

Table for PP



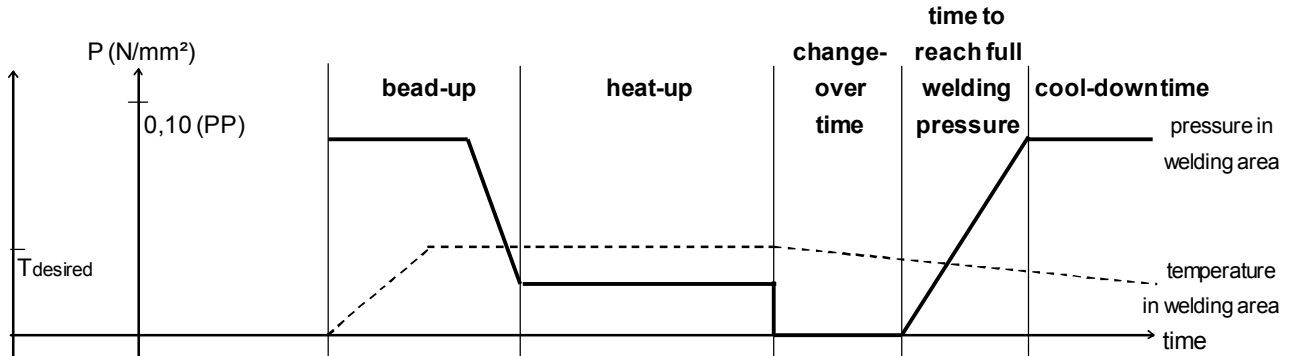
Foundation: 2207, 2208 DIN 16932 German association for welding
Use for: **4000 / 4001 / 4002**

1 bar on manometer: **23 N**

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 !



pipe diameter OD [mm]	pipe wall (s) [mm]	SDR	bead-up pressure [bar]	circular bead min. [mm]	heat-up time [s]	max. change-over time [s]	time to reach welding pressure [s]	welding pressure [bar]	cool-down time [min] ①
90	2,2	41	3	0,5	94	4	5	3	2
	2,8	33	4	0,5	104	4	5	4	3
	3,5	26	5	0,5	117	5	6	5	4
	5,1	17,6	6	0,5	145	5	6	6	7
	8,2	11	10	1,0	192	6	8	10	14
	12,3	7,4	14	1,0	249	7	11	14	20
	15,0	6	16	1,0	281	8	14	16	24
110	2,7	41	4	0,5	103	4	5	4	3
	3,4	33	5	0,5	115	5	6	5	4
	4,2	26	7	0,5	130	5	6	7	6
	6,3	17,6	9	0,5	164	6	7	9	10
	10,0	11	14	1,0	217	7	9	14	17
	15,1	7,4	20	1,0	283	8	14	20	24
	18,3	6	23	1,0	322	9	16	23	29
125	3,1	41	6	0,5	110	4	5	6	4
	3,9	33	7	0,5	124	5	6	7	5
	4,8	26	8	0,5	140	5	6	8	7
	7,1	17,6	12	1,0	176	6	7	12	12
	11,4	11	18	1,0	237	7	11	18	19
	17,1	7,4	26	1,0	307	8	15	26	27
	20,8	6	30	1,5	348	10	18	30	33

