





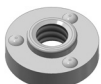
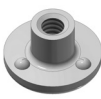

Recommended welding practices and setups

On the following pages, there are complete tables of recommended weld setups.

These weld setups cover the welding of parts to the most popular metal thicknesses. They are specifically given for use with low carbon, cold rolled steel and 302 stainless steel where applicable.


Material welded to: low carbon cold rolled steel

Welding setups to metal thickness: 24 to 11 Gage

Part Type	Thread Size		Pressure Range in LBS.		Weld Cycles		Current in Secondary Amps.		Recommended Electrode Dia.		Approx. KVA Size
	Inch	Metric	From	To	From	To	From	To	Part Side	Sheet Side	Welder
BT / BTM 	#8	M4	700	1,000	4	7	9,000	14,000	0.500	0.500	50
	#10	M5	700	1,000	4	7	9,000	14,000	0.500	0.500	50
	1/4-20	M6	800	1,200	5	9	10,000	15,000	0.500	0.500	75
	5/16-18	M8	1,000	1,300	8	10	12,000	17,000	0.625	0.625	75
ND / NDM 	#6	M3.5	550	800	6	10	12700	19500	0.250	0.250	30
	#8	M4	550	800	6	10	12700	19500	0.250	0.250	30
	#10	M5	550	800	6	10	12700	19500	0.250	0.250	30
	1/4-20	M6	800	1,300	8	15	14,000	20,000	0.312	0.312	50
	5/16-18	M8	1,000	2,000	10	25	15,000	25,000	0.375	0.375	75
	3/8-16	M10	1,000	2,000	10	25	15,000	25,000	0.375	0.375	75
PN / PNM 	#6	M3.5	300	1,000	3	10	7300	15,000	0.625	0.625	30
	#8	M4	300	1,000	3	10	7300	15,000	0.625	0.625	30
	#10	M5	300	1,000	3	10	7300	15,000	0.625	0.625	30
	1/4-20	M6	700	1,300	3	10	8500	16,000	0.813	0.813	50
	5/16-18	M8	1,000	1,500	6	12	10,000	17,000	1.000	1.000	75
	3/8-16	M10	1,000	1,500	6	12	10,000	17,000	1.125	1.125	75
QN / QNM 	#6	M3.5	400	900	3	8	8,000	16,000	0.625	0.625	30
	#8	M4	400	900	3	8	8,000	16,000	0.625	0.625	30
	#10	M5	400	900	3	8	8,000	16,000	0.625	0.625	30
	1/4-20	M6	800	1,200	4	10	13,000	20,000	0.813	0.813	50
	5/16-18	M8	900	1,500	5	15	15,000	24,000	1.000	1.000	75
	3/8-16	M10	900	1,500	5	15	15,000	24,000	1.000	1.000	75
	1/2-13	M12	1,000	3,500	6	16	20,000	35,000	1.250	1.250	100
RD / RDM 	#6	M3/M3.5	600	800	3	7	9,000	12,000	0.625	0.625	20
	#8	M4	600	800	3	7	9,000	12,000	0.625	0.625	20
	#10	M5	600	800	3	7	9,000	12,000	0.625	0.625	20
	1/4-20	M6	600	900	6	10	9,000	14,000	0.875	0.875	30
	5/16-18	M8	800	1,300	4	12	13,000	22,000	0.813	0.813	50
RH / RHM 	#6	M3.5	700	1,000	3	12	10,000	16,000	0.625	0.625	30
	#8	M4	700	1,000	3	12	10,000	16,000	0.625	0.625	30
	#10	M5	800	1,100	4	16	12,000	18,000	0.750	0.750	50
	1/4-20	M6	900	1,200	6	18	13,000	20,000	1.000	1.000	75
	5/16-18	M8	1,000	1,500	10	20	14,000	22,000	1.000	1.000	75
	3/8-16	M10	1,000	1,500	10	20	14,000	22,000	1.000	1.000	75
RN / RNM 	#6	M3.5	500	1,000	3	10	8,000	12,000	0.625	1.000	30
	#8	M4	500	1,000	3	10	8,000	12,000	0.625	0.625	30
	#10	M5	500	1,000	3	10	8,000	12,000	0.625	0.625	30
	1/4-20	M6	700	1,300	4	12	9,000	16,000	0.813	0.813	50
	5/16-18	M8	900	1,500	5	14	10,000	18,000	1.000	1.000	75
	3/8-16	M10	900	1,500	5	14	10,000	18,000	1.000	1.000	75
	1/2-13	M12	1,000	1,700	6	16	11,000	20,000	1.125	1.125	75

