

## Table for PP

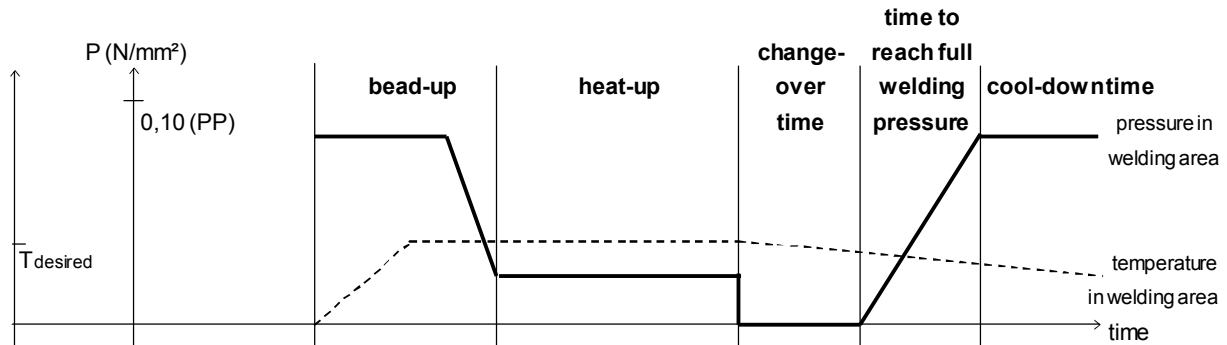


Foundation: 2207, 2208, DIN 16932 German association for welding

Use for: <b>Miniplast 2 / 110</b>	OD 20 - 110
<b>Maxiplast / 501 / 900 / 955</b>	OD 50 - 160
<b>Instaweld 160</b>	OD 50 - 160
<b>2000 / 3000 Kombi</b>	OD 50 - 250
<b>2500 DO 160 / 250 / 315</b>	OD 50 - 315
<b>ASM160 / ASM 315</b>	OD 50 - 315

The standard value for heating element temperature is 210° C +/- 10° C.  
The **smaller** the pipe wall the **higher** the temperature.

Additional to the given bead-up force and to the welding force the moving force of the support must be added !  
1 kp = 10 N



pipe diameter OD [mm]	pipe wall (s) [mm]	SDR	bead-up force [kp] [daN]	circular bead min. [mm]	heat-up time [s]	max. change-over time [s]	time to reach welding pressure [s]	welding force [kp] [daN]	cool-down time [min]
<b>20</b>	1,9	11	2	0,5	90	4	5	2	2
	2,8	7,4	2	0,5	104	4	5	2	3
	3,4	6	2	0,5	115	5	6	2	4
	4,1	5	3	0,5	128	5	6	3	5
<b>25</b>	2,3	11	2	0,5	95	4	5	2	2
	3,5	7,4	3	0,5	117	5	6	3	4
	4,2	6	3	0,5	130	5	6	3	6
	5,1	5	4	0,5	145	5	6	4	7
<b>32</b>	1,8	17,6	2	0,5	90	4	5	2	2
	2,9	11	3	0,5	106	4	5	3	3
	4,4	7,4	4	0,5	133	5	6	4	6
	5,4	6	5	0,5	149	5	6	5	8
	6,5	5	6	0,5	167	6	7	6	11
<b>40</b>	1,8	26	3	0,5	90	4	5	3	2
	2,3	17,6	3	0,5	95	4	5	3	2
	3,7	11	5	0,5	121	5	6	5	5
	5,5	7,4	6	0,5	151	5	6	6	8
	6,7	6	8	0,5	170	6	7	8	11
	8,1	5	9	1,0	190	6	8	9	14

