

Georg Fischer GF TM 160 / GF TM 160 CNC

Welding parameters for egeplast SLM® 3.0 pipes – butt fusion jointing WITHOUT cutting back the coating

Welding takes place according to the relevant DVS guidelines DVS 2207 and 2208.

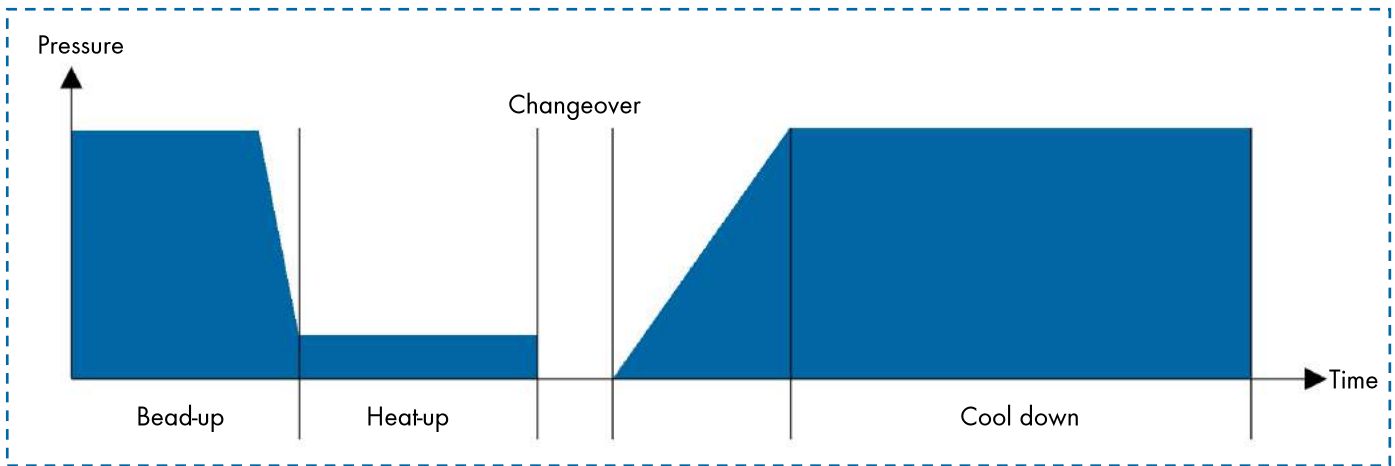
The following parameters apply to the machine type listed above only.

Reference value for the heating element temperature is 220 °C. Changeover time should be kept as short as possible.

Additionally to the given bead-up force and welding force, the moving force of the support must be added.

Cylinder cross-section = 353 mm²

Please compare the specified cylinder cross-section with the label on your machine. If this differs, please contact your egeplast representative.



Schematic presentation of the welding process

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max) t	Joining pressure build-up time t	Cool-down time	
		P	Bead size	Pmax	t			P	t
50 mm	SDR 11	3.80 bar	1 mm	0.50 bar	61 s	6 s	6 s	3.80 bar	9 min
	SDR 9	4.30 bar	1.5 mm	0.50 bar	72 s	6 s	6 s	4.30 bar	10 min
	SDR 7.4	5.00 bar	1.5 mm	0.50 bar	85 s	7 s	7 s	5.00 bar	12 min
63 mm	SDR 17.6	4.20 bar	1 mm	0.50 bar	52 s	5 s	5 s	4.20 bar	7 min
	SDR 17	4.30 bar	1 mm	0.50 bar	54 s	5 s	5 s	4.30 bar	8 min
	SDR 13.6	5.00 bar	1 mm	0.50 bar	63 s	6 s	6 s	5.00 bar	9 min
	SDR 11	5.80 bar	1.5 mm	0.50 bar	75 s	6 s	6 s	5.80 bar	10 min
	SDR 9	6.70 bar	1.5 mm	0.50 bar	89 s	7 s	7 s	6.70 bar	12 min
	SDR 7.4	7.70 bar	1.5 mm	0.50 bar	104 s	7 s	7 s	7.70 bar	14 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Continuation Georg Fischer GF TM 160 / GF TM 160 CNC

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
75 mm	SDR 17.6	5.70 bar	1 mm	1.00 bar	59 s	6 s	6 s	5.70 bar	8 min
	SDR 17	5.80 bar	1 mm	1.00 bar	61 s	6 s	6 s	5.80 bar	9 min
	SDR 13.6	6.80 bar	1.5 mm	1.00 bar	73 s	6 s	6 s	6.80 bar	10 min
	SDR 11	7.90 bar	1.5 mm	1.00 bar	85 s	7 s	7 s	7.90 bar	12 min
	SDR 9	9.20 bar	1.5 mm	1.00 bar	102 s	7 s	7 s	9.20 bar	14 min
	SDR 7.4	10.70 bar	2 mm	1.00 bar	122 s	8 s	8 s	10.70 bar	16 min
90 mm	SDR 17.6	7.90 bar	1 mm	1.00 bar	69 s	6 s	6 s	7.90 bar	10 min
	SDR 17	8.20 bar	1.5 mm	1.00 bar	72 s	6 s	6 s	8.20 bar	10 min
	SDR 13.6	9.60 bar	1.5 mm	1.00 bar	85 s	7 s	7 s	9.60 bar	12 min
	SDR 11	11.20 bar	1.5 mm	1.00 bar	101 s	7 s	7 s	11.20 bar	14 min
	SDR 9	13.10 bar	2 mm	1.00 bar	121 s	8 s	8 s	13.10 bar	16 min
	SDR 7.4	15.10 bar	2 mm	1.00 bar	144 s	9 s	9 s	15.10 bar	19 min
110 mm	SDR 17.6	11.90 bar	1.5 mm	1.00 bar	85 s	7 s	7 s	11.90 bar	12 min
	SDR 17	12.30 bar	1.5 mm	1.00 bar	88 s	7 s	7 s	12.30 bar	12 min
	SDR 13.6	14.30 bar	1.5 mm	1.00 bar	104 s	7 s	7 s	14.30 bar	14 min
	SDR 11	16.70 bar	2 mm	1.10 bar	123 s	8 s	8 s	16.70 bar	16 min
	SDR 9	19.50 bar	2 mm	1.30 bar	148 s	9 s	9 s	19.50 bar	19 min
	SDR 7.4	22.70 bar	2 mm	1.50 bar	177 s	10 s	10 s	22.70 bar	23 min
125 mm	SDR 17.6	14.80 bar	1.5 mm	1.00 bar	93 s	7 s	7 s	14.80 bar	13 min
	SDR 17	15.30 bar	1.5 mm	1.00 bar	96 s	7 s	7 s	15.30 bar	13 min
	SDR 13.6	18.00 bar	1.5 mm	1.20 bar	115 s	8 s	8 s	18.00 bar	15 min
	SDR 11	21.20 bar	2 mm	1.40 bar	138 s	9 s	9 s	21.20 bar	18 min
	SDR 9	24.80 bar	2 mm	1.70 bar	166 s	9 s	10 s	24.80 bar	21 min
	SDR 7.4	28.80 bar	2.5 mm	1.90 bar	198 s	10 s	11 s	28.80 bar	25 min
140 mm	SDR 17.6	18.30 bar	1.5 mm	1.20 bar	103 s	7 s	7 s	18.30 bar	14 min
	SDR 17	18.80 bar	1.5 mm	1.30 bar	106 s	7 s	7 s	18.80 bar	14 min
	SDR 13.6	22.20 bar	2 mm	1.50 bar	127 s	8 s	8 s	22.20 bar	17 min
	SDR 11	26.10 bar	2 mm	1.70 bar	152 s	9 s	9 s	26.10 bar	20 min
	SDR 9	30.70 bar	2 mm	2.00 bar	183 s	10 s	11 s	30.70 bar	23 min
	SDR 7.4	35.80 bar	2.5 mm	2.40 bar	220 s	11 s	12 s	35.80 bar	27 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Georg Fischer GF TM 250 / GF TM 250 CNC

Welding parameters for egeplast SLM® 3.0 pipes – butt fusion jointing WITHOUT cutting back the coating

Welding takes place according to the relevant DVS guidelines DVS 2207 and 2208.

