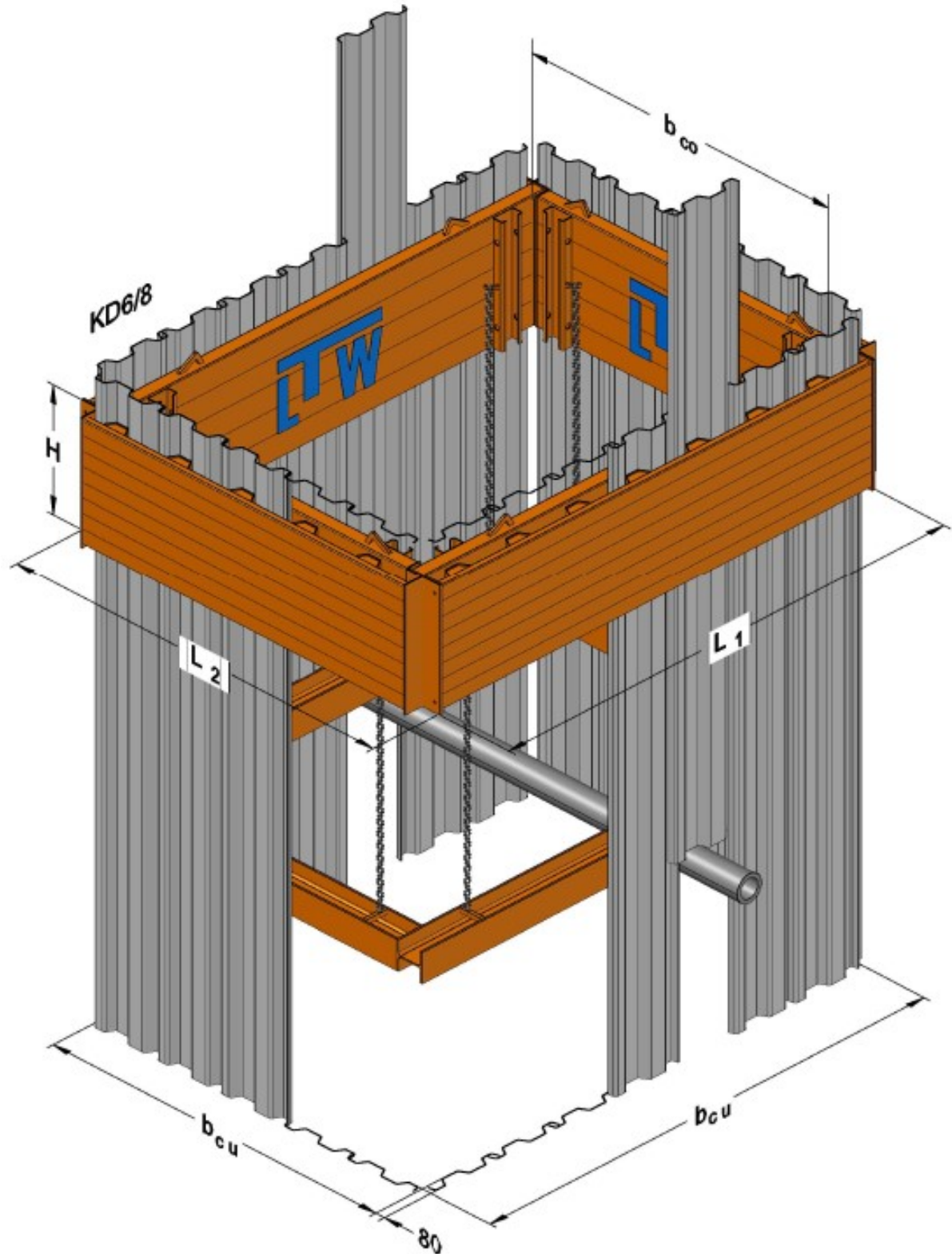


# TECHNICAL CHARACTERISTICS

## LTW Manhole Pile Guide Box



### SYSTEM VIEW



- 1 DK – Long Side
- 2 DK – Front End

L Plate Lengths

$b_{cu}$  working width between sheets  
 $b_{co}$  working width inside plates

# TECHNICAL CHARACTERISTICS

## LTW Manhole Pile Guide Box



### DK – Long Side Plate $t_{PI\text{-inside}} = 120 \text{ mm}$ for trench sheets type KD 6/8

Plate-length <b>L</b> [ m ]	Plate-height <b>H</b> [ m ]	Interior width between plates <b>b<sub>co</sub></b> [ m ]	Interior width betw. sheets <b>b<sub>cu</sub></b> [ m ]	Exterior width <b>b</b> [ m ]	Number of trench sheets <b>N</b> per plate	Limit state design beam load <b>q<sub>d</sub></b> [ kN / m ]	Weight Plate <b>G<sub>PL</sub></b> [ kg ]
3,62	1,00	~3,39	~3,63	~3,93	6 * KD6	97,0	935
4,03	1,00	~3,80	~4,04	~4,35	7 * KD6	78,1	1.030
4,84	1,00	~4,61	~4,85	~5,16	8 * KD6	96,0	1.315
5,44	1,00	~5,21	~5,45	~5,76	9 * KD6	76,0	1.460
5,94	1,00	~5,71	~5,95	~6,26	10 * KD6	63,7	1.585

