

TRACK 315R - ISO 11414

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

PHASE	DN	90				110				125				140				160				180				200				225				250				280				315			
	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	7.4	9	11	13.6	7.4	9	11	13.6				
	WALL THICKNESS	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	24.6	20.1	16.4	13.3	27.4	22.4	18.2	14.7	30.8	25.1	20.5	16.6	34.2	27.9	22.7	18.4	38.3	31.2	25.4	20.6	43.1	35	28.6	23.3
	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	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																																225°C ±10°C											
①	HEAT SOAK PRESSURE (bar) Total pistons area 9.04 cm ²	ADD DRAG PRESSURE																																											
		6	5	4.2	3.5	9	7.5	6.25	5.2	11.5	9.7	8.1	6.7	14.5	12.2	10.1	8.3	18.9	15.9	13.3	11	24	20.1	16.8	13.9	29.6	25	20.7	17.04	37.4	31.4	26.3	21.6	46	38.8	32.3	26.7	58	48.6	40.5	33.5	73.3	61.1	51.2	42.5
	HEATING TIME BEAD B1 (bead width)	From 1 to 2 mm																				From 2 to 3 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)	01:15				01:25				01:33				01:44				01:50				02:00				02:10				02:23				02:35				02:50				03:08			
③	HEATING PLATE WITHDRAWAL (s)	4				4				4.5				4.5				5				5.5				5.5				6															
④	CHANGEOVER TIME (s)	4				4				4.5				4.5				5				5.5				5.5				6															
⑤	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																																											
		6	5	4.2	3.5	9	7.5	6.25	5.2	11.5	9.7	8.1	6.7	14.5	12.2	10.1	8.3	18.9	15.9	13.3	11	24	20.1	16.8	13.9	29.6	25	20.7	17.04	37.4	31.4	26.3	21.6	46	38.8	32.3	26.7	58	48.6	40.5	33.5	73.3	61.1	51.2	42.5
	FUSION TIME (min)	Minimum 10																																											
⑥	COOLING TIME (min:s)	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	20:00	17:42	20:00	20:00	20:00	19:57	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00	20:00

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

PHASE	DN	90				110				125				140				160				180				200				225				250				280				315			
	SDR	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	17	21	26	33	17	21	26	33	17	21	26	33				
	WALL THICKNESS	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	10.7	8.6	6.9	5.5	11.9	9.6	7.7	6.2	13.4	10.8	8.6	6.9	14.8	11.9	9.6	7.7	16.6	13.4	10.7	8.6	18.7	15	12.1	9.7
	PN	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	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																																225°C ±10°C											
①	HEAT SOAK PRESSURE (bar) Total pistons area 9.04 cm ²	ADD DRAG PRESSURE																																											
		2.9	2.3	1.9	1.5	4.3	3.5	2.8	2.3	5.5	4.5	3.6	3	6.9	5.6	4.5	3.7	9	7.3	6	4.8	11.3	9.2	7.5	6	14	11.5	9.2	7.5	17.7	14.5	11.6	9.4	21.8	17.7	14.5	11.7	27.4	22.3	18	14.6	34.7	28	23	18.5
	HEATING TIME BEAD B1 (bead width)	From 1 to 2 mm																				From 2 to 3 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)	01:15				01:25				01:33				01:44				01:50				02:00				02:10				02:23				02:35				02:50				03:08			
③	HEATING PLATE WITHDRAWAL (s)	4				4				4.5				4.5				5				5.5				5.5				6															
④	CHANGEOVER TIME (s)	4				4				4.5				4.5				5				5.5				5.5				6															
⑤	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																																											
		2.9	2.3	1.9	1.5	4.3	3.5	2.8	2.3	5.5	4.5	3.6	3	6.9	5.6	4.5	3.7	9	7.3	6	4.8	11.3	9.2	7.5	6	14	11.5	9.2	7.5	17.7	14.5	11.6	9.4	21.8	17.7	14.5	11.7	27.4	22.3	18	14.6	34.7	28	23	18.5
	FUSION TIME (min)	Minimum 10																																											
⑥	COOLING TIME (min:s)	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	16:03	12:54	10:21	08:15	17:51	14:24	11:33	09:18	20:00	16:12	12:54	10:21	20:00	17:51	14:24	11:33	20:00	20:00	16:03	12:54	20:00	20:00	18:09	14:33

TRACK 315R - DVS 2207-1

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

PHASE	DN	90				110				125				140				160				180				200				225				250				280				315							
	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	7.4	9	11	13.6	7.4	9	11	13.6								
	WALL THICKNESS	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	24.6	20.1	16.4	13.3	27.4	22.4	18.2	14.7	30.8	25.1	20.5	16.6	34.2	27.9	22.7	18.4	38.3	31.2	25.4	20.6	43.1	35	28.6	23.3				
	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	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5	25	20	16	12.5
1	TRIMMING PRESSURE	DRAG PRESSURE + the necessary pressure to produce the trimming operation																																															
	HEATING PLATE TEMPERARURE	210°C ±10°C																																															
	HEAT SOAK PRESSURE (bar) Total pistons area 9.04 cm ²	ADD DRAG PRESSURE																																															
	HEATING TIME	AS BEAD IS FORMED																																															
	BEAD HEIGHT (mm)	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	2.5	2.5	2	2	3	2.5	2	2	3	2.5	2.5	2	3	3	2.5	2	3	3	2.5	2	3.5	3	2.5	2.5	3.5	3	3	2.5
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)	8	7	7	6	9	8	9	7	9	9	8	7	10	9	8	7	11	10	9	8	11	10	9	9	12	10	10	9	14	12	10	9	15	15	11	10	16	13	12	10	18	16	12	11				
4	CHANGE OVER TIME (s)	8	7	7	6	9	8	9	7	10	9	8	7	11	9	8	7	12	11	9	8	13	11	9	9	14	12	11	9	16	14	11	10	17	18	12	11	19	15	13	11	22	19	14	13				
5	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																																															
	FUSION TIME (min:s)	5	4.2	3.5	2.9	7.5	6.3	5.2	4.3	9.6	8.1	6.7	5.5	12	10.2	8.5	7	15.8	13.3	11	9.1	19.9	16.8	14	11.5	24.6	20.7	17.2	14.2	31.2	26.1	21.9	18	38.5	32.3	26.9	22.2	48.2	40.5	33.7	27.8	61	51	42.7	35.5				

