# HAND LOOMS & WEAVING EQUIPMENT

MADE IN FINLAND SINCE 1898 WWW.toika.com





TOIKA is a family business, founded in 1898. For several decades it has been one of the leading manufacturers of weaving equipment in the world. The fifth generation is now taking part in its operations.

Experience and continuity are the values which we consider important in the manufacture of our weaving equipment. We think that every item should be both functional and estetically pleasing. The high quality of TOIKA looms is recognized all over the world.

All TOIKA looms are made of high quality, selected Finnish birch, which has been both air-dried and kiln-dried. Parts subject to bending are laminated for extra strength. A distinguishing feature of TOIKA looms is the use of a special varnish in the finishing process which preserves the original light colour of the hardwood. All TOIKA looms are guaranteed for 1 year against defects in material and workmanship.

Toika is an authorised Ashford dealer.

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# EEVA (4322-4398)

The Eeva loom is a large traditional Scandinavian countermarch loom for weaving all kinds of projects from light transparent fabrics to heavy rugs. Eeva is usually equipped with a hanging beater, but an underslung can be ordered. The warp beam, complete with holders, can easily be detached from Eeva without the need to dismantle the loom. A traditional 2-legged bench is standard on the Eeva although the adjustable bench may be substituted. Eeva can be equipped with 4, 8 or 12 shafts.

Weaving width	Total width	Weight
80 cm	117 cm	100 kg
100 cm	137 cm	110 kg
120 cm	157 cm	120 kg
150 cm	187 cm	130 kg
Height	Depth	With bench
170 cm	150 cm	185 cm

Weaving width	Total width	Weight
31 ½"	46 1⁄8"	220 lbs
39 3⁄8"	53 1/8"	240 lbs
47 ¼"	61 ¾"	265 lbs
59"	73 5⁄8"	285 lbs
Height	Depth	With bench
66 7%"	59"	72 1/8"



The large side opening allows for easy access to warp and tie-up.

Both the adjustable Eeva bench and the handy cog wheel warp tensioning system shown in the picture are popular options for Eeva.

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The Liisa loom can be fitted with a variety of supplementary equipment.

A traditional 2-legged bench is standard on the Liisa although the adjustable bench may be substituted.



# LIISA (4122-4198)

Liisa is descended from the original Toika and is a solid and reliable countermarch loom. While Liisa usually is shipped with an underslung beater, an overhead beater kit is available as an option. Liisa is solid enough for a steady diet of rugs, yet gentle enough for a sheer transparent fabric.

The cog wheel warp tensioning system shown in the picture is the most popular option for Liisa. Liisa can be equipped with 4, 8 or 12 shafts.

Weaving width	Total width	Weight
80 cm	117 cm	90 kg
100 cm	137 cm	100 kg
120 cm	157 cm	110 kg
150 cm	187 cm	120 kg
Height	Depth	With bench
153 cm	136 cm	170 cm

Weaving width	Total width	Weight
31 ½"	46 1⁄8"	200 lbs
39 ¾"	53 7%"	220 lbs
47 ¼"	61 ¾"	240 lbs
59"	73 5⁄8"	265 lbs
Height	Depth	With bench
60 ¼"	53 ½"	66 7%"

# JAANA (4284-4298)

Jaana is a very compact loom and because of its smaller overall dimensions, allows a full countermarch loom in smaller room or apartment situations. Jaana has all of the traditional Toika sturdiness, yet has a convenient and pleasantly low working height. Jaana can be equipped with a hanging or underslung beater and 4 or 8 shafts.



Jaana comes with a traditional 2-legged Laila bench, but an adjustable Eeva bench can be substituted.

Weaving width	Total width	Weight
80 cm	117 cm	70 kg
100 cm	137 cm	80 kg
Height	Depth	With bench
128 cm	117 cm	158 cm

Weaving width	Total width	Weight
31 ½"	46 1⁄8"	154 lbs
39 ¾"	53 7%"	175 lbs
Height	Depth	With bench
50 ¾"	46 1⁄8"	62 ¼"



The dimension of the Jaana loom is based on ergonomic factors and ensures a convenient and pleasantly low working height.