### DK – Front End Plate $t_{PI\text{-inside}} = 120 \text{ mm}$ for trench sheets type KD 6/8

Plate-length <b>L</b> [ m ]	Plate-height <b>H</b> [ m ]	Interior width between plates <b>b<sub>co</sub></b> [ m ]	Interior width betw. sheets <b>b<sub>cu</sub></b> [ m ]	Exterior width <b>b</b> [ m ]	Number of trench sheets <b>n</b> per plate	Limit state design beam load <b>q<sub>d</sub></b> [ kN / m ]	Weight Plate <b>G<sub>PL</sub></b> [ kg ]
3,33	1,00	~2,76	~3,00	~3,31	5 * KD6	167,1	770
3,92	1,00	~3,35	~3,59	~3,90	6 * KD6	113,5	900
4,34	1,00	~3,77	~4,01	~4,32	7 * KD6	89,7	995

## TENSILE FORCES

lifting eyes at the plate head  $R_d = 229 \text{ kN}$

### Trench sheets, steel quality S275JRC KD 6/8



Type	Width <b>b</b> [ mm ]	Height <b>h</b> [ mm ]	Thickness <b>t</b> [ mm ]	Section Modulus <b>W<sub>y</sub></b> [ cm <sup>3</sup> /m ]	Moment of inertia <b>I<sub>y</sub></b> [ cm <sup>4</sup> /m ]	Bending Moment <b>M<sub>d</sub></b> [ kNm/m ]	Weight Single Pile [ kg/m ]	Weight Wall [ kg/m <sup>2</sup> ]
<b>KD 6/8</b>	600	80	8	242	969	60,5	50,0	83,3

## ACCESSORIES

Description	Dimension	Req. qty. per Manhole
Hexagon Screws	M20 * 50	8
Washers	A22	8

