

Additional Processes

6-5

TABLE 6.1
CROSSED WIRE WELDING OF LOW CARBON STEEL WIRE

COLD-DRAWN WIRE					HOT-DRAWN WIRE			
Wire Diameter Inch	"Weld Time" Cycles (60 Hz)	Weld Force lb	Welding* Current Amperes	Weld Strength lb	"Weld Time" Cycles (60 Hz)	Weld Force lb	Welding* Current Amperes	Weld Strength lb
15 "Percent Setdown"					15 "Percent Setdown"			
1/16	5	100	600	450	5	100	600	350
1/8	10	125	1,800	975	10	125	1,850	750
3/16	17	360	3,300	2,000	17	360	3,500	1,500
1/4	23	580	4,500	3,700	23	580	4,900	2,800
5/16	30	825	6,200	5,100	30	825	6,600	4,600
3/8	40	1,100	7,400	6,700	40	1,100	7,700	6,200
7/16	50	1,400	9,300	9,600	50	1,400	10,000	8,800
1/2	60	1,700	10,300	12,200	60	1,700	11,000	11,500
30 "Percent Setdown"					30 "Percent Setdown"			
1/16	5	150	800	500	5	150	800	400
1/8	10	260	2,650	1,125	10	260	2,770	850
3/16	17	600	5,000	2,400	17	600	5,100	1,700
1/4	23	850	6,700	4,200	23	850	7,100	3,000
5/16	30	1,450	9,300	6,100	30	1,450	9,600	5,000
3/8	40	2,060	11,300	8,350	40	2,060	11,800	6,800
7/16	50	2,900	13,800	11,300	50	2,900	14,000	9,600
1/2	60	3,400	15,800	13,600	60	3,400	16,500	12,400
50 "Percent Setdown"					50 "Percent Setdown"			
1/16	5	200	1,000	550	5	200	1,000	450
1/8	10	350	3,400	1,250	10	350	3,500	900
3/16	17	750	6,000	2,500	17	750	6,300	1,800
1/4	23	1,240	8,600	4,400	23	1,240	9,000	3,100
5/16	30	2,000	11,400	6,500	30	2,000	12,000	5,300
3/8	40	3,000	14,400	8,800	40	3,000	14,900	7,200
7/16	50	4,450	17,400	11,900	50	4,450	18,000	10,200
1/2	60	5,300	21,000	14,600	60	5,300	22,000	13,000

• Tabulated Strengths Of Crossed Wire Welds For Specified Percentages Of Setdown
• * Starting values shown are based on experience of member companies.

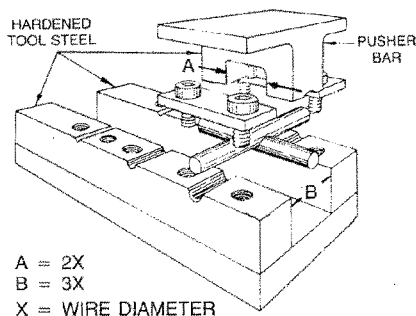
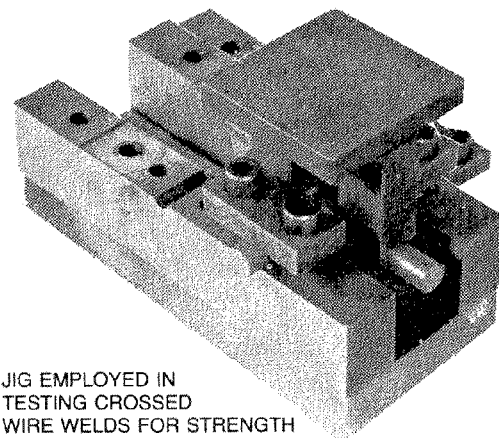


Fig. 6.5 - Sketch Of Jig For Physically Testing Crossed Wire Welds



JIG EMPLOYED IN TESTING CROSSED WIRE WELDS FOR STRENGTH

Fig. 6.6 - Jig Sketched In Fig. 6.5