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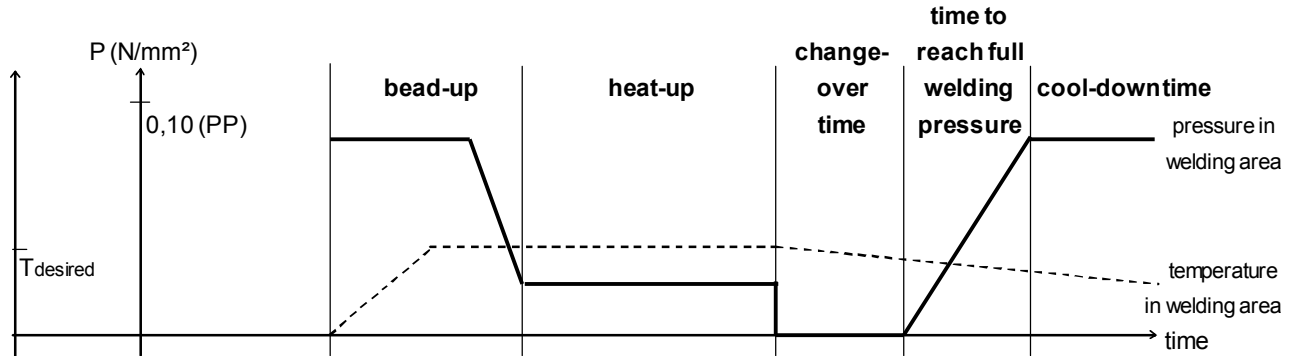
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140	3,5	41	7	0,5	117	5	6	7	4
	4,3	33	8	0,5	131	5	6	8	6
	5,4	26	10	0,5	149	5	6	10	8
	8,0	17,6	15	1,0	189	6	8	15	14
	12,7	11	23	1,0	254	7	12	23	21
	19,2	7,4	32	1,5	332	9	17	32	30
	23,3	6	38	1,5	373	10	20	38	36
160	4,0	41	9	0,5	126	5	6	9	5
	4,9	33	11	0,5	141	5	6	11	7
	6,2	26	14	0,5	162	6	7	14	10
	9,1	17,6	19	1,0	204	6	9	19	15
	14,6	11	29	1,0	277	8	13	29	24
	21,9	7,4	42	1,5	359	10	19	42	34
	26,6	6	49	2,0	405	11	23	49	41
180	4,4	41	11	0,5	133	5	6	11	6
	5,5	33	14	0,5	151	5	6	14	8
	6,9	26	17	0,5	173	6	7	17	12
	10,2	17,6	24	1,0	220	7	10	24	17
	16,4	11	37	1,0	298	8	15	37	26
	24,6	7,4	53	1,5	386	11	21	53	38
	29,0	6	60	2,0	423	12	25	60	44

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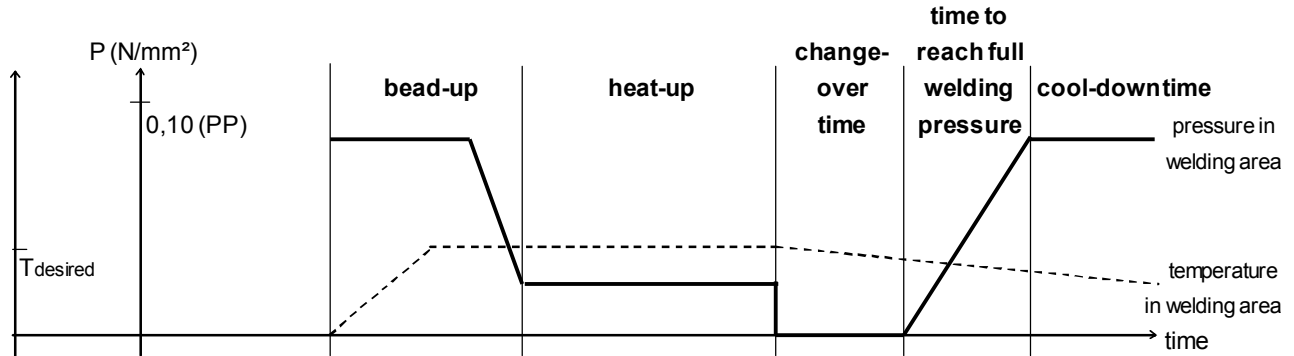
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200	4,9	41	14	0,5	141	5	6	14	7
	6,2	33	17	0,5	162	6	7	17	10
	7,7	26	21	1,0	185	6	8	21	13
	11,4	17,6	30	1,0	237	7	11	30	19
	18,2	11	46	1,0	320	9	16	46	29
	27,4	7,4	65	2,0	411	11	23	65	42
	33,2	6	76	2,0	456	13	29	76	50
225	5,5	41	17	0,5	151	5	6	17	8
	6,9	33	21	0,5	173	6	7	21	12
	8,6	26	26	1,0	197	6	8	26	15
	12,8	17,6	38	1,0	255	7	12	38	21
	20,5	11	58	1,5	345	9	18	58	32
	30,8	7,4	82	2,0	437	12	26	82	47
	37,4	6	96	2,5	487	14	32	96	55
250	6,2	41	21	0,5	162	6	7	21	10
	7,7	33	26	1,0	185	6	8	26	13
	9,6	26	32	1,0	211	7	9	32	16
	14,2	17,6	46	1,0	272	8	13	46	23
	22,7	11	71	1,5	367	10	20	71	35
	34,2	7,4	101	2,0	463	13	29	101	51
280	6,9	41	26	0,5	173	6	7	26	12
	8,6	33	32	1,0	197	6	8	32	15
	10,7	26	40	1,0	227	7	10	40	18
	15,9	17,6	58	1,0	292	8	14	58	26
	25,4	11	89	1,5	394	11	22	89	39
	38,3	7,4	127	2,5	493	14	33	127	57