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

PHASE	DN	90				110				125				140				160				180				200				225				250				315				315						
	SDR	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	17	21	26	33	17	21	26	33	17	21	26	33	17	21	26	33			
	WALL THICKNESS	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	10.7	8.6	6.9	5.5	11.9	9.6	7.7	6.2	13.4	10.8	8.6	6.9	14.8	11.9	9.6	7.7	16.6	13.4	10.7	8.6	18.7	15	12.1	9.7			
	PN	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	10	8	6.3	4	10	8	6.3	4	10	8	6.3	4	10	8	6.3	4	10	8	6.3
	TRIMMING PRESSURE	DRAG PRESSURE + the necessary pressure to produce the trimming operation																																														
	HEATING PLATE TEMPERARURE	210°C ±10°C																																														
	HEAT SOAK PRESSURE (bar) Total pistons area 9.04 cm ²	ADD DRAG PRESSURE																																														
	HEATING TIME	AS BEAD IS FORMED																																														
	BEAD HEIGHT (mm)	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	1.5	1.5	1	1	1.5	1.5	1.5	1	2	1.5	1.5	1	2	1.5	1.5	1.5	2	2	1.5	1.5	2	2	1.5	1.5	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)	5	5	5	5	6	5	5	5	6	6	5	5	6	6	5	5	7	6	6	5	7	7	6	5	8	7	6	6	8	8	7	6	9	8	7	6	9	8	7	6	10	9	8	7			
4	CHANGE OVER TIME (s)	5	5	5	5	6	5	5	5	6	6	5	5	6	6	5	5	7	6	6	5	7	7	6	5	8	7	6	6	9	8	7	6	9	8	7	6	10	9	7	6	11	9	8	7			
5	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																																														
	FUSION TIME (min:s)	7.2	2	1.6	1.3	3.6	2.9	2.3	1.9	4.5	3.7	3	2.5	5.7	4.7	3.8	3	7.5	6.1	5	4	9.5	7.7	6.2	5	11.7	9.5	7.7	6.3	14.8	12	9.7	7.9	18.1	14.8	12	9.7	22.8	18.6	15	12.2	28.9	23.5	19.1	15.5			

TRACK 315R - DVS 2207-15

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

PHASE	DN	90		110			125		140			160			180		200			225		250			280		315			
	SDR	21	33	21	33		21	33	21	33		21	33		21	33	21	33		21	33	21	33		21	33	21	33		
	WALL THICKNESS	4.3	2.8	5.3	3.4	3	6	3.9	6.7	4.3	3	7.7	4.9	3	8.6	5.5	9.6	6.2	3	10.8	6.9	11.9	7.7	3	13.4	8.6	15	9.7	4	
	PN	S-10	S-16	S-10	S-16	V	S-10	S-16	S-10	S-16	V	S-10	S-16	V	S-10	S-16	S-10	S-16	V	S-10	S-16	S-10	S-16	V	S-10	S-16	S-10	S-16	V	
	TRIMMING PRESSURE	DRAG PRESSURE + the necessary pressure to produce the trimming operation																												
	HEATING PLATE TEMPERATURE	240°C ±8°C																												
①	HEAT SOAK PRESSURE (bar) Total pistons area 9.04 cm ²	ADD DRAG PRESSURE																												
		1.3	0.85	1.9	1.3	1.1	2.5	1.6	3.1	2	1.4	4	2.6	1.6	5.1	3.3	6.3	4.1	2.1	8	5.2	9.8	6.5	2.6	12.4	8.1	15.6	10.3	4.3	
	HEATING TIME	AS BEAD IS FORMED																												
	BEAD HEIGHT (mm)	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	0.9	0.5	1	0.6	0.6	1	0.7	1.1	0.7	0.7	1.1	0.8	1.3	1	1	
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)	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	02:06	01:35	02:16	01:42	01:10	02:28	01:49	02:39	01:57	01:10	02:54	02:06	03:10	02:17	01:20	
③	HEATING PLATE WITHDRAWAL (s)	3	3	3	3	3	4	3	4	3	3	4	3	3	4	3	4	4	4	4	4	4	4	4	4	4	4	5	4	4
④	CHANGEVER TIME (s)	4	3	4	4	4	4	4	5	4	4	6	4	4	6	5	7	6	6	7	6	6	6	6	6	6	6	9	7	7
⑤	FUSION PRESSURE (bar)	ADD DRAG PRESSURE																												
		1.3	0.85	1.9	1.3	1.1	2.5	1.6	3.1	2	1.4	4	2.6	1.6	5.1	3.3	6.3	4.1	2.1	8	5.2	9.8	6.5	2.6	12.4	8.1	15.6	10.3	4.3	
	FUSION TIME (min:s)	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	12:17	08:30	13:31	09:21	05:27	14:48	10:13	15:54	11:11	05:27	17:24	12:17	19:00	13:38	06:40	