CROMPTON & KNOWLES MAKES WIDEST LOOM IN ITS HISTORY

In the gigantic machines which manufacture paper, the pulp, in one operation, is carried from the forming wire in a wet state through several pairs of press rolls. The standard conveyor felt for this operation is one woven from high quality woolen yarn and the felt must be endless. Consequently, the demand has been for a loom that will weave tubular woven goods which can be formed into an endless conveyor felt and then threaded onto the paper making machine without any splicing. The accompanying picture shows a portion of a highly efficient newsprint machine as made by Rice, Barton & Fales, Inc. The endless “wet felt” conveyor belts are shown in dotted lines.

The Loom on the C. & K. Erecting Floor

To meet a recent demand for this material, Crompton & Knowles was called upon to build a loom 540” between swords. This loom is known as a 2x2 box, 12 harness, type “A” Felt Loom, and it is capable of weaving a tubular material having a circumference of 1040”. The two photographs show the loom on the Crompton & Knowles erecting floor. Twenty-four men are sitting on the arch.

The heavy, all-steel bridge construction of the arch is particularly interesting. This arch is unsupported except at the ends. The harnesses are operated by a Knowles head motion. The breast beam, the arches,
and the 15" diameter take-up roll are manufactured in one continuous piece.

Two three-horsepower motors, one at either end, operate the loom at a speed of 30 picks per minute. There are seven crank wrists. The 28" shuttle travels at a speed of approximately 35 miles per hour. The shuttle

In the same space as occupied by this one loom could be put five 82" High Speed Worsted Looms or seven 52" Super-Silk Looms. The accompanying drawing is interesting in this connection.

The approximate weight is 20 tons.

After the loom has been run at the Crompton &

is thrown as in any other Crompton & Knowles loom, except that there are elliptical gears driving the picking roll and thus imparting a sharper motion to the picker stick.

The over-all length of the loom is 650", with a depth of 101". The height from floor to top of arch is 100".

Knowles shop it will be disassembled and shipped to the customer on two flat cars.

The construction of this gigantic loom is directly in line with the C. & K. policy of being ready to make a special loom for any particular requirement of the textile industry.