Air Cylinder Pressure Chart

	Air Cylinder Diameter									
PSI	**3.5**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
5	50	60	95	140	192	250	320	392	475	565
10	110	125	195	282	385	500	635	785	950	1130
15	165	188	295	424	577	755	955	1180	1425	1700
20	220	250	392	565	770	1005	1270	1570	1900	2270
25	275	314	490	705	960	1256	1590	1962	2375	2835
30	330	376	588	847	1154	1507	1907	2355	2850	3400
35	385	440	686	990	1346	1760	2225	2750	3325	3960
40	440	500	785	1130	1540	2010	2543	3140	3800	4530
45	495	565	885	1270	1730	2260	2860	3532	4275	5100
50	550	628	980	1413	1925	2512	3180	3925	4750	5650
55	605	690	1080	1554	2115	2763	3497	4318	5225	6230
60	660	753	1177	1695	2310	3015	3815	4710	5700	6800
65	715	816	1275	1836	2500	3265	4133	5102	6175	7350
70	770	880	1373	1978	2692	3517	4450	5495	6650	7930
75	825	942	1470	2120	2885	3770	4775	5890	7125	8500
80	880	1004	1570	2260	3077	4020	5085	6280	7600	9050
85	935	1068	1668	2402	3270	4270	5405	6670	8075	9620
90	990	1130	1766	2543	3460	4520	5723	7065	8550	10200
95	1045	1193	1864	2684	3655	4773	6040	7460	9025	10750
100	1100	1256	1962	2826	3846	5024	6360	7850	9500	11300

For Rocker Arm Welders:

If you are operating a rocker arm welder, you must first calculate the machine **arm leverage** as follows:

Arm leverage = A ÷ B

- A = distance from the weld cylinder rod to the weld arm pivot
- B = distance from the weld arm pivot to the weld tip

As an example, on a rocker arm welder with a 5” diameter cylinder that measures 18” from the cylinder rod to the weld arm pivot (A) and 24” from the weld arm pivot to the welding tip (B):

Arm leverage = 18 ÷ 24 = .75
Total tip force = .75 x cylinder output force listed above

For Fixture Type Cylinders:

For most brands of fixture cylinders, the part number is a helpful thing to find when determining the force. In most cases, the part number is located on the cylinder wall or on the side of the mounting bracket.

Brand	Typical Model Number	Area of Cylinder	lbs @ 100 PSI
SAVAIR	C-G-584-6N	5.84	584
ACP	AC-C-G-937	9.37	937
GROSSEL	2-GA-1157-1.5	11.57	1157

As an example, if the welder is equipped with the SAVAIR cylinder listed above and the weld needs 360lbs of pressure:

PSI = (360 ÷ 584) x 100 = 61.6 PSI