



ANNEX I

**INDEX OF PRODUCTS
(IOP)**



Chapter 1

Machinery For Spinning Preparation, Man-Made Fibre Production, Spinning, Auxiliary Machinery And Accessories

Product Code Product Description

1.1 Preparatory machinery for cotton spinning systems

- 1.1.1 Gins
- 1.1.2 Baling presses
- 1.1.3 Bale breakers, bale pluckers
- 1.1.4 Blow room machines
- 1.1.5 Blending machines
- 1.1.6 Foreign fibre/part separators
- 1.1.7 Automatic feeding devices for carding machines
- 1.1.8 Cards
- 1.1.9 Drawing machines
- 1.1.10 Lap winders
- 1.1.11 Combing machines
- 1.1.12 Roving frames
- 1.1.13 Waste reclamation lines, tearers
- 1.1.14 Other preparatory machinery for cotton spinning systems

1.2 Preparatory machinery for worsted, semi-worsted and or woollen spinning systems

- 1.2.1 Baling presses
- 1.2.2 Opening lines for raw wool
- 1.2.3 Raw wool scouring lines
- 1.2.4 Carbonising lines
- 1.2.5 Opening, cleaning and blending lines
- 1.2.6 Waste reclamation lines, tearers
- 1.2.7 Auto-feeders
- 1.2.8 Worsted cards
- 1.2.9 Semi-worsted cards
- 1.2.10 Woollen cards
- 1.2.11 Drawing machines
- 1.2.12 Combing machines
- 1.2.13 Back washing machines
- 1.2.14 Finishers
- 1.2.15 Roving frames for worsted yarn
- 1.2.16 Other preparatory machinery for worsted, semi-worsted and woollen spinning systems

1.3 Preparatory machinery for bast fibre spinning systems

- 1.3.1 Opening, cleaning and blending machines
- 1.3.2 Auto-feeders
- 1.3.3 Cards
- 1.3.4 Combing machines
- 1.3.5 Drawing machines
- 1.3.6 Roving frames
- 1.3.7 Other preparatory machinery for bast fibre spinning systems

1.4 Machinery for the production of reeling silk

- 1.4.1 Automatic silk reeling machine
- 1.4.2 Other silk reeling machine

1.5 Machinery for the production of man-made filaments and fibres and for filament treatment

- 1.5.1 Extruders
- 1.5.2 Spinning plant for the production of man-made filaments and fibres, including laboratory machines
- 1.5.3 Winding or take-up units
- 1.5.4 Draw-winders
- 1.5.5 Draw-twisters
- 1.5.6 Staple fibre cutting machines
- 1.5.7 Cutting converters
- 1.5.8 Stretch-breaking machines
- 1.5.9 Baling presses
- 1.5.10 Tape producing plants
- 1.5.11 Fibrillation lines
- 1.5.12 Other machinery for the production of man-made filaments and fibres and for filament treatment

1.6 Spinning machines

- 1.6.1 Ring-spinning machines for cotton spinning system
- 1.6.2 Ring-spinning machines for worsted spinning system
- 1.6.3 Ring-spinning machines for semi-worsted spinning system
- 1.6.4 Ring-spinning machines for woollen spinning system
- 1.6.5 Ring-spinning machines for bast-fibres spinning
- 1.6.6 Ring-spinning machines for compact spinning
- 1.6.7 Ring-spinning machines for direct spinning
- 1.6.8 Rotor spinning machines
- 1.6.9 Air jet spinning machines
- 1.6.10 Self-acting mules
- 1.6.11 Centrifugal spinning machines
- 1.6.12 Flyer spinning machines
- 1.6.13 Friction spinning machines
- 1.6.14 Self-twist spinning machines
- 1.6.15 Hollow spindle spinning machines
- 1.6.16 Fancy yarn spinning devices
- 1.6.17 Electrospinning machines
- 1.6.18 Other spinning machines

1.7 Automatic doffing, piecing and transport systems for spinning preparation and spinning machines and man-made fibre production (for equipment for texturing machines, see 2.6)

- 1.7.1 Automatic doffing machines and devices
- 1.7.2 Automatic piecing devices
- 1.7.3 Automatic transport systems between spinning preparatory and spinning machines
- 1.7.4 Other automatic doffing, piecing and transport systems for spinning preparation and spinning machines and man-made fibre production (for transport systems between spinning and winding, doubling and twisting machines, see 2.6.3)

1.8 Auxiliary machinery and devices for spinning preparation and spinning and man-made fibre production

- 1.8.1 Mounting machines for flexible card clothing and metallic card wire
- 1.8.2 Card grinding machines
- 1.8.3 Card cleaning machines
- 1.8.4 Cot grinding and covering machines

- 1.8.5 Sliver can coilers
- 1.8.6 Additional devices (e.g. humidifying, waxing, oiling)
- 1.8.7 Cleaning units for extrusion tools
- 1.8.8 Steamers, autoclaves and dryers for tows
- 1.8.9 Travelling cleaners for spinning machines
- 1.8.10 Bobbin strippers
- 1.8.11 Machinery for the treatment of pellets
- 1.8.12 Other auxiliary machinery and devices for spinning preparation and spinning and man-made fibre production

