

TRACK 160 - ISO 11414

BUTT FUSION PARAMETERS FOR PE100 PIPES AND FITTINGS - SDR 7.4/SDR 9/SDR 11/SDR 13.6

PHASE	DN	50				63				75				90				110				125				140				160			
	SDR	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6
	WALL THICKNESS	6.9	5.6	4.6	3.7	8.6	7.1	5.8	4.7	10.3	8.4	6.8	5.5	12.3	10.1	8.2	6.6	15.1	12.3	10	8.1	17.1	14	11.4	9.2	19.2	15.7	12.7	10.3	21.9	17.9	14.6	11.8
	PN	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5
	TRIMMING PRESSURE	DRAG PRESSURE + the necessary pressure to produce the trimming operation																															
	HEATING PLATE TEMPERATURE	210°C ± 10°C																															
①	HEAT SOAK PRESSURE (bar) Total pistons area 9.8 cm ²	ADD DRAG PRESSURE																															
		1.7	1.5	1.2	1	2.7	2.3	2	1.5	4	3.2	2.7	2.2	5.5	4.7	4	3.2	8.2	7	6	5	10.5	9	7.5	6.2	13.5	11.3	9.5	7.5	17.5	15	12	10
	HEATING TIME	AS BEAD B1 IS FORMED																															
	BEAD B1 (bead width)	From 1 to 2 mm																															
②	HEAT SOAK PRESSURE	IMMOBILIZATION (RELEASE THE PHASE ① HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)																															
		ATTENTION !: REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER																															
	HEAT SOAK TIME (min: s ± 10s)	00:55				01:02				01:08				01:15				01:25				01:33				01:40				01:50			
③	HEATING PLATE WITHDRAWAL (s)	3.5												4												4.5							
④	CHANGEOVER TIME (s)	3.5												4												4.5							
⑤	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																															
		1.7	1.5	1.2	1	2.7	2.3	2	1.5	4	3.2	2.7	2.2	5.5	4.7	4	3.2	8.2	7	6	5	10.5	9	7.5	6.2	13.5	11.3	9.5	7.5	17.5	15	12	10
	FUSION TIME (min)	Minimum 10																															
⑥	COOLING TIME (min: s)	10:21	8:24	06:54	5:33	12:54	10:39	08:42	07:03	15:27	12:36	10:12	08:15	18:27	15:09	12:18	10:03	20:00	18:27	15:00	12:09	20:00	20:00	17:06	13:48	20:00	20:00	19:03	15:27	20:00	20:00	17:42	

BUTT FUSION PARAMETERS FOR PE100 PIPES AND FITTINGS - SDR 17 / SDR 21 / SDR 26 / SDR 33

PHASE	DN	50				63				75				90				110				125				140				160			
	SDR	17	21			17	21	26	33	17	21	26	33	17	21	26	33	17	21	26	33	17	21	26	33	17	21	26	33	17	21	26	33
	WALL THICKNESS	3	2.4			3.8	3	2.4	2.3	4.5	3.6	2.9	2.3	5.4	4.3	3.5	2.8	6.6	5.3	4.2	3.4	7.4	6	4.8	3.9	8.3	6.7	5.4	4.3	9.5	7.7	6.2	4.9
	PN	10	8			10	8	6.3	4	10	8	6.3	4	10	8	6.3	4	10	8	6.3	4	10	8	6.3	4	10	8	6.3	4	10	8	6.3	4
	TRIMMING PRESSURE	DRAG PRESSURE + the necessary pressure to produce the trimming operation																															
	HEATING PLATE TEMPERATURE	210°C ± 10°C																															
①	HEAT SOAK PRESSURE (bar) Total pistons area 9.8 cm ²	ADD DRAG PRESSURE																															
		1	0.7			1.3	1	1	1	2	1.5	1.2	1	2.5	2	1.7	1.5	4	3.2	2.5	2	5	4	3.3	2.7	6.5	5	4.2	3.5	8.5	7	5.5	4.5
	HEATING TIME	AS BEAD B1 IS FORMED																															
	BEAD B1 (bead width)	From 1 to 2 mm																															
②	HEAT SOAK PRESSURE	IMMOBILIZATION (RELEASE THE PHASE ① HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)																															
		ATTENTION !: REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER																															
	HEAT SOAK TIME (min: s ± 10s)	00:55				01:02				01:08				01:15				01:25				01:33				01:40				01:50			
③	HEATING PLATE WITHDRAWAL (s)	3.5												4												4.5							
④	CHANGEOVER TIME (s)	3.5												4												4.5							
⑤	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																															
		1	0.6			1.3	1	1	1	2	1.5	1.2	1	2.5	2	1.7	1.5	4	3.2	2.5	2	5	4	3.3	2.7	6.5	5	4.2	3.5	8.5	7	5.5	4.5
	FUSION TIME (min)	Minimum 10																															
⑥	COOLING TIME (min: s)	04:30	03:36			05:42	04:30	03:36	03:27	06:45	05:24	04:21	03:27	08:06	06:27	05:15	04:12	09:54	07:57	06:18	05:06	11:06	09:00	07:12	05:51	12:27	10:03	08:06	06:27	14:15	11:33	09:18	07:21

