

E+S Trench shoring systems / Sliding rail systems

Deep Linear shoring



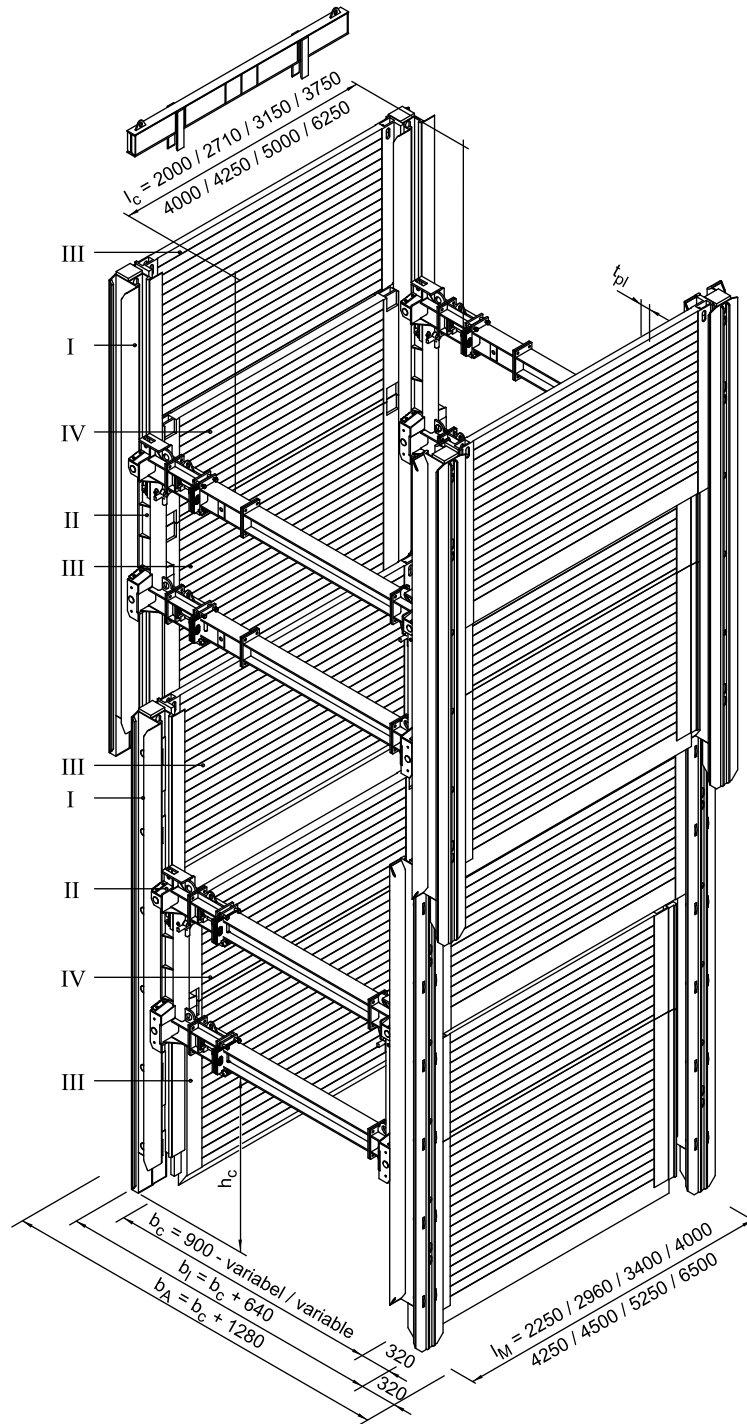
↑ Deep Linear shoring

Module length	2,25 m - 6,50 m
Length slide rail	variabel
Panel height	1,32 m / 2,32 m
Pipe culvert height	variabel

The deep linear shoring is a further development of the known powerful linear shoring where two units of linear trench support are connected with each other. When finally installed, the two supporting modules, the components of which are of the same length, complement each other, dealing independently with the pressure of the soil, while ensuring the required enormous excavation of around 14 m which can be reached using this method. Due to its high performance, this new method constitutes a really big step forward in shoring technology.

The scope of application of this new shoring method are deeper building pits for sewer line construction, shafts and press pits up to a depth of 14 m, depending on the surface properties. With extremely poor, cohesive and “sticky” grounds with great friction forces to be overcome between the individual shoring elements and the ascending ground, application of this newly developed deeper linear shoring can be economic already for depths ranging from 7 to 10 m since, here, deployment of a traditional linear shoring – especially its demolition – can be exhausting and time-consuming due to the high friction forces involved.