# Table for PP

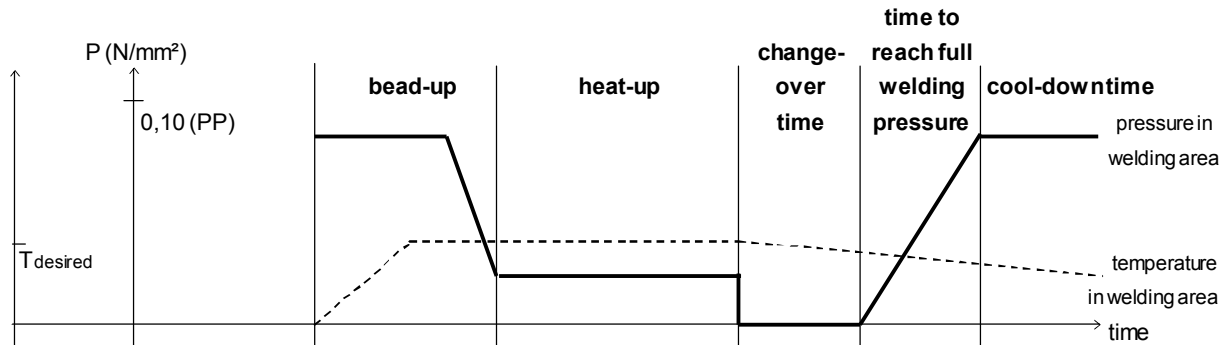


Foundation: 2207, 2208, DIN 16932 German association for welding

Use for: **Miniplast 2 / 110** OD 20 - 110  
**Maxiplast / 501 / 900 / 955** OD 50 - 160  
**Instaweld 160** OD 50 - 160  
**2000 / 3000 Kombi** OD 50 - 250  
**2500 DO 160 / 250 / 315** OD 50 - 315  
**ASM160 / ASM 315** OD 50 - 315

The standard value for heating element temperature is 210° C +/- 10° C.  
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 1 kp = 10 N



pipe diameter OD [mm]	pipe wall (s) [mm]	SDR	bead-up force [kp] [daN]	circular bead min. [mm]	heat-up time [s]	max. change-over time [s]	time to reach welding pressure [s]	welding force [kp] [daN]	cool-down time [min]
<b>50</b>	1,8	33	3	0,5	90	4	5	3	2
	2,0	26	4	0,5	90	4	5	4	2
	2,9	17,6	5	0,5	106	4	5	5	3
	4,6	11	7	0,5	137	5	6	7	6
	6,9	7,4	10	0,5	173	6	7	10	12
	8,3	6	11	1,0	193	6	8	11	14
	10,1	5	13	1,0	218	7	9	13	17
<b>63</b>	1,8	41	4	0,5	90	4	5	4	2
	2,0	33	4	0,5	90	4	5	4	2
	2,5	26	5	0,5	99	4	5	5	3
	3,6	17,6	7	0,5	119	5	6	7	4
	5,8	11	11	0,5	156	6	7	11	9
	8,6	7,4	15	1,0	197	6	8	15	15
	10,5	6	18	1,0	224	7	10	18	18
	12,7	5	21	1,0	254	7	12	21	21
<b>75</b>	1,9	41	5	0,5	90	4	5	5	2
	2,3	33	6	0,5	95	4	5	6	2
	2,9	26	7	0,5	106	4	5	7	3
	4,3	17,6	10	0,5	131	5	6	10	6
	6,8	11	15	0,5	172	6	7	15	12
	10,3	7,4	21	1,0	221	7	10	21	17
	12,5	6	25	1,0	251	7	11	25	21
	15,1	5	29	1,0	283	8	14	29	24

