

TABLE 2. MECHANICAL EQUIPMENT FOR U. S. MARINE HOSPITAL GROUP*

BOILERS		Sq. Ft. STEAM RAD.	HOT WATER TANK AND HEATER CAPACITY		TOTAL HOT AND COLD WATER PER DAY PER OCCUPANT	NUMBER OF PLUMBING FIXTURES PER PATIENT			
No.	H. P. Each		For Toilets and Baths	For Kitchen and Laundry		W. C.	Urin.	Lav.	Bath Tubs
4	120	17,000	1400 gal. storage 2500 gal. per hr.	700 gal. storage 1500 gal. per hr.	200	1/9	1/18	1/6	1/12

Laundry							
POUNDS DRY WASH PER WEEK	FLOOR SPACE	WASHERS		No. 30 IN. EXTRACTORS	DRYING TUMBLER	POWER PRESSES FOR UNIFORMS	FLAT WORK IRONER
		No.	Size				
14,400	3740 sq. ft.	1	36"x54"	2	1	4-38"	110 in. 6 roll 65 lin. ft. per minute.

REFRIGERATION			KITCHENS		
Tons Capacity	Ice Made	Refrigerated Storage Space Cu. Ft.	Floor Area	Diet Kitchen on each Floor of Hospital	Kettles and Steamers
8	1 ton	2400	2300 sq. ft.	13' x 20'	1-50 gal. 2-40 " 2-60 " 1-4 sect. steamer

RANGES, OVENS AND WARMERS			MACHINES	
Gas range	8 ft. 0 in. long		One-2 peck per minute paring machine.	
Comb. gas and coal range	8 ft. 0 in. "		One-2½ lb. per minute meat chopper.	
Gas broiler	3 ft. 0 in. "		One-80 qt. mixing machine and coffee grinder.	
Gas griddle and toaster	3 ft. 0 in. "		One-40 qt. ice cream freezer.	
4 compartment pastry oven.				
20 sq. ft. baking shelves.				

*Capacity: 249 beds for patients, 57 attendants, 26 nurses, 2 internes, 1 officer in charge, 4 junior medical officers and 4 administration assistants.

The serving and diet kitchens in the main building are each equipped with a household type gas range and an automatic electric refrigerator. As food for the wards will be distributed generally by means of insulated food carts direct from the main kitchen, diet kitchen equipment has been kept to the minimum.

In addition to the above equipment, however, two of the diet kitchens are provided with dishwashers with steam sterilizing equipment for use in case of contagious diseases.

The main serving kitchen and dining rooms are located on the main floor directly over the kitchen. An electric dumb-waiter is provided for carrying food between the kitchen and serving rooms. An average of 60 per cent of the patients in Public Health Service Hospitals are ambulant. This gives about 150 patients to be served from the main serving

kitchen. The serving kitchen is about 20 x 40 ft. and is arranged in cafeteria style. It has a steam table 10 ft. long, provided with meat, soup and vegetable dishes, and about 30 lin. ft. of counters with tray slides. This steam table and counter is ample to serve at least 300 people per hour, so that the 150 patients can be served in one-half hour. The counters and steam table are made of galvanized iron, finished with lacquer paint, and are equipped with solid nickel silver tops. They have storage shelves with sliding doors underneath.

The dining rooms for patients aggregate about 2500 sq. ft. or about 17 sq. ft. per person served.

A large dishwasher is located adjacent to the dining rooms, and a smaller dishwasher is located on the first floor to serve dining rooms on that floor, so that all dishes are washed on the same floor as that on which they are used, thereby greatly reducing the required capacity of the dumb-waiter.

Nurses and attendants are served in separate dining rooms on the same floor as the patients, and in a dining room on the first floor adjacent to the main kitchen.

OPERATING DATA ON 1400 BUILDINGS

TABLE 3. GENERAL SUMMARY OF OPERATING DATA FROM 1400 U. S. TREASURY DEPARTMENT BUILDINGS CONTAINING 1910 LOW PRESSURE AND 90 HIGH PRESSURE BOILERS, 775 ELEVATORS AND 8 ELECTRIC GENERATING PLANTS

VALUE OF BUILDINGS AND EQUIPMENT EXCLUSIVE OF LAND	VALUE OF MECHANICAL EQUIPMENT	YEARLY COST OF REPAIRS TO MECHANICAL EQUIPMENT	YEARLY COST OF OPERATING SUPPLIES	YEARLY COST OF LABOR	YEARLY COST OF REPAIRS TO BUILDING, VAULTS, NEW FURNITURE, FURNITURE REPAIRS, CARPETS, LIGHTING FIXTURES, ETC.
\$500,000,000	\$50,000,000	\$550,000	\$3,011,500	\$6,500,000	\$1,805,000

About 6000 engineers, janitors, laborers, firemen, charwomen, mechanics, etc., are employed to care for these buildings. There is approximately one employee of this character for each 100,000 cu. ft. of building content.

To approximate roughly, one mechanic or maintenance man proper is estimated for each 1,000,000 cu. ft. In addition, a fireman force is estimated on the following basis:

One man to each 800 to 1000 tons of coal fired when steam is generated the year round, or one man to each 400 to 500 tons when steam is generated during the heating season only. If an electric generating plant is operated, three additional watch engineers are required. The foregoing does not include the cleaning force.

In a building containing an electric generating plant and having a cubic content of about 18,000,000 cu. ft. using 9000 tons of coal, the force so obtained is split up about as follows:

One chief engineer, 4 assistant engineers, 1 plumber, 1 electrician, 14 engineer helpers (general mechanics, oilers, etc.) and 10 firemen.

A laborer is expected to keep clean, on an average, 6000 to 8000 sq. ft.