Deep Linear shoring



I	Linear shoring support	b_A	Shoring / trench width (outer rail)
II	Linear shoring boogie car	b_l	Shoring / trench width (inner rail)
III	Base panel	b_c	Inner width
IV	Top panel	h_c	Pipe culvert height
l_M	Module length	t_{pl}	Thickness
l_c	Pipe culvert length		

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(All dimensions in mm)

Deep Linear shoring

Linear shoring support -outside-

Art. No.	Short description	l [m]	G [kg]
820 951	Linear shoring support -outside-	5,13	1.265,0
820 947	Linear shoring support -outside-	6,13	1.265,0
820 953	Linear shoring support -outside-	7,13	1.475,0

Linear shoring support -inside-

Art. No.	Short description	l [m]	G [kg]
820 952	Linear shoring support -inside-	5,13	1.195,0
820 948	Linear shoring support -inside-	6,13	1.300,0
820 954	Linear shoring support -inside-	7,13	1.550,0

Linear shoring boogie car

Art. No.	Short description	l [m]	G [kg]
832 224	Linear shoring boogie car (Deep linear shoring)	2,20	505,0

Base panel -outside- (Height 2,32 m)

Art. No.	l [m]	l _M [m]	t _{pl} [m]	l _c [m]	G / VP [kg]	A [m ²]
821 150	2,00	2,25	0,11	2,00	540,0	4,64
821 170	2,71	2,96	0,11	2,71	670,0	6,29
821 310	3,15	3,40	0,11	3,15	755,0	7,31
821 770	3,75	4,00	0,11	3,75	865,0	8,70
821 910	4,00	4,25	0,11	4,00	985,0	9,28
821 913	4,25	4,50	0,15	4,25	1.225,0	9,86
821 912	5,00	5,25	0,15	5,00	1.545,0	11,60
821 916	6,25	6,50	0,15	6,25	1.910,0	14,50

Top panel -outside- (Height 1,32 m)

Art. No.	l [m]	l _M [m]	t _{pl} [m]	l _c [m]	G / VP [kg]	A [m ²]
822 075	2,00	2,25	0,11	2,00	365,0	2,64
821 190	2,71	2,96	0,11	2,71	450,0	3,58
822 310	3,15	3,40	0,11	3,15	510,0	4,16
822 710	3,75	4,00	0,11	3,75	580,0	4,95
822 810	4,00	4,25	0,11	4,00	640,0	5,28
822 813	4,25	4,50	0,15	4,25	900,0	5,61
822 815	5,00	5,25	0,15	5,00	1.130,0	6,60
822 830	6,25	6,50	0,15	6,25	1.400,0	8,25

Top panel -outside- (Height 2,30 m)

Art. No.	l [m]	l _M [m]	t _{pl} [m]	l _c [m]	G / VP [kg]	A [m ²]
822 820	5,00	5,25	0,15	5,00	1.700,0	11,50

Base panels -inside- (height 2.32 m)

Art. No.	l [m]	l _M [m]	t _{pl} [m]	l _c [m]	G / VP [kg]	A [m ²]
821 120	1,89	2,25	0,11	2,00	516,0	4,38
821 160	2,60	2,96	0,11	2,71	650,0	6,03
821 250	3,04	3,40	0,11	3,15	730,0	7,05
821 610	3,64	4,00	0,11	3,75	840,0	8,44
821 850	3,89	4,25	0,11	4,00	965,0	9,02
821 855	4,14	4,50	0,15	4,25	1.185,0	9,58

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Base panels -inside- (height 2.32 m) (contd.)

Art. No.	l [m]	l _M [m]	t _{pl} [m]	l _c [m]	G / VP [kg]	A [m ²]
821 860	4,89	5,25	0,15	5,00	1.505,0	11,34
821 861	6,13	6,50	0,15	6,25	1.880,0	14,22

Top panels -inside- (height 1.32 m)

Art. No.	l [m]	l _M [m]	t _{pl} [m]	l _c [m]	G / VP [kg]	A [m ²]
822 060	1,89	2,25	0,11	2,00	355,0	2,49
821 180	2,60	2,96	0,11	2,71	445,0	3,43
822 120	3,04	3,40	0,11	3,15	500,0	4,01
822 620	3,64	4,00	0,11	3,75	570,0	4,80
822 760	3,89	4,25	0,11	4,00	635,0	5,13
822 783	4,14	4,50	0,15	4,25	870,0	5,45
822 800	4,89	5,25	0,15	5,00	1.090,0	6,45
822 801	6,13	6,50	0,15	6,25	1.370,0	8,09

Top panels -inside- (height 2.30 m)