1.9 Accessories for spinning preparatory machinery

- 1.9.1 Spindles, parts, flyers
- 1.9.2 Steel pins
- 1.9.3 Needle rollers, bars and segments
- 1.9.4 Spiked lattices, lags
- 1.9.5 Flexible card clothing
- 1.9.6 Metallic card wires
- 1.9.7 Sliver cans, springs
- 1.9.8 Flat and conveyor belts
- 1.9.9 Pressure rollers, cots and aprons, condensers
- 1.9.10 Accessories for silk reeling machines
- 1.9.11 Online sensors and measuring devices
- 1.9.12 Other accessories for spinning preparatory machinery

1.10 Accessories for machinery for the production of man-made filaments and fibres and for filament treatment

- 1.10.1 Tubes
- 1.10.2 Filters for cleaning of polymers
- 1.10.3 Spinning, discharge and lubrication pumps
- 1.10.4 Spinnerets
- 1.10.5 Godets
- 1.10.6 Pressure rollers, cots and aprons, condensers
- 1.10.7 Online sensors and measuring devices
- 1.10.8 Other accessories for machinery for the production of man-made filaments and fibres and for filament treatment

1.11 Accessories for spinning machines

- 1.11.1 Spindles and parts
- 1.11.2 Rings for ring-spinning machines
- 1.11.3 Travellers, inserting and dismantling tools for travellers
- 1.11.4 Rotors and parts
- 1.11.5 Opening rollers for rotor spinning machines
- 1.11.6 Other accessories for rotor spinning machines
- 1.11.7 Accessories for compact spinning machines
- 1.11.8 Sliver cans, springs
- 1.11.9 Tubes
- 1.11.10 Drafting systems
- 1.11.11 Pressure rollers, cots and aprons, condensers
- 1.11.12 Spindle tapes and tangential belts
- 1.11.13 Yarn cleaners, knotters, splicers
- 1.11.14 Steel pins
- 1.11.15 Yarn brakes
- 1.11.16 Yarn thread guides
- 1.11.17 Flat and conveyor belts
- 1.11.18 Ceramic and porcelain accessories
- 1.11.19 Roller coverings
- 1.11.20 Leather accessories
- 1.11.21 Online sensors and measuring devices
- 1.11.22 Other accessories for spinning machines

1.12 Accessories for automatic doffing, piecing and transport systems for spinning preparation and spinning machines

- 1.12.1 Flat and conveyor belts
- 1.12.2 Other accessories for automatic doffing, piecing and transport systems for spinning preparation and spinning machines



Chapter 2

Machinery For Winding, Texturing, Twisting, Auxiliary Machinery And Accessories

2.1 Winding and reeling and covering machinery

- 2.1.1 Cone and cheese winders
- 2.1.2 Precision cone and cheese winders
- 2.1.3 Pirn winders
- 2.1.4 Winding machines for tubular cops
- 2.1.5 Winding machines for bottle bobbins
- 2.1.6 Sewing-thread winding machines
- 2.1.7 Winding machines for flanged bobbins
- 2.1.8 Reeling machines
- 2.1.9 Hank to cone winders
- 2.1.10 Balling winders
- 2.1.11 Card winding machines
- 2.1.12 Yarn singeing machines
- 2.1.13 Yarn raising machines
- 2.1.14 Covering machines
- 2.1.15 Rewinding machines
- 2.1.16 Other winding, reeling and covering machinery

2.2 Yarn steaming, setting, moistening and coating machinery

- 2.2.1 Autoclaves for steaming
- 2.2.2 Heat-setting machines
- 2.2.3 Moistening machines
- 2.2.4 Yarn coating machines
- 2.2.5 Other yarn steaming, setting and moistening machinery

2.3 Texturing, bulking and crimping machinery

- 2.3.1 False-twist texturing machines
- 2.3.2 Air texturing machines
- 2.3.3 Air intermingling machines
- 2.3.4 Bulking and crimping machines
- 2.3.5 Other texturing, bulking and crimping machinery

2.4 Doubling and twisting machinery for staple fibre and filament yarns

- 2.4.1 Doubling machines
- 2.4.2 Two-for-one twisters
- 2.4.3 Two-for-one twisters with heat treatment
- 2.4.4 Direct cabling machines
- 2.4.5 Up-twisters
- 2.4.6 Ring twisting frames
- 2.4.7 Ring doubling and twisting machines
- 2.4.8 Flyer twisting machines
- 2.4.9 Fancy twisters
- 2.4.10 Chenille yarn twisting machines
- 2.4.11 Other doubling and twisting machinery for staple fibre and filament yarns

2.5 Cordage and rope making machinery

- 2.5.1 Laying machines
- 2.5.2 Cabling and rope making machines
- 2.5.3 Other cordage and rope making machinery

