

boiler feed pumps drop off very rapidly for the smaller sizes of pumps and for low load conditions. For this reason centrifugal pumps are not

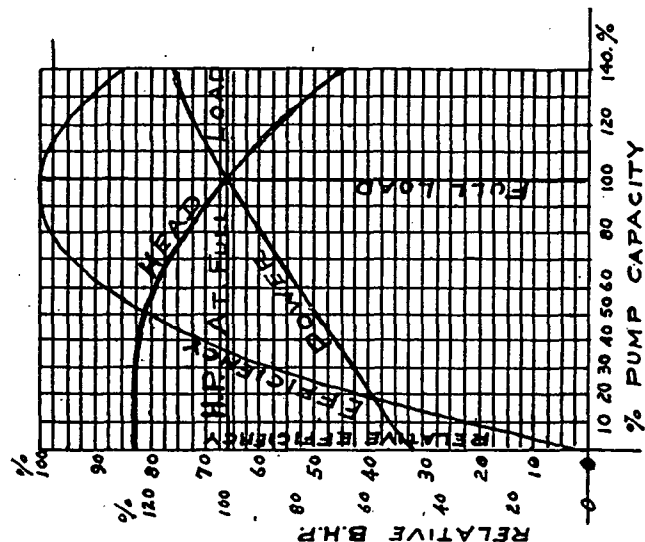


FIG. 41. FOR SELECTION OF SIZE AND STAGE OF CENTRIFUGAL BOILER FEED PUMPS

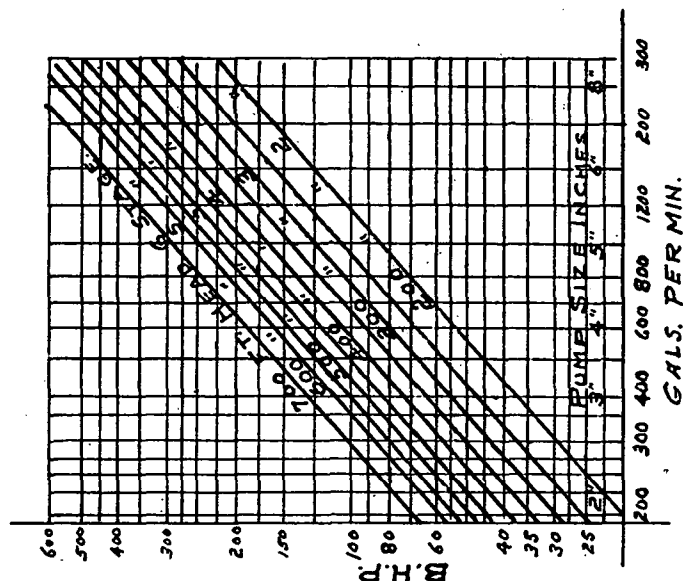


FIG. 40. TYPICAL CHARACTERISTICS OF CENTRIFUGAL BOILER FEED PUMPS

usually employed for installations of less than 1000 boiler horsepower. Screw pumps may be used with good economy for small capacities.

TABLE 67. SCREW PUMPS

Since the capacity and pressure at which Screw Pumps will operate is almost infinite, we can only give some idea of their capacity. Efficiencies range from 60 per cent to 70 per cent.

SIZE	G. P. M.	MAX. REV.	SUCTION INCHES	DISCHARGE INCHES
2	2- 15	1600	2	1 1/2
2 1/2	10- 20	1600	2	1 1/2
3	20- 50	1600	2 1/2	2 1/2
3 1/4	40- 60	1600	3	2 1/2
3 1/2	55- 100	1500	4	3
4	85- 200	1400	4	4
5	175- 275	1200	5	4
5 1/4	200- 325	1200	5	4
6	275- 475	1200	6	6
7	300- 600	1000	8	6
8	450- 750	875	8	8
9	700-1000	720	10	10
10	800-1400	700	12	12
12	1200-2100	600	14	14
16	1750-4200	425	16	15

TABLE 68. SIZES, REVOLUTIONS PER MIN. HEADS PUMPED AGAINST, POWER REQUIRED AND BOILER HORSE POWER FOR SEVERAL COMMERCIAL SIZES OF CENTRIFUGAL BOILER FEED PUMPS

SIZE OF PUMP INCHES	H. P.	PIPE SIZES INCHES		CAPACITY GALLONS PER MIN.	BOILER H. P. SERVED WITHOUT FACTOR OF SAFETY
		Suction	Discharge		
Two Stage for 100 lb. Working Pressure					
2		2½	2	100	1450
2½		3	2½	150	2175
3		4	3	225	3262
4		5	4	400	5800
5		6	5	620	8990
6		8	6	900	13,000
8		10	8	1600	23,000
Three Stage for 150 lb. Working Pressure					
2		2½	2	100	1450
2½		3	2½	150	2175
3		4	3	225	3262
4		5	4	400	5800
5		6	5	620	8990
6		8	6	900	13,000
8		10	8	1600	23,000
Four Stage for 250 lb. Working Pressure					
2		2½	2	100	1450
2½		3	2½	150	2175
3		4	3	225	3262
4		5	4	400	5800
5		6	5	620	8990
6		8	6	900	13,000
8		10	8	1600	23,000