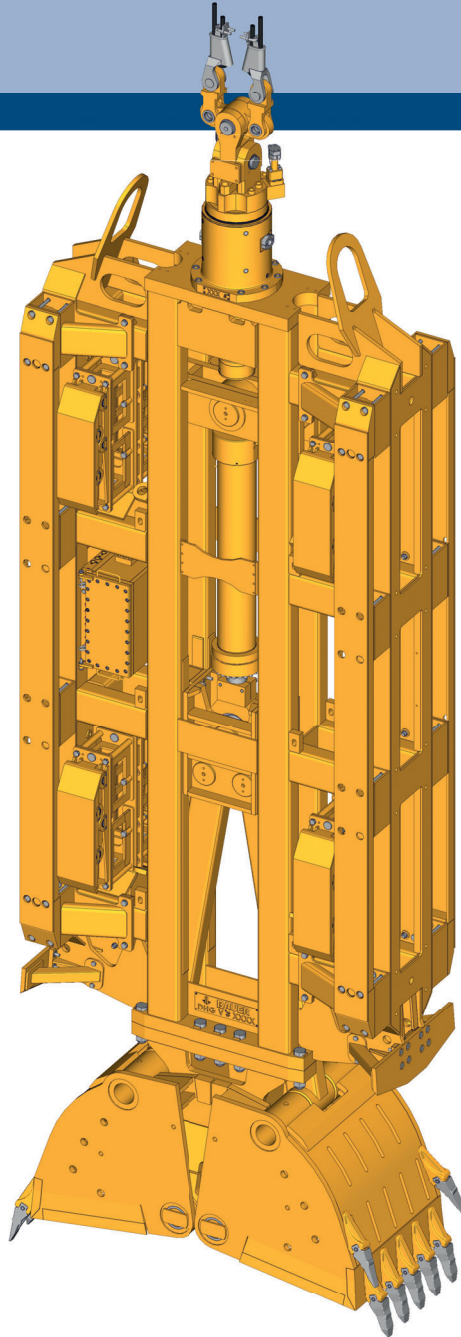


# DHG V

## Diaphragm Wall Hydraulic Grab

*Grab System*

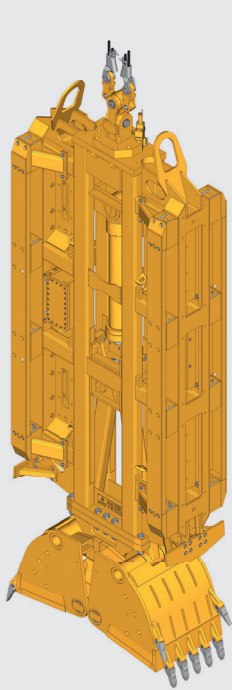


## DHG V - Variety with value

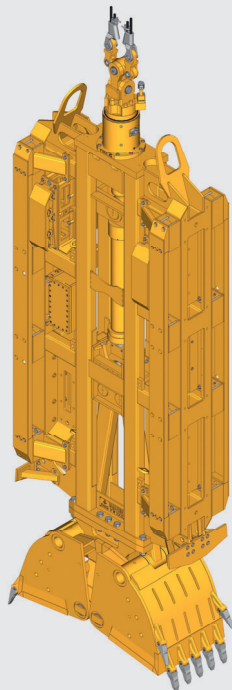
Global market conditions have seen changes which have affected every aspect of a successful job site. There has been a focus on increased efficiency and cost savings, one result of which has been a trend for contractors to move from using mechanical grabs to hydraulic diaphragm wall grabs. The hydraulic grab comes out in the lead in terms of trench accuracy and ease of operation.

With the DHG V, Bauer designed a grab with the accuracy of a hydraulic grab and the strength and freefall abilities of a mechanical grab.