Material welded to: low carbon cold rolled steel

Welding setups to metal thickness: 24 to 11 Gage

Part Type	Thread Size		Pressure Range in LBS.		Weld Cycles		Current in Secondary Amps.		Recommended Electrode Dia.		Approx. KVA Size	
	Inch	Metric	From	To	From	To	From	To	Part Side	Sheet Side	Welder	
 SF	5/16-18	—	1,500	3,000	10	25	30,000	50,000	1.125	1.125	200	
	3/8-16	—	1,500	3,000	10	25	30,000	50,000	1.125	1.125	200	
	1/2-13	—	2,200	3,700	15	25	30,000	50,000	1.125	1.125	200	
 SN / SNM	#6	M3.5	550	800	6	10	12700	19500	0.218	0.250	30	
	#8	M4	550	800	6	10	12700	19500	0.022	0.250	30	
	#10	M5	550	800	6	10	12700	19500	0.250	0.250	30	
	1/4-20	M6	800	1,300	8	15	14,000	20,000	0.312	0.312	50	
	5/16-18	M8	1,000	2,000	10	25	15,000	25,000	0.375	0.375	75	
 3/8-16	M10	1,000	2,000	10	25	15,000	25,000	0.375	0.375	75		
	 TP	#6	—	550	800	6	10	12700	19500	0.250	0.250	30
		#8	—	550	800	6	10	12700	19500	0.250	0.250	30
		#10	—	550	800	6	10	12700	19500	0.250	0.250	30
		1/4-20	—	800	1,300	8	15	14,000	20,000	0.312	0.312	50
5/16-18		—	1,000	2,000	10	25	15,000	25,000	0.375	0.375	75	
 3/8-16	—	1,000	2,000	10	25	15,000	25,000	0.375	0.375	75		
	 WF / WFM	#6	M3.5	700	950	3	8	8,000	14500	0.625	1.000	30
		#8	M4	700	950	3	8	8,000	14500	0.625	0.625	30
		#10	M5	800	1,050	6	12	9,000	15200	0.750	0.750	50
		1/4-20	M6	900	1,100	7	14	10,000	16100	1.000	1.000	75
5/16-18		M8	1,000	1,200	8	15	12,000	18,000	1.000	1.000	75	
 3/8-16	M10	1,000	1,200	8	15	12,000	18,000	1.000	1.000	75		
	 WP / WPM	#6	M3.5	400	900	3	8	8,000	16,000	0.625	0.625	30
		#8	M4	400	900	3	8	8,000	16,000	0.625	0.625	30
		#10	M5	450	950	3	10	11,000	16,000	0.625	0.625	50
		1/4-20	M6	600	1,000	4	11	12,000	17,000	0.625	0.625	75
5/16-18		M8	800	1,100	5	12	13,000	18,000	0.750	0.750	75	
 3/8-16	M10	800	1,100	5	12	13,000	18,000	0.750	0.750	75		
	 WS / WSM	#6	M3.5	400	900	3	8	8,000	16,000	0.625	0.625	30
		#8	M4	400	900	3	8	8,000	16,000	0.625	0.625	30
		#10	M5	450	950	3	10	11,000	16,000	0.625	0.625	50
		1/4-20	M6	600	1,000	4	11	12,000	17,000	0.625	0.625	75
5/16-18		M8	800	1,100	5	12	13,000	18,000	0.750	0.750	75	
 3/8-16	M10	900	1,200	6	13	14,000	19,000	0.875	0.875	75		
	 WT / WTM	#6	M3.5	800	1,000	4	9	9,000	15,000	0.625	0.625	30
		#8	M4	800	1,000	4	9	9,000	15,000	0.625	0.625	30
		#10	M5	900	1,200	7	13	10,000	16,000	0.750	0.750	50
		1/4-20	M6	1,000	1,300	8	15	11,000	17,000	1.000	1.000	75
 3/8-16		M10	1,000	1,300	8	15	11,000	17,000	1.000	1.000	75	
	 WW / WWM	#6	M3.5	700	1,200	5	9	13,000	20,000	0.625	0.625	75
		#8	M4	900	1,800	6	10	18,000	30,000	0.625	0.625	75
		#10	M5	1,200	2,000	7	15	20,000	40,000	0.750	0.750	100
		1/4-20	M6	1,600	3,000	8	20	25,000	50,000	1.000	1.000	150
5/16-18		M8	1,800	3,200	10	25	30,000	60,000	1.00	0 1.000	200	
 3/8-16	M10	1,800	3,200	10	25	30,000	60,000	1.000	1.000	200		
	 XN / XNM	#6	M3.5	350	800	5	10	9700	17800	0.218	0.250	20
		#8	M4	350	800	5	10	9700	17800	0.218	0.250	20
		#10	M5	350	800	5	10	9700	17800	0.218	0.250	20
		1/4-20	M6	350	800	5	10	9700	17800	0.250	0.250	20
5/16-18		M8	800	1,300	8	15	14,000	20,000	0.312	0.312	50	
 3/8-16	M10	800	1,300	8	15	14,000	20,000	0.312	0.312	50		