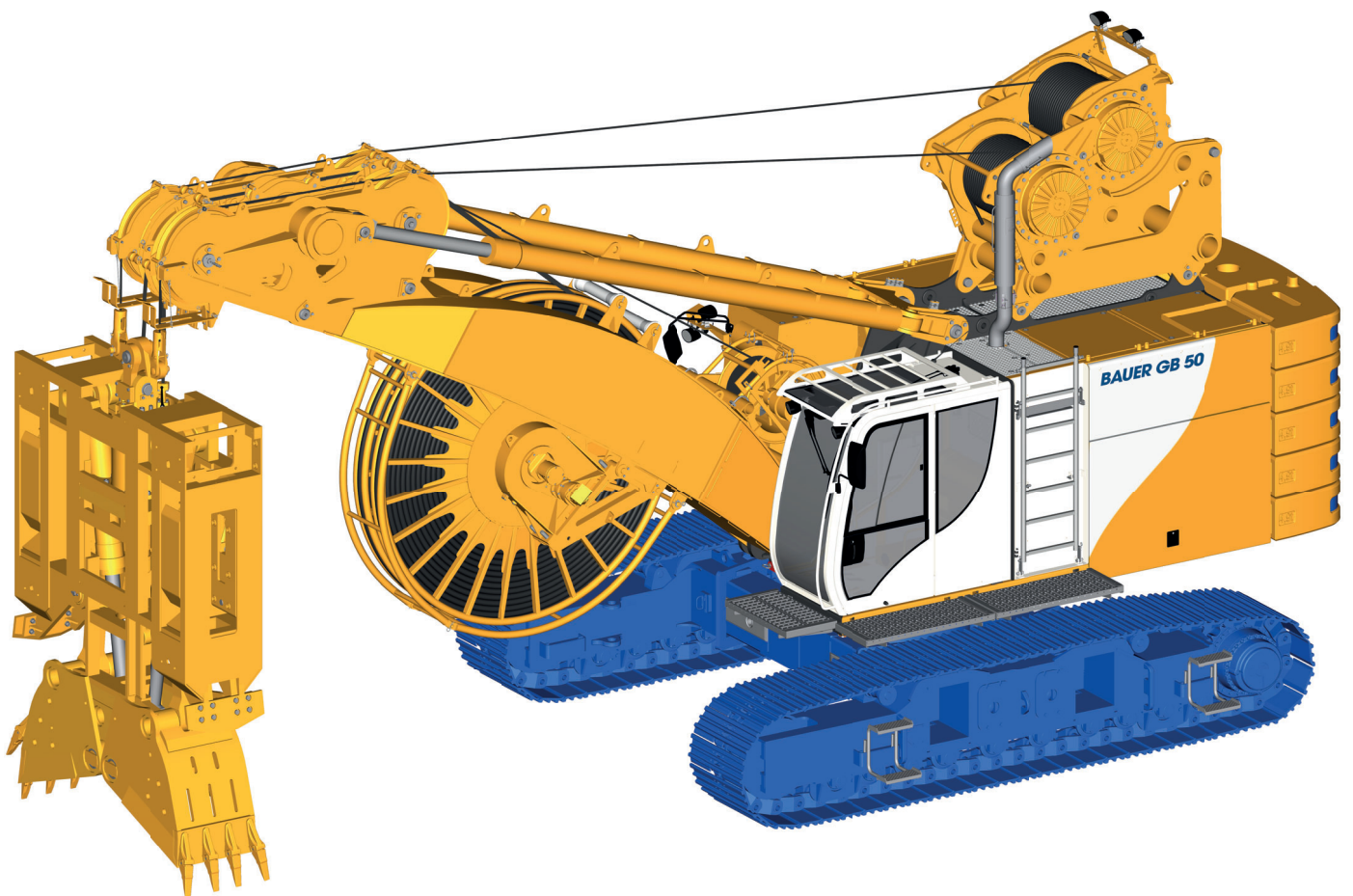
**G = 5 x 4.9 t  
 B = 3000**





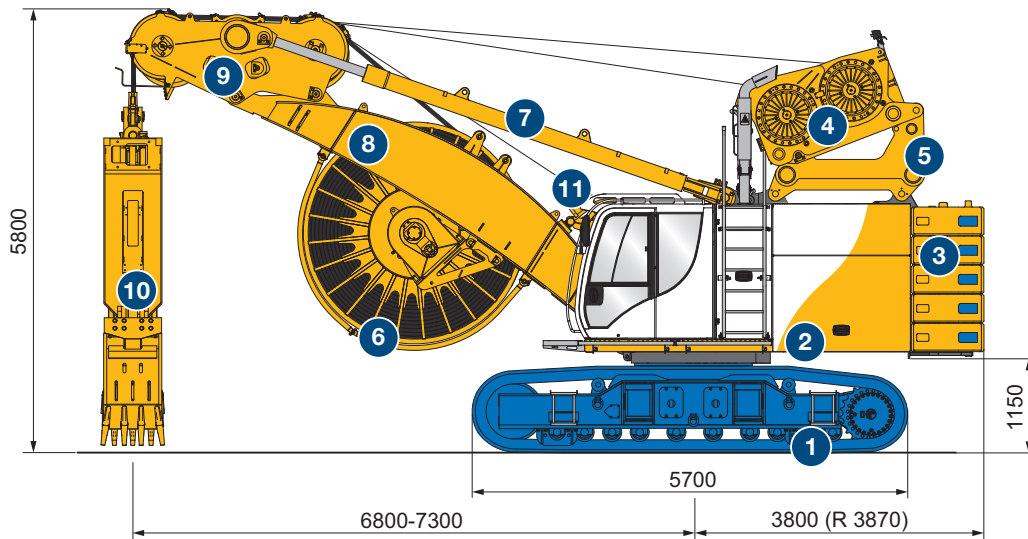
## GB 50 Low Headroom

- For confined jobsites
- Minimum headroom height 5.8 m
- Available as an option for GB 50
- Same base carrier and HDSG hose winding system, i. e. easy conversion from GB 50 to GB 50 Low Headroom
- DHG/LT low headroom grab with turning device



# GB 50 Low Headroom

Wall thickness:	800 – 1,200 mm
Wall depth:	50 m
Maximum hoisting force:	360 kN
Max. hook load (incl. soil filling):	20 t (Rocker system)
Weight (without grab):	83 t
Headroom height:	5,800 mm – 6,500 mm



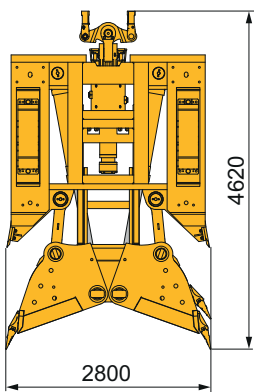
- |                                   |                                                    |
|-----------------------------------|----------------------------------------------------|
| 1 Extendable undercarriage UW 95* | 7 Double cylinder kinematic system*                |
| 2 Upper carriage BT 70D*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

## Technical Specifications

### GB 50 Low Headroom

Max. hook load (rocker system)	20 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
Base carrier BT 70 D and crawler UW 95 – specifications as per GB 50 see page 6	
Main winch 2 pcs (optional 2 x hoisting winch or 2 x free-fall winch for chiseling mode)	