# Welcome to $\mathcal{E}$ legant $\mathcal{S}$ implicity -

the wonderful world of Computer Assist Weaving!

The result of over 30 years of research and development, and building on the legendary EW series, the new Toika ES series brings you an even faster and more powerful product for your weaving enjoyment.

ES Computer Assist Looms are offered 16 shaft, 24 shaft and 32 shaft configurations. Traditional weaving looms are based on treadles, lamms and jacks. Your Toika ES computer assist loom replaces all of those parts with a single pedal - much like that on a sewing machine.

The pedal means that the weaver requires no strain or effort to lift multiple shafts - something literally impossible to do easily with a standard loom. Compared to its predecessor ES models, the ES series brings the owner improved electronics, an even longer working life, easier maintenance and fewer mechanical components.

Powered by the latest version of WeavePoint Software, the ES loom operates alongside a computer equipped with Microsoft Windows and one open USB port. The unit has a direct connection to the USB port - just plug it in, turn on the loom and then the computer and the weaver is ready to go.







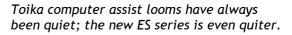
The ES control unit, contained in a sleek and beautifully designed outer case, is directed by the computer and software to select the appropriate shafts and open the shed automatically. The shed is a true countermarch - the shafts that are programmed to rise do rise and those that are programmed to sink do sink. Sheds are also even throughout as the ES unit automatically compensates for the shafts that are farthest from the weaver.

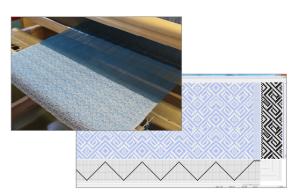
ES units also allow the weaver to select from three weaving modes. Fast mode closes the shed on one pick and opens the next one with a pedal press. Slow mode opens the shed with one press of the pedal and closes the shed with another. Normal mode opens the shed and allows it to stay open as long as the pedal stays pressed. If the weaver wants to unweave, there is a reverse mode.

The new ES series allows the weaver to spend more time planning projects and designing fabrics while essentially eliminating treading and tie up errors.

Toika ES units can also be installed on practically all manual Toika looms so that owners can enjoy computer assisted weaving.

And many other brands of Scandinavian type looms can be fitted with the ES system as well.









# **LAILA** (4183)

The Laila loom is designed for weavers who do not have enough space for a very large loom or who want an additional loom for sampling or experimental projects. The Laila loom is suitable for weaving all types of fabrics except rugs.

Laila can be folded with the warp in place and it occupies very little space when being stored or transported. Laila comes equipped with 4 or 8 shafts.

The Laila bench (4186), which is especially proportioned for this loom, is available separately.



30 kg Height Depth With bench Depth folded 120 cm 85 cm 115 cm 60 cm

103 cm

Weight

Total width

Weaving wic	lth	Total width	Weight
27 1	2"	40 1⁄2"	65 lbs
Height	Depth	With bench	Depth folded
47 ¼"	33 ½"	45 ¼"	23 5⁄8"

Laila is a small countermarch loom that can be folded even with the warp in place.

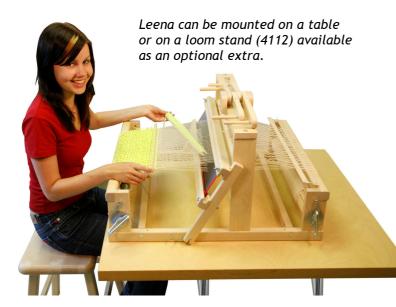
Weaving width

70 cm

# LEENA (4111 and 4311)

Leena is a table loom for weaving light items such as scarves, table runners, pillowcases, towels, small rya rugs, etc. Table looms are especially useful for teaching, sampling, and in small house situations where space is at a premium.

The shafts are raised by top mounted locking action levers which are light and smooth in operation. Spring assisted shaft returns provide a clear working shed. Leena is available at 60 cm (23 %") weaving width with 4 (4111) or 8 shafts (4311). The loom is delivered with a reed, 200 heddles and 2 flat shuttles.





