

drying of rubber electrically is claimed to be both practical and economical, 40 kilowatts being sufficient to dry 3,000 pounds of rubber per day to an extent which reduces the total drying time from 18 to 10 days.

As the public-utility companies extend their transmission lines rubber estates will probably turn more and more to the use of electric power. The prospect of such extensions, however, may have the effect of reducing the tendency to install private generating equipment except on sites where water power is convenient.

TEA INDUSTRY

Although one of the largest power companies operating in Java, G. E. B. E. O., is generating current in the Preanger district, which is the center of the tea industry, the majority of the tea estates are generating their own power. This is chiefly due to the fact that at present hydroelectric and Diesel installations on the estates are producing current cheaper than it could be bought from the G. E. B. E. O. The location of the tea estates, which are in the mountainous districts of west Java, enables them to utilize the many waterfalls in the Preanger district and generate their own hydroelectric power. Some estates have no water power available, and are using Diesel motors to generate current for lighting and power purposes. The majority of the estates have plants with a capacity of from 150 to 200 kilovolt-amperes.

Electric current is used chiefly by the tea industry to operate the various machines such as tea rollers, ball breakers, driers, and sifters, connected with the preparation of tea in the factories. Formerly the majority of the machines were operated by one large motor which was connected to a shaft running the length of the factory. During the last few years, however, there has been a tendency to use individual motors for each machine. In some of the larger tea factories between 30 and 40 small motors, from 2 to 25 horsepower capacity, are operating the machines.

The majority of tea factories are equipped with from 10 to 15 fans of from 4 to 6 feet in diameter, of which about 50 per cent are electrically driven. The "wilting" rooms of the tea factories are usually equipped with from 6 to 8 of these fans for ventilating purposes, and the remainder are put in the sorting rooms, where the native workers use them for blowing away the tea dust. These fans or blowers are as a rule direct coupled and are operated by motors of from 2 to 15 horsepower.

Two tea factories have recently installed locally manufactured electrical equipment for drying the tea. Although the results have been favorable, the practice is not considered economically sound, since the use of oil or wood burners for this process is cheaper.

Electric current is also employed for lighting purposes on the tea estates. It is now the policy of the estates to equip the native workers' quarters with electric lights in order to make them more satisfied with their surroundings.

There is room for considerable extension of the use of electricity in the tea industry, but it is retarded at the present time by low prices for tea, which have the effect of reducing the number of new estates opened up, as well as cutting down expenditures for new equipment.