2.6 Automatic doffing, piecing and transport systems for winding, texturing and twisting machines

- 2.6.1 Automatic doffing machines and devices
- 2.6.2 Automatic piecing devices
- 2.6.3 Automatic transport systems between spinning and winding, doubling and twisting machines
- 2.6.4 Other automatic doffing, piecing and transport systems for winding, texturing and twisting machines

2.7 Auxiliary machinery and devices for winding, texturing and twisting

- 2.7.1 Additional devices (e.g. humidifying, waxing, oiling, singeing, setting)
- 2.7.2 Bobbin strippers, tube cleaning machines
- 2.7.3 Other auxiliary machinery for winding, texturing and twisting

2.8 Accessories for winding, texturing and twisting machinery

- 2.8.1 Spindles and parts
- 2.8.2 Rings for ring-twisting
- 2.8.3 Travellers, inserting and dismantling tools for travellers
- 2.8.4 Tubes, cops
- 2.8.5 Spindle tapes and tangential belts
- 2.8.6 Yarn cleaners, knotters, splicers
- 2.8.7 Yarn break detectors
- 2.8.8 Yarn brakes
- 2.8.9 Yarn thread guides
- 2.8.10 Yarn warp sensors
- 2.8.11 Air texturing and interlacing jets
- 2.8.12 False-twist units and parts
- 2.8.13 Flat and conveyor belts
- 2.8.14 Ceramic and porcelain accessories
- 2.8.15 Pressure rollers, cots and aprons, condensers
- 2.8.16 Online sensors and measuring devices
- 2.8.17 Other accessories for winding, texturing and twisting machinery

2.9 Accessories for automatic doffing, piecing and transport systems for winding, texturing and twisting machines

- 2.9.1 Flat and conveyor belts
- 2.9.2 Other accessories for automatic doffing, piecing and transport systems for winding, texturing and twisting machines



Chapter 3

Machinery For Web Formation, Bonding And Finishing Of Nonwovens And Felting, Auxiliary Machinery And Accessories

3.1 Machinery for web formation

- 3.1.1 Bale breakers, bale pluckers
- 3.1.2 Opening, cleaning, blending and dosing machines

- 3.1.3 Feeding devices
- 3.1.4 Cards
- 3.1.5 Web laying machines
- 3.1.6 Machines for aerodynamic web formation
- 3.1.7 Machines for wet-laying of webs
- 3.1.8 Production lines for spunbonded and meltblown webs (for extruders, see 1.5.1)
- 3.1.9 Web drafting machines
- 3.1.10 Other machinery for web formation

3.2 Machinery for bonding and finishing of nonwovens

- 3.2.1 Needle felting machines
- 3.2.2 Spunlace machines
- 3.2.3 Chemical bonding machines
- 3.2.4 Thermal bonding machines
- 3.2.5 Ultrasound bonding machines
- 3.2.6 Felting machinery
- 3.2.7 Hat-making machinery
- 3.2.8 Dryers for nonwovens
- 3.2.9 Calenders
- 3.2.10 Coating machines
- 3.2.11 Combining and laminating machines
- 3.2.12 Wadding sizing/glueing machines
- 3.2.13 Puncturing machines
- 3.2.14 Other machinery for bonding and finishing of nonwovens (for winding devices, see 8.7.9; for cutting, rolling and folding machinery, see 8.6; for multiaxial warp knitting machines, stitch bonding machines, see 5.4.3; for converting machines, see 10.4.20)

3.3 Auxiliary machinery and devices for web formation, bonding and finishing of nonwovens and felting

- 3.3.1 Mounting machines for flexible card clothing and metallic card wire
- 3.3.2 Card grinding machines
- 3.3.3 Card cleaning machines
- 3.3.4 Transport devices for nonwovens production
- 3.3.5 Chemical dispensing systems
- 3.3.6 Other auxiliary machinery for web formation, bonding and finishing of nonwovens and felting

3.4 Accessories for machinery for web formation, bonding and finishing of nonwovens and felting

- 3.4.1 Spinnerets for spunbonded and meltblown webs
- 3.4.2 Flexible card clothing
- 3.4.3 Metallic card wires
- 3.4.4 Conveyor belts, cross lapper belts
- 3.4.5 Felting needles
- 3.4.6 Hydroentangling jets
- 3.4.7 Calender bowls and rollers
- 3.4.8 Roller coverings
- 3.4.9 Web inspection systems
- 3.4.10 Online sensors and measurement devices
- 3.4.11 Other accessories for machinery for web formation, bonding and finishing of nonwovens and felting (for filters for cleaning of polymers, see 1.10.2)



Chapter 4

Weaving Preparatory Machinery, Weaving, Tufting Machinery, Auxiliary Machinery And Accessories

