Hawle heavy-duty surface box

for busy roads exposed to heavy loads

Explanatory notes on the brochure

General media information in the product descriptions may apply subject to certain restrictions. Kindly always state the relevant medium in your given application when you place an order or submit a query.

If you have any further questions about our products, please do not hesitate to contact our employees of the application engineering division at any time.

	Products for use in connection with potable water
hawle G 5 JAHRE Gewährleistung	In general, products sold by us are subject to the statutory warranty period of 2 years from the date of delivery at Hawle. Due to the high quality of Hawle products, we are able to offer you an extended warranty of 5 years for products manufactured by us. For more details, please see our website at: **www.hawle.de/en/warranty-extension/**
hawle Q 10 JAHRE Qualitätsgarantie	Information on our “10-year quality guarantee” for Hawle potable water products are available at the following link: **www.hawle.de/en/10-years-quality-warranty/**
hawle	For current information, please see our Hawle app. Further information is available at **www.hawle.de/en/downloads/hawle-app/hawle-app/**

Hawle heavy-duty surface box

On busy roads, increased heavy-duty loads may create significant exposure and harmful impacts, which may result in the sinking of surface boxes installed there. This is caused, i.a., by a soft subgrade or large-pored asphalt, so-called silent asphalt. Moreover, in summer, when high temperatures prevail, asphalt can soften and sag due to the high loads. This may also cause surface boxes installed in the road in floating technique to sink. The Hawle heavy-duty surface box was specifically developed to address this problem. Accordingly, it eliminates the need for extensive and costly repair work. In the Hawle heavy-duty surface box, the load is transferred via the base plate in a form-locked connection.

The Hawle heavy-duty surface box consists of the base box, the drawing ring and the cast-iron cover. The base box has a thread, which accommodates a threaded ring, to allow for height adjustment at the installation site. Upon installation, the Hawle heavy-duty surface box is placed on a base plate in the anti-freeze layer of the new road. In the next step, the asphalt surface structure, consisting of the base layer, the binder layer and the top layer, is applied, and the drawing ring is gradually pulled upward and held in place by the compacted asphalt. The drawing ring must be fitted and fastened by screwing the internal threaded ring upward only after the compacting is completed. This locks the drawing ring in place and the surface box can no longer sag down.

The Hawle telescopic extension spindle must be hooked into the threaded ring of the heavy-duty surface box before installation. This ensures that the extension spindle remains flexible and can also move upward during adjustment. At the same time, the fitting can still be operated easily. The drawing ring is designed for a height adjustment range of 22 cm maximum. We have developed an adjustment tool for turning the threaded ring, which can be ordered separately. The Hawle heavy-duty surface box is available in a version for gate valves and in a version for valves.