Weaving width	Total width	Weight
60 cm	73 cm	10 kg
Height 4-shaft	Height 8-shaft	Depth
46 cm	64 cm	79 cm

Weaving width	Total width	Weight
23 5⁄8"	<b>28</b> ¾"	22 lbs
Height 4-shaft	Height 8-shaft	Depth
18 1⁄8"	25 ¼"	31 1⁄8"

LOOM STAND	
Height	Weight
55 cm	2 kg
21 5⁄8"	4.5 lbs

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Weaving width	Total width	Weight
55 cm	82 cm	18 kg

Weaving width	Total width	Weight	
22"	32 ¼"	40 lbs	

# Height Height folded Depth Depth folded 107 cm 119 cm 82 cm 33 cm 42 ½" 46 ½" 32 ¼" 13"

# **ANNI WORKSHOP LOOM (4522)**

The Anni workshop loom is the perfect loom for a beginning weaver.

Anni is a two shaft, two treadle direct tie-up loom with a weaving width of 55 cm (22"). The loom is delivered assembled.

Made with a scissors leg arrangement, the Anni loom conveniently folds for easy, compact storage and transport - even when warped.

The wheels on the back legs make it easy to move the loom.

There is a handy shelf on top of the loom for weaving accessories.

Anni is a compact loom that folds for travel and storage - even when warped.



#### LOOM BENCHES: EEVA, LIISA and LAILA

The adjustable Eeva benches come in two sizes and fit all the Toika looms. The Laila bench fits the Laila and Jaana looms as well as the Leena table loom when equipped with a stand. The non-adjustable Liisa benches fit both the Liisa and Eeva looms.

Item #	Bench	Width	Height	Width	Height
4466	EEVA 60	60 cm	56 - 69 cm	23 5⁄8"	22" - 271⁄8"
4488	EEVA 80	80 cm	56 - 69 cm	31 ½"	22" - 271⁄8"
4186	LAILA	50 cm	58 cm	19 5⁄8"	22 7⁄8"
4450	LIISA 50	50 cm	67 cm	19 5⁄8"	26 ¾"
4480	LIISA 80	80 cm	67 cm	31 ½"	26 ¾"

**COG WHEEL WARP RELEASE SYSTEM** (1445, EEVA and LIISA): With this useful device the weaver can release and control the warp tension without getting up from the bench.



**BEAM APRONS** (1400-1492): Beam aprons are available for looms in all sizes. We deliver beam aprons with finished edges and, on request, with eyelets for cords (1406).



**WARP STICKS** (4100-4190): Warp sticks are available in weaving widths 60 cm (for the table loom), 70, 80, 100, 120, 150 and 185 cm (23  $\frac{5}{3}$ ", 27  $\frac{1}{2}$ ", 39  $\frac{3}{6}$ ", 47  $\frac{1}{4}$ ", 59" and 72  $\frac{7}{6}$ "). They are delivered in bunches of 50 pcs or half bunches.

**SECTIONAL WARP BEAM** (1451-1458, EEVA, LIISA and JAANA): When you are using a sectional warp beam, you wind the warp direct to the beam in sections. A sectional warp beam is a standard beam mounted with four rails, which have metal loops every two centimeters (or 1") for dividing the warp into sections. The measure around the sectional warp beam is 75 cm (29  $\frac{1}{2}$ "). Rails are also available separately.

**LOIMI TENSION BOX FOR SECTIONAL WARPING** (4491): For sectional warping a tension box is needed to keep the warp threads taut and in order. The box is fastened to the back beam of the loom. One of the warp threads goes round the tension box's counter to give the length of the warp. In case you need to undo part of the warp, the counter will compensate for the length undone.

**DOUBLE WARP BEAM AND DOUBLE BACK BEAM** (4308-4408, EEVA and LIISA): An extra warp beam can be fastened to the Eeva and Liisa looms, enabling you, for instance, to create warp patterns. Any loom with two warp beams should also have two back beams to prevent the yarns from clinging to each other.

The Eeva loom in the picture is equipped with a double warp beam and a double back beam and the cog wheel warp tensioning system for both warp beams.

WARP BEAM WITH FLANGE (EEVA and LIISA): If you want to use extra long warps, a warp beam with a flange is convenient. The beam is fitted to the loom with supporting pieces, which makes it possible and easy to remove the beam for specialist warping operation.