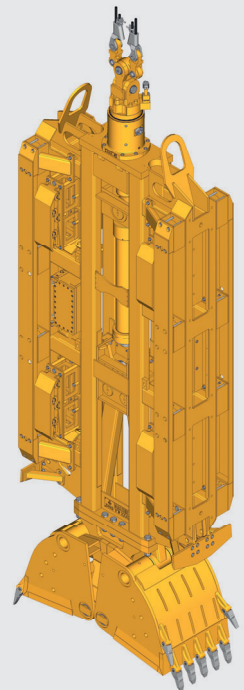
This new grab system is available in a range of sizes and configurations to satisfy the wide range of applications and challenges our customers on the front lines are facing worldwide.



**DHG V**  
with extensions



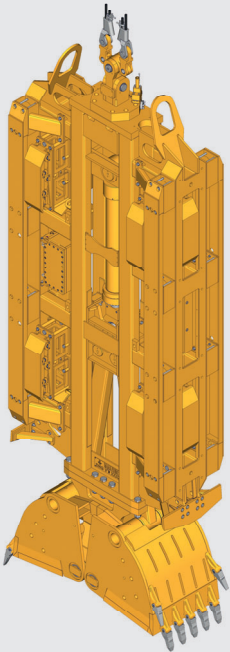
**DHG V**  
with 4 flaps and  
turning device



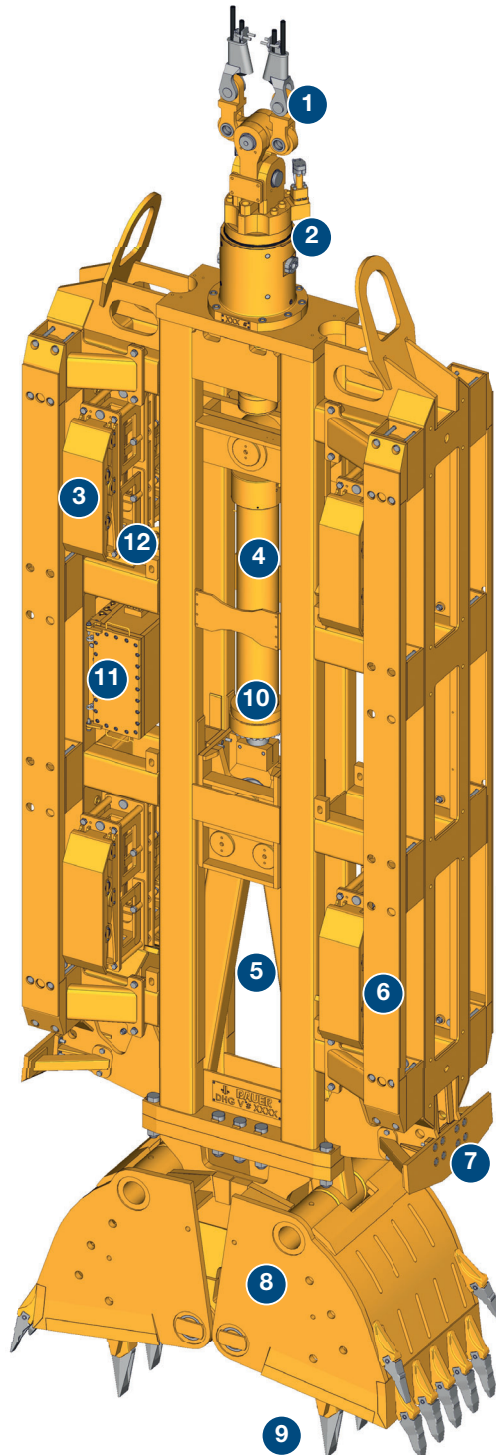
**DHG V**  
with 8 flaps and  
turning device

- Grab weight can be optimized to all hook loads
- Optimized flow resistance in the trench
- Stronger grab body & shovel set
- Larger bushings & bearings
- Multiple length, width and weight options
- Huge weight range with just one grab body
- A single grab type for multiple applications