TRACK 160 - DVS 2207-1

BUTT FUSION PARAMETERS FOR PE100 PIPES AND FITTINGS - SDR 7.4/SDR 9/SDR 11/SDR 13.6

PHASE	DN	50				63				75				90				110				125				140				160			
	SDR	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6	7.4	9	11	13.6
	WALL THICKNESS	6.9	5.6	4.6	3.7	8.6	7.1	5.8	4.7	10.3	8.4	6.8	5.5	12.3	10.1	8.2	6.6	15.1	12.3	10	8.1	17.1	14	11.4	9.2	19.2	15.7	12.7	10.3	21.9	17.9	14.6	11.8
	PN	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5
	TRIMMING PRESSURE	DRAG PRESSURE + the necessary pressure to produce the trimming operation																															
	HEATING PLATE TEMPERARURE	210°C ±10°C																															
①	HEAT SOAK PRESSURE (bar) Total pistons area 9.8 cm2	ADD DRAG PRESSURE																															
	HEATING TIME	AS BEAD IS FORMED																															
	BEAD HEIGHT (mm)	1	1	1	0.5	1.5	1.5	1	1	1.5	1.5	1	1	2	1.5	1.5	1	2	2	1.5	1.5	2	2	1.5	1.5	2.5	2	2	1.5	2.5	2	2	1.5
②	HEAT SOAK PRESSURE	IMMOBILIZATION (RELEASE THE PHASE ① HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)																															
	HEAT SOAK TIME (min:s ±10s)	ATTENTION !: REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER																															
③	HEATING PLATE WITHDRAWAL (s)	6	5	5	5	6	6	5	5	7	7	6	5	8	7	7	6	9	8	9	7	9	9	8	7	10	9	8	7	11	10	9	8
④	CHANGEOVER TIME (s)	6	5	5	5	6	6	5	5	7	7	6	5	8	7	7	6	9	8	9	7	10	9	8	7	11	9	8	7	12	11	9	8
⑤	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																															
	FUSION TIME (min:s)	09:50	07:46	06:10	06:00	11:55	10:07	08:05	06:19	13:58	11:41	09:41	07:36	16:21	13:43	11:26	09:22	19:33	16:21	13:36	11:19	21:50	18:17	15:17	12:38	24:14	20:14	16:48	13:58	27:19	22:45	18:58	15:46