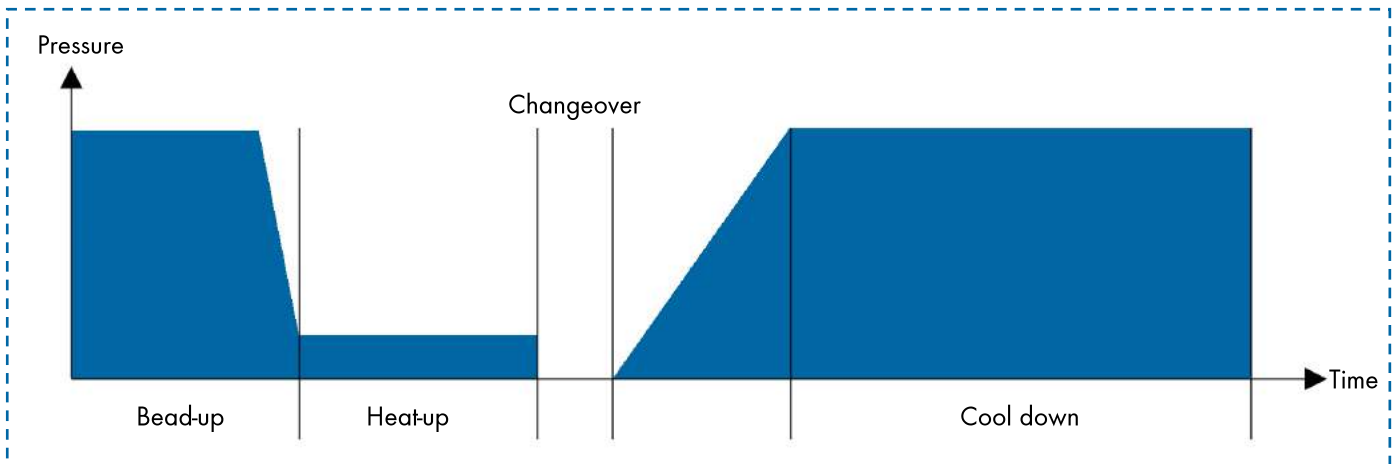
The following parameters apply to the machine type listed above only.

Reference value for the heating element temperature is 220 °C. Changeover time should be kept as short as possible.

Additionally to the given bead-up force and welding force, the moving force of the support must be added.

Cylinder cross-section = 510 mm²

Please compare the specified cylinder cross-section with the label on your machine. If this differs, please contact your egeplast representative.



Schematic presentation of the welding process

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
75 mm	SDR 17.6	3.90 bar	1 mm	1.00 bar	59 s	6 s	6 s	3.90 bar	8 min
	SDR 17	4.00 bar	1 mm	1.00 bar	61 s	6 s	6 s	4.00 bar	9 min
	SDR 13.6	4.70 bar	1.5 mm	1.00 bar	73 s	6 s	6 s	4.70 bar	10 min
	SDR 11	5.50 bar	1.5 mm	1.00 bar	85 s	7 s	7 s	5.50 bar	12 min
	SDR 9	6.40 bar	1.5 mm	1.00 bar	102 s	7 s	7 s	6.40 bar	14 min
	SDR 7.4	7.40 bar	2 mm	1.00 bar	122 s	8 s	8 s	7.40 bar	16 min
90 mm	SDR 17.6	5.50 bar	1 mm	1.00 bar	69 s	6 s	6 s	5.50 bar	10 min
	SDR 17	5.70 bar	1.5 mm	1.00 bar	72 s	6 s	6 s	5.70 bar	10 min
	SDR 13.6	6.60 bar	1.5 mm	1.00 bar	85 s	7 s	7 s	6.60 bar	12 min
	SDR 11	7.70 bar	1.5 mm	1.00 bar	101 s	7 s	7 s	7.70 bar	14 min
	SDR 9	9.10 bar	2 mm	1.00 bar	121 s	8 s	8 s	9.10 bar	16 min
	SDR 7.4	10.50 bar	2 mm	1.00 bar	144 s	9 s	9 s	10.50 bar	19 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Continuation Georg Fischer GF TM 250 / GF TM 250 CNC

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
110 mm	SDR 17.6	8.20 bar	1.5 mm	1.00 bar	85 s	7 s	7 s	8.20 bar	12 min
	SDR 17	8.50 bar	1.5 mm	1.00 bar	88 s	7 s	7 s	8.50 bar	12 min
	SDR 13.6	9.90 bar	1.5 mm	1.00 bar	104 s	7 s	7 s	9.90 bar	14 min
	SDR 11	11.50 bar	2 mm	1.00 bar	123 s	8 s	8 s	11.50 bar	16 min
	SDR 9	13.50 bar	2 mm	1.00 bar	148 s	9 s	9 s	13.50 bar	19 min
	SDR 7.4	15.70 bar	2 mm	1.00 bar	177 s	10 s	10 s	15.70 bar	22 min
125 mm	SDR 17.6	10.30 bar	1.5 mm	1.00 bar	93 s	7 s	7 s	10.30 bar	13 min
	SDR 17	10.60 bar	1.5 mm	1.00 bar	96 s	7 s	7 s	10.60 bar	13 min
	SDR 13.6	12.50 bar	1.5 mm	1.00 bar	115 s	8 s	8 s	12.50 bar	15 min
	SDR 11	14.70 bar	2 mm	1.00 bar	138 s	9 s	9 s	14.70 bar	18 min
	SDR 9	17.20 bar	2 mm	1.10 bar	166 s	9 s	10 s	17.20 bar	21 min
	SDR 7.4	20.00 bar	2.5 mm	1.30 bar	198 s	10 s	11 s	20.00 bar	25 min
140 mm	SDR 17.6	12.70 bar	1.5 mm	1.00 bar	103 s	7 s	7 s	12.70 bar	14 min
	SDR 17	13.00 bar	1.5 mm	1.00 bar	106 s	7 s	7 s	13.00 bar	14 min
	SDR 13.6	15.40 bar	2 mm	1.00 bar	127 s	8 s	8 s	15.40 bar	17 min
	SDR 11	18.00 bar	2 mm	1.20 bar	152 s	9 s	9 s	18.00 bar	20 min
	SDR 9	21.30 bar	2 mm	1.40 bar	183 s	10 s	11 s	21.30 bar	23 min
	SDR 7.4	24.80 bar	2.5 mm	1.70 bar	220 s	11 s	12 s	24.80 bar	27 min
160 mm	SDR 17.6	16.80 bar	1.5 mm	1.10 bar	119 s	8 s	8 s	16.80 bar	16 min
	SDR 17	17.40 bar	2 mm	1.20 bar	123 s	8 s	8 s	17.40 bar	16 min
	SDR 13.6	20.40 bar	2 mm	1.40 bar	147 s	9 s	9 s	20.40 bar	19 min
	SDR 11	24.00 bar	2 mm	1.60 bar	177 s	10 s	10 s	24.00 bar	22 min
	SDR 9	28.10 bar	2.5 mm	1.90 bar	211 s	11 s	12 s	28.10 bar	26 min
	SDR 7.4	32.70 bar	2.5 mm	2.20 bar	253 s	12 s	14 s	32.70 bar	31 min
180 mm	SDR 17.6	21.90 bar	2 mm	1.50 bar	137 s	8 s	9 s	21.90 bar	18 min
	SDR 17	22.60 bar	2 mm	1.50 bar	142 s	9 s	9 s	22.60 bar	19 min
	SDR 13.6	26.50 bar	2 mm	1.80 bar	170 s	9 s	10 s	26.50 bar	22 min
	SDR 11	31.00 bar	2.5 mm	2.10 bar	202 s	10 s	12 s	31.00 bar	25 min
	SDR 9	36.10 bar	2.5 mm	2.40 bar	241 s	11 s	13 s	36.10 bar	30 min
	SDR 7.4	41.90 bar	3 mm	2.80 bar	288 s	13 s	15 s	41.90 bar	35 min
200 mm	SDR 17.6	26.40 bar	2 mm	1.80 bar	150 s	9 s	9 s	26.40 bar	19 min
	SDR 17	27.30 bar	2 mm	1.80 bar	155 s	9 s	9 s	27.30 bar	20 min
	SDR 13.6	32.00 bar	2 mm	2.10 bar	184 s	10 s	11 s	32.00 bar	23 min
	SDR 11	37.60 bar	2.5 mm	2.50 bar	221 s	11 s	12 s	37.60 bar	27 min
	SDR 9	44.10 bar	3 mm	2.90 bar	265 s	12 s	14 s	44.10 bar	32 min
	SDR 7.4	51.20 bar	3 mm	3.40 bar	318 s	14 s	17 s	51.20 bar	39 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Continuation Georg Fischer GF TM 250 / GF TM 250 CNC

