

# WELDING TABLES

Machine PT200		DVS 2207-1 rel. August 2015			
Thrust section sq.cm. 4,32		Material PE			

SDR 41						Welding range 90 200					
D	S	P1 bead		P2 t 2		t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGE OV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
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90	2,2	2,1	0,5	0.. 0,1	22	0.. 5	5	2,1	4,0	5,0	6,5
110	2,7	3,1	0,5	0.. 0,2	27	0.. 5	5	3,1	4,0	5,0	6,5
125	3,0	4,1	0,5	0.. 0,3	30	0.. 5	5	4,1	4,0	5,0	6,5
140	3,4	5,1	0,5	0.. 0,3	34	0.. 5	5	5,1	4,0	5,0	6,5
160	3,9	6,6	0,5	0.. 0,4	39	0.. 5	5	6,6	4,0	5,0	6,5
180	4,4	8,4	0,5	0.. 0,6	44	0.. 5	5	8,4	4,0	5,0	6,5
200	4,9	10,4	1,0	0.. 0,7	49	0.. 5	5	10,4	4,3	5,4	7,0
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SDR 33						Welding range 90 200					
D	S	P1 bead		P2 t 2		t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGE OV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
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90	2,7	2,6	0,5	0.. 0,2	27	0.. 5	5	2,6	4,0	5,0	6,5
110	3,3	3,9	0,5	0.. 0,3	33	0.. 5	5	3,9	4,0	5,0	6,5
125	3,8	5,0	0,5	0.. 0,3	38	0.. 5	5	5	4,0	5,0	6,5
140	4,2	6,3	0,5	0.. 0,4	42	0.. 5	5	6,3	4,0	5,0	6,5
160	4,8	8,2	1,0	0.. 0,5	48	0.. 5	5	8,2	4,3	5,3	6,9
180	5,5	10,4	1,0	0.. 0,7	55	0.. 5	5	10,4	4,8	6,0	7,6
200	6,1	12,8	1,0	0.. 0,9	61	0.. 6	6	12,8	5,2	6,6	8,4
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SDR 27,6						Welding range 63 200					
D	S	P1 bead		P2 t 2		t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGE OV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
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63	2,3	1,5	0,5	0.. 0,1	23	0.. 5	5	1,5	4,0	5,0	6,5
75	2,7	2,1	0,5	0.. 0,1	27	0.. 5	5	2,1	4,0	5,0	6,5
90	3,3	3,1	0,5	0.. 0,2	33	0.. 5	5	3,1	4,0	5,0	6,5
110	4,0	4,6	0,5	0.. 0,3	40	0.. 5	5	4,6	4,0	5,0	6,5
125	4,5	6,0	1,0	0.. 0,4	45	0.. 5	5	6	4,0	5,0	6,5
140	5,1	7,5	1,0	0.. 0,5	51	0.. 5	5	7,5	4,5	5,6	7,2
160	5,8	9,8	1,0	0.. 0,7	58	0.. 6	6	9,8	5,0	6,3	8,1
180	6,5	12,3	1,0	0.. 0,8	65	0.. 6	6	12,3	5,6	7,0	8,9
200	7,2	15,2	1,5	0.. 1,0	72	0.. 6	6	15,2	6,2	7,7	9,8
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**REMEMBER:**

Heating mirror temperature must be 220 °C +/- 10°C;

Add drag pressure to P1 and P5;

A reduction of cooling time of up to 50% is permitted in the following circumstances:

- The joint connection was created under workshop conditions and
- the removal of the part from the welding machine and its temporary until the complete cooling time according to column t5 causes negligible loading of the joint connection

