



AUTOMIG

Tables of welding data for fillet and butt welds in steel

Recommended welding data - MIG/MAG welding - Fillet welds

Plate thickness, mm	1	1.5	2	3	5	8	10	12
Type of weld								
Welding position	1 KP 2 KP	1 KP 2 KP	1 KP 2 KP	1 KP 2 KP	1 KP 2 KP	1 KP 2 KP	1 KP 2 KP	1 KP 2 KP
Number of runs	1	1	1	1	1	1	2	3
Wire diameter, mm	0.8	0.8	0.8	0.8	1.0	1.0	1.0	1.0
Shielding gas	80/20	80/20	80/20	80/20	80/20	80/20	80/20	80/20
Wire speed, m/min	4.5	7.0	8.0	7.5	10.0	11.0	12.0 8.5	15.0
Current, A	90	125	140	200	225	235	240 210	265
Voltage, V	18.5	21.0	21.0	22.0	28.0	32.5	33.0 28.0	34.0
Gas consumption, l/min	12	12	12	12	12	12	12	12

Recommended welding data - MIG/MAG welding - Fillet welds

Plate thickness, mm	1	1.5	2	3	5	8	10	12
Designation acc. DS/ISO 2553 Type of weld								
Designation acc. DS 889 Welding position	3 KP 1/f	3 KP 1/f	3 KP 1/f	3 KP 1/f	3 KP 1/f	3 KP 1/f	3 KP 1/f 1/s	3 KP 1/f 1/s
Number of runs	1	1	1	1	1	1	2	2
Wire diameter, mm	0.8	0.8	0.8	1.0	1.0	1.0	1.0	1.0
Shielding gas	80/20	80/20	80/20	80/20	80/20	80/20	80/20	80/20
Wire speed, m/min	4.5	6.3	7.8	6.0	7.0	4.5	7.0 4.5	8.0 4.5
Current, A	90	120	145	175	185	140	185 140	210 140
Voltage, V	16.5	19.5	20.5	21.5	22.5	19.5	22.0 20.0	23.0 20.0
Gas consumption, l/min	12	12	12	12	12	12	12	12

Recommended welding data - MIG/MAG welding - Butt welds

Plate thickness, mm	1	1.5	2	3	5	5	8	10	12
Designation acc. DS/ISO 2553 Type of weld									
Welding position	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P	1 P
Groove gap, mm	0	0.5	1.5	2	2	2	2	2	2
Open angle, degrees	-	-	-	-	50	50	50	50	50
Number of runs	1	1	1	1	2	2	2	3	3
Wire diameter, mm	0.8	0.8	0.8	1.0	0.8	1.0	1.0	1.0	1.0
Current, A	80	100	110	125	118 100	125 112	175 175	175 210	185 220
Voltage, V	21.0	20.0	19.5	19.5	21.0 22.0	18.0 24.0	22.5 24.0	22.5 24.0	24.0 27.5
Gas consumption, l/min	12	12	12	12	12	12	12	12	12

Recommended welding data - MIG/MAG welding - Butt welds

Plate thickness, mm	1	1.5	2	3	5	5	8	10	12	Notes
Designation acc. DS/ISO 2553 Type of weld										
Welding position	3 P 1/f	3 P 1/f	3 P 1/f	3 P 1/f	3 P 1/f 1/s	3 P 1/f 1/s	3 P 1/f 1/s	3 P 1/f 1/s	3 P 1/f 1/s	
Groove gap, mm	0	0.5	1.5	2	2	2	2	2	2	
Open angle, degrees	-	-	-	-	50	50	50	50	50	
Number of runs	1	1	1	1	2	2	3	3	4	
Wire diameter, mm	0.8	0.8	0.8	1.0	0.8	1.0	1.0	1.0	1.0	
Shielding gas	80/20	80/20	80/20	80/20	80/20	80/20	80/20	80/20	80/20	
Wire speed, m/min	4.0	5.0	5.5	4.0	7.0 3.7	4.0 2.5	6.5 3.0	7.0 3.8	7.5 4.5	Intermediary and top runs welded in the same position
Current, A	80	100	110	125	125 80	130 80	170 100	180 115	200 135	
Voltage, V	20.0	19.5	19.0	19.0	20.5 19.5	18.0 18.5	20.5 20.0	21.5 20.5	22.0 20.5	
Gas consumption, l/min	12	12	12	12	12	12	12	12	12	