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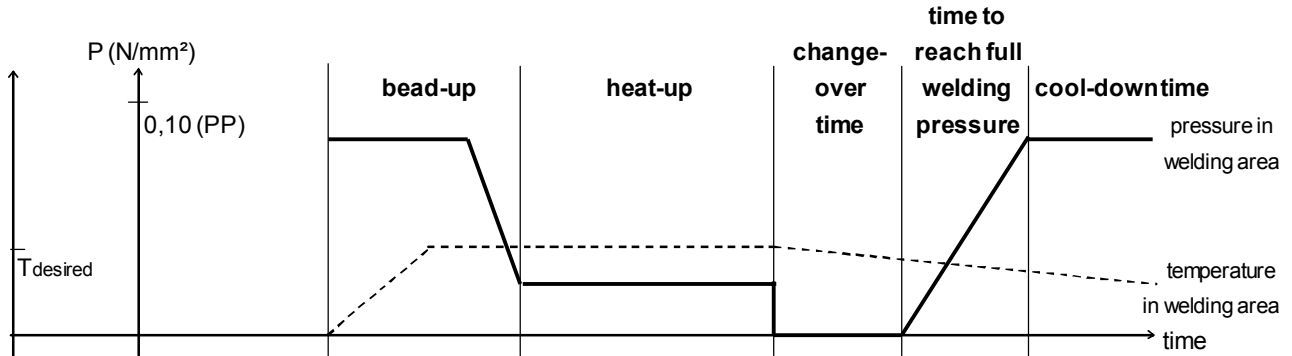
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315	7,7	41	33	1,0	185	6	8	33	13
	9,7	33	41	1,0	213	7	9	41	16
	12,1	26	51	1,0	246	7	11	51	20
	17,9	17,6	73	1,0	317	9	16	73	28
	28,6	11	112	2,0	420	12	24	112	44
355	8,7	41	42	1,0	199	6	8	42	15
	10,9	33	52	1,0	230	7	10	52	18
	13,6	26	64	1,0	264	7	12	64	22
	20,1	17,6	92	1,5	341	9	18	92	32
	32,2	11	142	2,0	448	13	28	142	48
400	9,8	41	53	1,0	214	7	9	53	16
	12,3	33	66	1,0	249	7	11	66	20
	15,3	26	81	1,0	221	7	10	81	17
	22,7	17,6	117	1,5	367	10	20	117	35
	36,3	11	181	2,0	480	14	31	181	54
450	11,0	41	66	1,0	231	7	10	66	18
	13,8	33	83	1,0	267	8	13	83	23
	17,2	26	102	1,0	308	8	15	102	27
	25,5	17,6	148	1,5	395	11	22	148	39
	40,9	11	229	2,5	508	15	35	229	59

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