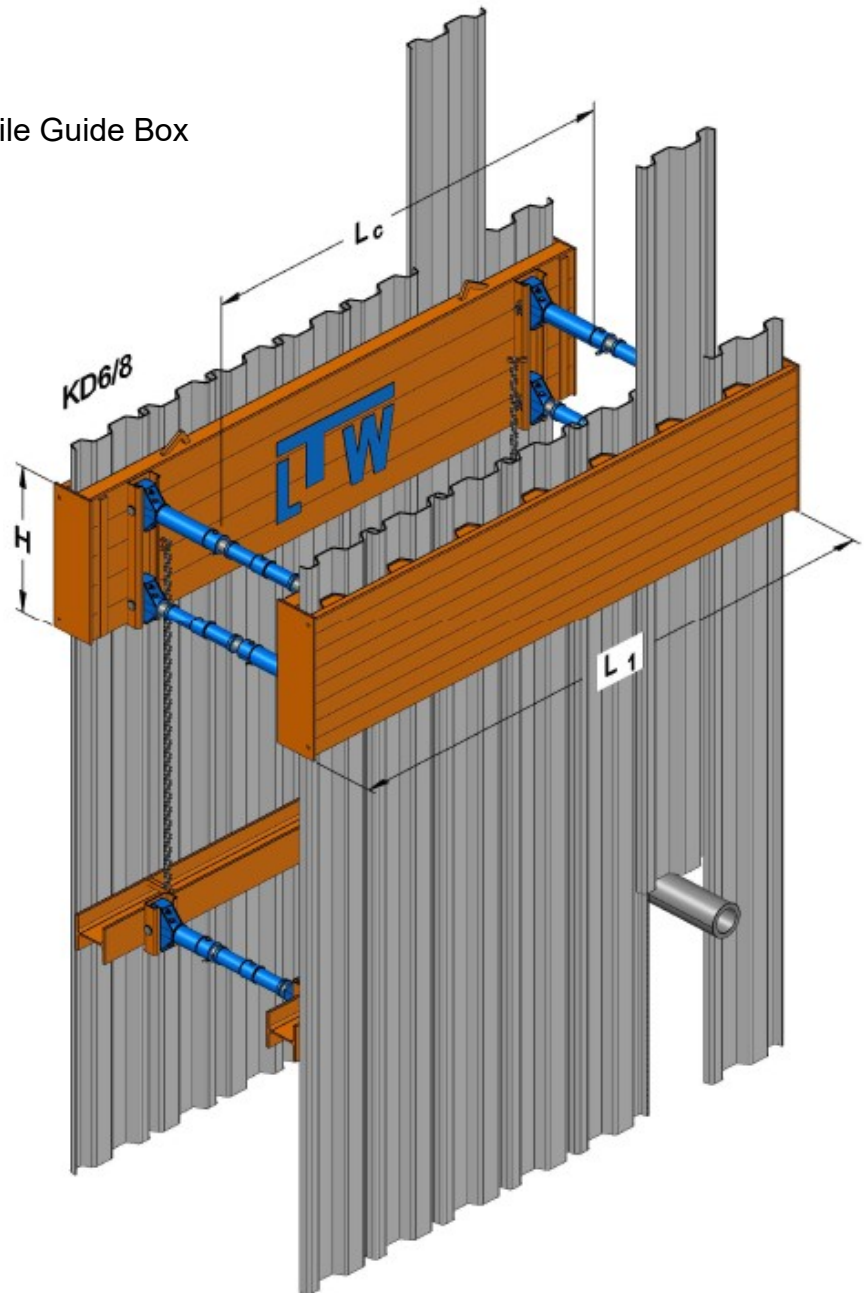
# TECHNICAL CHARACTERISTICS

## LTW Manhole Pile Guide Box



### SYSTEM VIEW

Long Side Plates used as Pile Guide Box



trench sheets type KD 6/8     $t_{PI\text{-inside}} = 120 \text{ mm}$

Plate length L [ m ]	Plate height H [ m ]	Pipe culvert length L <sub>c</sub> [ m ]	Number of trench sheets n per plate	Limit state design beam load q <sub>d</sub> [ kN / m ]	Plate weight G <sub>PL</sub> [ kg ]	Box weight G <sub>E</sub> [ kg ]
3,62	1,00	2,67	6 * KD6	97,0	935	2.150
4,03	1,00	3,08	7 * KD6	78,1	1.030	2.340
4,84	1,00	3,89	8 * KD6	96,0	1.315	2.910
5,44	1,00	4,49	9 * KD6	76,0	1.460	3.200
5,94	1,00	4,99	10 * KD6	63,7	1.585	3.450

