

# KS 60



The stable KS 60 trench box is configured for high loads, low weight and high safety – features that make this lightweight box the ideal shoring for open terrain and medium-sized inner-city sewer construction projects. In certain cases and subject to consultation with the manufacturer’s technical department, higher loads are possible at certain shoring depths.

The struts are compatible with those of the KS 100 boxes. The loads are taken up by the articulated sprung sockets between the struts and the shoring panel. Small excavators can therefore be used for quick and easy box installation and removal using the placement and dig-and-push methods.

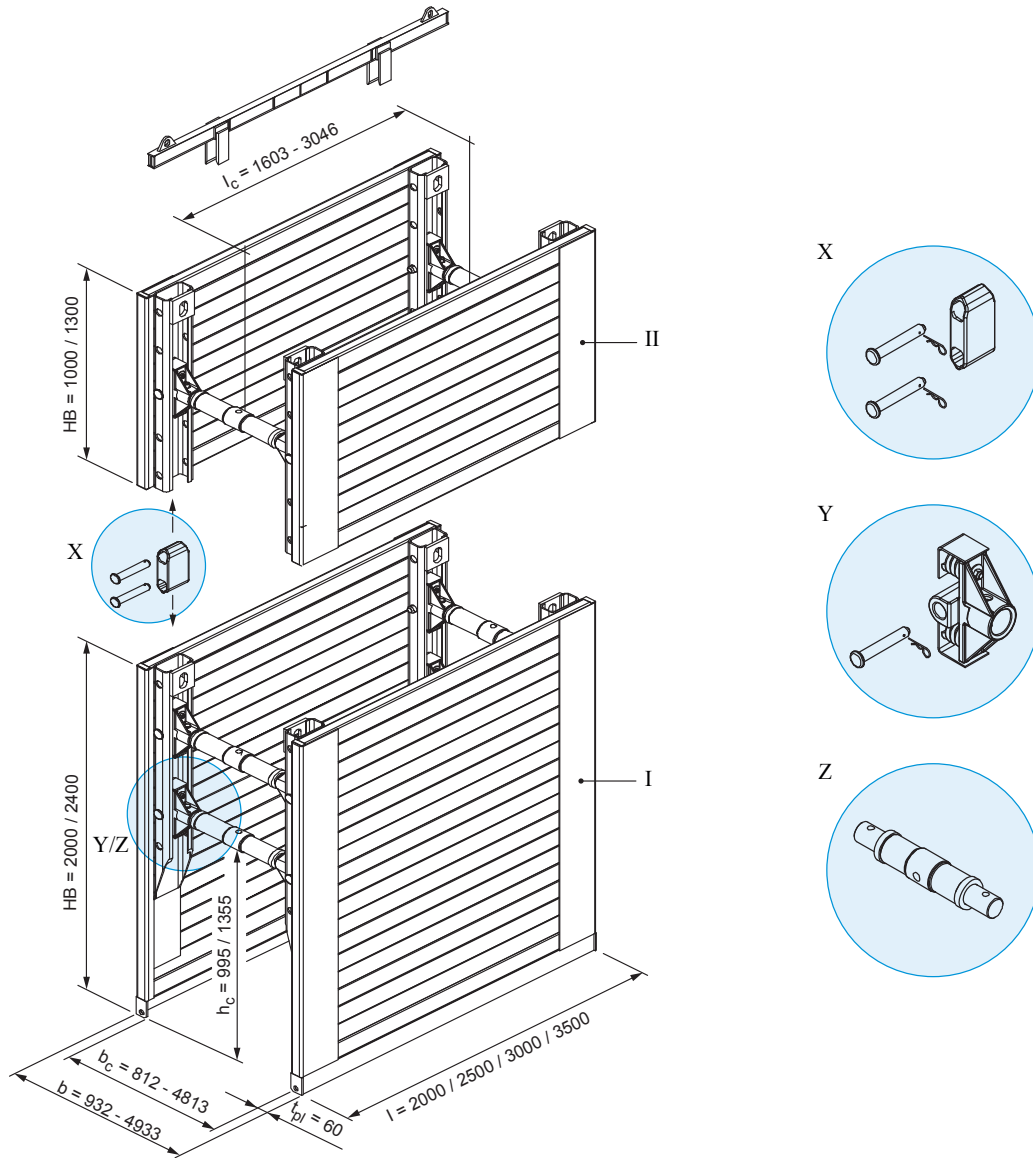
## Basic data

Shoring length	2,00 m - 3,50 m
Height base unit	2,00 m / 2,40 m
Height top unit	1,00 m / 1,30 m
Pipe culvert height	max. 1,355 m
Weight	1185 kg - 1565 kg
Trench width	variable, see page 84/85

## Advantages

- Suitable for open terrain and medium-scale sewer construction in urban centers
- Shoring struts are compatible with KS 100 boxes
- Can be installed and removed using small-scale excavators
- Low weight, high strength