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
225 mm	SDR 17.6	32.60 bar	2 mm	2.20 bar	164 s	9 s	10 s	32.60 bar	21 min
	SDR 17	33.80 bar	2 mm	2.30 bar	171 s	9 s	10 s	33.80 bar	22 min
	SDR 13.6	39.80 bar	2.5 mm	2.70 bar	204 s	10 s	12 s	39.80 bar	26 min
	SDR 11	46.90 bar	2.5 mm	3.10 bar	245 s	12 s	13 s	46.90 bar	30 min
	SDR 9	55.00 bar	3 mm	3.70 bar	295 s	13 s	16 s	55.00 bar	36 min
	SDR 7.4	64.00 bar	3 mm	4.30 bar	353 s	15 s	18 s	64.00 bar	43 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Georg Fischer GF TM 315 / GF TM 315 CNC

Welding parameters for egeplast SLM® 3.0 pipes – butt fusion jointing WITHOUT cutting back the coating

Welding takes place according to the relevant DVS guidelines DVS 2207 and 2208.

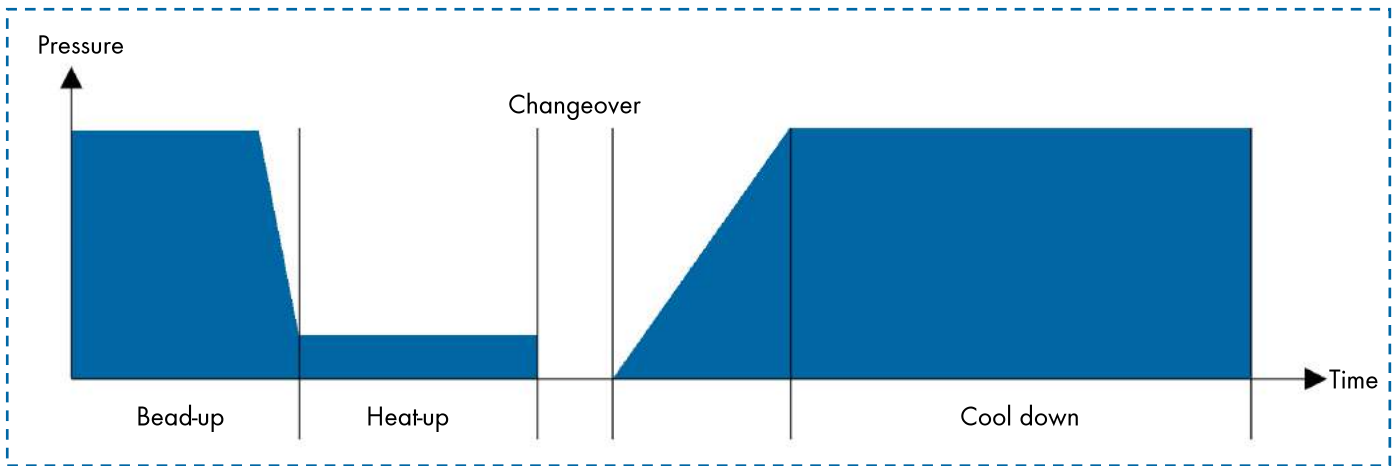
The following parameters apply to the machine type listed above only.

Reference value for the heating element temperature is 220 °C. Changeover time should be kept as short as possible.

Additionally to the given bead-up force and welding force, the moving force of the support must be added.

Cylinder cross-section = 510 mm²

Please compare the specified cylinder cross-section with the label on your machine. If this differs, please contact your egeplast representative.



Schematic presentation of the welding process

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max) t	Joining pressure build-up time t	Cool-down time	
		P	Bead size	Pmax	t			P	t
90 mm	SDR 17.6	5.50 bar	1 mm	1.00 bar	69 s	6 s	6 s	5.50 bar	10 min
	SDR 17	5.70 bar	1.5 mm	1.00 bar	72 s	6 s	6 s	5.70 bar	10 min
	SDR 13.6	6.60 bar	1.5 mm	1.00 bar	85 s	7 s	7 s	6.60 bar	12 min
	SDR 11	7.70 bar	1.5 mm	1.00 bar	101 s	7 s	7 s	7.70 bar	14 min
	SDR 9	9.10 bar	2 mm	1.00 bar	121 s	8 s	8 s	9.10 bar	16 min
	SDR 7.4	10.50 bar	2 mm	1.00 bar	144 s	9 s	9 s	10.50 bar	19 min
110 mm	SDR 17.6	8.20 bar	1.5 mm	1.00 bar	85 s	7 s	7 s	8.20 bar	12 min
	SDR 17	8.50 bar	1.5 mm	1.00 bar	88 s	7 s	7 s	8.50 bar	12 min
	SDR 13.6	9.90 bar	1.5 mm	1.00 bar	104 s	7 s	7 s	9.90 bar	14 min
	SDR 11	11.50 bar	2 mm	1.00 bar	123 s	8 s	8 s	11.50 bar	16 min
	SDR 9	13.50 bar	2 mm	1.00 bar	148 s	9 s	9 s	13.50 bar	19 min
	SDR 7.4	15.70 bar	2 mm	1.00 bar	177 s	10 s	10 s	15.70 bar	22 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Continuation Georg Fischer GF TM 315 / GF TM 315 CNC