4.1 Weaving preparatory machinery

- 4.1.1 Creels
- 4.1.2 Sectional warping machines
- 4.1.3 Beam warping machines
- 4.1.4 Draw-warping machines
- 4.1.5 Beaming machines
- 4.1.6 Sizing/slashing machines
- 4.1.7 Indigo warp dyeing lines
- 4.1.8 Leasing machines
- 4.1.9 Drawing-in machines
- 4.1.10 Warp-tying machines
- 4.1.11 Hand knotters and splicers
- 4.1.12 Other weaving preparatory machinery

4.2 Weaving machinery

- 4.2.1 Rapier weaving machines
- 4.2.2 Projectile weaving machines
- 4.2.3 Air jet weaving machines
- 4.2.4 Water jet weaving machines
- 4.2.5 Multiphase weaving machines
- 4.2.6 Shuttle looms
- 4.2.7 Circular weaving machines
- 4.2.8 Narrow fabrics weaving machines
- 4.2.9 Other weaving machines

4.3 Weaving machinery for special purposes

- 4.3.1 Weaving machines for heavy fabrics, for paper making felts and for wire filter fabrics
- 4.3.2 Weaving machines for tyre cord fabrics
- 4.3.3 Weaving machines for glass, aramid or carbon yarns
- 4.3.4 Weaving machines for leno fabrics
- 4.3.5 Weaving machines for plush and velvet
- 4.3.6 Weaving machines for terry fabrics
- 4.3.7 Weaving machines for carpet and rugs
- 4.3.8 Label weaving machines
- 4.3.9 Sample weaving machines
- 4.3.10 Other weaving machines for special purposes

4.4 Shedding machinery and shedding programming devices

- 4.4.1 Cam motions
- 4.4.2 Dobbies, mechanical
- 4.4.3 Dobbies, electronic
- 4.4.4 Jacquards, mechanical
- 4.4.5 Jacquards, electronic
- 4.4.6 Programming devices
- 4.4.7 Devices for woven name selvedge and false selvedge
- 4.4.8 Other shedding machinery and shedding programming devices

4.5 Tufting machinery

- 4.5.1 Tufting machines
- 4.5.2 Table models and hand tufters

- 4.5.3 Patterning devices for tufting machines
- 4.5.4 Other tufting machinery

4.6 Auxiliary machinery for weaving preparatory, weaving and tufting

- 4.6.1 Machines for cleaning reeds, healds and drop wires
- 4.6.2 Shuttle rectifying machines
- 4.6.3 Pirn strippers
- 4.6.4 Weft accumulators
- 4.6.5 Equipment for loom automation (for data monitoring and processing systems, see Chapter 15)
- 4.6.6 Separate cloth winding devices
- 4.6.7 Coating devices for direct use on weaving machines
- 4.6.8 Automatic exchange systems of warp and cloth beam and loom harness (quick style change)
- 4.6.9 Travelling cleaners for weaving machines
- 4.6.10 Transport devices for weaving preparatory and weaving
- 4.6.11 Other auxiliary machinery for weaving preparatory, weaving and tufting

4.7 Accessories for weaving preparatory, weaving and tufting machinery

- 4.7.1 Yarn brakes
- 4.7.2 Yarn thread guides
- 4.7.3 Ceramic and porcelain accessories
- 4.7.4 Healds
- 4.7.5 Reeds
- 4.7.6 Heald frames
- 4.7.7 Harnesses
- 4.7.8 Temples
- 4.7.9 Warp stop motions
- 4.7.10 Drop wires
- 4.7.11 Roller coverings
- 4.7.12 Leather accessories
- 4.7.13 Weft stop motions
- 4.7.14 Weft feelers
- 4.7.15 Cones, tubes and pirns for weaving
- 4.7.16 Pickers and lug straps
- 4.7.17 Rapier tapes, rapiers
- 4.7.18 Shuttles
- 4.7.19 Nozzles for weaving machines
- 4.7.20 Jacquard and dobby cards
- 4.7.21 Beams, beam flanges
- 4.7.22 Beams for narrow fabrics
- 4.7.23 Pick counters
- 4.7.24 Cutting devices for weaving machines
- 4.7.25 Tufting grippers, needles and cutters
- 4.7.26 Fabric inspection systems
- 4.7.27 Online sensors and measuring devices
- 4.7.28 Other accessories for weaving preparatory, weaving and tufting machinery



Chapter 5

Knitting And Hosiery Machinery, Auxiliary Machinery And Accessories

5.1 Preparatory machinery for knitting and hosiery

- 5.1.1 Creels
- 5.1.2 Beam warping machines
- 5.1.3 Sectional warping machines
- 5.1.4 Other preparatory machinery for knitting and hosiery

5.2 Circular knitting and hosiery machinery

- 5.2.1 Single cylinder knitting machines, over 165 mm cylinder diameter
- 5.2.2 Single cylinder electronic jacquard knitting machines, over 165 mm cylinder diameter
- 5.2.3 Double cylinder knitting machines, over 165 mm cylinder diameter
- 5.2.4 Double cylinder electronic jacquard knitting machines, over 165 mm cylinder diameter
- 5.2.5 Single cylinder knitting machines, up to 165 mm cylinder diameter
- 5.2.6 Double cylinder knitting machines, up to 165 mm cylinder diameter
- 5.2.7 Knitting machines for socks
- 5.2.8 Other circular knitting and hosiery machinery

