

The capacity in cubic feet of free air per minute was then calculated = volume of cylinder $\times$ strokes per minute, and the weight of air compressed per minute found by dividing the product by 13.65. W in the table above was multiplied by this quotient giving the number of foot pounds of work done per minute and hence the I. H. P.

$$\frac{\text{I.H.P.}}{\text{E.H.P.}} = \text{efficiency.}$$

Volume of cylinder = .04547 cu. ft.

Gauge press. lbs. per sq. in.	Strokes, per min.	Cu. ft. of air per min.	Lbs. air per min.	Ft. lbs. work per min.	I.H.P.	Eff. %
0	490	—	—	—	—	—
10	434	19.73	1.446	23130	.699	25.60
20	400	18.19	1.332	37040	1.123	38.10
30	374	17.01	1.246	46350	1.408	44.40
40	354	16.10	1.179	53300	1.615	47.10
50	338	15.37	1.126	58660	1.778	50.25
60	324	14.73	1.079	63030	1.910	51.25
70	308	14.00	1.026	65660	1.990	50.85
80	292	13.28	.973	67220	2.037	50.60
90	278	12.64	.926	68440	2.074	50.25

Test of Motor Compressor.

Eff. %
RPM
Horse P.