BUTT FUSION PARAMETERS FOR PE100 PIPES AND FITTINGS - SDR 17 / SDR 21 / SDR 26 / SDR 33

PHASE	DN	50				63				75				90				110				125				140				160			
	SDR	17	21			17	21	26	33	17	21	26	33	17	21	26	33	17	21	26	33	17	21	26	33	17	21	26	33	17	21	26	33
	WALL THICKNESS	3	2.4			3.8	3	2.4	2.3	4.5	3.6	2.9	2.3	5.4	4.3	3.5	2.8	6.6	5.3	4.2	3.4	7.4	6	4.8	3.9	8.3	6.7	5.4	4.3	9.5	7.7	6.2	4.9
	PN	10	8			10	8	6.3	4	10	8	6.3	4	10	8	6.3	4	10	8	6.3	4	10	8	6.3	4	10	8	6.3	4	10	8	6.3	4
	TRIMMING PRESSURE	DRAG PRESSURE + the necessary pressure to produce the trimming operation																															
	HEATING PLATE TEMPERARURE	210°C ±10°C																															
①	HEAT SOAK PRESSURE (bar) Total pistons area 9.8 cm2	ADD DRAG PRESSURE																															
	HEATING TIME	AS BEAD IS FORMED																															
	BEAD HEIGHT (mm)	0.5	0.5			0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	1	1	0.5	0.5	1.5	1	1	0.5	1.5	1	1	0.5	1.5	1.5	1	1	
②	HEAT SOAK PRESSURE	IMMOBILIZATION (RELEASE THE PHASE ① HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)																															
	HEAT SOAK TIME (min:s ±10s)	ATTENTION !: REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER																															
③	HEATING PLATE WITHDRAWAL (s)	5	5			5	5	5	5	5	5	5	5	5	5	5	6	5	5	5	6	6	5	5	6	6	5	5	7	6	6	5	
④	CHANGEOVER TIME (s)	5	5			5	5	5	5	5	5	5	5	5	5	5	6	5	5	5	6	6	5	5	6	6	5	5	7	6	6	5	
⑤	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																															
	FUSION TIME (min:s)	06:00	06:00			06:00	06:00	06:00	06:00	06:00	06:00	06:00	07:26	06:00	06:00	06:00	09:22	07:17	06:00	06:00	10:29	08:24	06:29	06:00	11:34	09:31	07:26	06:00	13:00	10:50	08:43	06:38	

TRACK 160 - DVS 2207-11

BUTT FUSION PARAMETERS FOR POLYPROPYLENE (PP) PIPES AND FITTINGS - SDR 7.4/SDR 11/SDR 17.6

PHASE	DN	50			63			75			90			110			125			140			160			
	SDR	7.4	11	17.6	7.4	11	17.6	7.4	11	17.6	7.4	11	17.6	7.4	11	17.6	7.4	11	17.6	7.4	11	17.6	7.4	11	17.6	
	WALL THICKNESS	6.9	4.6	2.9	8.6	5.8	3.6	10.3	6.8	4.3	12.3	8.2	5.1	15.1	10	6.3	17.1	11.4	7.1	19.2	12.7	8	21.9	14.6	9.1	
	PN	16	10	6	16	10	6	16	10	6	16	10	6	16	10	6	16	10	6	16	10	6	16	10	6	
TRIMMING PRESSURE	DRAG PRESSURE + the necessary pressure to produce the trimming operation																									
HEATING PLATE TEMPERARURE	210°C ±10°C																									
①	HEAT SOAK PRESSURE (bar) Total pistons area 9.8 cm2	ADD DRAG PRESSURE																								
	HEATING TIME	AS BEAD IS FORMED																								
	BEAD HEIGHT (mm)	0.5	0.5	0.5	1	0.5	0.5	1	0.5	0.5	1	1	0.5	1	1	0.5	1	1	1	1.5	1	1	1.5	1	1	
②	HEAT SOAK PRESSURE	IMMOBILIZATION (RELEASE THE PHASE ① HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)																								
	HEAT SOAK TIME (min:s ±10s)	ATTENTION !: REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER																								
③	HEATING PLATE WITHDRAWAL (s)	6	5	5	6	5	5	6	6	5	7	6	5	8	6	6	9	7	6	9	7	6	10	8	6	
④	CHANGEOVER TIME (s)	7	6	6	8	6	6	8	7	6	11	8	6	13	9	7	16	11	7	17	11	8	19	10	8	
⑤	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																								
	FUSION TIME (min:s)	11:46	06:16	06:00	14:34	09:07	06:00	17:17	11:31	06:00	20:26	13:55	07:26	24:26	16:48	10:19	27:17	19:02	12:10	30:17	21:00	13:36	34:09	23:43	15:22	

