

84.47 - Knitting machines, stitch-bonding machines and machines for making gimped yarn, tulle, lace, embroidery, trimmings, braid or net and machines for tufting.

- Circular knitting machines :

8447.11 -- With cylinder diameter not exceeding 165 mm

8447.12 -- With cylinder diameter exceeding 165 mm

8447.20 - Flat knitting machines; stitch-bonding machines

8447.90 - Other

This heading covers all machinery for the production of fabrics or trimmings by knitting, stitch-bonding, gimping, braiding, netting, tufting, etc., or for embroidery work on any ground, whether using unspun rovings, textile (including peat fibre) yarns, other yarns (e.g., of metal, glass or asbestos) or wire.

(A) KNITTING MACHINES

These consist of two main groups :

- (1) **Circular machines** which produce either a straight tubular fabric or, by varying the size of the stitches in the rows, a shaped tubular piece (for stockings, socks, sleeves of garments, berets, fezes or similar knitted headgear, etc.).
- (2) **Flat machines** for producing flat fabric of even width or, by increasing or decreasing the number of stitches in the rows, flat but shaped pieces of fabric to be subsequently made up by sewing (e.g., into stockings or socks). Flat machines include machines for ordinary knitting (e.g., Cotton's frames) and warp knitting (Raschel, milanese, locknit, etc., looms). These machines range from the very simple type to large machines with many rows of needles, in some cases equipped with Jacquard or similar mechanisms to produce various designs.

This heading also covers small domestic knitting machines, and machines designed to knit just the few stitches necessary for repairing stockings. Machines for joining two pieces of knitted fabric by simply **sewing together** the loops forming the knitted edges are classified in heading 84.52.

(B) STITCH-BONDING MACHINES

This group includes all kinds of stitch-bonding machines which produce fabrics by a chain-stitching process. The following are included :

- (1) **Machines** incorporating a needle mechanism for attaching the "warp" yarns and the "weft" yarns by chain-stitching.
- (2) **Machines** for inserting loops of yarn in a fabric backing previously produced on a conventional weaving loom, and attaching them to the backing with knitting stitches.
- (3) **Knitting-sewing machines** operate by stitching seams in loose-fibre fabric already made by other machines (for example, cards and garnetting machines) and so produce a consolidated sheet of textile material used as filtering material, carpet underlay, insulating material, etc.

**(C) MACHINES FOR MAKING KNOTTED NET, TULLE,
LACE, BRAID, OR TRIMMINGS, FOR GIMPING YARNS,
FOR EMBROIDERY, FOR TUFTING, ETC.**

These include :

- (1) **Machines for making nets or netting** for any purpose, either in the piece or to the shape of finished articles (e.g., fishing nets).
- (2) **Machines for making plain tulle.**
- (3) **Machines for making figured tulle, lace, etc.**
- (4) **Machines for making bobinot tulle, bobinot curtains and bobinot mechanical lace**, which manufacture flat netting or flat net curtains, as well as mechanical (woven) lace from warp and weft strands. However, the warp and weft strands are not interlaced at right angles as in weaving, but are surrounded and tied, by the to and fro movement of a shuttle, by a large number of warp strands (bobbin threads) arranged on small bobbins.
- (5) **Embroidery machines**, including hand embroidery machines (embroidery machines with pantograph shuttles), which, by means of needles, embroider various designs with one or more threads on an existing ground of woven fabric or other material. Embroidery machines, other than manually operated, may be equipped with Jacquard or similar mechanisms. The heading also covers thread drawing machines which withdraw, and bind the remaining threads into open-work embroidery.

The heading **does not cover** chain or blanket stitch machines (mainly used to edge certain textile articles, but which can also do simple embroidery), nor sewing machines which can do simple embroidery work in addition to ordinary sewing (**heading 84.52**).

- (6) **Gimping machines**. These wrap one yarn in close spirals round a generally thicker core (e.g., of metal wire, rubber thread, unspun fibres, or of one or more coarser yarns). These machines can also be used to gimp fine electrical wiring.
- (7) **Machines for making various trimmings by interlacing**, in various complex ways, yarns or unspun rovings (sometimes gimped) of various textiles (braiding looms, hook looms, etc.).

The heading also covers machines for braiding a wire sheath on hose of rubber, plastics, etc., or for braiding tubular plaits from wire, **provided** they have the essential mechanical parts characteristic of the textile machines referred to in the preceding paragraph.

- (8) **Machines for covering buttons, tassel cores, etc., with textile threads.**
- (9) **Tufting machines**, for inserting loops or tufts of textile yarn in a fabric backing in order to produce carpets, mats or lightweight articles (bedspreads, bath robes, etc.).

PARTS AND ACCESSORIES

Subject to the general provisions regarding the classification of parts (see the General Explanatory Note to Section XVI), parts and accessories of the machines of this heading are classified in **heading 84.48**.