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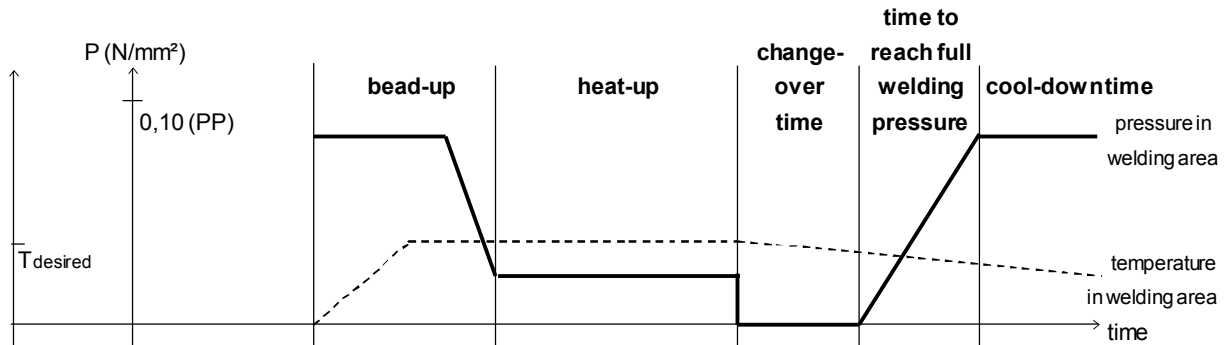


Foundation: 2207, 2208, DIN 16932 German association for welding

Use for: **Miniplast 2 / 110** OD 20 - 110  
**Maxiplast / 501 / 900 / 955** OD 50 - 160  
**Instaweld 160** OD 50 - 160  
**2000 / 3000 Kombi** OD 50 - 250  
**2500 DO 160 / 250 / 315** OD 50 - 315  
**ASM160 / ASM 315** OD 50 - 315

The standard value for heating element temperature is 210° C +/- 10° C.  
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pipe diameter OD [mm]	pipe wall (s) [mm]	SDR	bead-up force [kp] [daN]	circular bead min. [mm]	heat-up time [s]	max. change-over time [s]	time to reach welding pressure [s]	welding force [kp] [daN]	cool-down time [min]
<b>90</b>	2,2	41	7	0,5	94	4	5	7	2
	2,8	33	8	0,5	104	4	5	8	3
	3,5	26	10	0,5	117	5	6	10	4
	5,1	17,6	14	0,5	145	5	6	14	7
	8,2	11	22	1,0	192	6	8	22	14
	12,3	7,4	31	1,0	249	7	11	31	20
	15,0	6	36	1,0	281	8	14	36	24
	18,1	5	41	1,0	319	9	16	41	29
<b>110</b>	2,7	41	10	0,5	103	4	5	10	3
	3,4	33	12	0,5	115	5	6	12	4
	4,2	26	14	0,5	130	5	6	14	6
	6,3	17,6	21	0,5	164	6	7	21	10
	10,0	11	32	1,0	217	7	9	32	17
	15,1	7,4	46	1,0	283	8	14	46	24
	18,3	6	53	1,0	322	9	16	53	29
	22,1	5	62	1,5	361	10	19	62	34
<b>125</b>	3,1	41	12	0,5	110	4	5	12	4
	3,9	33	15	0,5	124	5	6	15	5
	4,8	26	19	0,5	140	5	6	19	7
	7,1	17,6	27	1,0	176	6	7	27	12
	11,4	11	41	1,0	237	7	11	41	19
	17,1	7,4	58	1,0	307	8	15	58	27
	20,8	6	69	1,5	348	10	18	69	33
	25,1	5	79	1,5	391	11	21	79	39

