

Hi/Lo Presses and Cylinders
Press force vs. Hydraulic pressure

Press or Ram (cylinder rod) force in U.S. Tons						
Model #	AH-4x-CF or 2P	AH-9x-CF or 2P	AH-14x-CF or 2P	AH-20x-CF or 2P	AH-30x-CF or 2P	AH-50x-CF or 2P
<i>Force rating in Tons</i>	4	9	14	20	30	50
Hydraulic PSI Gauge reading						
2,200					31.09	
2,150				21.10	30.38	
2,100				20.61	29.67	
2,050				20.12	28.97	51.50
2,000				19.63	28.26	50.24
1,950				19.13	27.55	48.98
1,900				18.64	26.85	47.73
1,850				18.15	26.14	46.47
1,800				17.66	25.43	45.22
1,750				17.17	24.73	43.96
1,700	6.01			16.68	24.02	42.70
1,650	5.83			16.19	23.31	41.45
1,600	5.65	10.05		15.70	22.61	40.19
1,550	5.48	9.73	15.21	15.21	21.90	38.94
1,500	5.30	9.42	14.72	14.72	21.20	37.68
1,450	5.12	9.11	14.23	14.23	20.49	36.42
1,400	4.95	8.79	13.74	13.74	19.78	35.17
1,350	4.77	8.48	13.25	13.25	19.08	33.91
1,300	4.59	8.16	12.76	12.76	18.37	32.66
1,250	4.42	7.85	12.27	12.27	17.66	31.40
1,200	4.24	7.54	11.78	11.78	16.96	30.14
1,150	4.06	7.22	11.28	11.28	16.25	28.89
1,100	3.89	6.91	10.79	10.79	15.54	27.63
1,050	3.71	6.59	10.30	10.30	14.84	26.38
1,000	3.53	6.28	9.81	9.81	14.13	25.12
950	3.36	5.97	9.32	9.32	13.42	23.86
900	3.18	5.65	8.83	8.83	12.72	22.61
850	3.00	5.34	8.34	8.34	12.01	21.35
800	2.83	5.02	7.85			20.10
750	2.65	4.71	7.36			
700	2.47	4.40	6.87			
650	2.30	4.08	6.38			
600	2.12	3.77	5.89			
550	1.94	3.45				
500	1.77					

Notes:

Where “x” in the model number signifies either (S)hort or (L)ong stroke. Pressures and forces are the same with either option.

To use this table, identify press’s or cylinder’s model and hydraulics oil pressure from your gauge. Example, if your have a Model AH9S-CF Press and the hydraulics pressure gauge, not the air pressure, is reading 1,350 psi, then the force of the press’s ram should be approx. 8.48 tons.

This assumes that the hydraulics oil pressure is metered or taken from the shutoff valve, through the cylinder fill port, on the high pressure side of the intensifier cylinder. It’s the square box on the side or front of the cylinder. Depending on what options were purchased with your machine, some machines have the hydraulic gauge already installed.