**FLY SHUTTLE DEVICE** (4320-4321, EEVA and LIISA): A fly shuttle device increases the speed of weaving.

The device is attached to the beater. It can be fitted to a Liisa or Eeva loom with weaving width 100, 120 or 150 cm ( $39 \frac{3}{3}$ ", 47  $\frac{1}{4}$ " or 59") with hanging or

underslung beater. A special fly shuttle is used with the fly shuttle device.

The fly shuttle device for the hanging beater is in one piece and for the underslung beater in two pieces.

**RUBBER FEET** (1160, EEVA and LIISA): Rubber feet prevent the loom from sliding on the floor. Size 42 x 120 mm ( $1 \frac{5}{3}$ " x 4  $\frac{3}{4}$ "). They are included in the delivery of a new Eeva or Liisa loom.

**RUBBER STOPPERS** (1161, EEVA, LIISA and JAANA): Rubber stoppers prevent the beater from hitting the side parts of the loom, when using an underslung beater. These are mounted in pre-drilled location holes in the side frames.





**LOCKING DEVICE FOR TWO EXTRA LONG TREADLES** (1118, EEVA and LIISA) This device is used for locking treadles in a wide loom together with extra long treadles. It is fastened on the front rail and holds two extra long treadles.



HOLDERS FOR SHAFTS (1446, EEVA and LIISA): Hang these holders at the back of your loom to keep extra shafts, treadles, lamms and warp sticks in order.





#### TRADITIONAL REEDS (3020060-3120200):

Toika has been making reeds for over 120 years. Today reeds are usually made of stainless steel but are made in the traditional way using the best possible raw materials. Specially treated yarn is used as a binder to keep the dents in place. The height of the standard reed is 12 cm ( $4\frac{3}{4}$ "). The reeds are packed in plastic covers and thus protected against dust and humidity during storage and transport. Please specify length and number, when ordering a reed. Reed number indicates the number of dents in 10 cm (Europe) or per inch (USA).



#### PROFILE REEDS (6020-6070, 7020-7099)

Profile reeds are manufactured in metal and are the latest in reed technology. These are extra sturdy reeds for hard use and easy storage. Order by length and dents per 10 cm or inch.

Standard reed numbers (dents/10 cm) are 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90 and 100. Standard reed numbers (dents/inch) are 5, 6, 8, 9, 10, 11, 12, 15, 18, 20, 22 and 25.

Standard lengths are 60, 70, 80, 90, 100, 110, 120, 140, 150, 160, 185 and 200 cm (from 23  $\frac{5}{10}$ " to 78  $\frac{3}{4}$ ").

On request we also manufacture numbers and lengths other than the above mentioned. It is also possible to make reeds of a greater height and of a thicker dent section.

#### REED STAND (3001)

The reed stand neatly organizes and stores a variety of different reeds in a standing position. The varnished stand holds over 50 reeds.





#### RADDLE, model A (3155-3300)

Raddle A is an open reed, which is inserted in the beater for beaming. The height is 8 cm (3  $\frac{1}{8}$ ) and pin length 6 cm (2  $\frac{3}{8}$ ). The distance between pins is 1 cm ( $\frac{3}{8}$ ). Available in all widths.

#### RADDLE WITH CAPE, model B (3080-3150)

Raddle B is covered with a cape. It is suspended from the back side of the castle with cords when beaming. The raddle height without cape is 10.5 cm (4  $\frac{1}{8}$ ") and with cape 13.5 cm (5  $\frac{3}{8}$ "). The distance between pins is 1 cm ( $\frac{3}{8}$ "). Available in weaving widths 80, 100, 120 and 150 cm (31  $\frac{1}{2}$ ", 39  $\frac{3}{8}$ ", 47  $\frac{1}{4}$ " and 59").



#### **METAL STRETCHERS**

Stretchers or temples are used for keeping the fabric edges straight. Metal stretchers are easy to adjust and because of the strength of steel, cover very little of your warp, resulting in fewer movements and more visibility. Our stretchers are made of steel and lengths range from 15 cm to 240 cm (5  $\frac{7}{8}$ " to 94  $\frac{1}{2}$ ").