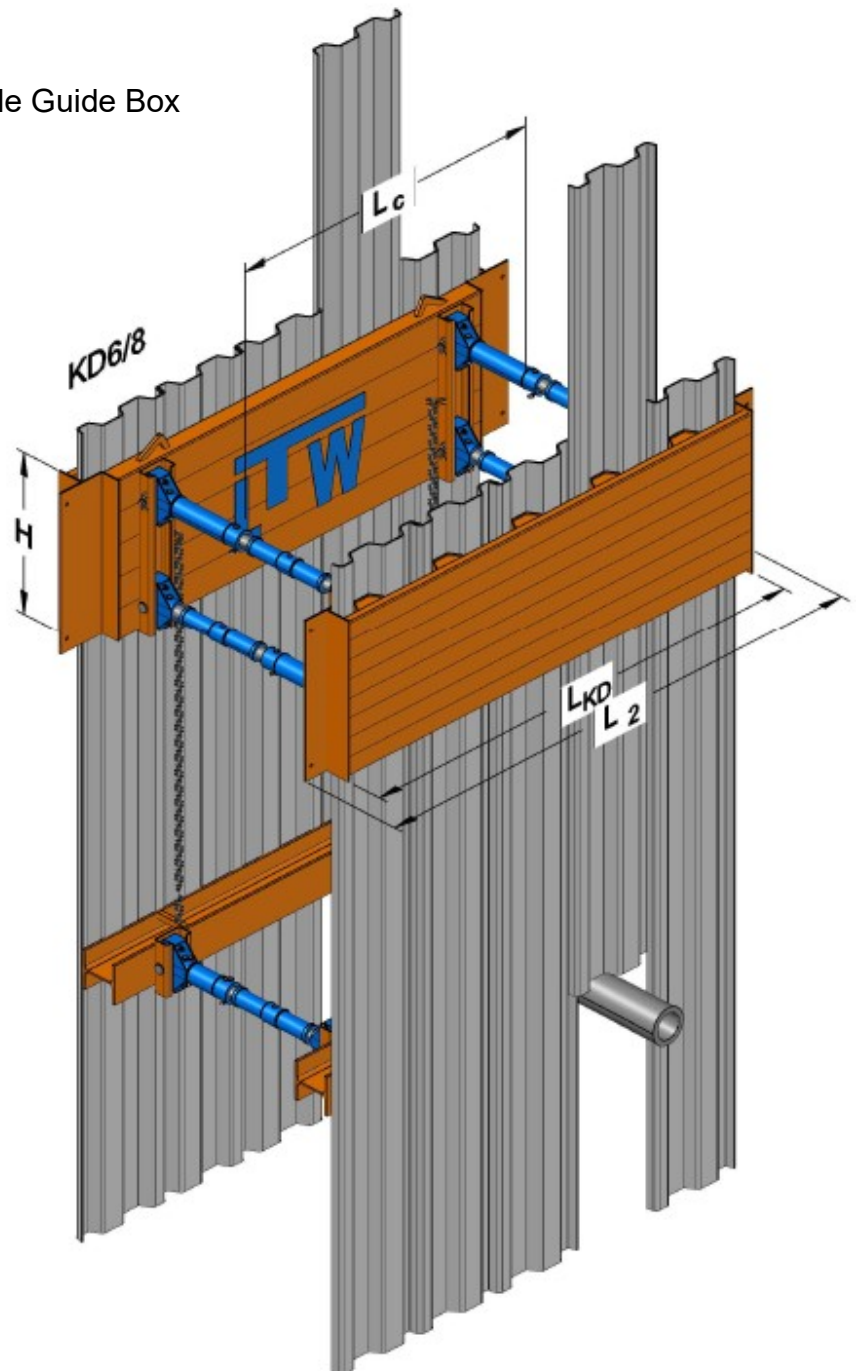
# TECHNICAL CHARACTERISTICS

## LTW Manhole Pile Guide Box



### SYSTEM VIEW

Front End Plates used as Pile Guide Box



trench sheets type KD 6/8       $t_{PI\text{-inside}} = 120 \text{ mm}$

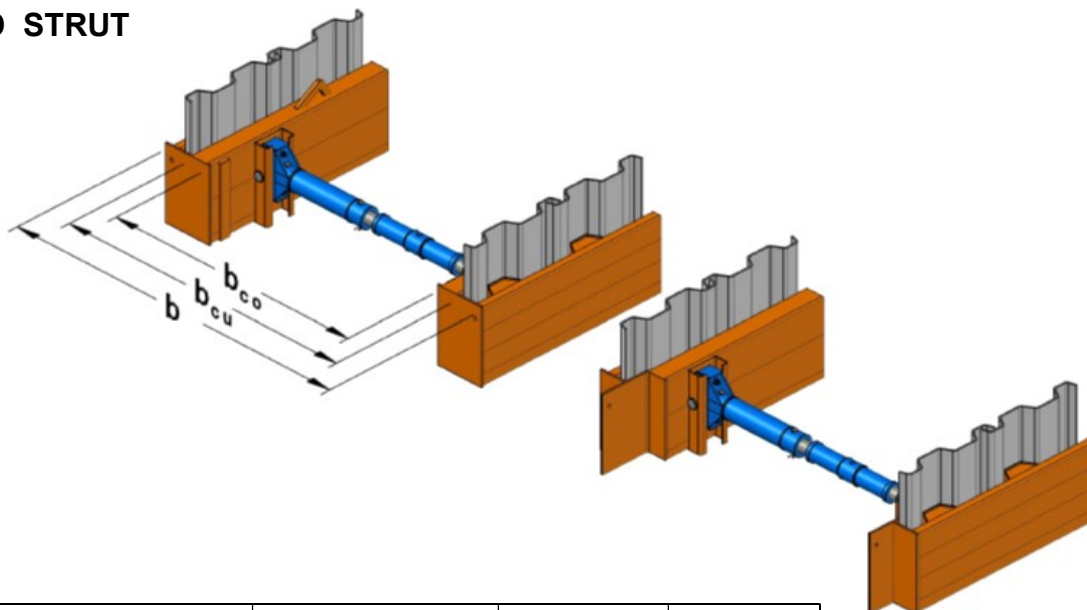
Plate length $L$ [ m ]	Lengths of shoring with sheets $L_{KD}$ [ m ]	Pipe culvert length $L_c$ [ m ]	Number of trench sheets $n$ per plate	Limit state design beam load $q_d$ [ kN / m ]	Plate weight $G_{PL}$ [ kg ]	Box weight $G_E$ [ kg ]
3,33	~3,01	~2,10	5 * KD6	167,1	770	1.820
3,92	~3,60	~2,69	6 * KD6	113,5	900	2.080
4,34	~4,02	~3,11	7 * KD6	89,7	995	2.270

# TECHNICAL CHARACTERISTICS

## LTW Manhole Pile Guide Box

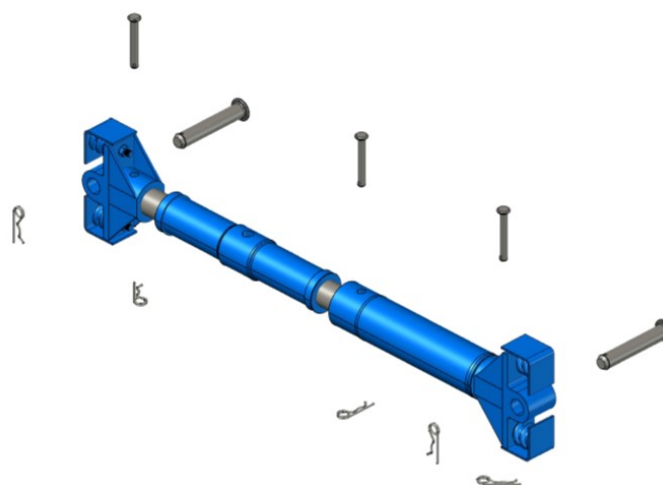