Surface box for gate valves
order no. 207-02

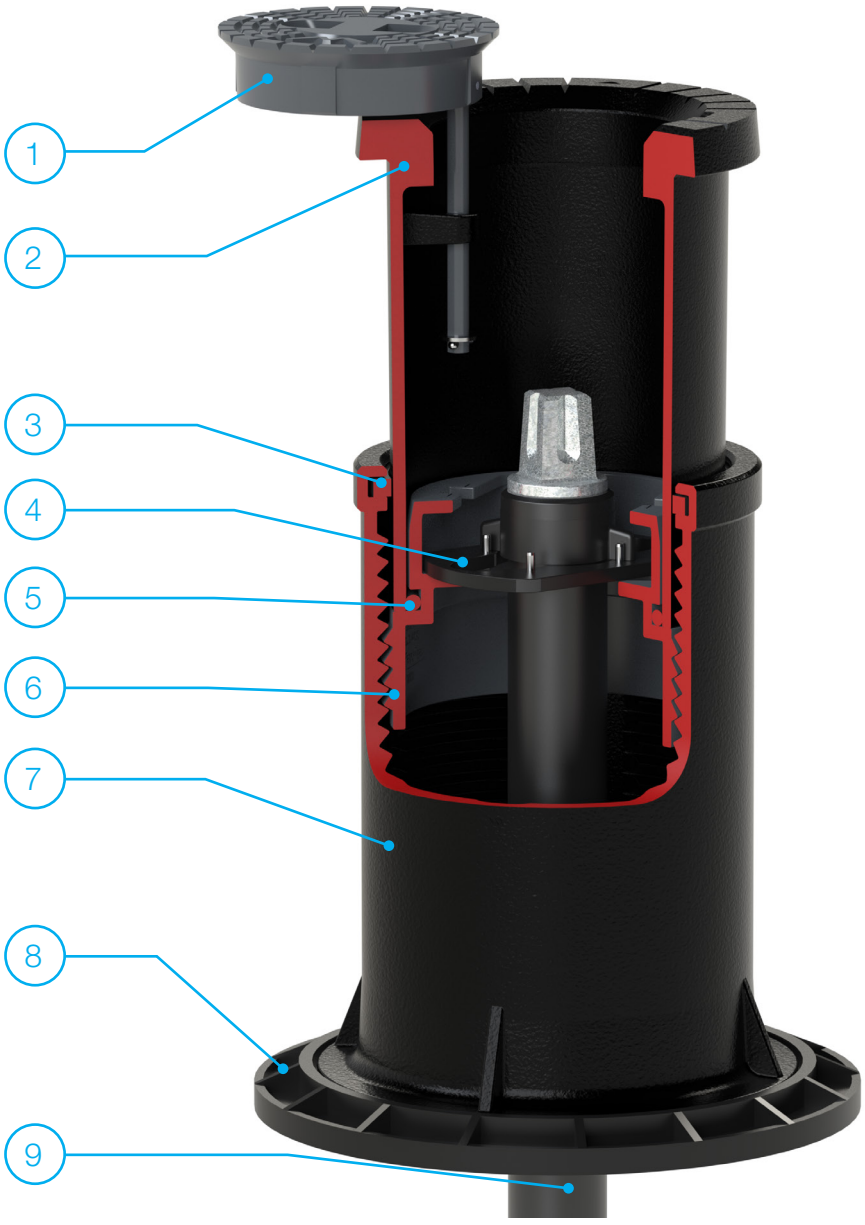
Surface box for valves
order no. 187-02

Technical features

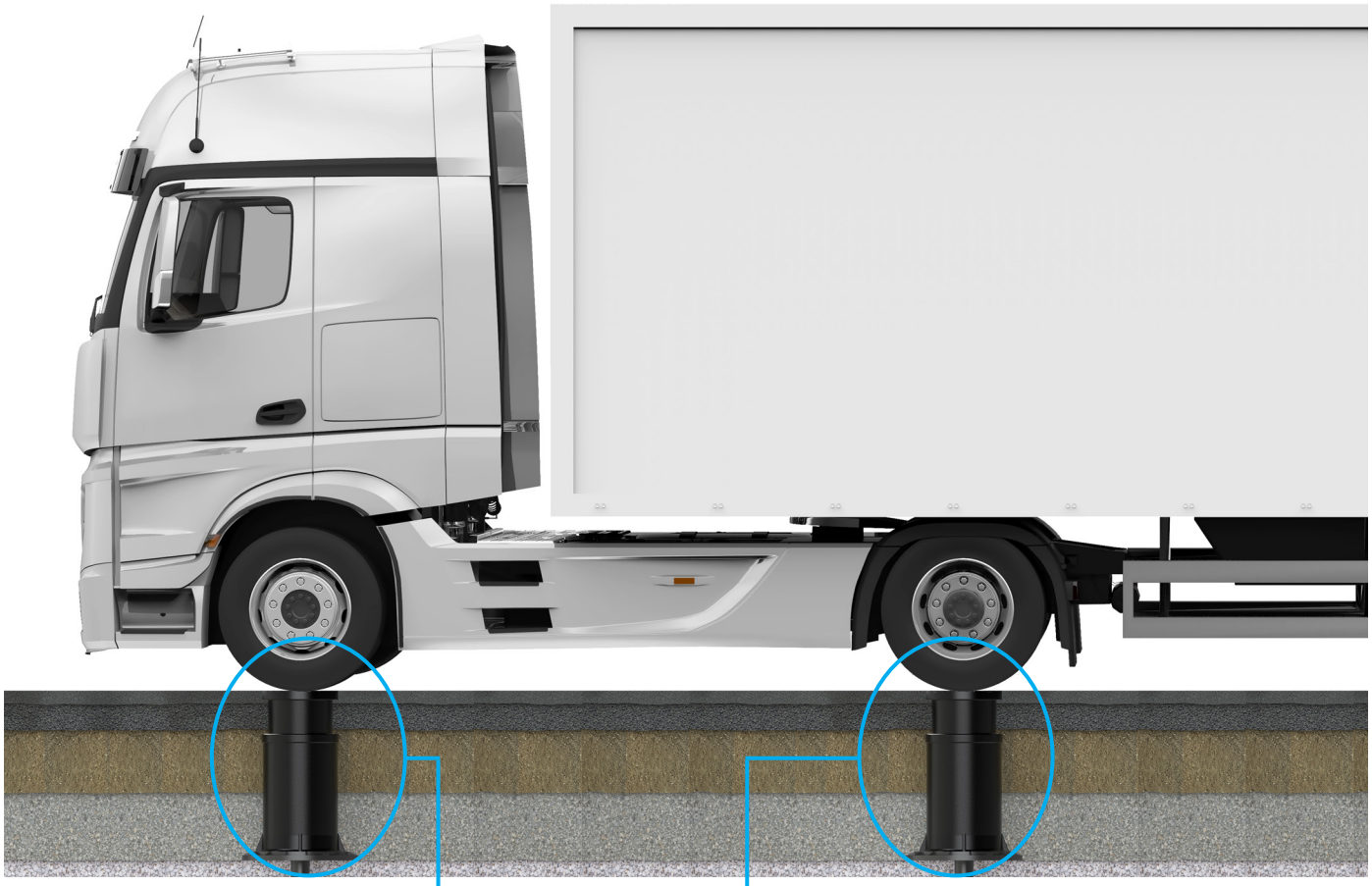
- Surface box for rolling in
- Load transfer via the base plate due to form-locked connection
- Stepless locking with threaded ring
- Hawle angle seat cover
- Height of threaded ring and drawing ring adjustable after installation
- Adjustment range of 22 cm max.
- Extension spindle can be hooked/inserted in the threaded ring
- Individual adjustment to the height of the base layer
- For valves and gate valves
- Cover labels for potable water, sewage, gas available

