

The ideas and features incorporated in Cyrefco looms are not new. The long history of weaving involves people and looms from all parts of the world. Many important

design concepts were developed when handweaving

was an integral part of peoples' daily lives.

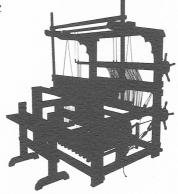
Cyrefco looms are traditional looms, but not a copy of any particular loom. By blending ideas from past and present with modern materials the result is a well thought out tool for today's handweaver.

Each Cyrefco loom is handcrafted primarily of alder and maple hardwoods. The finish is hand rubbed danish oil, providing durability as well as a

warm luster.

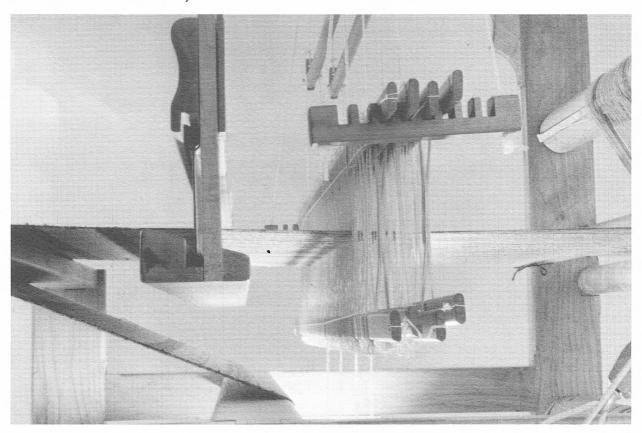
The loom is a pleasant addition to the studio, living room or any convenient work space. If the loom must be moved or stored it is easily done by knocking out six tapered wedges and removing a few pegs. Reassembly is equally fast. The tapered wedges and matching mortice and tenon tapered slots guarantee a snug fit and a stable loom.

We invite you to read the following pages which detail the features built into each beautiful Cyrefco loom.



#### The Beater

The overhead beater is a tradition, found all over the world. It provides rhythmic, easy beater action which is properly used for delicate fabrics or heavily beaten fabrics such as rugs. The Cyrefco beater is easily adjusted for vertical height in half inch increments and the sliding upper cross piece adjusts for any reed height. The lower cross piece is cut on an angle to complement the lower shed angle. This allows it to support the lower shed and provide a shuttle race. The reed slot is deeply cut so that threads may only rest on the shuttle race and cannot touch the lower frame of the reed (which may be rough and damaging to warp threads). The slot passes the reed support members so that reeds which are wider than the loom may be used.



## The Heddles

Textilsolv linked polyester heddles are used inasmuch as they provide dimensional stability, strength, quietness and minimal width which eases the passing of warp threads as the harnesses move up and down.

### The Shed

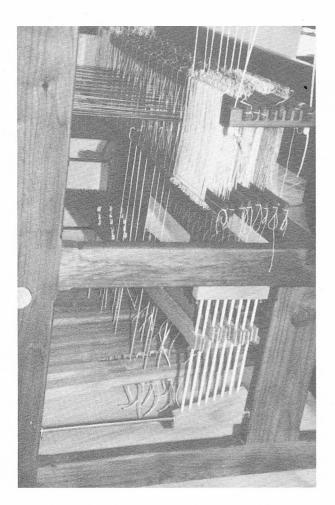
The counterbalanced harness roller support system provides an accurate, balanced shed. Rollers, with parallel support cords keep harnesses level, even with narrow warps. (The older, traditional "horse" support system used on many traditional looms often does not keep harnesses level, with resulting degradation of shed.)

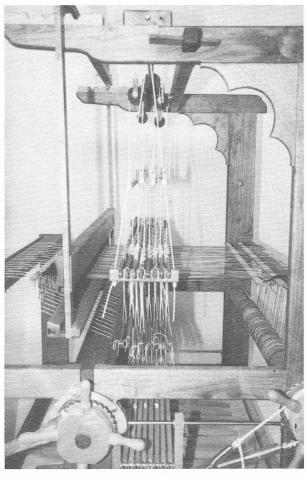
Treading pulls tied up harnesses downwards, which in turn causes the remainder of the harnesses to move upwards. Because of this balance, treadling effort is minimal and generally much easier than treadling jack looms.