**Length:** 2,400 – 3,800 mm  
**Width:** 600 – 1,500 mm  
**Hydraulic cylinder:** 120, 180 t  
**Weight:** 15 – 34 t  
**No. of steering flaps:** 4, 8, 12



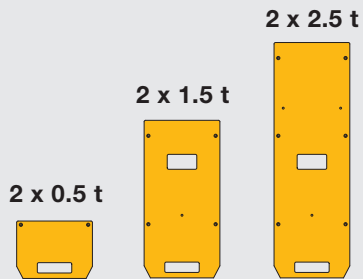
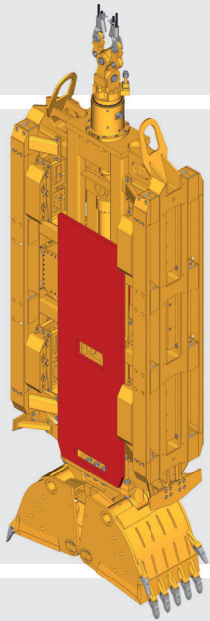
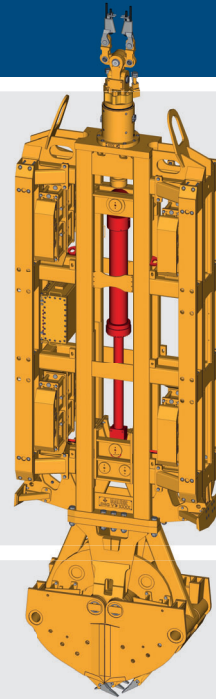
**DHG V**  
with 12 flaps



- 1 Annex set
- 2 Turning device
- 3 Steering flap
- 4 Cylinder
- 5 Thrust rod
- 6 Extension
- 7 Cutting edge
- 8 Shovel set
- 9 Chiseling device
- 10 Control shovel position (optional)
- 11 Gyroscopic compass (optional)
- 12 Control steering flap position (optional)

## Cylinder force

- Hydraulic cylinder forces range from 1,200 kN to 1,800 kN
- A simple mounting system allows for quick and easy cylinder exchange

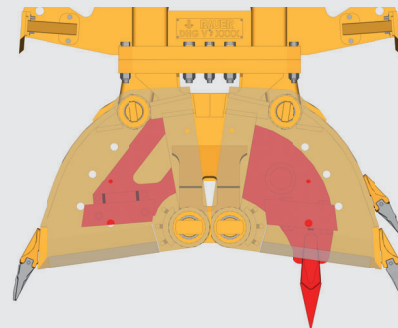


## Additional weights

Additional weights of different sizes can be added if necessary, directly distributing additional weight into the trellis.

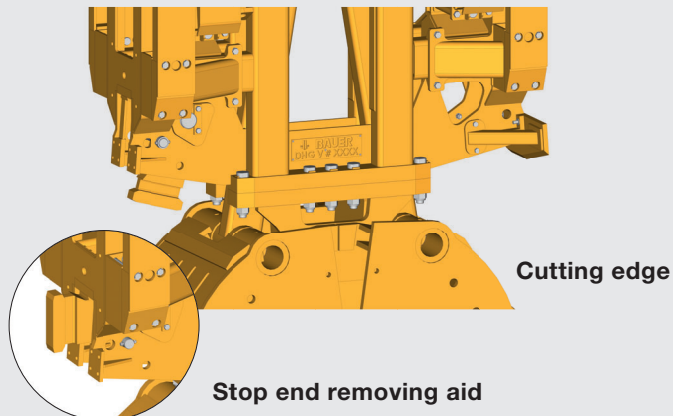
## Cleaner and chiseling device

Customers can select either a cleaning or chiseling system for installation in the shovel, and can later switch between the two functions by changing trellis.