Metal pin plates, plastic locking pieces and point protectors are available also separately in two sizes: small for stretchers with first size 15-90 cm (5  $\frac{7}{8}$ " - 35  $\frac{3}{8}$ ") and large for stretchers with first size 100-150 cm (39  $\frac{3}{8}$ " - 59").

Item #	Size (cm)	Colour	Size (inches)
3505	15 - 20 cm	yellow	5 1⁄8 - 7 1⁄8"
3520	20 - 27 cm	orange	7 7⁄8 - 10 5⁄8"
3525	25 - 32 cm	green	9 7⁄8 - 12 5⁄8"
3530	30 - 43 cm	red	11 ¾ - 16 ¾"
3540	40 - 60 cm	violet	15 ¾ - 23 ¾"
3550	50 - 70 cm	blue	<b>19</b> <sup>3</sup> ⁄ <sub>4</sub> - <b>27</b> <sup>1</sup> ⁄ <sub>2</sub> "
3560	60 - 95 cm	green	23 5% - 37 3%"
3570	70 - 105 cm	yellow	<b>27</b> ½ - <b>41</b> ¾"
3580	80 - 130 cm	orange	31 ½ - 51 ⅓"
3590	90 - 150 cm	red	35 ¾ - 59"
3510	100 - 160 cm	violet	<b>39</b> ¾ - 63"
3512	120 - 190 cm	blue	47 ¼ - 74 ¾"
3515	150 - 240 cm	green	<b>59</b> - <b>94</b> ½"





Parts are also available separately.

#### RUG SHUTTLES, WOODEN (1630-1670)

\* varnished, wooden rug shuttles



\* lengths 30, 40, 50, 60 and 70 cm (11 %", 15 ¾", 19 ¾", 23 %" and 27 ½")

#### **RUG SHUTTLE, PLASTIC (1654)**

\* plastic rug shuttle, length 55 cm (21 5%")

#### FLAT SHUTTLES (4620, 4625 & 4650)

\* lengths 20, 30 and 50 cm (7 %", 11 %" and 19 34")

#### BOAT SHUTTLES WITH ROLLERS

\* varnished shuttle with rollers (4632, 4638 and 4642)
\* lengths 32, 38 and 42 cm (12 5/8", 15" and 16 1/2")

#### **DOUBLE SHUTTLE (4644)**

\* varnished shuttle with rollers for two bobbins

\* length 40 cm (15 ¾")

#### FLY SHUTTLE (4652)

\* wooden shuttle with metal tips and rollers

\* length 37 cm (14 5%")

#### **POPPANA SHUTTLES**

\* varnished rug shuttle with disk (4640)

- \* varnished shuttle with disk and rollers (4630)
- \* length 40 cm (15 ¾")



#### BOAT SHUTTLES WITHOUT ROLLERS

- \* varnished shuttle without rollers (4622, 4628 and 4634)
- \* lengths S 22, M 28 and L 34 cm (8 5/8", 11" and 13 3/8")

#### YARN SHUTTLE (4633)

- \* varnished shuttle without rollers
- \* length 32 cm (12 5%")

#### DAMASK SHUTTLE (4635)

- \* low shuttle without rollers for small sheds
- \* length 32 cm (12 %")

#### QUILLS (1632 & 1652)

- \* made of cardboard, length 11.5 cm (4 1/2")
- \* 1632 quills for bobbin winder B with normal spindle (1418)
- \* 1652 quills for bobbin winder B2 with heavy spindle (1419)





#### WARPING MILLS (4720, 4730 & 4740)

- \* vertical floor model, varnished
- \* ball bearings ensure smooth rotation
- \* the boards holding the lease pegs can be locked into any position
- \* the wooden frame can be detached and folded to take little storage space
- \* the warping mill can also be dismantled to take even less storing space
- \* sturdy stand with adjustable legs and metal stays to ensure stability

Item #	Circumf.	Height	Weight
4720	2 m	120 cm	27 kg
4730	3 m	150 cm	35 kg
4740	4 m	180 cm	43 kg

Item #	Circumf.	Height	Weight
4720	<b>78</b> ¾"	47 ¼"	60 lbs
4730	118 ½"	59"	78 lbs
4740	157 ½"	70 7⁄8"	96 lbs

WARPING FRAME (4705)