Machine PT200	DVS 2207-1 rel. August 2015
Thrust section sq.cm. 4,32	Material PE

SDR 26						Welding range 63 200					
D	S	P1	bead	P2	t 2	t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGEOV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
63	2,4	1,6	0,5	0..0,1	24	0..5	5	1,6	4,0	5,0	6,5
75	2,9	2,3	0,5	0..0,2	29	0..5	5	2,3	4,0	5,0	6,5
90	3,5	3,3	0,5	0..0,2	35	0..5	5	3,3	4,0	5,0	6,5
110	4,2	4,9	0,5	0..0,3	42	0..5	5	4,9	4,0	5,0	6,5
125	4,8	6,3	1,0	0..0,4	48	0..5	5	6,3	4,2	5,3	6,9
140	5,4	7,9	1,0	0..0,5	54	0..5	5	7,9	4,7	5,9	7,6
160	6,2	10,3	1,0	0..0,7	62	0..6	6	10,3	5,3	6,7	8,5
180	6,9	13,1	1,0	0..0,9	69	0..6	6	13,1	5,9	7,4	9,4
200	7,7	16,1	1,5	0..1,1	77	0..6	6	16,1	6,5	8,1	10,3
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SDR 22						Welding range 63 200					
D	S	P1	bead	P2	t 2	t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGEOV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
63	2,9	1,9	0,5	0..0,1	29	0..5	5	1,9	4,0	5,0	6,5
75	3,4	2,7	0,5	0..0,2	34	0..5	5	2,7	4,0	5,0	6,5
90	4,1	3,8	0,5	0..0,3	41	0..5	5	3,8	4,0	5,0	6,5
110	5,0	5,7	1,0	0..0,4	50	0..5	5	5,7	4,4	5,5	7,1
125	5,7	7,4	1,0	0..0,5	57	0..5	5	7,4	4,9	6,2	7,9
140	6,4	9,3	1,0	0..0,6	64	0..6	6	9,3	5,5	6,9	8,7
160	7,3	12,1	1,5	0..0,8	73	0..6	6	12,1	6,2	7,7	9,8
180	8,2	15,3	1,5	0..1,0	82	0..6	6	15,3	6,8	8,6	10,9
200	9,1	18,9	1,5	0..1,3	91	0..7	7	18,9	7,5	9,4	12,0
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SDR 21						Welding range 63 200					
D	S	P1	bead	P2	t 2	t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGEOV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
63	3,0	2,0	0,5	0..0,1	30	0..5	5	2	4,0	5,0	6,5
75	3,6	2,8	0,5	0..0,2	36	0..5	5	2,8	4,0	5,0	6,5
90	4,3	4,0	0,5	0..0,3	43	0..5	5	4	4,0	5,0	6,5
110	5,2	6,0	1,0	0..0,4	52	0..5	5	6	4,6	5,7	7,4
125	6,0	7,7	1,0	0..0,5	60	0..6	6	7,7	5,2	6,5	8,2
140	6,7	9,7	1,0	0..0,6	67	0..6	6	9,7	5,7	7,2	9,1
160	7,6	12,7	1,5	0..0,8	76	0..6	6	12,7	6,4	8,1	10,2
180	8,6	16,0	1,5	0..1,1	86	0..7	7	16	7,1	8,9	11,4
200	9,5	19,8	1,5	0..1,3	95	0..7	7	19,8	7,8	9,8	12,5
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**REMEMBER:**

Heating mirror temperature must be 220 °C +/- 10°C;

Add drag pressure to P1 and P5;

A reduction of cooling time of up to 50% is permitted in the following circumstances:

- The joint connection was created under workshop conditions and
- the removal of the part from the welding machine and its temporary until the complete cooling time according to column t5 causes negligible loading of the joint connection

Machine PT200	DVS 2207-1 rel. August 2015
Thrust section sq.cm. 4,32	Material PE

SDR 17,6						Welding range 63 200					
D	S	P1 bead		P2 t 2		t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGE OV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
63	3,6	2,3	0,5	0..0,2	36	0..5	5	2,3	4,0	5,0	6,5
75	4,3	3,3	0,5	0..0,2	43	0..5	5	3,3	4,0	5,0	6,5
90	5,1	4,7	1,0	0..0,3	51	0..5	5	4,7	4,5	5,6	7,2
110	6,3	7,1	1,0	0..0,5	63	0..6	6	7,1	5,4	6,8	8,6
125	7,1	9,1	1,5	0..0,6	71	0..6	6	9,1	6,1	7,6	9,6
140	8,0	11,5	1,5	0..0,8	80	0..6	6	11,5	6,7	8,4	10,6
160	9,1	15,0	1,5	0..1,0	91	0..7	7	15	7,5	9,4	12,0
180	10,2	18,9	1,5	0..1,3	102	0..7	7	18,9	8,3	10,4	13,4
200	11,4	23,4	1,5	0..1,6	114	0..8	8	23,4	9,1	11,4	14,7
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SDR 17						Welding range 63 200					
D	S	P1 bead		P2 t 2		t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGE OV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
63	3,7	2,4	0,5	0..0,2	37	0..5	5	2,4	4,0	5,0	6,5
75	4,4	3,4	0,5	0..0,2	44	0..5	5	3,4	4,0	5,0	6,5
90	5,3	4,9	1,0	0..0,3	53	0..5	5	4,9	4,6	5,8	7,5
110	6,5	7,3	1,0	0..0,5	65	0..6	6	7,3	5,6	7,0	8,9
125	7,4	9,4	1,5	0..0,6	74	0..6	6	9,4	6,2	7,8	9,9
140	8,2	11,8	1,5	0..0,8	82	0..6	6	11,8	6,9	8,6	11,0
160	9,4	15,5	1,5	0..1,0	94	0..7	7	15,5	7,7	9,7	12,4
180	10,6	19,6	1,5	0..1,3	106	0..7	7	19,6	8,5	10,7	13,8
200	11,8	24,2	1,5	0..1,6	118	0..8	8	24,2	9,3	11,8	15,2
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SDR 13,6						Welding range 63 200					
D	S	P1 bead		P2 t 2		t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGE OV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
63	4,6	2,9	1,0	0..0,2	46	0..5	5	2,9	4,1	5,1	6,7
75	5,5	4,2	1,0	0..0,3	55	0..5	5	4,2	4,8	6,0	7,7
90	6,6	6,0	1,0	0..0,4	66	0..6	6	6	5,7	7,1	9,0
110	8,1	9,0	1,5	0..0,6	81	0..6	6	9	6,8	8,5	10,8
125	9,2	11,6	1,5	0..0,8	92	0..7	7	11,6	7,5	9,5	12,1
140	10,3	14,6	1,5	0..1,0	103	0..7	7	14,6	8,3	10,5	13,5
160	11,8	19,0	1,5	0..1,3	118	0..8	8	19	9,3	11,8	15,2
180	13,2	24,1	2,0	0..1,6	132	0..8	9	24,1	10,3	13,1	17,0
200	14,7	29,7	2,0	0..2,0	147	0..9	9	29,7	11,2	14,3	18,8
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**REMEMBER:**