# Tie-up

Cyrefco uses the Textilsolv tie-up system with polyester loop cord which eliminates the need for weaver's knots.

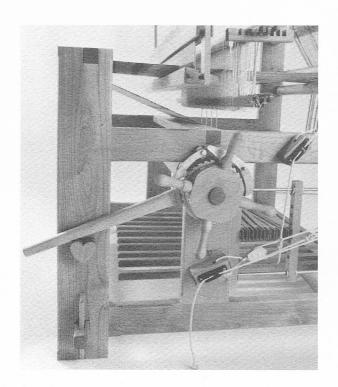
The warp and cloth rollers are slotted so that tie-up sticks fit into the rollers and the warp or cloth roll directly onto their rollers smoothly without lumps. This permits a more precise winding on of the warp than with tie-up sticks attached by long cords. Pieces of heavy kraft or butcher paper work well to separate warp layers. The nuisance of warp sticks is avoided. Woven pieces may be cut off without re-tying by weaving in half thickness tie-up sticks between sections of your fabric. Then after weaving enough of the new piece for it to reach 1½ times around the cloth roller the first piece can be cut off. The two half sticks folded together and placed in the slot then become the new tie-up stick.

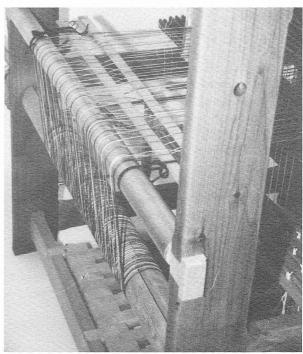


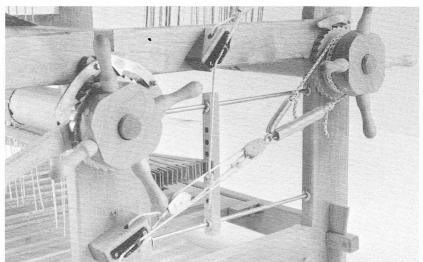


### The Lams

Lams are pivoted at one end and are supported at the other end with lam guides. The bottom of the lam guide assembly is cut at an angle and serves as a lam and treadle travel stop, which, with correct tie-up assures that the lower shed angle will be correct without shadow sheds.







# Warp Advance and Constant Tension Braking System

The warp advance mechanism and constant tension braking system work together to provide ease and speed of weaving and uniformity of woven fabric. To advance the warp the weaver merely reaches down (while sitting at the bench) and lifts the warp advance lever associated with the cloth roller ratchet system. The warp is moved in as small or large increments as desired. The warp tension remains constant. Because it is so easy to advance the warp in small increments, the weaver may weave at the shed/cloth location of greatest convenience without the aggravation and lost time of getting up constantly to unlatch ratchets and release and retighten warp tension as part of advancing the warp. In certain patterns and twills uniformity of beat and tension is very important and this Cyrefco feature is a great asset.

The warp tension is maintained by the brake drum and adjustable spring brake system. It is very easy to adjust the tension should it be too tight or too loose. The cloth and warp beam ratchets are provided for use in winding on the warp.

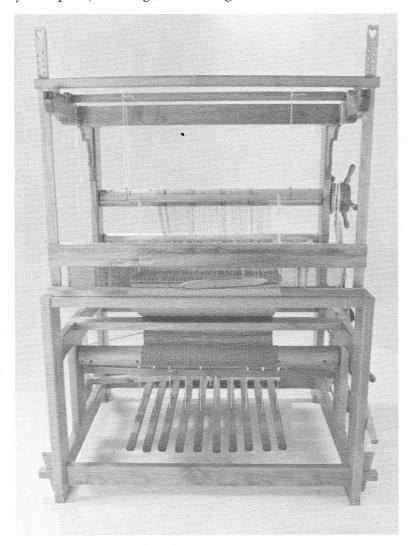
If a supplemental warp roller is added, it has its own independent constant tension brake. Therefore both warp rollers may be easily adjusted to widely differing warp tensions, depending on the requirements of the fibers used.