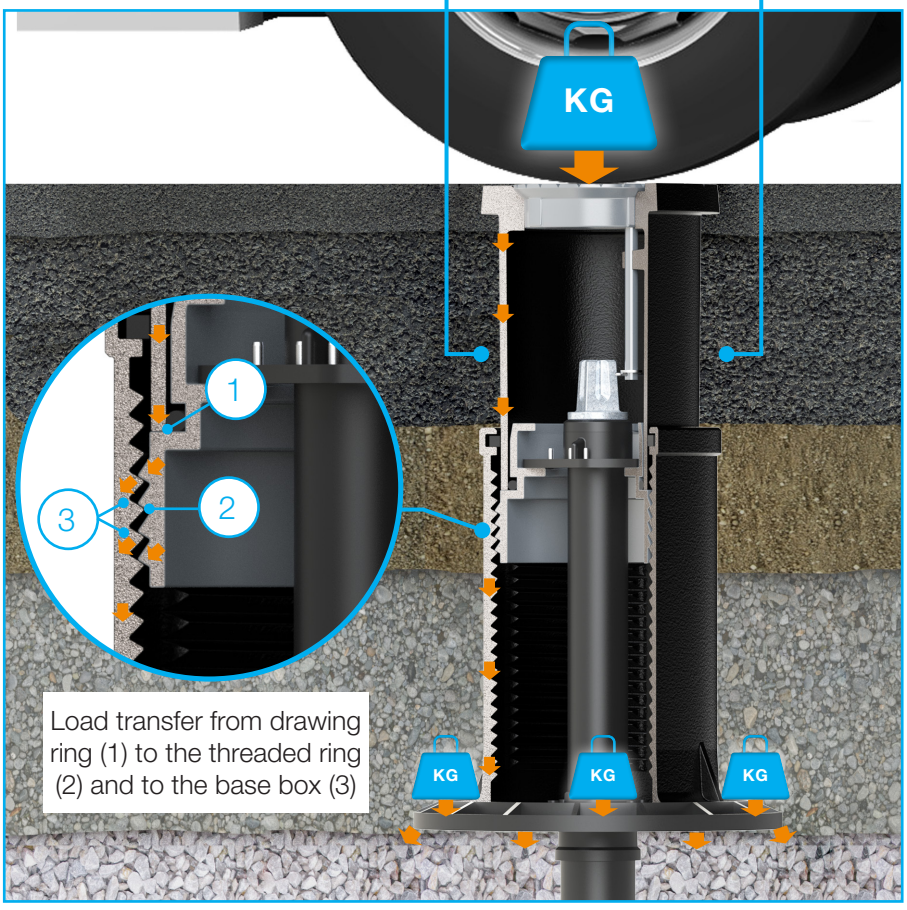
Structure: Heavy-duty surface box

No.	Short designation	Material
1	Cover	Cast iron, GJS-400, Hawle epoxy powder coating
2	Drawing ring	Cast iron, GJS 400
3	Wiper (dirt gasket)	Elastomer
4	Insertable plate/clip	PE
5	O-ring	Elastomer
6	Threaded ring	Cast iron, GJS-400, Hawle epoxy powder coating
7	Base box	Cast iron, GJS 400
8	Base plate (not included in the scope of delivery)	
9	Hawle extension spindle (not included in the scope of delivery)	