Cleaner

Chisel / Cleaner



Cutting edge

Stop end removing aid

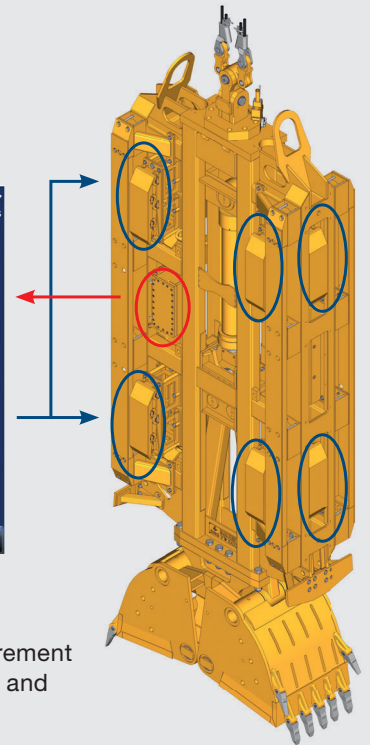
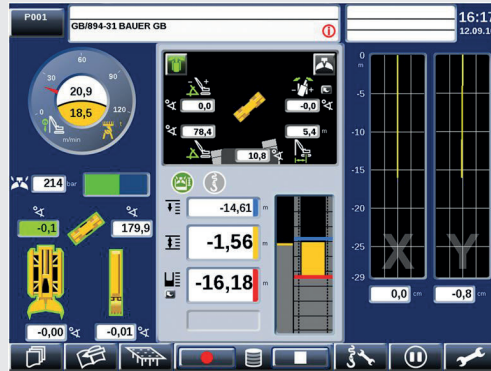
## Cutting edge or stop end removing aid

Simple exchange between these two options is possible.

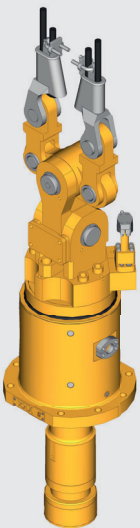
### Deviation control

The grab module for B-Tronic system was developed for monitoring the verticality of diaphragm wall trenches continuously during excavation. The current position of the grab is transferred and displayed online during the excavation. An inclinometer is built into the grab to measure the inclination of the trench in the x- and y-axis.

Data transfer from the grab to the operator's cab is carried out via a heavy-duty electrical cable which, by following every move of the grab, is automatically reeled on and off by a hydraulically operated cable recoil system. Data are visualized on a touch-screen monitor. The measured values can be stored, evaluated and printed by using a PC. A final measurement of deviation of the trench is carried out by a separate survey of the trench after the completion of excavation.



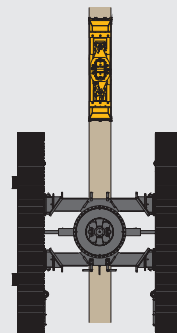
Optional: Additionally the DHG V can be equipped with a gyroscope and distance measurement for grab cylinder and steering flaps. So the deviation on z-axis, the actual shovel position and positions of the steering flaps can be displayed on the B-Tronic screen to support of the operator.



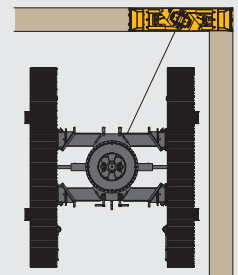
### Turning device TD 4

Turning device TD 4 can be installed in all grabs with a minimum body thickness of 600 mm.

The hydraulically operated rotating device increases manoeuvrability when working on corner panels or in confined areas. Productivity in hard soil and verticality is also improved as the negative influence of asymmetric teeth arrangement is compensated by turning the grab at 180°.



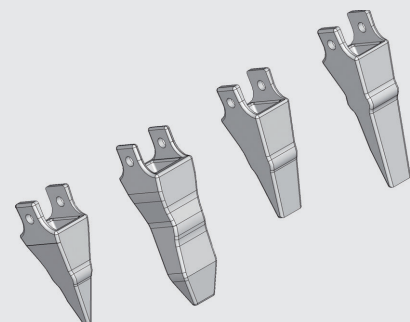
TD 4 in 90°



TD 4 in 25°

### Teeth

Various tooth options are available for maximum effectiveness in a wide range of soil conditions.