5.3 Flat knitting machinery

- 5.3.1 Flat bed knitting machines
- 5.3.2 Straight-bar knitting machines (cotton looms)
- 5.3.3 Other flat bed knitting machinery

5.4 Warp knitting machines

- 5.4.1 Flat warp knitting machines
- 5.4.2 Raschel machines
- 5.4.3 Multiaxial warp knitting machines, stitch bonding machines
- 5.4.4 Crochet machines
- 5.4.5 Other warp knitting machinery

5.5 Knitting machines for special purposes

- 5.5.1 Knitting machines for seamless products
- 5.5.2 High pile circular knitting machines
- 5.5.3 Garment length knitting machines
- 5.5.4 Knitting machines for gloves

5.6 Auxiliary machinery for knitting and hosiery production

- 5.6.1 Yarn feeders
- 5.6.2 Unraveling machine
- 5.6.3 Electronic pattern preparing systems
- 5.6.4 Separate cloth winding devices
- 5.6.5 Travelling cleaners for knitting machines
- 5.6.6 Transport devices for knitting and hosiery production
- 5.6.7 Other auxiliary machinery for knitting and hosiery production

5.7 Accessories for knitting and hosiery machinery

- 5.7.1 Needles
- 5.7.2 Jacks
- 5.7.3 Knitting cylinders
- 5.7.4 Roller coverings
- 5.7.5 Sinkers
- 5.7.6 Sectional beams
- 5.7.7 Yarn thread guides
- 5.7.8 Ceramic and porcelain accessories
- 5.7.9 Yarn control devices
- 5.7.10 Needle control devices
- 5.7.11 Online sensors and measuring devices
- 5.7.12 Other accessories for knitting and hosiery machinery



Chapter 6

Embroidery Machinery, Auxiliary Machinery And Accessories

6.1 Embroidery machinery

- 6.1.1 Preparatory machinery for embroidery
- 6.1.2 Shuttle embroidery machines (single and multi head)
- 6.1.3 Embroidery machines and automatic units (single head)
- 6.1.4 Embroidery machines and automatic units (multi head)
- 6.1.5 Chenille embroidery machines
- 6.1.6 Other embroidery machinery

6.2 Auxiliary machinery for embroidery

- 6.2.1 Embroidery sequin devices
- 6.2.2 Embroidery laser devices
- 6.2.3 Other auxiliary embroidery machinery

6.3 Accessories for embroidery machinery

- 6.3.1 Yarn thread guides
- 6.3.2 Shuttles
- 6.3.3 Needles
- 6.3.4 Ceramic and porcelain accessories
- 6.3.5 Online sensors and measuring devices
- 6.3.6 Embroidery threads
- 6.3.7 Embroidery backing materials
- 6.3.8 Other accessories for embroidery machinery



Chapter 7

Braiding Machinery And Accessories

7.1 Braiding machinery

- 7.1.1 Preparatory and auxiliary machinery for braids and trimmings
- 7.1.2 Braiding machines
- 7.1.3 Machines for trimmings
- 7.1.4 Lace braiding machines
- 7.1.5 Fringing machines
- 7.1.6 Other braiding machinery

7.2 Accessories for braiding machinery

- 7.2.1 Yarn thread guides
- 7.2.2 Ceramic and porcelain accessories
- 7.2.3 Bobbins
- 7.2.4 Online sensors and measuring devices
- 7.2.5 Other accessories for braiding machinery



Chapter 8

Washing, Bleaching, Dyeing, Drying, Finishing, Cutting, Rolling And Folding Machinery, Auxiliary Machinery And Accessories

8.1 Dry and wet pre-treatment machinery

- 8.1.1 Carbonising machines
- 8.1.2 Singeing machines
- 8.1.3 Fabric cleaning machines, beating and dust removal machines
- 8.1.4 Crabbing machines, kiers, boiling apparatus
- 8.1.5 Desizing machines
- 8.1.6 Bleaching apparatus and machines, batch
- 8.1.7 Bleaching plant, continuous
- 8.1.8 Yarn washing machines
- 8.1.9 Rope washing machines
- 8.1.10 Open-width washing machines
- 8.1.11 Solvent washing machines
- 8.1.12 Milling/fulling machines
- 8.1.13 Mercerising machines for yarns
- 8.1.14 Mercerising machines for woven and knitted fabrics
- 8.1.15 Other dry and wet pre-treatment machinery (for padding and impregnating machines, see 8.5.31; for machines for plasma treatment, see 8.5.30)

