

Air Cylinder Based Resistance Welding Force Chart • In Pounds And Kilograms											
Air Cylinder Diameter		Air Cylinder Area		Air Pressure 40 PSI/2.758 Bars		Air Pressure 60 PSI/4.137 Bars		Air Pressure 80 PSI/5.516 Bars		Air Pressure 100 PSI/6.895 Bars	
Inches/MM	Sq. Inches/Sq. CM	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms
0.75	19.05	0.44	2.84	17.60	7.98	26.40	11.97	38.20	17.33	44.00	19.96
1.00	25.40	0.78	5.03	31.20	14.15	46.80	21.23	62.40	28.30	78.00	35.38
1.25	31.75	1.23	7.93	49.20	22.32	73.80	33.47	98.40	44.63	123.00	55.79
1.50	38.10	1.77	11.42	70.80	32.11	106.20	48.17	141.60	64.23	177.00	80.29
1.75	44.45	2.41	15.55	96.40	43.73	144.60	65.59	192.80	87.45	241.00	109.32
2.00	50.80	3.14	20.26	125.60	56.97	188.40	85.46	251.20	113.94	314.00	142.43
3.00	76.20	7.07	45.61	282.80	128.28	424.20	192.41	565.60	256.55	707.00	320.69
4.00	101.60	12.57	81.09	502.80	228.07	754.20	342.10	1,005.60	456.13	1,257.00	570.16
5.00	127.00	19.64	126.70	785.60	356.34	1,178.40	534.51	1,571.20	712.68	1,964.00	890.85
6.00	152.40	28.27	182.37	1,130.80	512.92	1,696.00	769.29	2,260.00	1,025.11	2,827.00	1,282.30
7.00	177.80	38.48	248.23	1,539.00	698.08	2,309.00	1,047.34	3,078.00	1,396.15	3,848.00	1,745.41
8.00	203.20	50.27	324.29	2,010.80	912.08	3,030.00	1,374.38	4,020.00	1,823.43	5,027.00	2,280.20
9.00	228.60	63.62	410.41	2,545.00	1,154.39	3,817.00	1,731.35	5,090.00	2,308.77	6,362.00	2,885.74
10.00	254.00	87.54	564.72	3,141.00	1,424.73	4,720.00	2,140.94	6,300.00	2,857.62	7,854.00	3,562.50
12.00	304.80	113.10	729.61	4,524.00	2,052.04	6,770.00	3,070.80	9,050.00	4,104.99	11,310.00	5,130.10
14.00	355.60	153.94	993.07	6,157.00	2,792.75	9,220.00	4,182.10	12,300.00	5,579.16	15,394.00	6,982.56
16.00	406.40	201.06	1,297.04	8,042.00	3,647.77	12,063.00	5,471.66	16,085.00	7,296.00	20,106.00	9,119.88
18.00	457.20	254.46	1,641.52	10,178.00	4,616.64	15,268.00	6,925.41	20,356.00	9,233.28	25,446.00	11,542.05

This chart shows the pressure in Pounds and Kilograms that is applied to the the welding electrodes of a resistance welding machine, when a specific diameter air cylinder and air pressure are used.