## Width Definition

### Two grab size standards are available

Size variation is demonstrated on a basis of the 600 mm trench grab, with measurement variation applying to all models.

#### Standard 1:

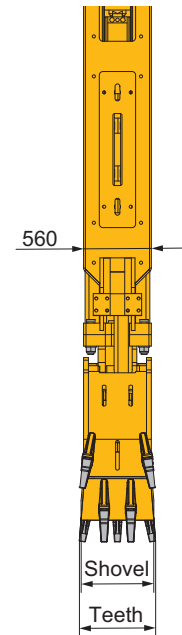
Teeth: 630 mm

Shovel: 600 mm

#### Standard 2:

Teeth: 600 mm

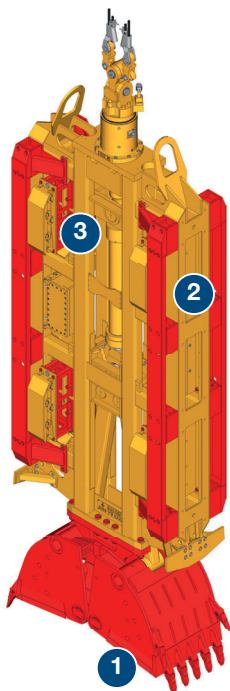
Shovel: 580 mm



## Grab Body Extensions

**Width extension sets** can be used in conjunction with different shovel sizes to increase trench width.

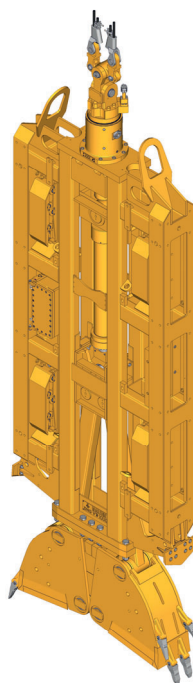
**Length extension sets** can be used to extend a 2,400 mm grab body to 2,800 mm, the 2,400 and 2,800 mm grab bodies to 3,200 mm as well as the 2,800 mm grab body to 3,800 mm.



Width extension



- 1 Shovel set & trestle
- 2 Guide extension
- 3 Flap extensions



Length extension



- 1 Shovel set
- 2 Guide extension



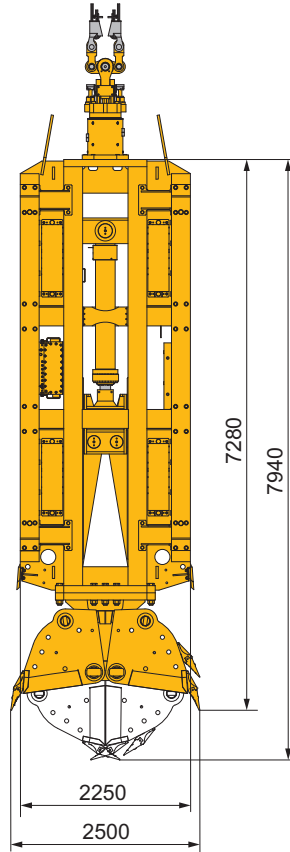
DHG V 1,200 x 2,800 mm

DHG V 600 x 2,800 mm

DHG V 600 x 3,200 mm

Special lengths and widths available on demand.

