



PLASTIC WELDING

Useful welding parameter for HD-PE, LD-PE and PVC Membranes

Please note: The final welding parameter will vary depending on the ambient temperature and the material quality. Test welds need to be carried out. All Pressure values are cold settings before heating. These tables are to be used as a guide only. Leister takes no responsibility for poor quality welding!

		HD-PE (mm)						LD-PE (mm)					PVC (mm)						
		0.3	0.5	1.0	1.5	2.0	2.5	3.0	0.3	0.5	1.0	1.5	2.0	0.8	1.0	1.5	2.0	2.5	3.0
Combi wedge	Short	400° C 7.0 m/min. 70% Air vol. 400 N	500° C 6.0 m/min. 80% Air vol. 600 N	560° C 3.0 m/min. 100% Air vol. 750 N	560° C 2.2 m/min. 100% Air vol. 800 N				400° C 7.0 m/min. 70% Air vol. 400 N	500° C 6.0 m/min. 80% Air vol. 500 N	560° C 3.0 m/min. 100% Air vol. 600 N	560° C 2.5 m/min. 100% Air vol. 700 N	560° C 2.0 m/min. 100% Air vol. 800 N	500° C 5.5 m/min. 80% Air vol. 300 N	560° C 4.0 m/min. 100% Air vol. 400 N	560° C 3.0 m/min. 100% Air vol. 500 N	560° C 2.0 m/min. 100% Air vol. 600 N	560° C 1.5 m/min. 100% Air vol. 650 N	560° C 1.2 m/min. 100% Air vol. 750 N
	Long			560° C 4.0 m/min. 100% Air vol. 750 N	560° C 3.0 m/min. 100% Air vol. 800 N	560° C 2.5 m/min. 100% Air vol. 850 N					560° C 4.5 m/min. 100% Air vol. 600 N	560° C 3.5 m/min. 100% Air vol. 700 N	560° C 3.0 m/min. 100% Air vol. 800 N		560° C 5.0 m/min. 100% Air vol. 400 N	560° C 4.0 m/min. 100% Air vol. 500 N	560° C 3.0 m/min. 100% Air vol. 600 N	560° C 2.0 m/min. 100% Air vol. 650 N	560° C 1.5 m/min. 100% Air vol. 750 N
TWINNY T7	Short	400° C 5.5 m/min. 70% Air vol. max. pressure	500° C 4.5 m/min. 80% Air vol. max. pressure	560° C 2.5 m/min. 100% Air vol. max. pressure	560° C 1.5 m/min. 100% Air vol. max. pressure				400° C 5.5 m/min. 70% Air vol. ¾ pressure	500° C 4.5 m/min. 80% Air vol. ¾ pressure	560° C 2.5 m/min. 100% Air vol. ¾ pressure	560° C 2.0 m/min. 100% Air vol. ¾ pressure	560° C 1.5 m/min. 100% Air vol. ¾ pressure	500° C 4.5 m/min. 80% Air vol. ½ pressure	560° C 3.5 m/min. 100% Air vol. ½ pressure	560° C 2.5 m/min. 100% Air vol. ½ pressure	560° C 1.8 m/min. 100% Air vol. ½ pressure	560° C 1.2 m/min. 100% Air vol. ½ pressure	560° C 0.8 m/min. 100% Air vol. ½ pressure
	Long			560° C 3.0 m/min. 100% Air vol. max. pressure	560° C 2.0 m/min. 100% Air vol. max. pressure	560° C 1.5 m/min. 100% Air vol. max. pressure					560° C 3.5 m/min. 100% Air vol. ¾ pressure	560° C 2.5 m/min. 100% Air vol. ¾ pressure	560° C 2.0 m/min. 100% Air vol. ¾ pressure		560° C 4.0 m/min. 100% Air vol. ½ pressure	560° C 3.0 m/min. 100% Air vol. ½ pressure	560° C 2.0 m/min. 100% Air vol. ½ pressure	560° C 1.5 m/min. 100% Air vol. ½ pressure	560° C 1.0 m/min. 100% Air vol. ½ pressure