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
125 mm	SDR 17.6	10.30 bar	1.5 mm	1.00 bar	93 s	7 s	7 s	10.30 bar	13 min
	SDR 17	10.60 bar	1.5 mm	1.00 bar	96 s	7 s	7 s	10.60 bar	13 min
	SDR 13.6	12.50 bar	1.5 mm	1.00 bar	115 s	8 s	8 s	12.50 bar	15 min
	SDR 11	14.70 bar	2 mm	1.00 bar	138 s	9 s	9 s	14.70 bar	18 min
	SDR 9	17.20 bar	2 mm	1.10 bar	166 s	9 s	10 s	17.20 bar	21 min
	SDR 7.4	20.00 bar	2.5 mm	1.30 bar	198 s	10 s	11 s	20.00 bar	25 min
140 mm	SDR 17.6	12.70 bar	1.5 mm	1.00 bar	103 s	7 s	7 s	12.70 bar	14 min
	SDR 17	13.00 bar	1.5 mm	1.00 bar	106 s	7 s	7 s	13.00 bar	14 min
	SDR 13.6	15.40 bar	2 mm	1.00 bar	127 s	8 s	8 s	15.40 bar	17 min
	SDR 11	18.00 bar	2 mm	1.20 bar	152 s	9 s	9 s	18.00 bar	20 min
	SDR 9	21.30 bar	2 mm	1.40 bar	183 s	10 s	11 s	21.30 bar	23 min
	SDR 7.4	24.80 bar	2.5 mm	1.70 bar	220 s	11 s	12 s	24.80 bar	27 min
160 mm	SDR 17.6	16.80 bar	1.5 mm	1.10 bar	119 s	8 s	8 s	16.80 bar	16 min
	SDR 17	17.40 bar	2 mm	1.20 bar	123 s	8 s	8 s	17.40 bar	16 min
	SDR 13.6	20.40 bar	2 mm	1.40 bar	147 s	9 s	9 s	20.40 bar	19 min
	SDR 11	24.00 bar	2 mm	1.60 bar	177 s	10 s	10 s	24.00 bar	22 min
	SDR 9	28.10 bar	2.5 mm	1.90 bar	211 s	11 s	12 s	28.10 bar	26 min
	SDR 7.4	32.70 bar	2.5 mm	2.20 bar	253 s	12 s	14 s	32.70 bar	31 min
180 mm	SDR 17.6	21.90 bar	2 mm	1.50 bar	137 s	8 s	9 s	21.90 bar	18 min
	SDR 17	22.60 bar	2 mm	1.50 bar	142 s	9 s	9 s	22.60 bar	19 min
	SDR 13.6	26.50 bar	2 mm	1.80 bar	170 s	9 s	10 s	26.50 bar	22 min
	SDR 11	31.00 bar	2.5 mm	2.10 bar	202 s	10 s	12 s	31.00 bar	25 min
	SDR 9	36.10 bar	2.5 mm	2.40 bar	241 s	11 s	13 s	36.10 bar	30 min
	SDR 7.4	41.90 bar	3 mm	2.80 bar	288 s	13 s	15 s	41.90 bar	35 min
200 mm	SDR 17.6	26.40 bar	2 mm	1.80 bar	150 s	9 s	9 s	26.40 bar	19 min
	SDR 17	27.30 bar	2 mm	1.80 bar	155 s	9 s	9 s	27.30 bar	20 min
	SDR 13.6	32.00 bar	2 mm	2.10 bar	184 s	10 s	11 s	32.00 bar	23 min
	SDR 11	37.60 bar	2.5 mm	2.50 bar	221 s	11 s	12 s	37.60 bar	27 min
	SDR 9	44.10 bar	3 mm	2.90 bar	265 s	12 s	14 s	44.10 bar	32 min
	SDR 7.4	51.20 bar	3 mm	3.40 bar	318 s	14 s	17 s	51.20 bar	39 min
225 mm	SDR 17.6	32.60 bar	2 mm	2.20 bar	164 s	9 s	10 s	32.60 bar	21 min
	SDR 17	33.80 bar	2 mm	2.30 bar	171 s	9 s	10 s	33.80 bar	22 min
	SDR 13.6	39.80 bar	2.5 mm	2.70 bar	204 s	10 s	12 s	39.80 bar	26 min
	SDR 11	46.90 bar	2.5 mm	3.10 bar	245 s	12 s	13 s	46.90 bar	30 min
	SDR 9	55.00 bar	3 mm	3.70 bar	295 s	13 s	16 s	55.00 bar	36 min
	SDR 7.4	64.00 bar	3 mm	4.30 bar	353 s	15 s	18 s	64.00 bar	43 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Continuation Georg Fischer GF TM 315 / GF TM 315 CNC

OD core pipe [mm]	SDR core pipe *	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
250 mm	SDR 17.6	39.50 bar	2 mm	2.60 bar	179 s	10 s	11 s	39.50 bar	23 min
	SDR 17	40.70 bar	2 mm	2.70 bar	185 s	10 s	11 s	40.70 bar	23 min
	SDR 13.6	48.30 bar	2.5 mm	3.20 bar	223 s	11 s	12 s	48.30 bar	28 min
	SDR 11	56.90 bar	3 mm	3.80 bar	268 s	12 s	14 s	56.90 bar	33 min
	SDR 9	66.90 bar	3 mm	4.50 bar	323 s	14 s	17 s	66.90 bar	40 min
	SDR 7.4	78.20 bar	3.5 mm	5.20 bar	389 s	17 s	20 s	78.20 bar	47 min
280 mm	SDR 17.6	48.50 bar	2.5 mm	3.20 bar	197 s	10 s	11 s	48.50 bar	25 min
	SDR 17	50.20 bar	2.5 mm	3.30 bar	204 s	10 s	12 s	50.20 bar	26 min
	SDR 13.6	59.60 bar	2.5 mm	4.00 bar	246 s	12 s	13 s	59.60 bar	30 min
	SDR 11	70.40 bar	3 mm	4.70 bar	297 s	13 s	16 s	70.40 bar	36 min
	SDR 9	83.10 bar	3 mm	5.50 bar	359 s	16 s	18 s	83.10 bar	44 min
	SDR 7.4	97.20 bar	3.5 mm	6.50 bar	432 s	18 s	22 s	97.20 bar	52 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Georg Fischer GF 400 / GF 400 CNC

Welding parameters for egeplast SLM® 3.0 pipes – butt fusion jointing WITHOUT cutting back the coating

Welding takes place according to the relevant DVS guidelines DVS 2207 and 2208.

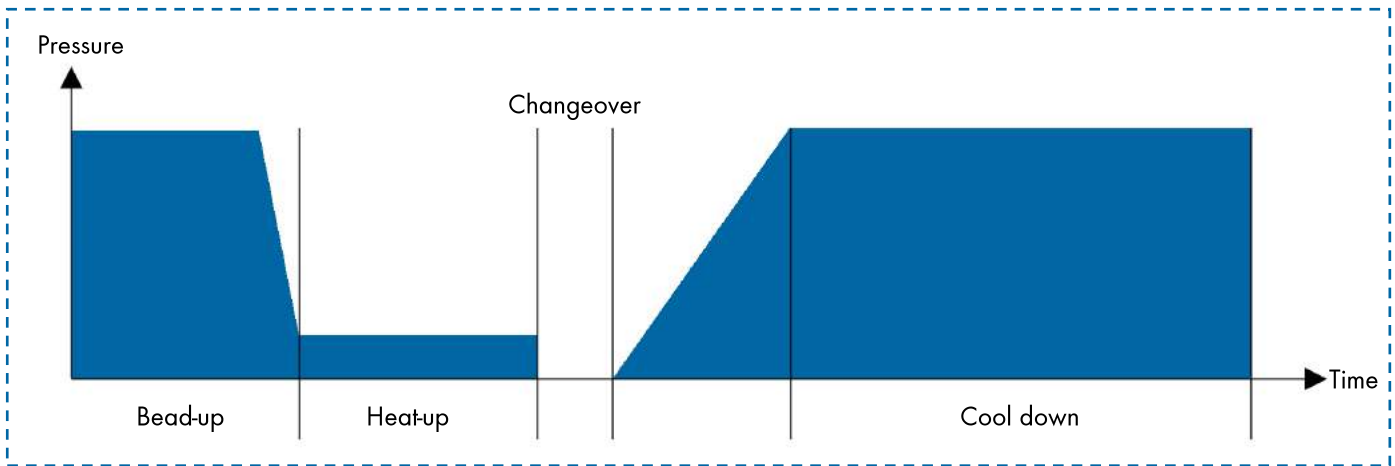
The following parameters apply to the machine type listed above only.