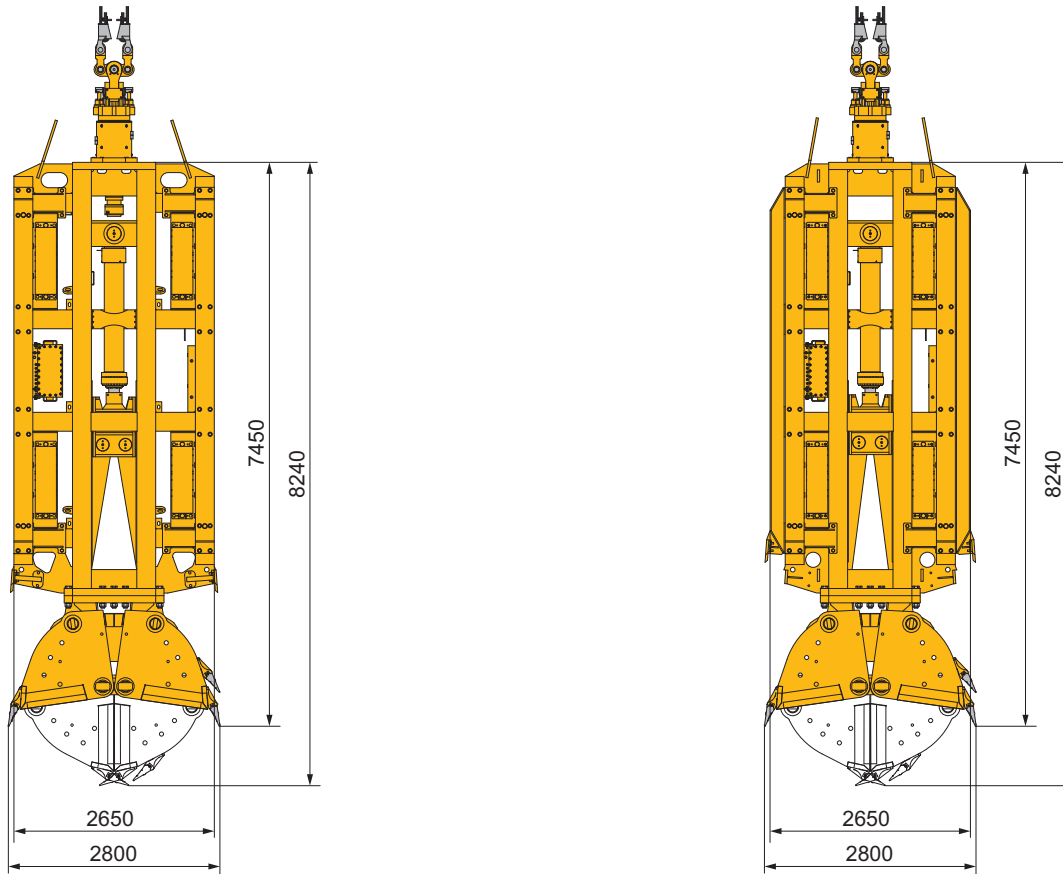
2,500 mm Trench Length (convertible to 2,400 mm)



DHG V 2,500 mm <sup>1)</sup> – weight table (in tons)					
Width (mm)	600	800	1000	1200	1500
Volume (m <sup>3</sup> )	0.57	0.82	1.07	1.32	1.70
Weight of soil fill	1.14	1.64	2.14	2.64	3.40
Basic grab weight	15.49	16.09	16.57	17.24	17.98
8 flaps	1.66	2.21	2.29	2.46	2.64
Weight with filling, 8 flaps	18.29	19.94	21.00	22.34	24.02
Weight with filling, 8 flaps and TD 4	19.05	20.70	21.76	23.10	24.78
Options shovel set					
With chiseling device	-	0.66	0.67	0.96	0.91
Upgrade to heavy trestle	0.55	1.41	1.52	2.00	2.62
Further options					
Upgrade to heavy rod	0.80		X axis flaps		0.83
Upgrade to 180 t cylinder	0.54		BAUER stop end removing aid		0.43
Upgrade to heavy lining guide	2.63		TD 4 (t)		0.76

\* for 2,400 mm length the same weight table can be used (the weight difference is insignificant)