Art. No.	l [m]	l _M [m]	t _{pl} [m]	l _c [m]	G / VP [kg]	A [m ²]
822 065	1,89	2,25	0,11	2,00	530,0	4,35
822 155	2,60	2,96	0,11	2,71	660,0	5,98
822 180	3,04	3,40	0,11	3,15	740,0	6,99
822 680	3,64	4,00	0,11	3,75	845,0	8,37
822 780	3,89	4,25	0,11	4,00	975,0	8,95
822 785	4,14	4,50	0,15	4,25	1.409,0	9,50

Extension bars for deep Linear shoring roller unit

Art. No.	Short description	l [m]	G [kg]
830 005	Extension bar HEB 220	0,140	38,0
830 010	Extension bar HEB 220	0,275	50,0
830 011	Extension bar HEB 220	0,350	55,0
830 012	Extension bar HEB 220	0,375	57,0
830 015	Extension bar HEB 220	0,412	60,0
830 020	Extension bar HEB 220	0,550	70,0
830 030	Extension bar HEB 220	1,100	110,0
830 075	Extension bar HEB 220	1,650	152,0
830 125	Extension bar HEB 220	2,200	192,0

Extension bars

Art. No.	Short description	l [m]	G [kg]
830 026	Extension bar HEB 220	0,640	75,0
830 310	Extension bar HEB 220, TLV, hydraulically adjustable	0,412 - 0,530	156,0

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Trench widths

Length of extension bar [m]	b _C [m]	b _I [m]	b _A [m]
without extension bar	0,900	1,540	2,180
0,275	1,175	1,815	2,455
0,550	1,450	2,090	2,730
1,100	2,000	2,640	3,280
1,650	2,550	3,190	3,830
2,200	3,100	3,740	4,380

Other trench widths possible by combining different extension bar lengths.

Larger trench widths available on request.

Accessories / Spares

Art. No.	Short description	l [m]	G [kg]	d [m]	Standard
842 758	Adapter for DKU piling frame, corner shoring, h = 0.50 m KDIV		47,0		
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		
842 749	Adapter for DKU piling frame, h = 0.50 m KDVI (single slide rail, E+S)		45,0		
842 759	Adapter for DKU piling frame, h = 1.00 m KDVI (single slide rail, E+S)		40,0		
842 751	Adapter for DKU piling frame, h = 1.00 m KDVI (single slide rail)		75,5		
834 080	Adapter for EGS / DGS (LV)		105,0		
336 960	Bearing claw for DKU piling frame element		40,0		
862 200	Connector		6,9		
834 100	Cover panel for in-situ concrete DG -base panel-	0,750	7,9		
834 110	Cover plate for in-situ concrete DG -top plate-	1,000	9,9		
842 099	DKU piling frame guide frame	2,27	105,0		
842 100	DKU piling frame guide frame	3,81	175,0		
IA 0150F	Nut M 24		0,1		DIN 934
IA 0210F	Nut M 36		0,4		DIN 934
832 230	Pin	0,150	1,4	0,035	
862 100	Pin (for connector)	0,110	0,8	0,035	
832 246	Pin for roller unit (deep Linear shoring)	0,300	4,6	0,05	
832 245	Pin, Linear shoring (double slide rail)	0,300	3,2	0,04	
850 720	Pin, Linear shoring (single slide rail)		2,5		
861 075	Pressure beam (boxes, slide rail)	4,60	425,0		
861 085	Pressure beam (boxes, slide rail)	5,80	525,0		
861 076	Pressure beam (Medium, Magnum shoring, KS 100, GLS)	1,60	175,5		
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		
834 015	Pressure plate for boogie car		12,4		
834 060	Pull adapter double slide rail		43,6		
834 057	Pull adapter single slide rail		30,8		
IB 0470F	Screw M 24 x 80		0,4		DIN 933
IB 0614F	Screw M 36 x 80		1,0		DIN 933
HE 0050 F	Spring cotter 6 mm		0,03	0,006	DIN 11024
HE 0060F	Spring cotter 8 mm		0,1	0,008	DIN 11024
821 100	Suspension chain KL-13-8	5,000	25,7		
842 704	Waling for DKU piling frame, module length 2.84 m (single slide rail, E+S)	2,60	300,0		
842 705	Waling for DKU piling frame, module length 3.88 m (single slide rail, E+S)	3,64	402,0		

Deep Linear shoring

Accessories / Spares (contd.)

Art. No.	Short description	l [m]	G [kg]	d [m]	Standard
842 710	Waling for DKU piling frame, module length 4.13 m (single slide rail, E+S)	3,89	420,0		
842 711	Waling for DKU piling frame, module length 4.38 m (single slide rail, E+S)	4,14	445,0		

l	Length	b _c	Inner width
b _A	Shoring / trench width (outer rail)	G	Weight
b _l	Shoring / trench width (inner rail)		

The details of length of pipe opening l_c refer to the rectangular roller unit.