

# WELDING TABLES

TABLE 1 – GUIDE VALUES FOR ALUMINIUM AND ALUMINIUM ALLOYS							
Plate thickness (mm)	Electrode diameter (mm)	Welding current (AC) with HF pulses (Amp.)	Gas nozzle (no.)	Gas quantity (l/min.)	Filler wire diameter (mm)	Welding speed (mm/min.)	Remarks
1.0	1.0	40 - 50	4	4 - 6	-	400	Flanging
1.5	1.6	60 - 70	4 - 6	4 - 6	2	300 - 350	
2.0	1.6	80 - 90	4 - 6	5 - 6	2	300 - 350	
3.0	2.4	120 - 140	5 - 7	6 - 7	2 - 3	260 - 300	
5.0	3.2	200 - 240	6 - 8	8 - 10	3 - 5	220 - 250	
6.0	4.0	220 - 340	8	8 - 10	4	200 - 250	

TABLE 2 - GUIDE VALUES FOR MAGNESIUM AND MAGNESIUM ALLOYS							
Plate thickness (mm)	Electrode diameter (mm)	Welding current (AC) with HF pulses (Amp.)	Gas nozzle (no.)	Gas quantity (l/min.)	Filler wire diameter (mm)	Welding speed (mm/min.)	Remarks
1.0	1.0	25 - 45	4	6	- 1.5	300	preferably flanging
1.5	1.6	40 - 60	4 - 6	6	- 1.5	300	
2.0	1.6	50 - 80	4 - 6	6	2	300	
3.0	1.6 - 2.4	80 - 110	4 - 6	8	3	250	first layer second layer
5.0	2.4	110 - 130	5 - 7	8	4 - 5	-	
	2.4	150 - 170	6	8	4 - 5	-	
	1.6 - 2.4	80 - 90	5 - 6	9	4 - 5	-	

High welding current with backing – low welding current without backing

TABLE 3 – GUIDE VALUES FOR ALLOYED AND NON-ALLOYED STEEL							
Plate thickness (mm)	Electrode diameter (mm)	Welding current (DC) (Amp.) straight polarity	Gas nozzle (no)	Gas quantity (l/min.)	Filler wire diameter (mm)	Welding speed (mm/min.)	Remarks
1.0	1.0	30 - 60	4	4	- 1.5	300 - 350	
1.5	1.6	70 - 80	4 - 5	5	- 1.5	300	
2.0	1.6	90 - 110	4 - 5	5	2	280 - 300	
3.0	1.6 - 2.4	130 - 150	4 - 6	5	3	250 - 300	
5.0	2.4 - 3.2	180 - 250	6 - 8	6	4	200 - 240	
6.0	4.0	190 - 340	8	6	4	180 - 220	

TABLE 4 – GUIDE VALUES FOR COPPER							
Plate thickness (mm)	Electrode diameter (mm)	Welding current (DC) (Amp.) straight polarity	Gas nozzle (no)	Gas quantity (l/min.)	Filler wire diameter (mm)	Welding speed (mm/min.)	Remarks
1.0	1.6	80 - 100	5 - 6	6	- 1.5	280 - 320	
1.5	1.6	110 - 140	5 - 6	6	- 1.5	270 - 300	
2.0	2.4	140 - 170	6 - 7	7	2	260 - 300	
3.8	2.4 - 3.2	170 - 220	6 - 8	7	3	240 - 280	
5.0	3.2 - 4.0	250 - 300	8	7	4,5	200 - 240	