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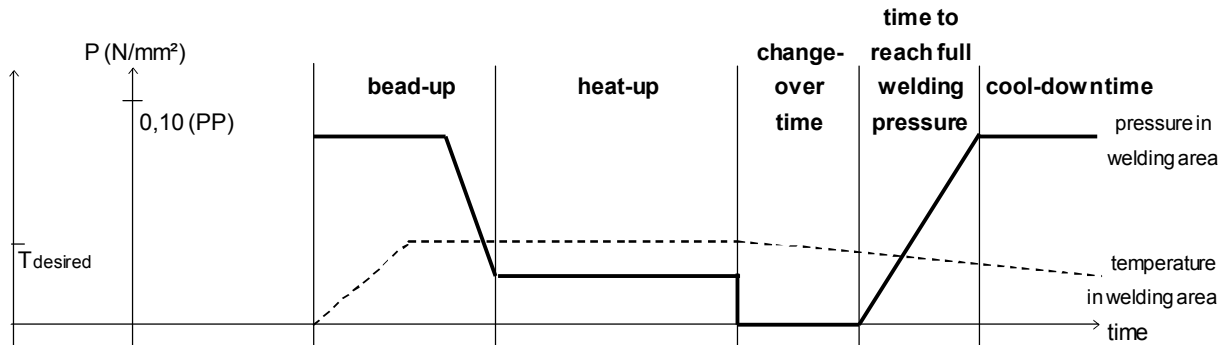


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Use for: **Miniplast 2 / 110** OD 20 - 110  
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**ASM160 / ASM 315** OD 50 - 315

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pipe diameter OD [mm]	pipe wall (s) [mm]	SDR	bead-up force [kp] [daN]	circular bead min. [mm]	heat-up time [s]	max. change-over time [s]	time to reach welding pressure [s]	welding force [kp] [daN]	cool-down time [min]
<b>140</b>	3,5	41	16	0,5	117	5	6	16	4
	4,3	33	19	0,5	131	5	6	19	6
	5,4	26	23	0,5	149	5	6	23	8
	8,0	17,6	34	1,0	189	6	8	34	14
	12,7	11	51	1,0	254	7	12	51	21
	19,2	7,4	73	1,5	332	9	17	73	30
	23,3	6	86	1,5	373	10	20	86	36
	28,1	5	99	2,0	416	12	24	99	43
<b>160</b>	4,0	41	20	0,5	126	5	6	20	5
	4,9	33	24	0,5	141	5	6	24	7
	6,2	26	30	0,5	162	6	7	30	10
	9,1	17,6	44	1,0	204	6	9	44	15
	14,6	11	67	1,0	277	8	13	67	24
	21,9	7,4	96	1,5	359	10	19	96	34
	26,6	6	112	2,0	405	11	23	112	41
	32,1	5	129	2,0	447	13	28	129	48
<b>180</b>	4,4	41	25	0,5	133	5	6	25	6
	5,5	33	31	0,5	151	5	6	31	8
	6,9	26	38	0,5	173	6	7	38	12
	10,2	17,6	55	1,0	220	7	10	55	17
	16,4	11	85	1,0	298	8	15	85	26
	24,6	7,4	121	1,5	386	11	21	121	38
	29,0	6	138	2,0	423	12	25	138	44
	36,1	5	164	2,0	478	14	31	164	54

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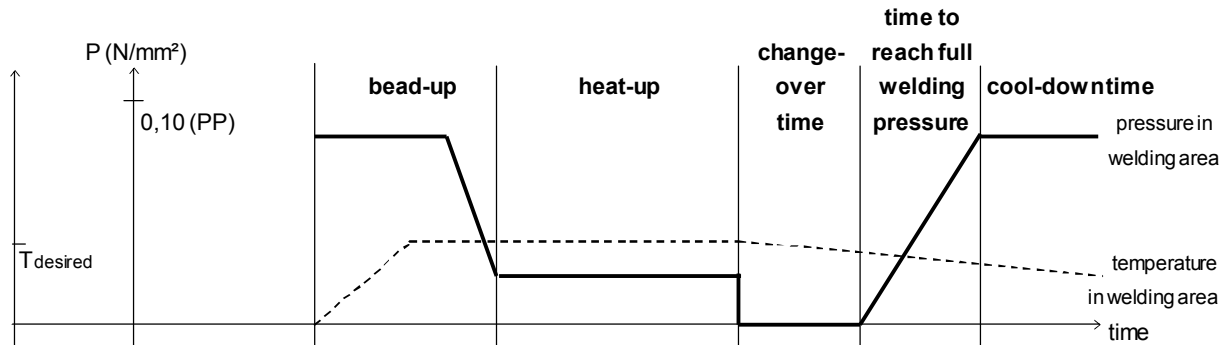


