Industrials and Institutionals: Below 200 Ps

For notes on uses and limitations of this tabulation • See this page

Compiled by J C McCabe, Associate Editor

Company	Location	First Operation, New Units	Nominal Pressure, psi	Nominal Steam Temperature, F	BOILERS: Number	BOILERS: Capacity, Each 1000 lb per hr	BOILERS: Manufacturer	BOILERS: Firing	TURBINES: Capacity, 1000 kw	TURBINES: Speed, rpm	TURBINES: Manufacturer	TURBINES: Exhaust Pressure, psia	TURBINES: No. of Bleed Points	Total Boiler Capacity Total Prime Movers Capacity, kw	Total Boiler Capacity Total Prime Movers Capacity, kw
249 PSI AND BELOW, Con'td															
Phoenix Mfg Co	Joliet, Ill		125	...	1	20	BW	O	....	....	....	....	....		45
R & R Clothing Co	Allentown, Pa	8-47	125	Sat	1	8	HB	O	....	....	....	....	....		
Raybestos Manhattan Corp	Charleston, S. C	1947	125	Sat	2	35	BW	O	....	....	....	....	....		
Sanger Winery Assn	Sanger, Calif		125	...	1	9	BW	O	....	....	....	....	....		
Smith College	Northampton, Mass	1-48	125	...	3	40	EM	O	....	....	....	....	....		120
Springfield Woolen Mills	Springfield, Tenn	1947	125	Sat	2	17	BW	O	....	....	....	....	....		
U S Veterans Admin	Rumsmont, N. Y	10-47	125	Sat	1	14	BW	SS	....	....	....	....	....		
Viking Corp	Chicago, Ill	12-47	125	353	1	60	BW	O	....	....	....	....	....		108
General Ribbon Mills, Inc	Catasauqua, Penna	2-48	120	540	1	30	CE	UF (58)	....	....	....	....	....		
Standard Brands, Inc	Red Wing, Minn	6-47	115	347	1	12	HB	UF (81)	....	....	....	....	....		225
American Hide & Leather Co	Ballston Spa, N. Y	12-47	100	327	1	30	CE	TO (127)	....	....	....	....	....		60
Amoskeag Lawrence Mills	Manchester, N. H		100	327	2	9	CB	O	....	....	....	....	....		37
					1	10	CB	O							
Chrysler Corp	Newark, Delaware	1948		...	2	14	CB	O	....	....	....	....	....		
Commonwealth of Kentucky		1948	100	Sat	2	6	TI	UF (30)	....	....	....	....	....		13
Dominion Bridge Co, Ltd	Lachine, Que		100	538	3	23	DB	UF (72)	....	....	....	....	....		
Duplan Corp	Winston-Salem, N. C	1947		...	1	...	K	O	....	....	....	....	....		
Fritsche Bros, Inc	Clifton, N. J	2-48	100	...	1	11	BW	O	....	....	....	....	....		25
Hathaway Mfg Co	New Bedford, Mass		100	Sat	2	12	BW	O	....	....	....	....	....		24
Hillsboro Hotel	Tampa, Florida	7-47	100	Sat	1	7	BW	O	....	....	....	....	....		15
Edward Hines Lumber Co	Chicago, Ill		100	330	2	6	KB	O	....	....	....	....	....		8
Interchemical Corp	Union, N. J		100	334	1	4	CB	O	....	....	....	....	....		
Kingan & Co	Omaha, Neb		100		1	14	CB	O	....	....	....	....	....		
Lionel Corp	Irvington, N. J			Sat	1	21	BW	O	....	....	....	....	....		45
Mercy Hospital	Hamilton, Ohio	5-48	100	328	1	20	BW	O	....	....	....	....	....		30
Mount Holyoke College	South Hadley, Mass		100	Sat	3	15	RB	O	....	....	....	....	....		36.5
Museum of Science & Industry	Chicago, Ill	3-48	100		1	14	CB	O	....	....	....	....	....		12
Oneida, Ltd	Sherrill, N. Y	3-48	100	Sat	1	18	BW	SS (84)	....	....	....	....	....		12
Pittsburgh Plate Glass	Detroit, Mich	11-47			2	11	EC	UF (49)	....	....	....	....	....		31
Sacred Heart Hospital	Yankton, S. Dak		100	Sat	3	4	K	UF (40)	....	....	....	....	....		
Texas College of Mines	El Paso, Texas	9-48	100		1	6		O	....	....	....	....	....		
Toledo Scale Co	Toledo, Ohio	6-48	100	338	1	11	K	UF (67)	....	....	....	....	....		32
Union College	Schenectady, N. Y		100	Sat	2	37	BW	SS	....	....	....	....	....		54
Universal Match Corp	Chicago, Ill	5-48	100	...	1	18	BW	SS (67)	....	....	....	....	....		22
Univ of Florida	Gainesville, Fla	5-48	100	Sat	1	34	BW	O	....	....	....	....	....		...
Univ of Maine	Orono, Maine	1947	100	Sat	2	30	BW	O	....	....	....	....	....		...
Van Curler Hotel	Schenectady, N. Y		100	338	2	7	BW	O	....	....	....	....	....		14
Veterans Admin. Center	Hot Springs, S. Dak		100	358	1	10	BW	UF (220)	....	....	....	....	....		30
					1	10	MI	C							
Wayne Knitting Mills, Inc	Humboldt, Tenn		100	...	2	10	BW	SS (56)	....	....	....	....	....		30

