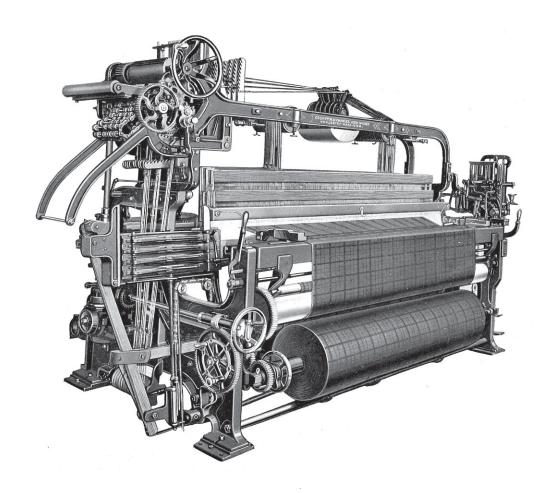
Automatic Intermediate Worsted Loom



CROMPTON & KNOWLES LOOM WORKS

WORCESTER, MASS. U.S.A.

PROVIDENCE, R.I.

PHILADELPHIA.PA.

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Southern Manager

CROMPTON & KNOWLES AUTOMATIC INTERMEDIATE WORSTED LOOM

The Crompton & Knowles Intermediate Worsted Loom is adapted for the weaving of worsted fabrics from light weights up to 15 oz. goods, and is available in both non-automatic and automatic types with the usual box combinations—2 x 1 and 4 x 1 automatic or non-automatic, 2 x 2 and 4 x 4 non-automatic only.

The relatively light construction and high speed of this loom, together with its proven dependability, makes it a most economical machine for plain and fancy worsteds of medium weight.

The box loom, besides being an obvious necessity for fancy fabrics also insures more perfect weaving of single color fabrics, such as serges, pencil stripes, etc., by allowing the use of several shuttles for the proper "mixing" of the filling, and thus avoiding the possibility of "filling bars" in the finished goods.

GENERAL SPECIFICATIONS

Frame: Double arch stands and arches. Wood breast beam with 5" iron plate on top. 1½" round iron lower front girt, 2" round iron upper back girt.

Harness Motion: Intermediate Knowles Head Motion, 25 harness, 4/10" space, driven from bottom shaft by split eccentric gears. Continuous running pattern chain. Guards for gears.

Box Motion: Controlled by separate chain in head motion.

Automatic Magazine: Stationary magazine for bobbins 8" long and 11%" yarn diameter.

Filling Detector: Multiple wire mechanical filling detector.

Drive: Individual motor drive. 1 h. p. motor. 2 x 1 coarse pitch gears between crank and bottom shafts. Bevel pinion on counter shaft with guard. Adjustable pulley frame. Brake on crank shaft. 2" iron crank shaft with 6½" throw of cranks. 1½" diameter bottom shaft. Caps on crank, pulley, and bottom shaft boxes have provision for wick lubrication.

Picking: Batwing type. 11/4" x 1/8" picking shafts. Split double roll arms on bottom shaft.

Lay: Wood lay beam with iron plate on bottom. Box end equipped with boxes 17 x 2 $\frac{3}{16}$ x 1 $\frac{3}{4}$ to take shuttle 16 $\frac{3}{4}$ x 1 $\frac{15}{16}$ x 1 $\frac{1}{2}$. Iron layend at magazine end for drop box type picker. Wood hand rail with iron strip set in top. Iron race plate. Shuttle check at both ends of lay.

Stop Motions: Center Filling Stop Motion No. 9 with sliding shield. Crompton & Knowles Regan Type Mechanical Warp Stop Motion with indicating rods over warp.

Protection: At both ends of looms.

Let-off: Single beam. Double beam stands. 65%" diameter beam barrel, 13" ratchet heads, 18" flanges. Steel band friction with weights and levers. Pipe back roll. With double beam stand one beam with 22" flanges may be used or two beams with 14" flanges.

Take-up: Positive reverse worm. Pipe roll with steel surfacing. Lower or winding roll driven by chain of gears and friction. Improved type of removable lower roll.

Selvage: Selvage motion at each end. Driven from upright shaft.

CHANGES

Take-up: Positive worm or ratchet ring type.

Head Drive: Driven from crank shaft.

Drive: Pulley 12" x 3¾" at right angles to bottom shaft.

Box Motion: Multiplier in head for box chain.

Beam: 22" beam flanges.

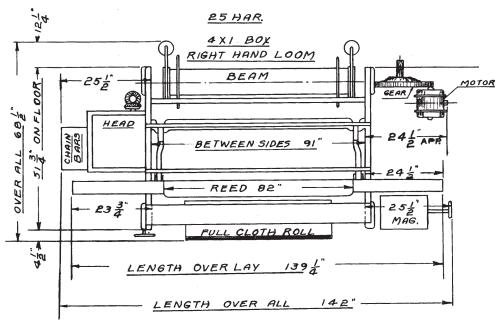
Filling Detector: Double contact type.

Shuttle Box, Non-Automatic: $17'' \times 2'' \times 1\frac{3}{4}''$ for shuttle $17'' \times 1\frac{3}{4}'' \times 1\frac{1}{2}''$.

Boxes, Non-Automatic: 2 x 1, 2 x 2, 4 x 1, 4 x 4. Automatic: 2 x 1, 4 x 1.

Widths: 72", 76", 82" between swords (most common).

Harness Motion: Knowles Head 16, 20 harness.



FLOOR PLAN OF LOOM 82" BETWEEN SWORDS

Speed: Depends on yarns, but is usually from 115–125 picks per minute.

We strongly advise individual motor drive for looms, especially for automatic looms.

The following list covers some of the types of looms and accessory machinery built by Crompton & Knowles Loom Works.

| GENERAL | | | Duck | | |
|---|---|---|---|--|---|
| Asbestos Brocatelle Burlap Cane Curtain Double Shuttle Plush | Fly Net Hammock Heavy Belting Lappet Linen Linen Crash Mohair | Plush Press Cloth Shawl, Fancy Sisal Bag Upholstery Velvet Window Shade | Flat Duck Light Duck Intermediate Duck | Medium Duck Heavy Duck Extra Heavy Duck Carpet and Rug | Special Extra Heavy Duck |
| Drapery | Woolen and Worst | | Axminster Brussels Chenille Cocoa Matting | Fibre Art Square Fibre Carpet Grass Twine Matting | Paper Carpet Tapestry Weft Wilton |
| Cassimere Clay Twill Dress Goods Felt Flannel | Gem Dress Goods Gem Worsted Heavy Worsted Intermediate Worsted | Jacketing Satinet Woolen Blanket | | Silk | |
| | | | Bread Silk | Jacquard Silk Narrow Fabric | Veiling |
| | Cotton | | Bandage Belting Brake Lining | Elastic Webbing Non-elastic Webbing | Ribbon Tape Wicking |
| Bag Cord Fabric Corduroy Cotton Blanket Cotton, Plain Cotton Plush Coutil | Crochet Quilt Damask Denim Gingham Handkerchief Huck Towel Jean | Lining Marseilles Quilt Mosquito Netting Sheeting Terry Towel Tire Fabric | Brane Brane | Miscellaneous | |
| | | | Bobbin Strippers Cop Winders Dobbies Jacquards | Narrow Fabric Warpers Mechanical Warp Stop Motion | Narrow Fabric Quillers Printing Drums Setting Frames |



PROVIDENCE, R.



CROMPTON & KNOWLES LOOM WORKS WORCESTER, MASSACHUSETTS, U.S.A.

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