Line pull (1st layer) effective / nominal	180 kN / 250 kN
Rope diameter	28 mm
Max. line speed	77 m/min

\* Standard GB 50 components. Only 5, 8, 9 and 10 are specific for low headroom application



### DHG LT (with TD 4 turning device option)

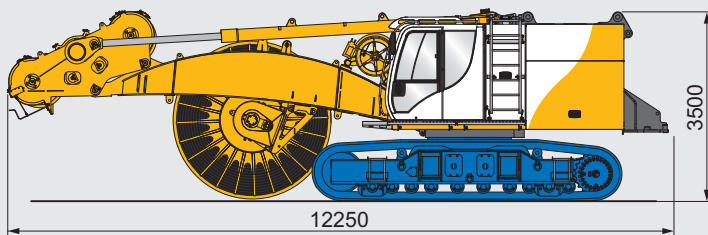
	800 mm	1,000 mm	1,200 mm	1,500 mm (on request)
Volume	0.72 m <sup>3</sup>	0.9 m <sup>3</sup>	1.08 m <sup>3</sup>	1.35 m <sup>3</sup>
Weight of soil	1.44 t	1.8 t	2.16 t	2.7 t
Transport weight	13.53 t	16.6 t	16.94 t	19.38 t
Weight with filling	14.97 t	18.4 t	19.1 t	22.08 t

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.

### Transport Data

#### Base machine without counterweights

**G = 51.5 B = 3,270**



#### Counterweights

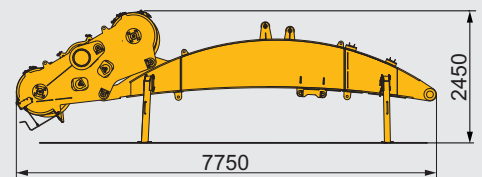
**G = 5 x 4.9**

**G = 24.5**



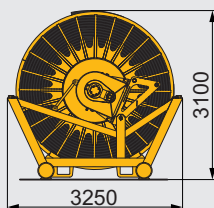
**G = 7.5**

**B = 2,000**



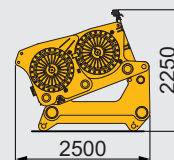
#### HDSG with transport rack

**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.



Global Network



Service



Equipment



Training

## International Service Hotline

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

**+49 8252 97-2888**

**BMA-Service@bauer.de**

\* Where available

**24/7**

*Grab System*



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