

# Butt-welding Fitting Installation

## Features:

Sun Rise HDPE pipes above 6" must be connected using butt welding. Butt welding is an economical joining method. The principle is to heat the two contact surfaces to a certain temperature, and pressurize them to connect. After cooling, they are combined together.

## Steps:

1



Place the two pipes on the welding machine

2



Place the planer between the two pipes and smooth the contact surfaces.

3



Insert an electric hot plate to heat and pressurize the two contact surfaces until complete molten beads appear.

4



Exit the hot plate and quickly join the two pipes together, then increase the pressure until molten beads form, and then maintain pressure until the joint cools to the point where it's touchable (Reference table as below).



Reference table

Machine type: Power-300

Pipe type : SDR-11

OD (mm)	Pressurize until molten beads form		Maintain heating		Exit the hot plate (Sec)	Pressurize to weld the pipes		Molten beads width (mm)	Cooling time (min)
	Pressure kgf/cm <sup>2</sup>	Molten beads width (mm)	Pressure kgf/cm <sup>2</sup>	Time (Sec)		Max. Pressure rising time (sec)	Pressure kgf/cm <sup>2</sup>		
75	4.5	1.3	1	90	3.8	12	4.5	7.0-11.0	14
100	7.3	1.5	1	120	4.2	15	7.3	8.0-12.8	15
125	11.0	1.8	1	150	4.4	19	11.0	9.4-14.5	16
150	15.3	2.0	1	180	4.7	22	15.3	10.5-16.3	17
200	26.2	2.5	1	230	5.2	29	26.2	12.8-20.3	20
250	40.1	3.0	1	290	5.8	36	40.1	15.0-23.2	22
300	57.0	3.4	1	340	6.2	43	57.0	17.5-26.7	24

Machine type: Power-600

Pipe type : SDR-11

OD (mm)	Pressurize until molten beads form		Maintain heating		Exit the hot plate (Sec)	Pressurize to weld the pipes		Molten beads width (mm)	Cooling time (min)
	Pressure kgf/cm <sup>2</sup>	Molten beads width (mm)	Pressure kgf/cm <sup>2</sup>	Time (Sec)		Max. Pressure rising time (sec)	Pressure kgf/cm <sup>2</sup>		
200	5.0	1.5	1.5	247	5	23	5.0	12.8-20.7	24
250	8.0	3.0	1.5	307	6	28	8.0	15.0-23.2	30
300	11.0	3.5	1.5	367	6	33	11.0	17.5-26.7	36
350	14.0	4.0	1.5	403	7	36	14.0	19.0-29.0	40
400	18.5	4.0	1.5	458	7	41	18.5	21.5-32.0	45
450	22.0	4.5	4.5	499	8	44	22.0	24.0-35.5	50
500	27.0	5.0	2.0	554	8	49	27.0	26.5-37.8	55
550	33.0	5.5	2.0	610	9	53	33.0	29.0-40.0	60
600	44.0	6.0	2.0	666	9	58	40.0	31.5-42.5	66