Stenger Trench Box



International Patent Pending (PCT)



2in1-solution

Developed for mini excavators

Stenger Trench Box is a very light box from only 300 kg which can be handled by a single person using a mini excavator. This makes it both easier and faster for you to secure working conditions for yourself and your co-workers.

Increased flexibility and functionality

Our boxes are reversible by design. All sizes can be used horizontal or vertically, simply by relocating the struts and flipping the box - thus every size can be used in two depths during excavation. The width of your workspace can also be adapted by adjusting the struts. This increased functionality makes our trench shoring boxes usable for a variety of tasks. Cutting edges are delivered fixed or as a mountable feature. Feel free to visit our website or contact us for more information on accessories.

The box can be transported as is, or be assembled in only a few minutes using the assembly rail when on site. When assembled the box is ready to be lowered into the excavation. This ensures security both during assembly and use. Disassembled the box is easy to stack and transport measuring 19-23 cm in height depending on type and size.



The Stenger trench shoring box shown in two sizes. From the left a horizontal medium-sized box with 129-218 struts, followed by a vertical oriented medium-sized box with 80-121 struts. Next to them we have two small-sized boxes, first horizontal and then vertical, both with 80-121 struts.

Tested to withstand the pressure

Force Technology has tested the struts and confirmed that they combined with our panels can withstand the pressure they face during excavations. The struts have also been tested and approved in Germany, where they are manufactured. Our panels have been tested by the Danish Technological Institute with both surface and focused pressure.

Designed in Denmark using quality material of high durability

Our trench shoring boxes are developed in Denmark under strict quality control ensured by demands of Danish Standard/EN 13331-1. We emphasize on using high quality steel profiles and sheets of hardened recycled plastic. The sheets can withstand temperatures of minus 60 degrees Celsius without risking loss of strength.

Accessories

Assembly rail, lifting chains, struts and clever simple fittings are designed to maximize efficiency and flexibility of our trench shoring boxes.

EURO Test Certified



Type 3

We developed our Type 3 models for the EURO Test certification from Germany's BG Bau. The Type 3 delivers considerable strength while still being manageable by relatively small machines. A 2-ton mini excavator can still handle a small-sized Type 3, which weighs in at only 300 kg when assembled with 80-121 struts.





Specifications Small Medium

Measurements (cm)	2000 x 1500	2000 x 2500	
Type 3 boxes with 80-121 struts	300 kg - 26 kN	540 kg - 26 kN	
Work height under struts	Both models: 80 cm		

^{*}kN is indicated as calculated earth pressure per m2

	Struts &	60 - 81	Struts 8	0 - 121	Struts 12	29-218
Arbejdsbredde i cm	Inside	Outside	Inside	Outside	Inside	Outside
Type 3 Small	54 - 75	65 - 86	74 - 115	85 - 126	123 - 212	134 - 223
Type 3 Medium	56 - 77	69 - 90	76 - 117	89 - 130	125 - 214	138 - 227

^{*}longer struts are available to fit all needs - please contact us with your request.

www.stengertrenchbox.com



Reference - Munck Forsyningsledninger A/S





Munck Forsyningsledninger A/S

Benny Nielsen appoints the weight as the box' greatest advantage, which makes it easy for his 4-ton excavator to handle it. "Thanks to Stenger trench shoring box' low weight, it's very easy to use. For instance, when our work site moves into our costumers backyard, or when creating a pump well," he explains.

Previously his company used alu-boxes which, compared to the trench shoring boxes, come with a more difficult assembly and less stability both in use and during transportation. The fact that the trench shoring box is transportable while assembled is yet another great advantage when it comes to saving time during deployment. "The trench shoring box just makes it much easier for us when we're excavating in depth or lose ground," Benny Nielsen comments.

Profitable safety

Holger Vohs of TM Calculator has concluded that there's money to be saved by using trench shoring instead of excavation plants. The table below shows the potential savings for an excavation in 2 meters depth using a ground area of 0,9 x 2,5 m based on DK costs.

Task type	Excavation	Using trench sho	oring Savings	Savings (%)
Excavation	505€	454€	51 €	10 %
Reestablishing mulch	96,5€	30€	66,5€	69 %.
Reestablishing asphalt	838 €	514€	324€	38 %
Reestablishing tiles	425€	157€	268€	63 %

Transporting dug up mulch, sand for refilling and new asphalt has been included in these calculations. Sidewalks are assumed reused and the calculations include renting/depreciation of the box.

Contact

If you seek an optimal solution to secure the safety of your employees during excavation or if you're interested in knowing more about our trench shoring boxes, please call: Margrethe Stenger + 45 74 83 53 18.

Or by e-mail: margrethe@stenger.dk

www.stengertrenchbox.com