Load transfer via form-locked connection





Load transfer from drawing ring (1) to the threaded ring (2) and to the base box (3)

By screwing the threaded ring (2) upward, a form-locked connection is formed between the drawing ring (1) and the threaded ring. This insures a load transfer from the drawing ring to the threaded ring.

In a next step, the load is distributed to the base box via the threaded connection of the threaded ring (2) and base box (3). This causes the load to be evenly distributed to the base plate and then discharged into the subgrade of the road.

Installation: Heavy-duty surface box

No.	Short designation
1	Cover
2	Drawing ring
3	Wiper (dirt gasket)
4	Insertable plate/clip
5	O-ring
6	Threaded ring
7	Base box
8	Base plate
9	Hawle extension spindle
10	Adjustment tool

1

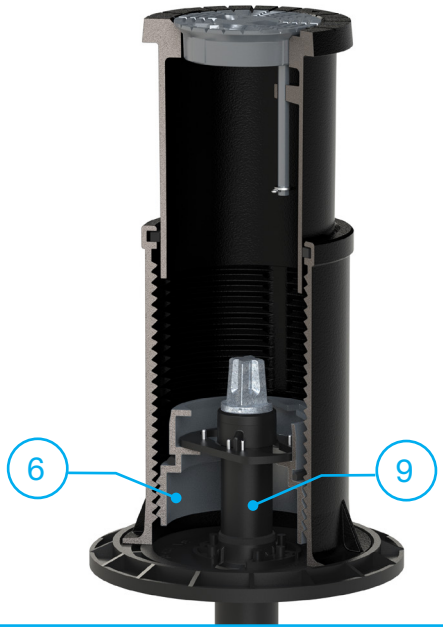


Figure: Extension spindle (9) is hooked in, threaded ring (6) is at bottom

2

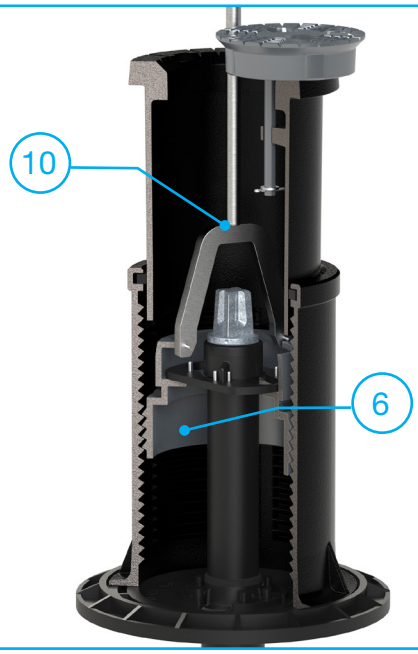


Figure: The adjustment tool (10) is used to screw the threaded ring (6) upward to the desired position.

