

WELDING TABLES

Machine PT160	DVS 2207-1 rel. August 2015
Thrust section sq.cm. 4,32	Material PE

SDR 41						Welding range 90 160					
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
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SDR 33						Welding range 90 160					
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
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SDR 27,6						Welding range 50 160					
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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50	1,8	1,0	0,5	0.. 0,1	18	0.. 5	5	1	4,0	5,0	6,5
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
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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 PT160	DVS 2207-1 rel. August 2015
Thrust section sq.cm. 4,32	Material PE

SDR 26						Welding range 50 160					
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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50	1,9	1,0	0,5	0..0,1	19	0..5	5	1	4,0	5,0	6,5
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
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SDR 22						Welding range 40 160					
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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40	1,8	0,8	0,5	0..0,1	18	0..5	5	0,8	4,0	5,0	6,5
50	2,3	1,2	0,5	0..0,1	23	0..5	5	1,2	4,0	5,0	6,5
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
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SDR 21						Welding range 40 160					
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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40	1,9	0,8	0,5	0..0,1	19	0..5	5	0,8	4,0	5,0	6,5
50	2,4	1,2	0,5	0..0,1	24	0..5	5	1,2	4,0	5,0	6,5
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
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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 PT160	DVS 2207-1 rel. August 2015
Thrust section sq.cm. 4,32	Material PE

SDR 17,6						Welding range 40 160					
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
40	2,3	0,9	0,5	0..0,1	23	0..5	5	0,9	4,0	5,0	6,5
50	2,8	1,5	0,5	0..0,1	28	0..5	5	1,5	4,0	5,0	6,5
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
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SDR 17						Welding range 40 160					
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
40	2,4	1,0	0,5	0..0,1	24	0..5	5	1	4,0	5,0	6,5
50	2,9	1,5	0,5	0..0,1	29	0..5	5	1,5	4,0	5,0	6,5
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
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SDR 13,6						Welding range 40 160					
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
40	2,9	1,2	0,5	0..0,1	29	0..5	5	1,2	4,0	5,0	6,5
50	3,7	1,9	0,5	0..0,1	37	0..5	5	1,9	4,0	5,0	6,5
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
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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 PT160	DVS 2207-1 rel. August 2015
Thrust section sq.cm. 4,32	Material PE

SDR 11						Welding range 40 160					
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
40	3,6	1,4	0,5	0..0,1	36	0..5	5	1,4	4,0	5,0	6,5
50	4,5	2,3	1,0	0..0,2	45	0..5	5	2,3	4,0	5,0	6,6
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
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SDR 9						Welding range 40 160					
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
40	4,4	1,7	0,5	0..0,1	44	0..5	5	1,7	4,0	5,0	6,5
50	5,6	2,7	1,0	0..0,2	56	0..5	5	2,7	4,8	6,1	7,8
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
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SDR 7,4						Welding range 40 160					
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
40	5,4	2,0	1,0	0..0,1	54	0..5	5	2	4,7	5,9	7,6
50	6,8	3,2	1,0	0..0,2	68	0..6	6	3,2	5,8	7,3	9,2
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
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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