KS 60



(All dimensions in mm)

I	Base unit	$l_c$	Pipe culvert length	X	Connector
II	Top unit	$b$	Shoring / trench width	Y	Mushroom spring with pin
HB	Height base unit	$b_c$	Inner width	Z	Spindle 98x...
HT	Height top unit	$h_c$	Pipe culvert height		
l	Length	$t_{pl}$	Thickness		

**Base units**

Art. No.	l [m]	h [m]	t <sub>pl</sub> [m]	h <sub>c</sub> [m]	l <sub>c</sub> [m]	G / VP [kg]	G / Box [kg]	A [m <sup>2</sup> ]	eh [kN/m <sup>2</sup> ]
131 060	3,00	2,00	0,06	0,995	2,61	460,0	1.185,0 *	6,00	26,3
131 080	3,50	2,00	0,06	0,995	3,05	560,0	1.385,0 *	7,00	26,6
131 040	2,00	2,40	0,06	1,355	1,61	394,0	1.053,0 *	4,80	39,1
131 050	2,50	2,40	0,06	1,355	2,11	460,0	1.185,0 *	6,00	31,3
131 070	3,00	2,40	0,06	1,355	2,61	515,0	1.295,0 *	7,20	26,1
131 090	3,50	2,40	0,06	1,355	3,05	650,0	1.565,0 *	8,40	22,3

\* with spindle 98x700

**Top units**

Art. No.	l [m]	h [m]	t <sub>pl</sub> [m]	h <sub>c</sub> [m]	l <sub>c</sub> [m]	G / VP [kg]	G / Box [kg]	A [m <sup>2</sup> ]	eh [kN/m <sup>2</sup> ]
131 140	3,00	1,00	0,06	-	2,61	265,0	705,0 *	3,00	26,3
131 160	3,50	1,00	0,06	-	3,05	333,0	841,0 *	3,50	26,6
131 120	2,00	1,30	0,06	-	1,61	260,0	695,0 *	2,60	66,7
131 130	2,50	1,30	0,06	-	2,11	295,0	765,0 *	3,25	39,7
131 150	3,00	1,30	0,06	-	2,61	330,0	835,0 *	3,90	26,3
131 170	3,50	1,30	0,06	-	3,05	395,0	965,0 *	4,55	26,6

\* with spindle 98x700

**Struts / Extension bars**

Art. No.	Short description	l [m]	G [kg]
139 385	Plug-in adapter pipe, ZW SB - 108x1000	1,00	28,0
139 400	Plug-in adapter pipe, ZW SB - 108x1500	1,50	37,4
139 420	Plug-in adapter pipe, ZW SB - 108x2000	2,00	47,3
139 425	Plug-in adapter pipe, ZW SB - 108x2500	2,50	60,0
139 430	Plug-in adapter pipe, ZW SB - 108x300	0,30	13,8
139 445	Plug-in adapter pipe, ZW SB - 108x500	0,50	17,7
139 470	Plug-in adapter pipe, ZW SB - 121x1000	1,00	36,3
139 510	Plug-in adapter pipe, ZW SB - 121x500	0,50	25,1
108 950	Spindle -heavy duty design-, lefthand, 98x817		38,0
108 960	Spindle -heavy duty design-, righthand, 98x817		39,0
138 260	Spindle to stick, 98x392		15,7
138 280	Spindle to stick, 98x550		22,0
138 290	Spindle to stick, 98x700		34,0
138 300	Spindle to stick, 98x817, complete		76,9

**Shoring widths for spindle 98x392**

Extension bar	l [m]	b <sub>c</sub> [m]	b [m]
	ohne	0,693 - 0,761	0,813 - 0,881
139 430	0,30	0,993 - 1,061	1,113 - 1,181
139 445	0,50	1,193 - 1,261	1,313 - 1,381
139 385	1,00	1,693 - 1,761	1,813 - 1,881
139 400	1,50	2,193 - 2,26	2,313 - 2,381
139 420	2,00	2,693 - 2,761	2,813 - 2,881
139 425	2,50	3,193 - 3,260	3,313 - 3,381

**Shoring widths for spindle 98x550**

Extension bar	l [m]	b <sub>c</sub> [m]	b [m]
	without	0,812 - 1,012	0,932 - 1,132
139 430	0,30	1,112 - 1,312	1,232 - 1,432
139 445	0,50	1,312 - 1,512	1,432 - 1,632
139 385	1,00	1,812 - 2,012	1,932 - 2,132
139 400	1,50	2,313 - 2,512	2,432 - 2,632
139 420	2,00	2,812 - 3,012	2,932 - 3,132
139 425	2,50	3,312 - 3,512	3,432 - 3,632