3

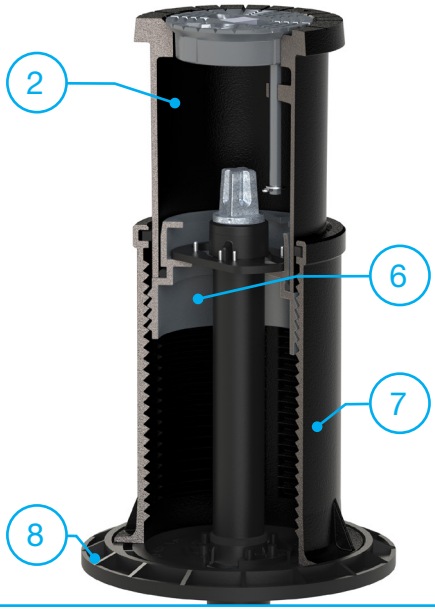
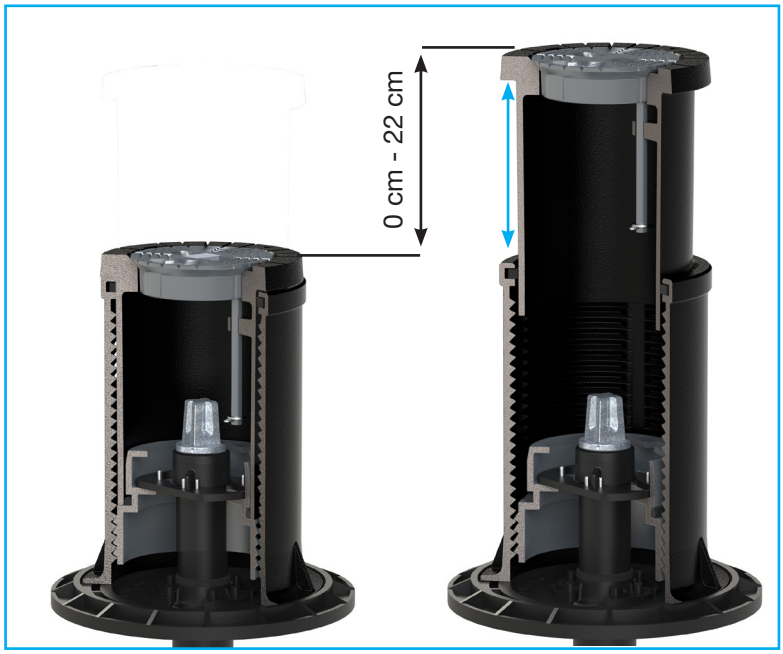
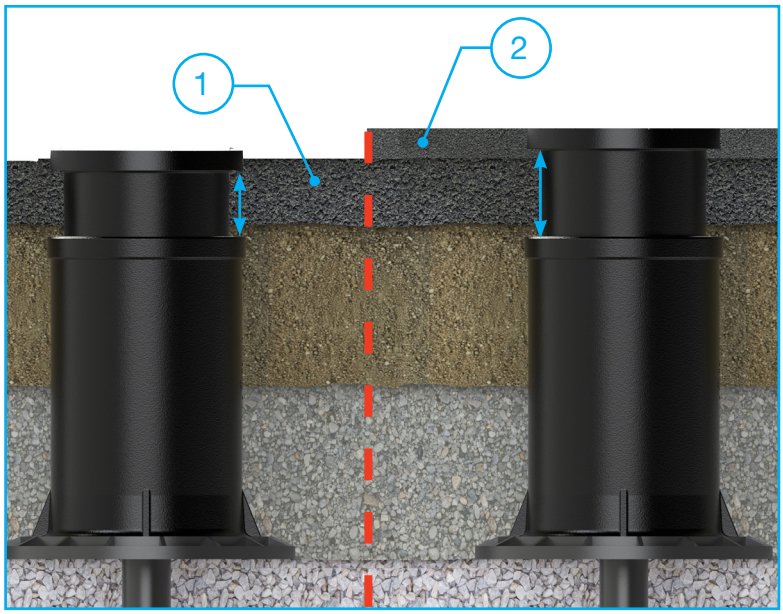


Figure: The threaded ring (6) is at the top; this creates a form-locked connection between the threaded ring (6) and the drawing ring (2), thus ensuring the load transfer via the base box (7) and/or the base plate (8).

Adjustment range





The drawing ring of the heavy-duty surface box allows for a height adjustment of 22 cm max. During the construction phase, for example, the ability to adjust the height of the surface box helps to eliminate on-site damage caused by construction site vehicles, etc.

First, the drawing ring of the surface box must be backfilled up to the base layer (1) to bond it with the street layer. As a result, the surface box does not protrude significantly above the street top and is, therefore, not susceptible to damage, e.g., from construction site vehicles driving over it. As soon as the final bituminous top layer (2) is applied onto the road, the surface box can be adjusted to the new street level thanks to the individually adjustable height.

This creates a flush bond with the street layer. In a next step, the threaded ring must be screwed upward to lock the drawing ring in place. Thanks to the wide height adjustment range and the lockable screw ring, the Hawle heavy-duty surface box combines the advantages of a surface box for rolling in with the positive properties of a rigid surface box.

Product supplement

597-02
Adjustment tool for heavy-duty surface box

No.:	Description	Properties
597-02	Adjustment tool for heavy-duty surface box	Adjustment tool for surface box for gate valves: Art. no.: 5972079000 Adjustment tool for surface box for valves: Art. no. 5971879000

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