Wedge		Steel wedge required																		
COMET 700	90 mm			400° C 5.0 m/min. 700 N	400° C 4.5 m/min. 900 N	400° C 4.0 m/min. 900 N	400° C 3.5 m/min. 1000 N								400° C 4.0 m/min. 550 N	400° C 3.2 m/min. 600 N	400° C 3.0 m/min. 650 N	400° C 2.7 m/min. 700 N	400° C 2.5 m/min. 750 N	
	60 mm		400° C 5.0 m/min. 600 N	400° C 4.5 m/min. 700 N	400° C 3.5 m/min. 800 N	400° C 3.0 m/min. 900 N				300° C 5.0 m/min. 650 N	350° C 4.5 m/min. 700 N	380° C 4.0 m/min. 750 N	380° C 3.5 m/min. 800 N		400° C 3.0 m/min. 550 N	400° C 2.7 m/min. 600 N	400° C 2.5 m/min. 650 N	400° C 2.3 m/min. 700 N	400° C 2.0 m/min. 750 N	
COMET 500	60 mm		400° C 4.0 m/min. max. pressure	400° C 3.5 m/min. max. pressure	400° C 3.0 m/min. max. pressure	400° C 2.5 m/min. max. pressure				300° C 4.5 m/min. ¾ pressure	350° C 4.0 m/min. ¾ pressure	380° C 3.5 m/min. ¾ pressure	380° C 3.0 m/min. ¾ pressure		400° C 3.0 m/min. ½ pressure	400° C 2.7 m/min. ½ pressure	400° C 2.5 m/min. ½ pressure	400° C 2.3 m/min. ½ pressure	400° C 2.0 m/min. ½ pressure	
GEOSTAR G7	230 V/2800 W			380° C 7.0 m/min. 900 N	400° C 6.0 m/min. 1050 N	400° C 5.0 m/min. 1200 N	400° C 3.5 m/min. 1300 N	400° C 2.5 m/min. 1400 N												
GEOSTAR G5	230 V/2800 W			380° C 3.6 m/min. 900 N	400° C 3.0 m/min. 1050 N	400° C 2.5 m/min. 1200 N	400° C 1.8 m/min. 1300 N	400° C 1.3 m/min. 1400 N								400° C 3.5 m/min. 600 N	400° C 3.2 m/min. 700 N	400° C 3.0 m/min. 750 N	400° C 2.7 m/min. 800 N	400° C 2.5 m/min. 850 N
GEOSTAR G5	120 V/1800 W			380° C 3.5 m/min. 900 N	400° C 2.9 m/min. 1050 N	400° C 2.4 m/min. 1200 N	400° C 1.6 m/min. 1300 N	400° C 1.2 m/min. 1400 N								400° C 3.5 m/min. 600 N	400° C 3.2 m/min. 700 N	400° C 3.0 m/min. 750 N	400° C 2.7 m/min. 800 N	400° C 2.5 m/min. 850 N

Useful welding parameter for HD-PE, LD-PE and PVC Membranes

Please note: The indicated welding parameter may vary depending on the ambient temperature and the material configuration.
 Test welds need to be done and the parameter aligned accordingly! Leister takes no responsibility for poor quality welding!