## 2,800 mm Trench Length

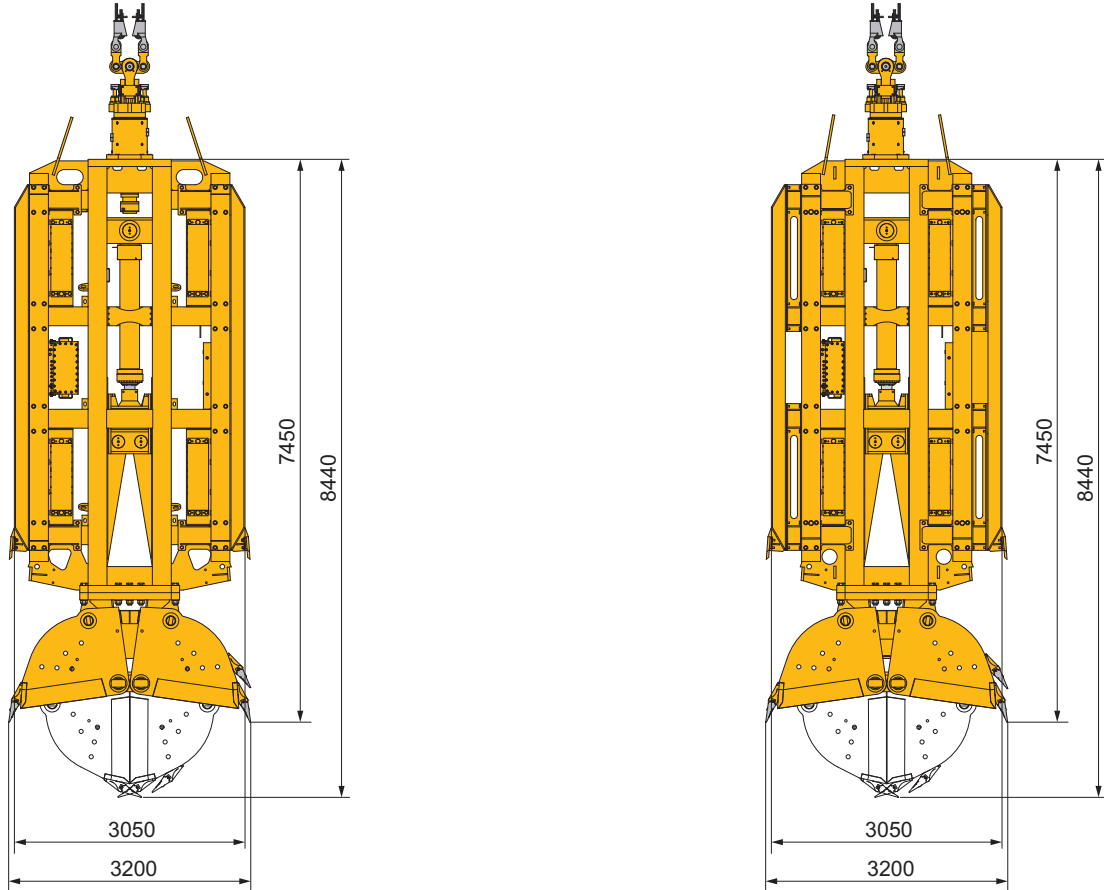


if grab body is based on 2.40 m = + 0.85 tons

DHG V 2,800 mm – weight table (in tons)					
Width (mm)	600	800	1000	1200	1500
Volume (m <sup>3</sup> )	0.73	1.04	1.36	1.68	2.15
Weight of soil fill	1.46	2.08	2.72	3.36	4.30
Basic grab weight	17.06	17.57	18.71	20.03	21.27
8 flaps	1.66	2.21	2.29	2.46	2.64
Weight with filling, 8 flaps	20.18	21.86	23.72	25.86	28.21
Weight with filling, 8 flaps and TD 4	20.94	22.62	24.48	26.62	28.97
Options shovel set					
With chiseling device	-	0.66	0.67	0.96	0.91
Upgrade to heavy trestle	0.55	1.41	1.52	2.00	2.63
Upgrade to heav					
Upgrade to heavy rod	0.81	X axis flaps		0.83	
Upgrade to 180 t cylinder	0.54	BAUER stop end removing aid		0.43	
Upgrade to heavy lining guide	2.63	TD 4		0.76	



