



handle in an intermediate position. The intermediate positions of the starting devices of large motors must be perceptible and clearly visible.

13. Motors which have to run a driving gear must preferably be started on a loose belt pulley or with uncoupled friction clutch. The electricity service may require this in special cases.

14. In dusty places, entirely inclosed motors with radiator or a cooling device or motors which absorb cool air should be preferred.

X-RAY AND THERAPEUTIC EQUIPMENT

The standing of the medical profession is high in the Netherland East Indies, and consequently there is a good but limited market for X-ray and therapeutic equipment. Prior to 1927 German manufacturers controlled this market. In that year, however, an American firm making this class of equipment appointed a large engineering concern as its representative and assigned a factory representative to the Netherland East Indies to work with its agent. The results have been encouraging, and at present the agents have realized the possibilities of the line to the extent of carrying a representative stock.

Despite the fact that the prices of the American equipment are more than double those of similar German and Dutch equipment (the latter has only recently been introduced), its popularity is increasing because of various features not included in other machines and because of the policy of the local agents in giving free service. Sales have been helped considerably by demonstrations in charge of a trained factory technical man before prominent Government officials and physicians. American firms manufacturing this type of equipment and desirous of marketing it in the Netherland East Indies could hardly hope to do so by correspondence alone. The 3 companies that at present control the market, 1 American, 1 German, and 1 Dutch company, all have their own salesmen in Java.

ELECTRICAL COMMUNICATION

TELEPHONES

Local telephone companies have been in operation in the Netherland East Indies since 1884, when private companies opened exchanges in Batavia, Surabaya, and Semarang. These plants were later taken over and operated by the Government, which at the present time owns and operates all the telephone service of the islands with the exception of the lines owned by the Deli Railway Co. on the northeast coast of Sumatra. At the end of 1928 there were 45,201 subscribers to Government telephones. During that year local calls totaled 73,000,000, while long-distance calls totaled 2,131,643. The revenue from the Government telephone service amounted to 11,219,-121 florins in 1928.

Although experiments have been conducted with American telephone apparatus and some has been installed in the islands, the majority of the equipment comes from Germany. Most of the local plants have only simple magneto switchboards. At the end of 1928 the following types of local plants were employed by the Government telephone service:

Common-battery, multiple-manual switchboards.....	9
Common-battery, multiple-manual switchboard with automatic selective cord switching.....	3