Wedge			HD-PE					LD-PE					PVC, Attention: Steel wedge only!								
			0.3	0.5	1.0	1.5	2.0	2.5	3.0	0.3	0.5	1.0	1.5	2.0	0.8	1.0	1.5	2.0	2.5	3.0	
COMET	Copper	95 mm			380° C 3.2 m/min 600 N	420° C 3.0 m/min 800 N	420° C 2.8 m/min 1000 N	420° C 2.5 m/min 1000 N					400° C 3.2 m/min 600 N	400° C 3.0 m/min 800 N							
	Copper	70 mm			380° C 2.5 m/min 600 N	420° C 2.5 m/min 800 N	420° C 2.2 m/min 1000 N	420° C 2.0 m/min 1000 N					400° C 2.8 m/min 600 N	400° C 2.5 m/min 800 N							
	Copper	50 mm		380° C 2.3 m/min 500 N	420° C 2.2 m/min 600 N	420° C 2.0 m/min 800 N					380° C 2.5 m/min 500 N	420° C 2.5 m/min 600 N									
	Steel	70 mm																400° C 2.8 m/min 700 N	420° C 2.5 m/min 800 N	420° C 2.4 m/min 1000 N	
	Steel	50 mm													400° C 2.8 m/min 600 N	420° C 2.5 m/min 600 N					
	Steel	20 mm	400° C 2.0 m/min 400 N	420° C 1.5 m/min 500 N							350° C 2.0 m/min 500 N				350° C 2.0 m/min 400 N						
ASTRO						420° C 4.5 m/min 1250 N	420° C 4.0 m/min 1500 N	420° C 3.0 m/min 1500 N	420° C 2.0 m/min 1500 N												
GEOSTAR G7 230 V / 2800 W					380° C 7.0 m/min 900 N	400° C 6.0 m/min 1050 N	400° C 5.0 m/min 1200 N	400° C 3.5 m/min 1300 N	400° C 2.5 m/min 1400 N				380° C 7.0 m/min 900 N	380° C 6.0 m/min 1050 N	380° C 5.0 m/min 1200 N						
GEOSTAR G5 230 V / 2800 W					380° C 3.6 m/min 900 N	400° C 3.0 m/min 1050 N	400° C 2.5 m/min 1200 N	400° C 1.8 m/min 1300 N	400° C 1.3 m/min 1400 N				380° C 3.5 m/min 900 N	380° C 3.0 m/min 1050 N	380° C 2.5 m/min 1200 N		400° C 3.5 m/min 600 N	400° C 3.2 m/min 700 N	400° C 3.0 m/min 750 N	400° C 2.7 m/min 800 N	400° C 2.5 m/min 850 N
GEOSTAR G5 120 V / 1800 W					380° C 3.5 m/min 900 N	400° C 2.9 m/min 1050 N	400° C 2.4 m/min 1200 N	400° C 1.6 m/min 1300 N	400° C 1.2 m/min 1400 N				380° C 3.0 m/min 900 N	380° C 2.5 m/min 1050 N	380° C 2.0 m/min 1200 N		400° C 3.5 m/min 600 N	400° C 3.2 m/min 700 N	400° C 3.0 m/min 750 N	400° C 2.7 m/min 800 N	400° C 2.5 m/min 850 N
Combi Wedge																					
TWINNY S	Short		450° C 3.5 m/min 400 N	500° C 3.0 m/min 500 N	500° C 2.0 m/min 800 N								480° C 3.5 m/min 400 N	500° C 3.0 m/min 500 N	500° C 2.0 m/min 600 N				500° C 2.5 m/min 400 N	550° C 2.5 m/min 500 N	600° C 2.5 m/min 600 N
	Long					550° C 2.0 m/min 800 N	550° C 1.8 m/min 1000 N										500° C 2.5 m/min 600 N	550° C 2.0 m/min 700 N		550° C 2.5 m/min 600 N	580° C 2.5 m/min 700 N
TWINNY T	Short		420° C 3.2 m/min 400 N	500° C 3.0 m/min 500 N	500° C 2.0 m/min 800 N								450° C 3.2 m/min 400 N	500° C 3.0 m/min 500 N	500° C 2.0 m/min 600 N				500° C 2.5 m/min 400 N	550° C 2.5 m/min 500 N	560° C 2.3 m/min 600 N
	Long					550° C 2.0 m/min 800 N	550° C 1.8 m/min 1000 N										500° C 2.5 m/min 600 N	550° C 2.0 m/min 700 N		550° C 2.5 m/min 600 N	550° C 2.5 m/min 800 N