8.2 Dyeing machines and apparatus

- 8.2.1 Continuous dyeing lines for tows and tops
- 8.2.2 Continuous dyeing lines for yarn
- 8.2.3 Continuous dyeing lines for warp
- 8.2.4 Continuous dyeing machines for narrow fabrics
- 8.2.5 Continuous dyeing machines for carpets
- 8.2.6 Continuous dyeing machines for other fabrics
- 8.2.7 Piece dyeing machines of terry towels and carpets
- 8.2.8 HT dyeing apparatus for cones
- 8.2.9 HT dyeing apparatus for beams
- 8.2.10 Yarn dyeing apparatus, atmospheric pressure
- 8.2.11 Padding mangles
- 8.2.12 Cabinet hank dyeing machines
- 8.2.13 Fabric dyeing apparatus, atmospheric pressure
- 8.2.14 Jet dyeing machines
- 8.2.15 HT overflow dyeing machines
- 8.2.16 Overflow dyeing machines, atmospheric pressure
- 8.2.17 Winch becks
- 8.2.18 Jiggers
- 8.2.19 Star-frame dyers
- 8.2.20 Random dyeing machines for fabrics
- 8.2.21 Centrifugal dyeing machines
- 8.2.22 Drum dyeing machines
- 8.2.23 Oval paddle dyeing machines
- 8.2.24 Sample dyeing equipment
- 8.2.25 Laboratory dyeing apparatus
- 8.2.26 Other dyeing machines and apparatus

8.3 Water extraction machines

- 8.3.1 Roller squeezers
- 8.3.2 Suction extractors
- 8.3.3 Centrifugal hydro-extractors
- 8.3.4 Other water extraction machines

8.4 Tentering and drying machines

- 8.4.1 Equalising machines
- 8.4.2 Tentering and stentering machines
- 8.4.3 Float dryers
- 8.4.4 Tensionless and conveyor dryers
- 8.4.5 Continuous tumblers
- 8.4.6 Loop dryers, festoon dryers
- 8.4.7 Loop steamers
- 8.4.8 Steam dryers
- 8.4.9 Hot flues
- 8.4.10 Post-printing dryers, drying lofts
- 8.4.11 Suction drum dryers, sieve drum dryers
- 8.4.12 Infrared dryers
- 8.4.13 Vertical dryers
- 8.4.14 Cylinder drying machines, drum drying machines
- 8.4.15 Felt calenders
- 8.4.16 Hank dryers
- 8.4.17 Package dryers
- 8.4.18 Tunnel dryers
- 8.4.19 Radio frequency dryers
- 8.4.20 Drying chambers, ovens
- 8.4.21 Vacuum dryers
- 8.4.22 Discontinuous tumblers
- 8.4.23 Other tentering and drying machines

8.5 Finishing machines

- 8.5.1 Damping machines
- 8.5.2 Agers, steaming machines and apparatus
- 8.5.3 Decatising machinery
- 8.5.4 Raising machines
- 8.5.5 Tigering machines
- 8.5.6 Polishing machines
- 8.5.7 Shearing machines
- 8.5.8 Cutting machines for velvets and velveteens
- 8.5.9 Suede finishing machines
- 8.5.10 Brushing machines
- 8.5.11 Waxing machines
- 8.5.12 Pile finishing machines
- 8.5.13 Finish breaking machines
- 8.5.14 Air jet finishing machines
- 8.5.15 Calenders
- 8.5.16 Singeing machines
- 8.5.17 Roller presses
- 8.5.18 Finishing presses
- 8.5.19 Knitwear ironing presses
- 8.5.20 Preboarding machines
- 8.5.21 Boarding machines for knitwear
- 8.5.22 Finishing machines for knitwear
- 8.5.23 Finishing machines for narrow fabrics
- 8.5.24 Pleating machines for the textile industry (for the garment making industry, see 10.6.6)
- 8.5.25 Carpet glueing machines
- 8.5.26 Shrinking machines (for shrinking machines for garments, see 10.3.1)
- 8.5.27 Polymerisers
- 8.5.28 Combining and laminating machines
- 8.5.29 Coating machines
- 8.5.30 Machines for plasma treatment
- 8.5.31 Padding and impregnating machines
- 8.5.32 Degreasing machines
- 8.5.33 Laser machines for special effects on broad fabrics (for the garment making industry, see 10.6.10)
- 8.5.34 Other finishing machines

8.6 Cutting, inspecting, measuring, rolling and folding machinery

- 8.6.1 Hot-cutting machines
- 8.6.2 Mechanical cutting machines
- 8.6.3 Laser cutting machines
- 8.6.4 Ultrasonic cutting machines
- 8.6.5 Inspecting machines (for inspecting machines for garments, see 10.3.4)
- 8.6.6 Measuring, rolling and folding machines for woven fabrics
- 8.6.7 Measuring, rolling and folding machines for knitted fabrics
- 8.6.8 Measuring, rolling and folding machines for nonwovens
- 8.6.9 Measuring, rolling and folding machines for narrow fabrics
- 8.6.10 Other cutting, inspecting, measuring, rolling and folding machinery

