

The first two mentioned companies are managed by J. C. Van Aaldaren of Batavia, while the Besoekische Electriciteit Maatschappij is under the direction of Anemaet & Co., Surabaya.

POWER-HOUSE EQUIPMENT

PRIME MOVERS

Boilers.—The Statistical Abstract of the Netherland East Indies, 1928, places the total number of boilers in central power stations at 75, of which 32 were located in the Outer Possessions. Some estimate of the general capacity of these boilers may be gained from the average size, which was 187 square meters of heating area. In addition to the boilers located in the central power stations there were undoubtedly others used by private industries for their steam turbines, but the sugar industry is the only one on which details are available. Sixteen of Java's 180 sugar mills are equipped with a total of 30 boilers for the purpose of driving steam turbines.

It is doubtful whether American manufacturers secured any of the above business. During 1926, 1927, and 1928, a total of 1,158 boilers were imported, of which Germany supplied 518, Netherlands 508, England 375, and the United States only 16. In addition to the boilers imported, a fair number are made locally by several large engineering concerns.

Superheaters.—Superheaters are not generally used, and America's trade in this line is insignificant. During the three years ended December, 1928, only 214 were imported, of which the United States supplied only 1. Germany and the Netherlands are the principal suppliers.

Steam turbines.—German and Dutch manufacturers have secured the majority of the business in steam turbines in the Netherland East Indies. There are several English and American steam turbines in operation in the islands, but none has a capacity exceeding 1,000 horsepower.

In the Government power stations there are more turbines manufactured by Gebr. Stork & Co. than any other make, chiefly because it is a Dutch firm. Six of the Stork steam turbines installed in the Government power plants are of over 2,000 horsepower, three are between 1,000 and 2,000 horsepower, and two are less than 1,000 horsepower. The Algemeene Elektrizitaets Gesellschapp of Germany (A. E. G.) has supplied six turbines of over 1,000 horsepower capacity to the Government, and a Swedish firm, A. B. de Lavel, has secured a limited amount of business in small-size machines.

Only one Stork steam turbine has been installed in the public-utility power plants. The A. E. G. has supplied six turbines to public-utility companies, three of which operate generators of over 3,000 kilowatts capacity. Another German firm, Brown, Boveri & Cie., has installed six steam turbines in the public-utility power plants, but of them only two are large units, developing over 2,000 kilowatts. One German and one Dutch firm, the Bergmann Elektrizitaetswerke A. G. and the Nederlandsche Fabriek van Wertuigen en Spoorwegmateriaal, have divided the balance of the public-utility company business between them. It may safely be said that continental