Reference value for the heating element temperature is 220 °C. Changeover time should be kept as short as possible.

Additionally to the given bead-up force and welding force, the moving force of the support must be added.

Cylinder cross-section = 904 mm²

Please compare the specified cylinder cross-section with the label on your machine. If this differs, please contact your egeplast representative.



Schematic presentation of the welding process

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
125 mm	SDR 17.6	5.80 bar	1.5 mm	1.00 bar	93 s	7 s	7 s	5.80 bar	13 min
	SDR 17	6.00 bar	1.5 mm	1.00 bar	96 s	7 s	7 s	6.00 bar	13 min
	SDR 13.6	7.00 bar	1.5 mm	1.00 bar	115 s	8 s	8 s	7.00 bar	15 min
	SDR 11	8.30 bar	2 mm	1.00 bar	138 s	9 s	9 s	8.30 bar	18 min
	SDR 9	9.70 bar	2 mm	1.00 bar	166 s	9 s	10 s	9.70 bar	21 min
	SDR 7.4	11.30 bar	2.5 mm	1.00 bar	198 s	10 s	11 s	11.30 bar	25 min
140 mm	SDR 17.6	7.10 bar	1.5 mm	1.00 bar	103 s	7 s	7 s	7.10 bar	14 min
	SDR 17	7.30 bar	1.5 mm	1.00 bar	106 s	7 s	7 s	7.30 bar	14 min
	SDR 13.6	8.70 bar	2 mm	1.00 bar	127 s	8 s	8 s	8.70 bar	17 min
	SDR 11	10.20 bar	2 mm	1.00 bar	152 s	9 s	9 s	10.20 bar	20 min
	SDR 9	12.00 bar	2 mm	1.00 bar	183 s	10 s	11 s	12.00 bar	23 min
	SDR 7.4	14.00 bar	2.5 mm	1.00 bar	220 s	11 s	12 s	14.00 bar	27 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Continuation Georg Fischer GF 400 / GF 400 CNC

OD core pipe [mm]	SDR core pipe *	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
160 mm	SDR 17.6	9.50 bar	1.5 mm	1.00 bar	119 s	8 s	8 s	9.50 bar	16 min
	SDR 17	9.80 bar	2 mm	1.00 bar	123 s	8 s	8 s	9.80 bar	16 min
	SDR 13.6	11.50 bar	2 mm	1.00 bar	147 s	9 s	9 s	11.50 bar	19 min
	SDR 11	13.60 bar	2 mm	1.00 bar	177 s	10 s	10 s	13.60 bar	22 min
	SDR 9	15.80 bar	2.5 mm	1.10 bar	211 s	11 s	12 s	15.80 bar	26 min
	SDR 7.4	18.40 bar	2.5 mm	1.20 bar	253 s	12 s	14 s	18.40 bar	31 min
180 mm	SDR 17.6	12.30 bar	2 mm	1.00 bar	137 s	8 s	9 s	12.30 bar	18 min
	SDR 17	12.70 bar	2 mm	1.00 bar	142 s	9 s	9 s	12.70 bar	19 min
	SDR 13.6	15.00 bar	2 mm	1.00 bar	170 s	9 s	10 s	15.00 bar	22 min
	SDR 11	17.50 bar	2.5 mm	1.20 bar	202 s	10 s	12 s	17.50 bar	25 min
	SDR 9	20.40 bar	2.5 mm	1.40 bar	241 s	11 s	13 s	20.40 bar	30 min
	SDR 7.4	23.70 bar	3 mm	1.60 bar	288 s	13 s	15 s	23.70 bar	35 min
200 mm	SDR 17.6	14.90 bar	2 mm	1.00 bar	150 s	9 s	9 s	14.90 bar	19 min
	SDR 17	15.40 bar	2 mm	1.00 bar	155 s	9 s	9 s	15.40 bar	20 min
	SDR 13.6	18.00 bar	2 mm	1.20 bar	184 s	10 s	11 s	18.00 bar	23 min
	SDR 11	21.20 bar	2.5 mm	1.40 bar	221 s	11 s	12 s	21.20 bar	27 min
	SDR 9	24.90 bar	3 mm	1.70 bar	265 s	12 s	14 s	24.90 bar	33 min
	SDR 7.4	28.90 bar	3 mm	1.90 bar	318 s	14 s	17 s	28.90 bar	39 min
225 mm	SDR 17.6	18.40 bar	2 mm	1.20 bar	164 s	9 s	10 s	18.40 bar	21 min
	SDR 17	19.10 bar	2 mm	1.30 bar	171 s	9 s	10 s	19.10 bar	22 min
	SDR 13.6	22.40 bar	2.5 mm	1.50 bar	204 s	10 s	12 s	22.40 bar	26 min
	SDR 11	26.40 bar	2.5 mm	1.80 bar	245 s	12 s	13 s	26.40 bar	30 min
	SDR 9	31.00 bar	3 mm	2.10 bar	295 s	13 s	16 s	31.00 bar	36 min
	SDR 7.4	36.10 bar	3 mm	2.40 bar	353 s	15 s	18 s	36.10 bar	43 min
250 mm	SDR 17.6	22.30 bar	2 mm	1.50 bar	179 s	10 s	11 s	22.30 bar	23 min
	SDR 17	23.00 bar	2 mm	1.50 bar	185 s	10 s	11 s	23.00 bar	23 min
	SDR 13.6	27.20 bar	2.5 mm	1.80 bar	223 s	10 s	12 s	27.20 bar	28 min
	SDR 11	32.10 bar	3 mm	2.10 bar	268 s	12 s	14 s	32.10 bar	33 min
	SDR 9	37.70 bar	3 mm	2.50 bar	323 s	14 s	17 s	37.70 bar	39 min
	SDR 7.4	44.10 bar	3.5 mm	2.90 bar	389 s	17 s	17 s	44.10 bar	47 min
280 mm	SDR 17.6	27.40 bar	2.5 mm	1.80 bar	197 s	10 s	11 s	27.40 bar	25 min
	SDR 17	28.30 bar	2.5 mm	1.90 bar	204 s	10 s	12 s	28.30 bar	26 min
	SDR 13.6	33.60 bar	2.5 mm	2.20 bar	246 s	12 s	13 s	33.60 bar	30 min
	SDR 11	39.70 bar	3 mm	2.60 bar	297 s	13 s	16 s	39.70 bar	36 min
	SDR 9	46.90 bar	3 mm	3.10 bar	359 s	16 s	18 s	46.90 bar	43 min
	SDR 7.4	54.80 bar	3.5 mm	3.70 bar	432 s	18 s	22 s	54.80 bar	52 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Continuation Georg Fischer GF 400 / GF 400 CNC