\* size 90 x 90 cm (35 ¾" x 35 ¾")

\* 22 pegs



#### WARPING PEGS (4710)

- \* suitable for short and narrow warps
- \* clamps are included for mounting

#### WARPING PADDLE (4741)

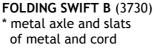
- \* solid wood, 24 holes
- \* warp multiple ends at once





FOLDING SWIFT A (3710) \* wooden axle and slats







FOLDING SWIFT C (3720) \* metal axle and

wooden slats



SWIFT STAND (4724) \* sturdy floor model

- \* holds four folding swifts
- \* height 170 cm (67")

### CONE HOLDER (1711)

#### \* for one cone \* adjustable

# cone ble



**UPRIGHT SWIFT** (4750)

- \* can hold two skeins simultaneously (two extra rollers required)
- \* height 140 cm (55 1/8")
- \* width 40 cm (15 ¾")
- \* weight 5 kg (11 lbs)
- \* width of rollers 24 cm (9 1/2")



#### SPOOL RACK (4714)

- \* sturdy floor model, varnished
- \* height 82 cm (32 1/4")
- \* width 45 cm (17 <sup>3</sup>/<sub>4</sub>")
- \* distance of rods 9.5 cm (3 <sup>3</sup>/<sub>4</sub>")
- \* spool space 16.5 cm (6 ½")
- \* holds 14 spools (1770)

**SPOOLS** (1770)

- \* length 15.5 cm (6 1/8")
- \* yarn space 11.5 cm (4 1/2")



## CONE STAND (4760)

- \* varnished, holds 10 cones
- \* distance of rods 15 cm (5 7/8")
- \* length 113 cm (44 ½"), height 122 cm (48") and depth 50 cm (19 %")
- \* its design ensures smooth unwinding of yarn from cones
- \* two guides for each yarn

### LINEN TIE-UP CORD (1831 & 1852)

- \* linen cord for the tie-up of a loom
- \* available in two sizes:
  1831 Number 4 (thicker), 100 g/ball (appr. 35 m)
  1852 Number 6 (thinner), 100 g/ball (appr. 50 m)

#### POLYESTER CORD SET (18500)

- \* holds a cone of 50 m (19 % ") polyester cord and 50 straight and 50 anchor pegs
- \* the pegs replace the knots in linen cords
- \* instructions are included in the package
- \* polyester cord and pegs are also available separately







#### READY CUT POLYESTER CORD SETS

The ready cut polyester cord sets include pre-cut pieces of cord, anchor pegs and instructions in colours.

- \* LIISA 4, 8 or 12 shafts, countermarch (1842-1844)
- \* EEVA 4, 8 or 12 shafts, countermarch (1846-1848)
- \* JAANA 4 or 8 shafts, countermarch (1840-1841)
- \* LAILA 4 or 8 shafts, countermarch (18494 & 18498)
- \* EEVA 4 shafts, counterbalance (1866)