Roller back beams are a part of the warp advance/constant tension brake system. The rollers permit the warp tension to be translated directly to the warp roller without the interference of the friction of a fixed back beam.

#### The Treadles

The treadles are pivoted from the back cross brace for good leverage and ease of operation. They are mounted on the treadle shaft with integral spacer blocks and minimum shaft to treadle clearance. This maintains treadle spacing so that treadle location may be relied on. Side to side floppiness is not necessary and has been avoided in the Cyrefco loom.

An alternate of four front hung treadles for direct treadle to harness tie-up is available. They may be treadled individually or in pairs, retaining the advantages of the counterbalanced harness suspension.



Horizontal Warping Mill

Cyrefco offers its horizontal warping mill in two ways. One is complete and free standing with a support stand. The other way is without a stand. The mill's central dowel rests in holes in the back frame of the loom while a warp is being made. The back beam must be removed or lowered while the warp is prepared to allow room for the mill to rotate. This can even be done with a warp on the loom, by releasing warp tension and dropping the back beam out of the way.

Why a horizontal mill instead of vertical? It is far easier on the back to move from side to side as you feed threads to the mill than it is to bob up and down as is necessary with a vertical mill.

Why use a warping mill instead of a warping board? Huge amounts of time and work are saved by using a mill and warp evenness is more easily controlled.

Yes, compared to a warping board, it is big. No, it doesn't take a lot of storage space! The stand is held together with a cross piece and two wedges which are quickly knocked out for disassembly.

The reel clamps and pegs are adjustable so that they may be moved left or right, or into a different reel quadrant depending on warp length. When the clamps are removed, the warp reel folds flat for easy storage.

The warping mill reel is 92 inches in circumference and will accommodate long warps.



Cone/Spool Rack

This combination portable rack has adjustable/removable pegs to hold cones of thread and removable shafts to hold spools of thread.



### The Bench

The weavers bench assembles and disassembles quickly and easily and bench height is adjustable to suit the comfort of the individual weaver.

# **Finishing**

The alder and maple hardwoods used in the looms are given a hand rubbed finish with Watco danish oil. In general, final wet sanding is done with 280 and 400 grit sandpaper to a smooth and lustrous surface.

Watco oil stabilizes the wood, lessening swelling, warping and shrinking. It hardens the surface as much as 25% as well as sealing it (spills and stains are usually removable). After years of wear and tear refinishing is easily done with this product.

### Size

The overall dimensions of the Cyrefco loom are approximately as follows:

48¼" deep by 54½" wide by 72" high. This includes projections, levers, beater, etc.

Maximum weaving width is 45".

Distance between the breast beam and the roller back beam is 43".

Weight is approximately 150-175 pounds depending on options.

# **Options**

A supplemental warp beam with additional roller back beam and braking system may be ordered for use with dissimilar warp fibers, double weave, etc.

An additional four harnesses (for a total of eight) may be ordered and include the requisite additional four treadles, lams, support rollers, tie-up cord, etc.

# Purchase options

Cyrefco looms, warping mills and benches may be purchased in three ways.

1. Completely assembled and finished and shipped knocked down, but easily put together.

2. Completely assembled and shipped knocked down, but easily put together. Sanding and finishing materials are provided by Cyrefco, but the elbow grease is provided by the purchaser.

3. In kit form with all gluing, assembly and finishing to be done by the purchaser. Sandpaper, glue, Watco Danish Oil and instructions are provided with the kit. It is not a trivial task, but one which may be very satisfying.



For more information please contact:

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