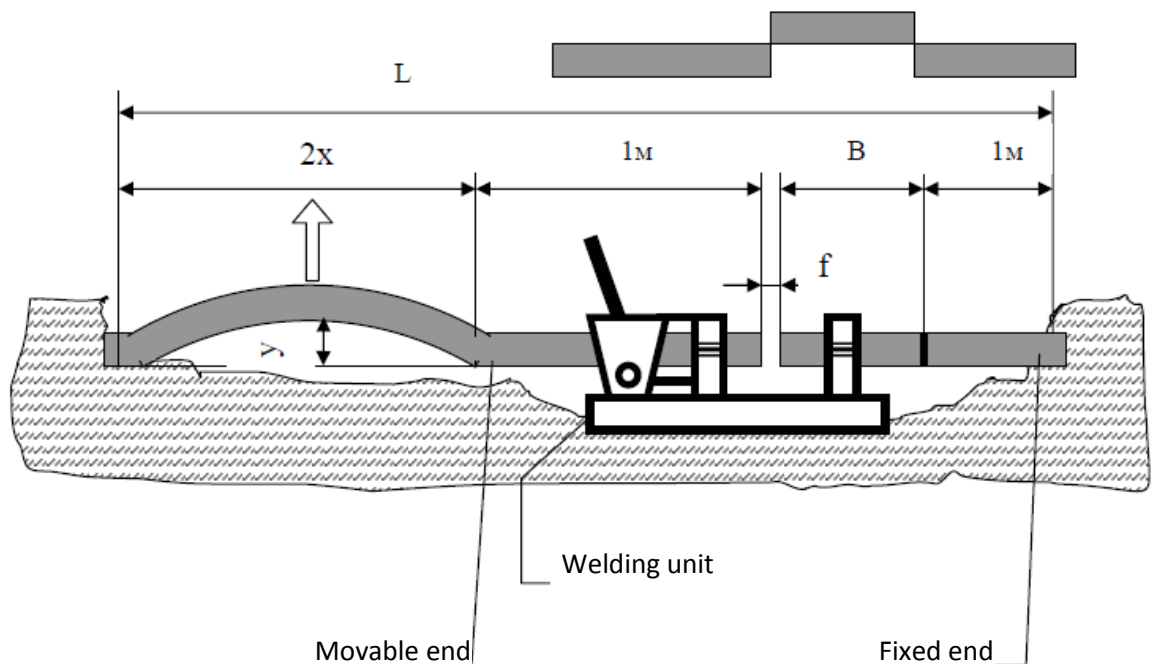


Pipeline Repair Consisting of a Damaged Piece Removal, Insertion of a New Piece, Butt Welding, and Subsequent Reinforcement with an Electrofusion Sleeve



Pipeline preparation to butt weld a pipe insertion

Length of the released part of the movable end  $2x$  (m) and height of rise  $y$  (m) of the pipeline depending on the air temperature

Pipe diameter $d_o$ mm	Surrounding air temperature $T_0$ °C															
	-15		-10		-5		0		+10		+20		+30		+45	
	$2x$	$y$	$2x$	$y$	$2x$	$y$	$2x$	$y$	$2x$	$y$	$2x$	$y$	$2x$	$y$	$2x$	$y$
63	18	1,0	18	0,9	18	0,9	17	0,9	16	0,9	14	0,8	13	0,8	11	0,8
90	22	1,1	22	1,1	22	1,1	21	1,0	19	1,0	17	0,9	16	0,8	13	0,8
110	25	1,1	24	1,1	24	1,1	23	1,1	21	1,0	19	1,0	17	0,9	15	0,9
125	27	1,3	27	1,3	27	1,3	26	1,2	23	1,1	20	1,1	19	1,0	16	1,0
140	29	1,6	28	1,6	28	1,6	27	1,4	25	1,3	22	1,3	20	1,2	18	1,2
160	33	1,6	32	1,6	32	1,6	31	1,6	28	1,5	25	1,4	23	1,4	20	1,3

Trench length  $L=2 \cdot x+B+2(m)$