A —Air cooled
AC —Allis-Chalmers Mfg Co
Bt —Bigelow Co
BW —Babcock & Wilcox Co
C —Coal, bituminous
CA —Coal, anthracite
CB —Cleaver-Brooks Co
CE —Combustion Engineering Co
CV —Canadian Vickers, Ltd
DB —Dominion Bridge Co
EC —Erie City Iron Works
EI —Elliott Co
EM —Edge Moor Iron Works
G —Gas
GE —General Electric Co
HB —Heilman Boiler Works
K —E Keeler Co
KB —Kewanee Boiler Corp
L —E Leonard & Sons, Ltd
MI —Murray Iron Works Co
O —Oil
P —Pulverized-fuel firing
RB —Riley Stoker Corp
SS —Spreader stoker
TG —Traveling-grate stoker
TI —Titusville Iron Works Co
UF —Underfeed Stoker
UI —Union Iron Works
We —Henry Vogt Machine Co
Wi —Wickes Boiler Co
WW —Wood waste
RF —Reverberating furnace
SE —Skinner Engine Co
B —Bagasse
W —Waste-heat boiler
C —Canadian Vickers Co construction
(160)—Stoker grate area, sq ft

General Notes on Design-Survey Tabulations

Knowing how the information in these tables is compiled helps to make clear their uses and limitations.

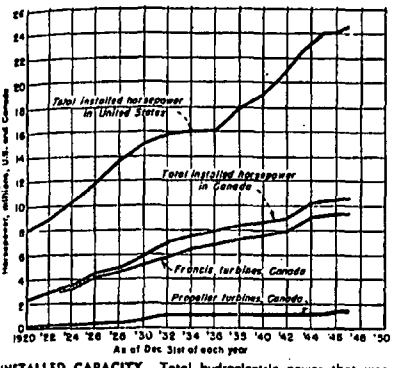
As a continuing operation, POWER's editors assemble news of installations being planned and equipment being ordered. From these records, questionnaires are mailed to the individual companies, asking for details of their projects. The replies form the basis for the tables.

No information is published except that returned on the questionnaire forms. This insures the accuracy of the data and the willingness of the plant owner to see them published. At approximately yearly intervals, data are tabulated and published, as in preceding pages.

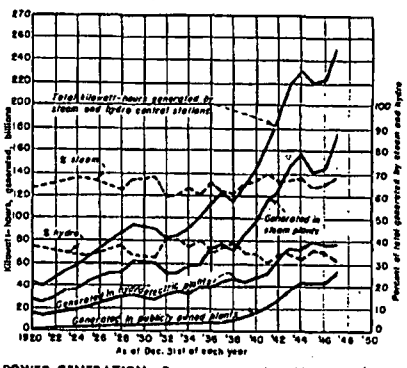
It can be seen that, in the nature of things, these tabulations cannot be complete. Nor can the published list correspond exactly in point of time with actual installations or announcement of them. Where engineering is done a long time ahead of construction, data may appear in the tables well before start of construction.