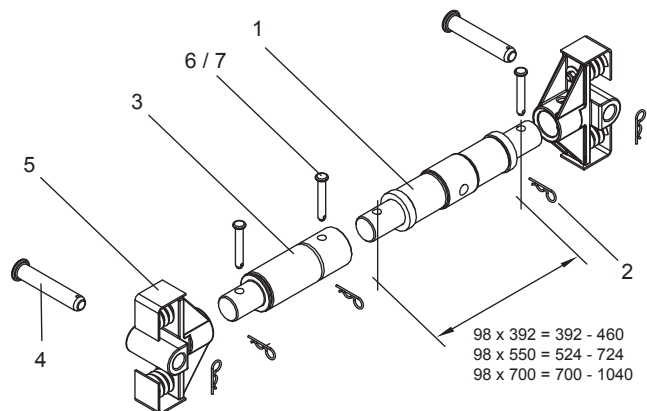
**Shoring widths for spindle 98x700**

Extension bar	l [m]	b <sub>c</sub> [m]	b [m]
	without	0,988 - 1,328	1,108 - 1,448
139 430	0,30	1,288 - 1,628	1,408 - 1,748
139 445	0,50	1,488 - 1,828	1,608 - 1,948
139 385	1,00	1,988 - 2,328	2,108 - 2,448
139 400	1,50	2,488 - 2,828	2,608 - 2,948
139 420	2,00	2,988 - 3,328	3,108 - 3,448
139 425	2,50	3,488 - 3,828	3,608 - 3,948

Different and larger widths are possible by combining different spacer bars.

l	Length	h	Height	G	Weight
l <sub>c</sub>	Pipe culvert length	h <sub>c</sub>	Pipe culvert height	G / VP	Weight per shoring panel
b	Shoring / trench width	t <sub>p</sub>	Thickness	G / Box	Weight per shoring box
b <sub>c</sub>	Inner width	A	Area	eh	Earth pressure max.

**Strut 98 x 392 / 550 / 700**



1	Spindle	4	Pin 212 x 43	7	Pin 140 x 20
2	Spring cotter	5	Mushroom spring		
3	Plug-in extension bar	6	Pin 125 x 20		

**Accessories / Spares**

Art. No.	Short description	l [m]	d [m]	G [kg]
842 752	Adapter for DKU piling frame, corner shoring, h = 0.50 m KDVI			55,0
842 753	Adapter for DKU piling frame, corner shoring, h = 1.00 m KDVI			94,0
850 699	Adjustment bar	0,7	0,024	2,5
139 070	Chain sling connection, 4-leg, 2300 x 13	2,30		45,0
139 080	Chain sling connection, 4-leg, 2800 x 13	2,80		57,0
139 100	Connection stanchion 290 x 145			5,5
842 099	DKU piling frame guide frame	2,27		105,0
842 100	DKU piling frame guide frame	3,81		175,0
859 982	Drop-in bearing block, adjustable, Krings			12,0
859 981	Drop-in bearing block, Emunds+Staudinger			26,0
110 070	Fixing for pressure spring 100 x 85	0,100	0,085	0,8
119 011	KVL adapter for spindles 98x530 / 98x700			7,6
138 170	Mushroom FP 80			13,0
IA 0120 F	Nut M 16			0,03
IA 0130 F	Nut M 20			0,03
138 030	Pin 125 x 20	0,125	0,020	0,4
138 040	Pin 140 x 20	0,140	0,020	0,4
138 070	Pin 212 x 43	0,212	0,043	2,5
861 077	Pressure beam (Lightweight shoring, KS 60, KVL)	1,80		80,0
861 078	Pressure beam (Lightweight shoring, KS 60, KVL)	2,30		95,0
861 079	Pressure beam (Lightweight shoring, KS 60, KVL)	2,80		110,0
861 080	Pressure beam (Lightweight shoring, KS 60, KVL)	3,30		125,0
861 076	Pressure beam (Medium, Magnum shoring, KS 100, GLS)	1,60		176,0
861 074	Pressure beam (Medium, Magnum shoring, KS 100, GLS)	2,35		236,0
861 070	Pressure beam (Medium, Magnum shoring, KS 100, GLS)	2,80		271,0
861 071	Pressure beam (Medium, Magnum shoring, KS 100, GLS)	3,40		318,0

**Accessories / Spares (contd.)**

Art. No.	Short description	l [m]	d [m]	G [kg]
138 160	Pressure spring FP 80	0,084	0,054	0,8
100 690	Rubber parts GPU 30 x 40			0,1
IB 0310 F	Screw M 16 x 55			0,11
IB 0360 F	Screw M 20 x 45			0,17
138 200	Spring cotter 92 x 5	0,092	0,005	0,1
336 960	Support bracket for DKU piling frame element			40,0
821 100	Suspension chain KL-13-8	5,000		25,7

l	Length	d	Diameter	G	Weight
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