### STANDARD STRUT



Brace Extension [ m ]	inner working width between plates <b>b<sub>co</sub></b> [ m ]	inner working width between sheets <b>b<sub>cu</sub></b> [ m ]	shoring width KD 6/8 <b>b</b> [ m ]	Weight <b>G</b> [ kg ]
<i>without</i>	0,99 - 1,29	1,23 - 1,53	1,54 - 1,84	71,0
0,30	1,29 - 1,59	1,53 - 1,83	1,84 - 2,14	15,5
0,50	1,49 - 1,79	1,73 - 2,03	2,04 - 2,34	20,0
0,80	1,79 - 2,09	2,03 - 2,33	2,34 - 2,64	26,7
1,00	1,99 - 2,29	2,23 - 2,53	2,54 - 2,84	31,1
1,50	2,49 - 2,79	2,73 - 3,03	3,04 - 3,34	42,3
2,00	2,99 - 3,29	3,23 - 3,53	3,54 - 3,84	53,4
2,50	3,49 - 3,79	3,73 - 4,03	4,04 - 4,34	64,5

A strut unit consists of two spring mushrooms, the strut and, if required a brace extension.



Spring Mushroom  
Standard Strut  
Brace Extension

Bolt  $\varnothing$  20\*148 mm with locking clip  
Bolt  $\varnothing$  40\*226 mm with locking clip