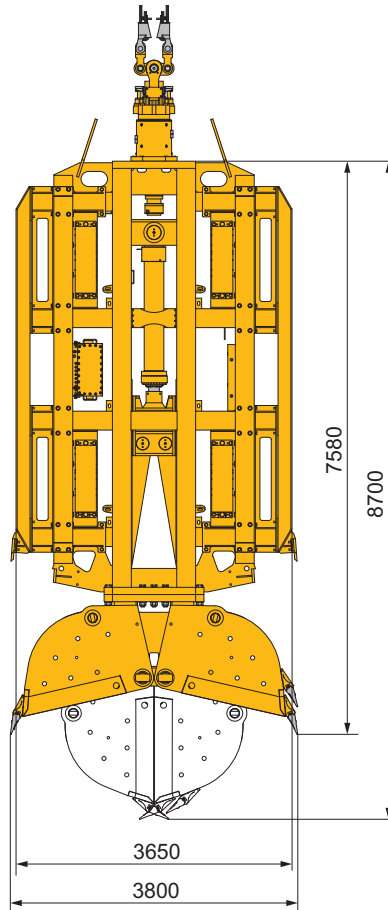
## 3,200 mm Trench Length



if grab body is based on 2.40 m = + 0.35 tons

DHG V 3,200 mm – weight table (in tons)					
Width (mm)	600	800	1000	1200	1500
Volume (m <sup>3</sup> )	0.88	1.25	1.63	2.01	2.57
Weight of soil fill	1.76	2.5	3.26	4.02	5.14
Basic grab weight	19.34	20.91	20.33	22.11	23.49
8 flaps	1.66	2.21	2.29	2.46	2.64
Weight with filling, 8 flaps	22.76	25.62	25.88	28.59	31.27
Weight with filling, 8 flaps and TD 4	23.52	26.38	26.64	29.35	32.03
Options shovel set					
With chiseling device	-	0.66	0.67	0.96	0.91
Upgrade to heavy trestle	-	1.41	1.52	2.00	2.62
Further options					
Upgrade to heavy rod	0.80		X axis flaps		0.83
Upgrade to 180 t cylinder	0.54		BAUER stop end removing aid		0.43
Upgrade to heavy lining guide	2.63		TD 4		0.76

## 3,800 mm Trench Length



**DHG V 3,800 mm – weight table (in tons)**

<b>Width (mm)</b>	<b>600</b>	<b>800</b>	<b>1000</b>	<b>1200</b>	<b>1500</b>
Volume (m³)	1.38	1.92	2.54	3.12	4.00
Weight of soil fill	2.76	3.90	5.08	6.24	8.00
Basic grab weight	20.40	22.10	22.80	24.25	26.15
8 flaps	1.66	2.21	2.29	2.46	2.64
Weight with filling, 8 flaps	24.82	28.21	30.17	32.96	36.79
Weight with filling, 8 flaps and TD 4	25.58	28.97	30.93	33.72	37.55
<b>Options shovel set</b>					
With chiseling device	-	0.66	0.67	0.96	0.91
Upgrade to heavy trestle	-	1.41	1.52	2.00	2.62
<b>Further options</b>					
Upgrade to heavy rod	0.80	X axis flaps		0.83	
Upgrade to 180 t cylinder	0.54	BAUER stop end removing aid		0.43	
Upgrade to heavy lining guide	2.63	TD 4		0.76	

# Impressions



## 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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