

inch.
feet.
per min.

Efficiency.
49.8
54.9
60.7
61.4
64.7
65.8
64.4
63.1
64.1
55.3
58.3
59.6
59.7
55.1
57.0
51.2
47.7

sq. inch.
5 ft.
per minute.

Efficiency.
37.9
41.2
44.4
44.5
49.7
52.8
56.0
60.0
63.2
64.0
65.0
59.5
61.8
58.6
57.9

sq. inch.
ft.
per minute.

Efficiency.
52.0
53.6
57.5
62.1
63.3
65.2
62.8
64.8
64.0

II.—NOZZLE .7532" DIAMETER.

(a) Pressure 75 lbs. per sq. inch.
Equivalent Head = 175 feet.
Discharge = 120 galls. per minute.

Speed.	Horse Power.	Efficiency.
402	3.68	58.5
501	4.10	65.0
618	4.34	68.8
675	4.34	68.9
750	4.33	68.7
770	4.30	67.7

(b) Pressure 100 lbs. per sq. inch.
Equivalent Head = 235 feet.
Discharge = 138 galls. per minute.

Speed.	Horse Power.	Efficiency.
370	4.82	49.4
371	4.86	50.0
475	5.67	58.4
515	5.95	60.7
588	6.20	63.9
654	6.60	67.8
698	6.66	68.6
756	6.88	70.8
815	6.72	69.3
911	6.35	65.6

The results given in the foregoing tables are represented graphically in figures 12-17.

In connection with the above results it is interesting and important to notice that the highest actual efficiency appears at a speed which is about .9 of that which theoretically should give the maximum efficiency.

Fig 12

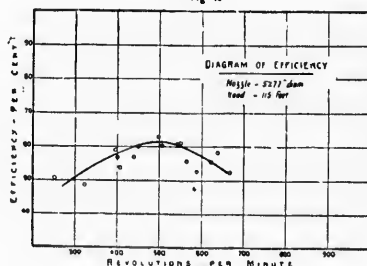


Fig 13