BUTT FUSION PARAMETERS FOR POLYPROPYLENE (PP) PIPES AND FITTINGS - SDR 26 / SDR 33 / SDR 41

PHASE	DN	50			63			75			90			110			125			140			160			
	SDR	26	33		26	33		26	33		26	33	33	26	33	41	26	33	41	26	33	41	26	33	41	
	WALL THICKNESS	2	1.8		2.5	2		2.9	2.3		3.5	2.8	2.8	4.2	3.4	2.7	4.8	3.9	3.1	5.4	4.3	3.5	6.2	4.9	4	
	PN	4	3.2		4	3.2		4	3.2		4	3.2	4	4	3.2	2.5	4	3.2	2.5	4	3.2	2.5	4	3.2	2.5	
TRIMMING PRESSURE	DRAG PRESSURE + the necessary pressure to produce the trimming operation																									
HEATING PLATE TEMPERARURE	210°C ±10°C																									
①	HEAT SOAK PRESSURE (bar) Total pistons area 9.8 cm2	ADD DRAG PRESSURE																								
	HEATING TIME	AS BEAD IS FORMED																								
	BEAD HEIGHT (mm)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
②	HEAT SOAK PRESSURE	IMMOBILIZATION (RELEASE THE PHASE ① HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)																								
	HEAT SOAK TIME (min:s ±10s)	ATTENTION !: REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER																								
③	HEATING PLATE WITHDRAWAL (s)	5	5		5	5		5	5		5	5	5	5	5	5	5	5	5	6	5	5	6	5	5	
④	CHANGEOVER TIME (s)	6	6		6	6		6	6		6	6	5	6	6	6	6	6	6	6	6	6	7	6	6	
⑤	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																								
	FUSION TIME (min:s)	06:00	06:00		06:00	06:00		06:00	06:00		06:00	06:00	06:00	06:00	06:00	06:00	06:43	06:00	06:00	11:34	06:00	06:00	10:05	06:58	06:00	

TRACK 160 - DVS 2207-15

BUTT FUSION PARAMETERS FOR NATURAL PVDF PIPES AND FITTINGS - SDR 21 / SDR 33 / VENTILACIÓN

PHASE	DN	50	63		75	90		110			125		140			160		
	SDR	21	21		21	21	33	21	33		21	33	21	33		21	33	
	WALL THICKNESS	3	3	2	3.6	4.3	2.8	5.3	3.4	3	6	3.9	6.7	4.3	3	7.7	4.9	3
	ISO	S-10	S-10	V	S-10	S-10	S-16	S-10	S-16	V	S-10	S-16	S-10	S-16	V	S-10	S-16	V
	TRIMMING PRESSURE	DRAG PRESSURE + the necessary pressure to produce the trimming operation																
	HEATING PLATE TEMPERATURE	240°C ±8°C																
❶	HEAT SOAK PRESSURE (bar) Total pistons area 9.8 cm ²	ADD DRAG PRESSURE																
		0.5	0.6	0.4	0.8	1.2	0.8	1.8	1.2	1	2.3	1.5	2.9	1.9	1.3	3.8	2.5	1.5
	HEATING TIME	AS BEAD IS FORMED																
	BEAD HEIGHT (mm)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.7	0.5	0.5
❷	HEAT SOAK PRESSURE	IMMOBILIZATION (RELEASE THE PHASE ❶ HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)																
		ATTENTION !: REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER																
	HEAT SOAK TIME (min:s ±10s)	01:10	01:10	01:00	01:16	01:23	01:08	01:33	01:14	01:10	01:40	01:19	02:47	01:23	01:10	03:06	01:29	01:10
❸	HEATING PLATE WITHDRAWAL (s)	3	3	3	3	3	3	3	3	3	4	3	4	3	3	4	3	3
❹	CHANGEOVER TIME (s)	3	3	3	4	4	3	4	4	4	4	4	5	4	4	6	4	4
❺	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																
		0.5	0.6	0.4	0.8	1.2	0.8	1.8	1.2	1	2.3	1.5	2.9	1.9	1.3	3.8	2.5	1.5
	FUSION TIME (min:s)	05:41	05:41	05:04	06:08	07:00	05:34	08:15	05:56	05:41	09:07	06:30	09:58	07:00	05:23	11:11	07:45	05:23