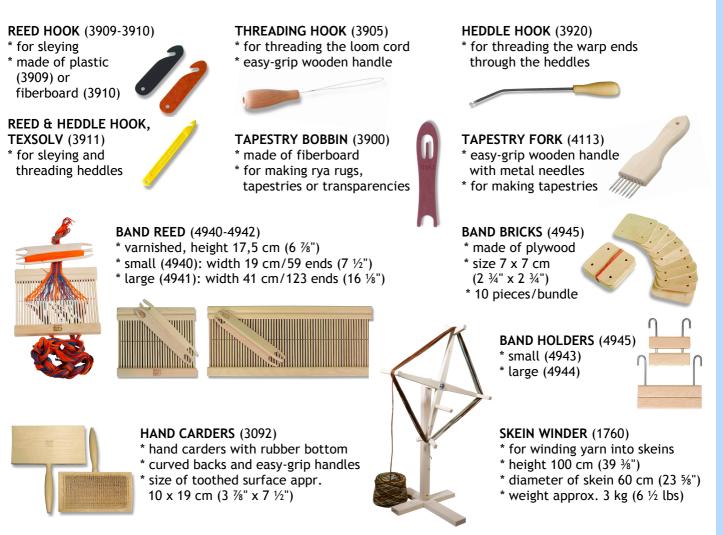
#### POLYESTER HEDDLES

- \* machine made, non-stretching and durable
- \* delivered in bundles of 100 pieces
- \* heddles (1815): 16 cm/1.2 cm (6 ¼", ½")
- \* heddles for Leena table loom (1820): 22 cm/1.2 cm (8  $\%",\,\%")$
- \* heddles for floor looms (1828): 28 cm/1.2 cm (11", 1/2")
- \* heddles for computer looms (1834): 33 cm/1.2 cm (13", 1/2")
- \* long-eyed heddles for draw looms (1833): 33 cm/6.4 cm (13", 2  $\frac{1}{2}$ ")
- \* pattern heddles for draw looms (1854): 54 cm/1.2 cm (21 ¼", ½")

HEDDLE BLOCK (1860) \* for making heddles of size 30 cm/2 cm (11<sup>3</sup>/<sub>4</sub>",<sup>3</sup>/<sub>4</sub>")







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#### LINEN YARN (100 % flax)

- \* available in sizes: 4/1 (413 tex), 6/1 (280 tex), 8/1 (206 tex) and 12/1 (137 tex)
- $^{\ast}$  available unbleached and  $\frac{1}{2}\text{-bleached},$  appr. 1 kg (cones)

#### LINEN TOW YARN (1910) \* 100 % flax tow 6/1 (280

\* 100 % flax tow, 6/1 (280 tex) \* wet-spun, 250 g/cone



- SEINE TWINE (100 % cotton)
- \* available in 6-ply (30x6 tex), 12-ply (30x12 tex), 15-ply (30x15 tex)
- \* unbleached, black and linen coloured available in 500 g/spool or 1.8 kg/cone
- \* 6-ply available in colours, 500 g/spool (1864)

#### **POPPANA** (1881)

- \* bias-cut cotton fabric
- \* 40-80 g/roll or 500 g/colour

### PAPER: CORD, YARN AND TAPE

- \* paper cord (0.8), 1140 tex, 200 g/175 m  $\,$
- \* thin paper yarn (1.65), 547 tex, 100 g/180 m
- \* paper tape (0.8, flat), 100 g/92 m

### JUTE

- \* thin jute yarn, 330x2 tex, 500 g/cone (1873)
- \* thick jute yarn, 280x8 tex, 500 g/cone (1874)

#### MERCERIZED COTTON

- \* 59x2 tex (10/2), 450 g/3813 m (1 lb/4200 yd), natural, white and black (1875)
- \* 118x2 tex (5/2), 450 g/1906 m, (1 lb/2100 yd)
- \* in colours (1896)

#### BAMBOO (1820)

- \* 100 % rayon from bamboo
- \* 118 x 2 tex (5/2)
- \* 450 g/1906 m (1 lb/2100 yd)

#### CHENILLE (1892)

- \* 100 % rayon, 342 tex
- \* 450 g/1315 m (1 lb/1450 yd)



#### TENCEL (100 % lyocell)

- \* 100 % lyocell
- \* 74x2 tex (8/2)
- \* 450 g/3040 m (1 lb/3360 yd)
- \* solid colours (1919)
- \* variegated colours (1920)

#### MERINO LUX (1805)

- \* 50 % merino/50 % tencel
- \* 89x2 tex (2/10)
- \* 250 g/1404 m (8.8 oz/1540 yd)









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#### SET FOR MAKING LACE(1608)

\* Set includes small pillow, 50 small bobbins & bag



#### HAND TUFTING TOOL (1625)

- \* Make tufted rugs, pillows and wall hangings easy and fast
- $^{\ast}$  the loop length can be adjusted



#### PILLOW FOR MAKING LACE (1617)

- \* traditional Finnish pillow
- \* with 17 cm roll (6 %")



#### TUFTING FRAMES

- \* small 50x50 cm (1627)
- \* large 70x70 cm (1634)
- \* nail lists also available separately



#### LACE BOBBINS (1611) \* 10 pc/bundle \* length 11 cm (4 ¾")

DEVICE FOR FILLING LACE BOBBINS (1612) \* used with bobbin wider B with normal spindle (1418)



MILK GLUE FOR TUFTING (1626) \* 250 ml bottle



