

MOTORS AT HOPPER PAPER COMPANY

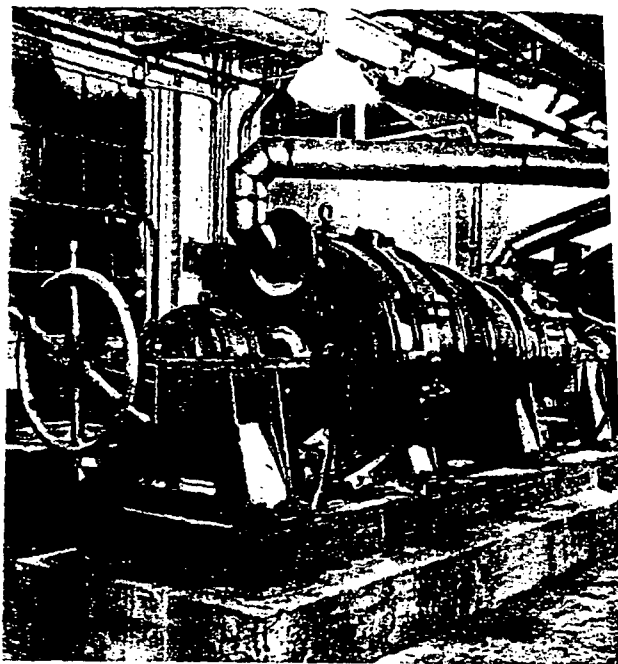
HOPPER PAPER COMPANY, located at Taylorville, Illinois—in the Abraham Lincoln country—has been making fine grades of paper since 1922, when the company took over a plant and paper machine which it has been enlarging and improving ever since.

Taylorville is a good location for a paper mill for three reasons. Below the mill is a subterranean water supply. Water is only 45 feet down and the lake is 45 feet deep under the mill area. Taylorville is also a coal mining center. Shipping to major printing is rapid.

The latest additions and improvements at Taylorville, including a new Fourdrinier paper machine, have brought this mill to a daily average capacity of 100 tons, from 25 tons in the early '30's. The new paper machine is 136 in. wide and trims 123 in. Its length over-all is 194 feet. Products are papers for offset printing and gravure, fine writing, papeterie, index bristols, box covers, and specialties. The raw material is purchased pulp, mostly bleached sulphite woodpulp, along with bleached kraft and soda pulp.

On the new unit the pulp first goes to pulpers where titanium, clay, alum, resin, starch, and dyes may be added. From the pulpers, the next step is to the two No. 2 Emerson jordans, one with stainless steel filling, and the other with bronze, and each driven by Elliott 350-hp synchronous motors, shown here.

Besides the jordans, Elliott motors drive auxiliaries. Some of these are shown here. There is also an Elliott motor driving the forced-draft fan in the power plant, and an Elliott 80,000-lb-per-hr deaerating feedwater heater serves this plant. The boiler plant, consisting of one 450-hp and two 400-hp boilers with chain grate stokers, generates enough steam at 190 psig, 500 F, to dry paper on both paper machines, the power plant skimming electric power from the steam so that only exhaust steam is used for drying paper on both machines. Other power is purchased at 2300 volts.



A close-up of one of the two jordans which are both driven Elliott 350-hp, 400-rpm, 2300-volt splashproof synchronous motor.

This view emphasizes the two Elliott 350-hp, 400-rpm synchronous motors which drive the new jordans. The installation also includes two Elliott C-W 7½-kw motor-generator sets which furnish the excitation for the two 350-hp synchronous motor.