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
315 mm	SDR 17.6	34.50 bar	2.5 mm	2.30 bar	221 s	10 s	12 s	34.50 bar	28 min
	SDR 17	35.80 bar	2.5 mm	2.40 bar	229 s	11 s	12 s	35.80 bar	28 min
	SDR 13.6	42.50 bar	3 mm	2.80 bar	277 s	12 s	14 s	42.50 bar	34 min
	SDR 11	50.20 bar	3 mm	3.30 bar	333 s	14 s	17 s	50.20 bar	41 min
	SDR 9	58.30 bar	3.5 mm	3.90 bar	396 s	17 s	17 s	58.30 bar	48 min
	SDR 7.4	69.30 bar	3.5 mm	4.60 bar	486 s	19 s	21 s	69.30 bar	59 min
355 mm	SDR 17.6	43.00 bar	2.5 mm	2.90 bar	244 s	11 s	13 s	43.00 bar	30 min
	SDR 17	44.70 bar	2.5 mm	3.00 bar	255 s	11 s	13 s	44.70 bar	32 min
	SDR 13.6	53.10 bar	3 mm	3.50 bar	307 s	13 s	16 s	53.10 bar	38 min
	SDR 11	62.90 bar	3.5 mm	4.20 bar	371 s	16 s	16 s	62.90 bar	45 min
	SDR 9	74.40 bar	3.5 mm	5.00 bar	450 s	18 s	19 s	74.40 bar	54 min
	SDR 7.4	87.10 bar	4 mm	5.80 bar	542 s	21 s	22 s	87.10 bar	64 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Georg Fischer GF 500 / GF 500 CNC

Welding parameters for egeplast SLM® 3.0 pipes – butt fusion jointing WITHOUT cutting back the coating

Welding takes place according to the relevant DVS guidelines DVS 2207 and 2208.

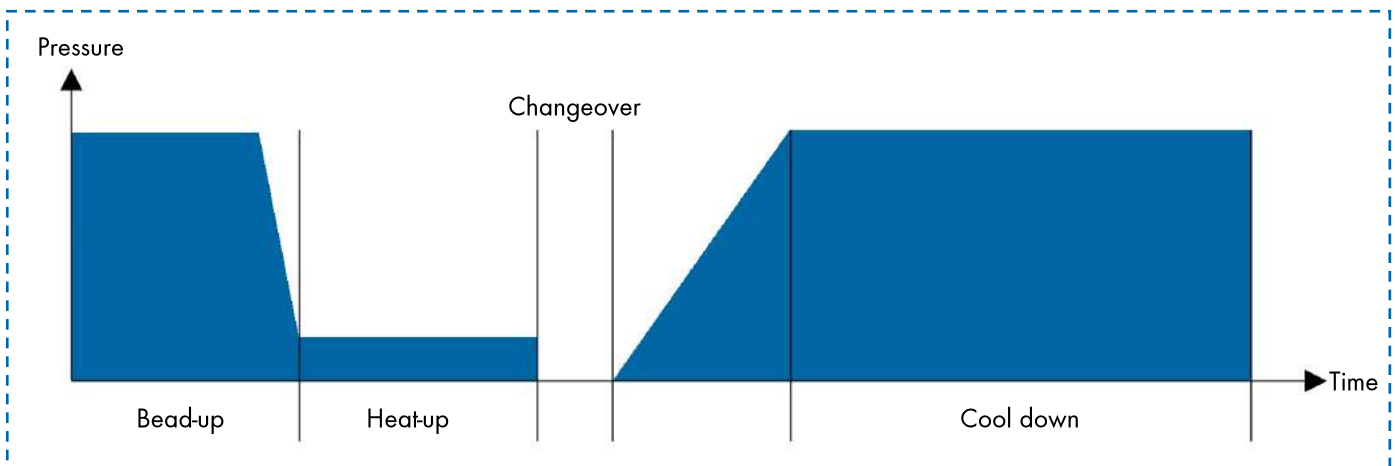
The following parameters apply to the machine type listed above only.

Reference value for the heating element temperature is 220 °C. Changeover time should be kept as short as possible.

Additionally to the given bead-up force and welding force, the moving force of the support must be added.

Cylinder cross-section = 1413 mm²

Please compare the specified cylinder cross-section with the label on your machine. If this differs, please contact your egeplast representative.



Schematic presentation of the welding process

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max) t	Joining pressure build-up time		Cool-down time	
		P	Bead size	Pmax	t		t	t	P	t
200 mm	SDR 17.6	9.50 bar	2 mm	1.00 bar	150 s	9 s	9 s	9.50 bar	19 min	
	SDR 17	9.80 bar	2 mm	1.00 bar	155 s	9 s	9 s	9.80 bar	19 min	
	SDR 13.6	11.50 bar	2 mm	1.00 bar	184 s	10 s	11 s	11.50 bar	23 min	
	SDR 11	13.60 bar	2.5 mm	1.00 bar	221 s	11 s	12 s	13.60 bar	27 min	
	SDR 9	15.90 bar	3 mm	1.10 bar	265 s	12 s	14 s	15.90 bar	32 min	
	SDR 7.4	18.50 bar	3 mm	2.00 bar	318 s	14 s	17 s	18.50 bar	39 min	
225 mm	SDR 17.6	11.80 bar	2 mm	1.00 bar	164 s	9 s	10 s	11.80 bar	21 min	
	SDR 17	12.20 bar	2 mm	1.00 bar	171 s	9 s	10 s	12.20 bar	21 min	
	SDR 13.6	14.40 bar	2.5 mm	1.00 bar	204 s	10 s	12 s	14.40 bar	26 min	
	SDR 11	16.90 bar	2.5 mm	1.10 bar	245 s	12 s	13 s	16.90 bar	30 min	
	SDR 9	19.80 bar	3 mm	1.30 bar	295 s	13 s	16 s	19.80 bar	36 min	
	SDR 7.4	23.10 bar	3 mm	1.50 bar	353 s	15 s	18 s	23.10 bar	43 min	

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Continuation Georg Fischer GF 500 / GF 500 CNC