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<b>200</b>	4,9	41	31	0,5	141	5	6	31	7
	6,2	33	38	0,5	162	6	7	38	10
	7,7	26	47	1,0	185	6	8	47	13
	11,4	17,6	68	1,0	237	7	11	68	19
	18,2	11	104	1,0	320	9	16	104	29
	27,4	7,4	149	2,0	411	11	23	149	42
	33,2	6	174	2,0	456	13	29	174	50
<b>225</b>	5,5	41	38	0,5	151	5	6	38	8
	6,9	33	48	0,5	173	6	7	48	12
	8,6	26	59	1,0	197	6	8	59	15
	12,8	17,6	86	1,0	255	7	12	86	21
	20,5	11	132	1,5	345	9	18	132	32
	30,8	7,4	188	2,0	437	12	26	188	47
	37,4	6	221	2,5	487	14	32	221	55
<b>250</b>	6,2	41	48	0,5	162	6	7	48	10
	7,7	33	59	1,0	185	6	8	59	13
	9,6	26	73	1,0	211	7	9	73	16
	14,2	17,6	106	1,0	272	8	13	106	23
	22,7	11	163	1,5	367	10	20	163	35
	34,2	7,4	232	2,0	463	13	29	232	51

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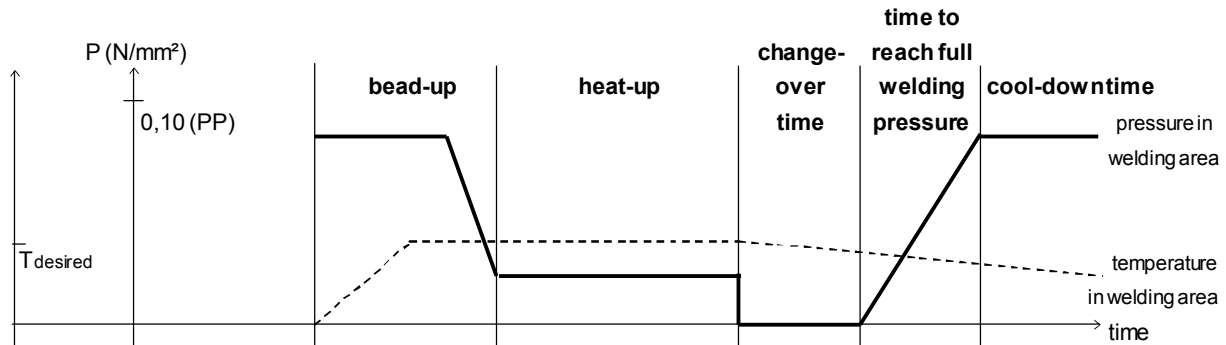


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<b>280</b>	6,9	41	60	0,5	173	6	7	60	12
	8,6	33	74	1,0	197	6	8	74	15
	10,7	26	91	1,0	227	7	10	91	18
	15,9	17,6	132	1,0	292	8	14	132	26
	25,4	11	204	1,5	394	11	22	204	39
	38,3	7,4	291	2,5	493	14	33	291	57
<b>315</b>	7,7	41	75	1,0	185	6	8	75	13
	9,7	33	94	1,0	213	7	9	94	16
	12,1	26	116	1,0	246	7	11	116	20
	17,9	17,6	168	1,0	317	9	16	168	28
	28,6	11	258	2,0	420	12	24	258	44

① Remaining under the cool-down time for up to 50% is allowed under the following conditions:

- prefabrication under workshop conditions
- low additional pressure at unclamping
- no additional pressure during further cooling down
- load onto the workpieces only after being completely cooled down