8.7 Auxiliary machinery for washing, bleaching, dyeing, drying, finishing, cutting, rolling and folding

- 8.7.1 Mixing machines for colours and finishing agents, colour straining and emulsifying
- 8.7.2 Dyeing colour kitchens
- 8.7.3 Colour and chemical dispensing systems
- 8.7.4 Grinding machines
- 8.7.5 Presses for bumps, tows and tops
- 8.7.6 Bag stitching and end-to-end sewing machines
- 8.7.7 Weft straighteners and other straightening devices
- 8.7.8 Rope detwisting, turning and slitting machines
- 8.7.9 Winding and plaiting devices
- 8.7.10 Transport devices for washing, bleaching, dyeing, drying, finishing, cutting, rolling and folding
- 8.7.11 Other auxiliary machinery for washing, bleaching, dyeing, drying, finishing, cutting, rolling and folding

8.8 Accessories for washing, bleaching, dyeing, drying, finishing, cutting, rolling and folding machinery

- 8.8.1 Shearing-blades and rollers
- 8.8.2 Dyeing spindles, dyeing tubes and cones
- 8.8.3 Dye beams
- 8.8.4 Pins, stenter clips and pin plates
- 8.8.5 Conveyor belts for dryers
- 8.8.6 Calender bowls
- 8.8.7 Flexible clothing for raising machines
- 8.8.8 Roller coverings
- 8.8.9 Stretching rollers
- 8.8.10 Expanders for fabrics in rope form
- 8.8.11 Fabrics guiding devices
- 8.8.12 Online sensors and measuring devices
- 8.8.13 Winding rollers
- 8.8.14 Decatising wrappers and blankets for finishing
- 8.8.15 Hosiery shapes
- 8.8.16 Temples
- 8.8.17 Other accessories for washing, bleaching, dyeing, drying, finishing, cutting, rolling and folding machinery



Chapter 9

Printing Machinery, Digital Printing, Auxiliary Machinery, Inks And Accessories

9.1 Printing machinery

- 9.1.1 Top and yarn printing machines
- 9.1.2 Roller printing machines
- 9.1.3 Flat screen printing machines
- 9.1.4 Rotary screen printing machines
- 9.1.5 Selvedge printing machines
- 9.1.6 Flock-printing machines
- 9.1.7 Other printing machinery

9.2 Digital printing machinery

- 9.2.1 Inkjet printers: UV inks
- 9.2.2 Inkjet printers: solvent inks
- 9.2.3 Inkjet printers: water-based inks
- 9.2.4 Inkjet printers: eco-solvent inks
- 9.2.5 Inkjet printers: latex inks
- 9.2.6 Inkjet printers: sublimation inks
- 9.2.7 Inkjet printers: pigment inks
- 9.2.8 Inkjet plotters
- 9.2.9 Other inkjet printing machinery

9.3 Auxiliary machinery for printing

- 9.3.1 Automated screen printing carriages
- 9.3.2 Transfer printing calenders
- 9.3.3 Auxiliary machinery for transfer printing
- 9.3.4 Transport devices for printing
- 9.3.5 Decal/labelling printers
- 9.3.6 Cleaning machines for screens
- 9.3.7 Colour kitchens for printing paste preparation
- 9.3.8 Patterning systems for flat screens
- 9.3.9 Roller engraving machines
- 9.3.10 Engraving systems for rotary screens
- 9.3.11 Other auxiliary machinery for printing

9.4 Accessories for printing machinery

- 9.4.1 Screens for printing
- 9.4.2 Papers for transfer printing
- 9.4.3 Printing rollers
- 9.4.4 Inkjet printing heads
- 9.4.5 Inkjet printing cartridges
- 9.4.6 Blankets for printing
- 9.4.7 Online sensors and measuring devices
- 9.4.8 Other accessories for printing

9.5 Inks

- 9.5.1 Screen printing inks
- 9.5.2 Digital printing inks



Chapter 10

Garment Making Machinery, Other Textile Processing Machinery, Auxiliary Machinery And Accessories

10.1 Software and systems for product planning, design and related automation technology for garment making

- 10.1.1 CAD computer aided design system
- 10.1.2 Pattern-making equipment and systems
- 10.1.3 Grading equipment and systems
- 10.1.4 Marker-making equipment and systems
- 10.1.5 CAM computer aided monitoring systems
- 10.1.6 Other software and systems for product planning, design and related automation technology for garment making

10.2 Equipment for product development

- 10.2.1 Plotters
- 10.2.2 Digitisers
- 10.2.3 Body forms and mannequins
- 10.2.4 3D body scanners
- 10.2.5 Other equipment for product development

10.3 Machinery for shrinking, fusing, cutting preparation, cutting and related automation technology

- 10.3.1 Shrinking machines for garments (for shrinking machines for fabrics, see 8.5.26)
- 10.3.2 Fusing equipment and machines
- 10.3.3 Fabric spreading, laying and unrolling machines
- 10.3.4 Fabric inspecting machines for garments (for inspecting machines for fabrics, see 8.6.5)
- 10.3.5 Automatic cutting systems
- 10.3.6 Hand operated cutting machines
- 10.3.7 Laser cutting machines
- 10.3.8 Die-cutting machines and press-cutting machines
- 10.3.9 Strip-cutting equipment and machines
- 10.3.10 Other cutting equipment and machines