OD core pipe [mm]	SDR core pipe *	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
250 mm	SDR 17.6	14.20 bar	2 mm	1.00 bar	179 s	10 s	11 s	14.20 bar	23 min
	SDR 17	14.70 bar	2 mm	1.00 bar	185 s	10 s	11 s	14.70 bar	24 min
	SDR 13.6	17.40 bar	2.5 mm	1.20 bar	223 s	11 s	12 s	17.40 bar	27 min
	SDR 11	20.50 bar	3 mm	1.40 bar	268 s	12 s	14 s	20.50 bar	33 min
	SDR 9	24.10 bar	3 mm	1.60 bar	323 s	14 s	17 s	24.10 bar	39 min
	SDR 7.4	28.20 bar	3.5 mm	1.90 bar	389 s	17 s	20 s	28.20 bar	47 min
280 mm	SDR 17.6	17.50 bar	2.5 mm	1.20 bar	197 s	10 s	11 s	17.50 bar	25 min
	SDR 17	18.10 bar	2.5 mm	1.20 bar	204 s	10 s	12 s	18.10 bar	26 min
	SDR 13.6	21.50 bar	2.5 mm	1.40 bar	246 s	12 s	13 s	21.50 bar	30 min
	SDR 11	25.40 bar	3 mm	1.70 bar	297 s	13 s	16 s	25.40 bar	36 min
	SDR 9	30.00 bar	3 mm	2.00 bar	359 s	16 s	18 s	30.00 bar	44 min
	SDR 7.4	35.10 bar	3.5 mm	2.30 bar	432 s	18 s	22 s	35.10 bar	52 min
315 mm	SDR 17.6	22.10 bar	2.5 mm	1.50 bar	221 s	11 s	12 s	22.10 bar	27 min
	SDR 17	22.90 bar	2.5 mm	1.50 bar	229 s	11 s	13 s	22.90 bar	28 min
	SDR 13.6	27.20 bar	3 mm	1.80 bar	277 s	13 s	15 s	27.20 bar	34 min
	SDR 11	32.10 bar	3 mm	2.10 bar	333 s	15 s	17 s	32.10 bar	41 min
	SDR 9	37.30 bar	3.5 mm	2.50 bar	396 s	17 s	20 s	37.30 bar	48 min
	SDR 7.4	44.30 bar	3.5 mm	3.00 bar	486 s	20 s	24 s	44.30 bar	58 min
355 mm	SDR 17.6	27.50 bar	2.5 mm	1.80 bar	244 s	12 s	13 s	27.50 bar	30 min
	SDR 17	28.60 bar	2.5 mm	1.90 bar	255 s	12 s	14 s	28.60 bar	31 min
	SDR 13.6	34.00 bar	3 mm	2.30 bar	307 s	14 s	16 s	34.00 bar	38 min
	SDR 11	40.30 bar	3.5 mm	2.70 bar	371 s	16 s	19 s	40.30 bar	45 min
	SDR 9	47.60 bar	3.5 mm	3.20 bar	450 s	18 s	23 s	47.60 bar	54 min
	SDR 7.4	55.70 bar	4 mm	3.70 bar	542 s	21 s	27 s	55.70 bar	64 min
400 mm	SDR 17.6	34.40 bar	3 mm	2.30 bar	271 s	12 s	15 s	34.40 bar	33 min
	SDR 17	35.60 bar	3 mm	2.40 bar	282 s	13 s	15 s	35.60 bar	34 min
	SDR 13.6	42.50 bar	3 mm	2.80 bar	342 s	15 s	18 s	42.50 bar	41 min
	SDR 11	50.60 bar	3.5 mm	3.40 bar	414 s	17 s	21 s	50.60 bar	50 min
	SDR 9	59.80 bar	4 mm	4.00 bar	502 s	20 s	25 s	59.80 bar	60 min
	SDR 7.4	70.20 bar	4 mm	4.70 bar	607 s	23 s	30 s	70.20 bar	70 min
450 mm	SDR 17.6	43.60 bar	3 mm	2.90 bar	305 s	14 s	16 s	43.60 bar	37 min
	SDR 17	45.20 bar	3 mm	3.00 bar	318 s	14 s	17 s	45.20 bar	39 min
	SDR 13.6	54.00 bar	3.5 mm	3.60 bar	385 s	16 s	20 s	54.00 bar	47 min
	SDR 11	64.10 bar	3.5 mm	4.30 bar	467 s	19 s	23 s	64.10 bar	56 min
	SDR 9	75.80 bar	4 mm	5.10 bar	566 s	22 s	28 s	75.80 bar	67 min
	SDR 7.4	88.90 bar	4 mm	5.90 bar	683 s	25 s	34 s	88.90 bar	78 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Georg Fischer GF 630 / GF 630 CNC

Welding parameters for egeplast SLM® 3.0 pipes – butt fusion jointing WITHOUT cutting back the coating

Welding takes place according to the relevant DVS guidelines DVS 2207 and 2208.

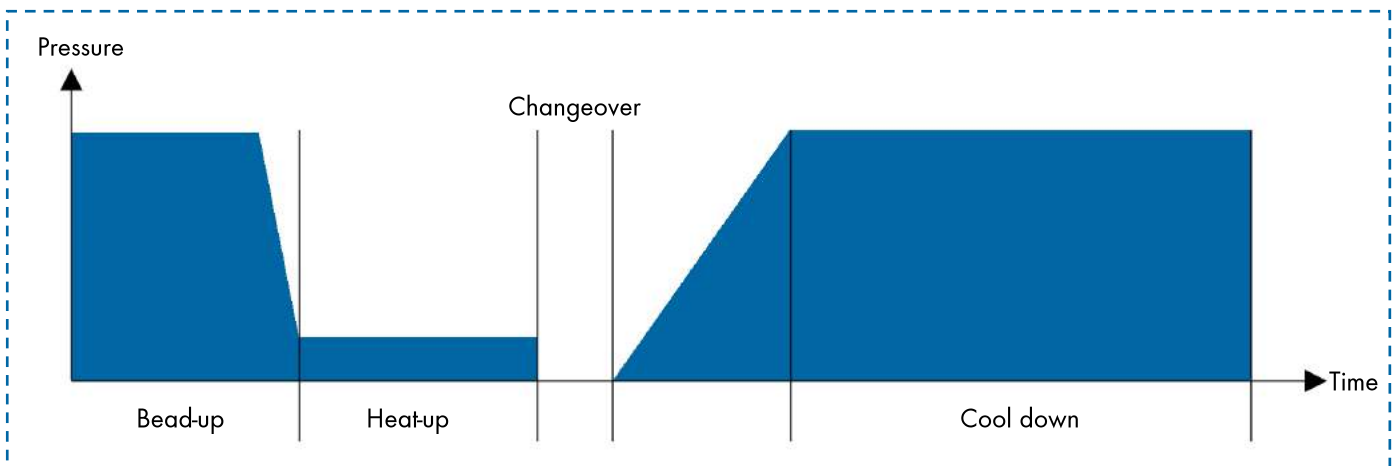
The following parameters apply to the machine type listed above only.

Reference value for the heating element temperature is 220 °C. Changeover time should be kept as short as possible.

Additionally to the given bead-up force and welding force, the moving force of the support must be added.

Cylinder cross-section = 1413 mm²

Please compare the specified cylinder cross-section with the label on your machine. If this differs, please contact your egeplast representative.



Schematic presentation of the welding process

OD core pipe [mm]	SDR core pipe *	Bead-up time		Heat-up time		Changeover time (max) t	Joining pressure build-up time t	Cool-down time	
		P	Bead size	Pmax	t			P	t
315 mm	SDR 17.6	22.10 bar	2.5 mm	1.50 bar	221 s	11 s	12 s	22.10 bar	27 min
	SDR 17	22.90 bar	2.5 mm	1.50 bar	229 s	11 s	13 s	22.90 bar	28 min
	SDR 13.6	27.20 bar	3 mm	1.80 bar	277 s	13 s	15 s	27.20 bar	34 min
	SDR 11	32.10 bar	3 mm	2.10 bar	333 s	15 s	17 s	32.10 bar	41 min
	SDR 9	37.30 bar	3.5 mm	2.50 bar	396 s	17 s	20 s	37.30 bar	48 min
	SDR 7.4	44.30 bar	3.5 mm	3.00 bar	486 s	20 s	24 s	44.30 bar	58 min
355 mm	SDR 17.6	27.50 bar	2.5 mm	1.80 bar	244 s	12 s	13 s	27.50 bar	30 min
	SDR 17	28.60 bar	2.5 mm	1.90 bar	255 s	12 s	14 s	28.60 bar	31 min
	SDR 13.6	34.00 bar	3 mm	2.30 bar	307 s	14 s	16 s	34.00 bar	38 min
	SDR 11	40.30 bar	3.5 mm	2.70 bar	371 s	16 s	19 s	40.30 bar	45 min
	SDR 9	47.60 bar	3.5 mm	3.20 bar	450 s	18 s	23 s	47.60 bar	54 min
	SDR 7.4	55.70 bar	4 mm	3.70 bar	542 s	21 s	27 s	55.70 bar	64 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Continuation Georg Fischer GF 630 / GF 630 CNC