Heating mirror temperature must be 220 °C +/- 10°C;

Add drag pressure to P1 and P5;

A reduction of cooling time of up to 50% is permitted in the following circumstances:

- The joint connection was created under workshop conditions and
- the removal of the part from the welding machine and its temporary until the complete cooling time according to column t5 causes negligible loading of the joint connection

Machine PT200	DVS 2207-1 rel. August 2015
Thrust section sq.cm. 4,32	Material PE

SDR 11						Welding range 63 200					
D	S	P1	bead	P2	t 2	t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGE OV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
63	5,7	3,6	1,0	0..0,2	57	0..5	5	3,6	5,0	6,2	8,0
75	6,8	5,1	1,0	0..0,3	68	0..6	6	5,1	5,9	7,3	9,3
90	8,2	7,3	1,5	0..0,5	82	0..6	6	7,3	6,8	8,6	10,9
110	10,0	10,9	1,5	0..0,7	100	0..7	7	10,9	8,1	10,2	13,1
125	11,4	14,1	1,5	0..0,9	114	0..8	8	14,1	9,1	11,4	14,7
140	12,7	17,7	2,0	0..1,2	127	0..8	8	17,7	10,0	12,6	16,4
160	14,5	23,1	2,0	0..1,5	145	0..9	9	23,1	11,1	14,2	18,6
180	16,4	29,2	2,0	0..1,9	164	0..9	10	29,2	12,3	15,7	20,8
200	18,2	36,1	2,0	0..2,4	182	0..10	11	36,1	13,5	17,3	23,0
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SDR 9						Welding range 63 200					
D	S	P1	bead	P2	t 2	t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGE OV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
63	7,0	4,3	1,0	0..0,3	70	0..6	6	4,3	6,0	7,5	9,5
75	8,3	6,1	1,5	0..0,4	83	0..7	7	6,1	6,9	8,7	11,1
90	10,0	8,7	1,5	0..0,6	100	0..7	7	8,7	8,1	10,2	13,1
110	12,2	13,0	2,0	0..0,9	122	0..8	8	13	9,6	12,2	15,8
125	13,9	16,8	2,0	0..1,1	139	0..9	9	16,8	10,7	13,6	17,8
140	15,6	21,1	2,0	0..1,4	156	0..9	10	21,1	11,8	15,0	19,8
160	17,8	27,6	2,0	0..1,8	178	0..10	10	27,6	13,2	17,0	22,5
180	20,0	34,9	2,5	0..2,3	200	0..10	11	34,9	14,7	18,9	25,1
200	22,2	43,1	2,5	0..2,9	222	0..11	12	43,1	16,3	20,8	27,7
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SDR 7,4						Welding range 63 200					
D	S	P1	bead	P2	t 2	t 3	t 4	P5	t 5		
DIAMETER	THICKNESS	EQUALISING		HEATING		CHANGE OV.	JOINING	COOLING	<15°	15°-25°c	25°-40°c
mm	mm	bar	mm	bar	sec	sec	sec	bar	min	min	min
63	8,5	5,1	1,5	0..0,3	85	0..7	7	5,1	7,1	8,9	11,3
75	10,1	7,2	1,5	0..0,5	101	0..7	7	7,2	8,2	10,3	13,3
90	12,2	10,3	2,0	0..0,7	122	0..8	8	10,3	9,6	12,1	15,7
110	14,9	15,4	2,0	0..1,0	149	0..9	9	15,4	11,3	14,5	19,0
125	16,9	19,9	2,0	0..1,3	169	0..9	10	19,9	12,6	16,2	21,4
140	18,9	25,0	2,0	0..1,7	189	0..10	11	25	13,9	17,9	23,9
160	21,6	32,6	2,5	0..2,2	216	0..11	12	32,6	15,9	20,2	27,0
180	24,3	41,3	2,5	0..2,8	243	0..12	13	41,3	17,8	22,6	30,1
200	27,0	51,0	3,0	0..3,4	270	0..12	14	51	19,7	24,9	33,2
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A reduction of cooling time of up to 50% is permitted in the following circumstances:

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