On the other hand, many publicly announced installations do not appear until long after the fact is widely known, when engineering has gone ahead sufficiently to allow the owner to supply full technical information. *In such cases, the matter is followed and when the data become available they are listed.* Each set of tables is checked against preceding ones to avoid duplication.

Thus, while each listing represents the most complete data available anywhere, and is representative of design and construction work in progress at that time, it does not include *all* current programs, nor does it consist entirely of strictly current construction.



INSTALLED CAPACITY. Total hydroelectric power that was installed in U. S. and Canada during last 27 years. In U. S. 500,000 hp of new hydro capacity was installed last year



POWER GENERATION. Power generated in U. S. steam and hydro central stations, kilowatt-hours supplied by each class of plant and the percent of total that each class generated

Hydro Advances in U. S. and Canada With Over 7,000,000 Hp on Order

▶NEW HYDROELECTRIC-PLANT construction continues at an accelerated rate. This is *true of projects being constructed* not only by governmental agencies, but also by public utilities and industrial interests, as the tables, pp 130-133 show. Here are recorded all projects for which power-generating equipment has been ordered, except some of the smaller installations. Because of space limitations, we have also omitted several large projects being constructed by governmental agencies, for which power-generating equipment had not been ordered.

U. S. Hydro. This year's table for the U. S. lists over 4,500,000 hp of new capacity on order or being installed as of Dec 31, 1947, compared to 3,150,000 hp in last year's table. Because of conditions growing out of the war—shortage of labor and materials, and slow deliveries of power-generating equipment —new capacity has not been going into operation as fast as expected. In 1946 it was only about 15,000 hp, but increased to about 500,000 in 1947, bringing the total for the U. S. to 24,500,000 hp; see curves upper left. Of the total capacity going into service last year, Grand Coulee accounted for 330,000 hp. Governmental agencies are now making over 80% of the water-power developments. The tables, p 127, list 70 *such projects* that have an *ultimate* capacity of nearly 16,000,000 hp, of which 13,250,000 hp have been installed or are on order. The map, p 126, shows locations of the projects.

In spite of the large water-power development programs of government agencies, utility companies are also active and have about 1,000,000 hp on order or under construction. These projects extend across the country, with the largest in Idaho and California.

Because 1947 was a poor water year in many parts of the country, power generated by water was slightly less than in 1946, or 78-billion kwhr. This condition, combined with a large increase in total power generation, 223-billion to 255-billion kwhr, caused that produced by hydro to drop to 30.5% of total generation, about the same as in 1930 and 1941, see curves upper right.

Grand Coulee. Grand Coulee plant on the Columbia River continues to be the largest power plant, either steam or hydro, in the world, with an ultimate capacity of 3,012,000 hp, or 2,190,000 kw. It now has 1,513,000 hp, or 1,100,000 kw installed in nine 165,000-hp main units and two 14,000-hp service units. Six more units are on order for installation in 1949-50, which will increase the plant's capacity to 2,503,000 hp, or 1,820,000 kw.

Canadian Hydro. In proportion to population, water power in Canada is being developed on a much larger scale *than in the U. S. This would be expected* because 97.5% of central-station power is hydro generated.

There is now under construction about 2,750,000 hp, of new plant capacity *and additions to existing plants.* Of this amount, 1,750,000 hp is in three projects: 500,000 hp for the Des Joachims plant of the Hydro-Electric Commission of Ontario, 660,000 hp for an extension to Beauharnois plant of the Quebec Hydroelectric Commission, and 620,000 for the Bridge River plant of the Bridge River Power Co in British Columbia.

Power generated by central stations in Canada increased to nearly 44-billion kwhr in 1947, a gain of 8% over 1946. Of this amount, the Hydro Electric Power Commission of Ontario generated or purchased 13.7 billion kwhr, or 32%. This power system is next to the largest in the world, being a close second to the Tennessee Valley Authority, which generated 14.8-billion kwhr last year.