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max)	Joining pressure build-up time	Cool-down time	
		P	Bead size	Pmax	t	t	t	P	t
400 mm	SDR 17.6	34.40 bar	3 mm	2.30 bar	271 s	12 s	15 s	34.40 bar	33 min
	SDR 17	35.60 bar	3 mm	2.40 bar	282 s	13 s	15 s	35.60 bar	34 min
	SDR 13.6	42.50 bar	3 mm	2.80 bar	342 s	15 s	18 s	42.50 bar	41 min
	SDR 11	50.60 bar	3.5 mm	3.40 bar	414 s	17 s	21 s	50.60 bar	50 min
	SDR 9	59.80 bar	4 mm	4.00 bar	502 s	20 s	25 s	59.80 bar	60 min
	SDR 7.4	70.20 bar	4 mm	4.70 bar	607 s	23 s	30 s	70.20 bar	70 min
450 mm	SDR 17.6	43.60 bar	3 mm	2.90 bar	305 s	14 s	16 s	43.60 bar	37 min
	SDR 17	45.20 bar	3 mm	3.00 bar	318 s	14 s	17 s	45.20 bar	39 min
	SDR 13.6	54.00 bar	3.5 mm	3.60 bar	385 s	16 s	20 s	54.00 bar	47 min
	SDR 11	64.10 bar	3.5 mm	4.30 bar	467 s	19 s	23 s	64.10 bar	56 min
	SDR 9	75.80 bar	4 mm	5.10 bar	566 s	22 s	28 s	75.80 bar	67 min
	SDR 7.4	88.90 bar	4 mm	5.90 bar	683 s	25 s	34 s	88.90 bar	78 min
500 mm	SDR 17.6	53.00 bar	3 mm	3.50 bar	335 s	15 s	17 s	53.00 bar	41 min
	SDR 17	55.20 bar	3 mm	3.70 bar	349 s	15 s	18 s	55.20 bar	42 min
	SDR 13.6	65.90 bar	3.5 mm	4.40 bar	424 s	18 s	21 s	65.90 bar	51 min
	SDR 11	78.40 bar	4 mm	5.20 bar	514 s	20 s	26 s	78.40 bar	61 min
	SDR 9	92.80 bar	4 mm	6.20 bar	623 s	23 s	31 s	92.80 bar	72 min
560 mm	SDR 17.6	65.60 bar	3 mm	4.40 bar	370 s	16 s	19 s	65.60 bar	45 min
	SDR 17	68.30 bar	3.5 mm	4.60 bar	386 s	16 s	24 s	68.30 bar	47 min
	SDR 13.6	81.80 bar	3.5 mm	5.50 bar	470 s	19 s	24 s	81.80 bar	56 min
	SDR 11	97.40 bar	4 mm	6.50 bar	571 s	22 s	29 s	97.40 bar	67 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.

Georg Fischer GF 800

Welding parameters for egeplast SLM® 3.0 pipes – butt fusion jointing WITHOUT cutting back the coating

Welding takes place according to the relevant DVS guidelines DVS 2207 and 2208.

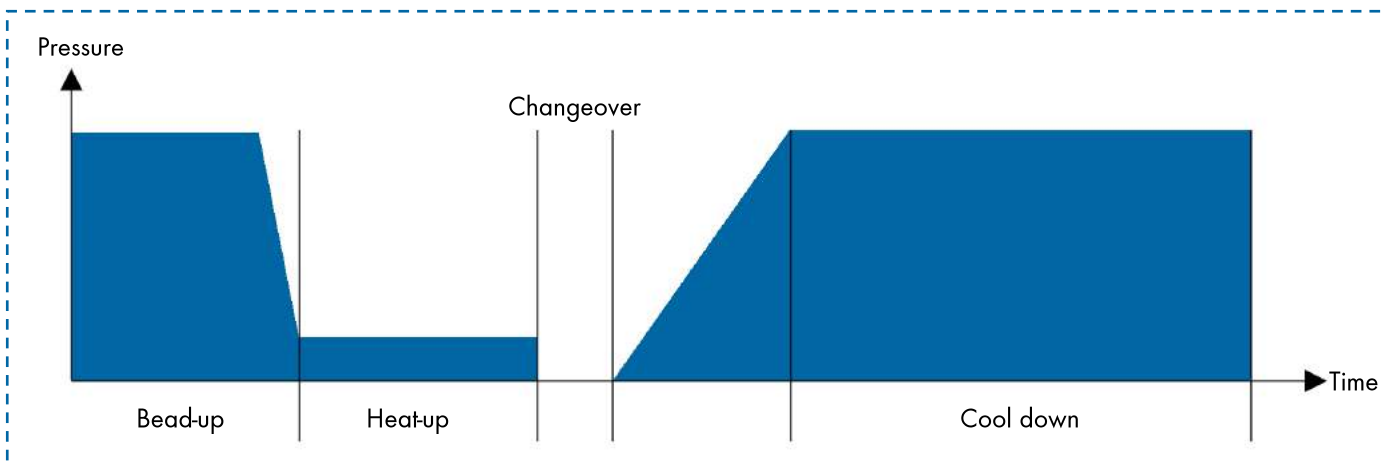
The following parameters apply to the machine type listed above only.

Reference value for the heating element temperature is 220 °C. Changeover time should be kept as short as possible.

Additionally to the given bead-up force and welding force, the moving force of the support must be added.

Cylinder cross-section = 2356 mm²

Please compare the specified cylinder cross-section with the label on your machine. If this differs, please contact your egeplast representative.



Schematic presentation of the welding process

OD core pipe [mm]	SDR core pipe*	Bead-up time		Heat-up time		Changeover time (max) t	Joining pressure build-up time t	Cool-down time	
		P	Bead size	Pmax	t			P	t
500 mm	SDR 17.6	31.30 bar	3 mm	2.10 bar	335 s	14 s	17 s	31.30 bar	40 min
	SDR 17	32.50 bar	3 mm	2.20 bar	349 s	15 s	18 s	32.50 bar	42 min
	SDR 13.6	38.80 bar	3.5 mm	2.60 bar	424 s	17 s	18 s	38.80 bar	51 min
	SDR 11	46.20 bar	4 mm	3.10 bar	514 s	20 s	20 s	46.20 bar	61 min
	SDR 9	54.70 bar	4 mm	3.70 bar	623 s	23 s	26 s	54.70 bar	72 min
560 mm	SDR 17.6	38.70 bar	3 mm	2.60 bar	370 s	16 s	19 s	38.70 bar	45 min
	SDR 17	40.20 bar	3.5 mm	2.70 bar	386 s	16 s	16 s	40.20 bar	46 min
	SDR 13.6	48.20 bar	3.5 mm	3.30 bar	470 s	19 s	20 s	48.20 bar	56 min
	SDR 11	57.40 bar	4 mm	3.90 bar	571 s	21 s	23 s	57.40 bar	67 min
630 mm	SDR 17.6	48.40 bar	3.5 mm	3.30 bar	412 s	17 s	17 s	48.40 bar	49 min
	SDR 17	50.40 bar	3.5 mm	3.40 bar	430 s	17 s	18 s	50.40 bar	51 min
	SDR 13.6	60.40 bar	4 mm	4.10 bar	524 s	20 s	21 s	60.40 bar	62 min
	SDR 11	72.10 bar	4 mm	4.90 bar	638 s	23 s	26 s	72.10 bar	73 min

*The indicated SDR-rate refers to the core pipe.

The calculated parameters in the tables already take into account the additional protective coating of the egeplast SLM® 3.0 pipes.