10.4 Machinery for sewing, quilting, linking and converting

- 10.4.1 Sewing machines (chainstitch)
- 10.4.2 Sewing machines (lockstitch)
- 10.4.3 Sewing machines (overedge, cover and other multi-thread stitch types)
- 10.4.4 Automatic button-sewing machines
- 10.4.5 Automatic buttonhole machines
- 10.4.6 Automatic tacking machines (mechanically or CNC programme controlled)
- 10.4.7 Belt-making and button-covering machines
- 10.4.8 Blindstitching and felling machines
- 10.4.9 Domestic sewing machines
- 10.4.10 Machines for attaching press-studs, rivets, hooks and eyes
- 10.4.11 Automated sewing units
- 10.4.12 Sewing machines for decorative effects
- 10.4.13 Other sewing machinery
- 10.4.14 Sewing workstations and associated equipment
- 10.4.15 Ultrasonic seaming equipment
- 10.4.16 High frequency welding machines
- 10.4.17 Quilting and mattress machinery
- 10.4.18 Cushion machines and other filling machinery
- 10.4.19 Linking machines
- 10.4.20 Converting machines
- 10.4.21 Other machinery for sewing, quilting, linking and converting

10.5 Sewing supplies and consumables

- 10.5.1 Sewing thread
- 10.5.2 Buttons and fasteners
- 10.5.3 Interlinings (fusible, thermal, etc)
- 10.5.4 Trimming materials
- 10.5.5 Hangers
- 10.5.6 Transfers
- 10.5.7 Branding or care labels
- 10.5.8 RFID labels (for RFID and transponder systems, see 15.6.2)
- 10.5.9 Other consumables for garment manufacture

10.6 Machinery and equipment for product finishing

- 10.6.1 Label printing machinery
- 10.6.2 Transfer presses (including form presses, pressing accessories, pressing room system)
- 10.6.3 Ironing equipment (including iron stations)
- 10.6.4 Pressing machines
- 10.6.5 Steaming machines and cabinets
- 10.6.6 Pleating apparatus (for pleating machines for the textile industry, see 8.5.24)
- 10.6.7 Inkjet printing machines for garments and finished products (for inkjet printing machines for fabrics, see Chapter 9)
- 10.6.8 Screen printing machines for garments and finished products
- 10.6.9 Rhinestone attaching machines
- 10.6.10 Laser machines for special effects on garments (for laser machines for special effects on broad fabric, see 8.5.33)
- 10.6.11 Washing machines (including stone and enzyme washing machines)
- 10.6.12 Sand blasting machines
- 10.6.13 Other machinery for product finishing

10.7 Auxiliary machinery for the garment making industry

- 10.7.1 Serrated edge sample cutting machines
- 10.7.2 Folding machines for ready made textiles and garments
- 10.7.3 Hanging garment transportation systems
- 10.7.4 Rail systems for garment pieces
- 10.7.5 Trolleys for garment pieces
- 10.7.6 Other auxiliary machinery for the garment making industry

10.8 Accessories for machinery for the garment making industry

- 10.8.1 Sewing machine parts and accessories
- 10.8.2 Sewing needles
- 10.8.3 Cutting room accessories
- 10.8.4 Online sensors and measuring devices
- 10.8.5 Other accessories for machinery for the garment making industry



Chapter 11

Machinery For Textile Reinforcement Structures For Composites, Auxiliary Machinery And Accessories

(for nonwoven machines, see Chapter 3; for weaving machines, see 4.3.3; for flat knitting machines, see 5.3.1; for warp knitting machines, see 5.4.1 and 5.4.3; for braiding machines, see 7.1.2)

11.1	Machines for the production and treatment of special fibres (e.g. carbon, glass, aramid fibres; for other fibre producing machines, see Chapter 1)
11.2	Filament winding machines
11.3	Fibre spreading machines
11.4	Tape laying machines, Fibre placement lines
11.5	Coating and impregnation machines for prepreg production
11.6	Other machines for the production of reinforcement structures
11.7	Special testing equipment for textile reinforcement structures
11.8	Auxiliary machinery and accessories for machines for textile reinforcement structures



Chapter 12

Laboratory Testing And Measuring Equipment And Accessories

12.1	Devices for sample preparation
12.2	Testing devices for textile machinery parts (e.g. spinnerets, card clothing)
12.3	Textile testing and measuring equipment for fibres and yarns
12.4	Textile testing and measuring equipment for fabrics
12.5	Conditioning apparatus for laboratory
12.6	Hygroscopes
12.7	Colour measuring instruments
12.8	Equipment for textile chemistry
12.9	Accessories for laboratory testing and measuring equipment



Chapter 13

Transport, Handling, Logistics, Storing And Packing Equipment And Accessories

13.1	Transport and handling equipment and accessories (for tracking and tracing of products, see 15.6)
13.1.1	General automatic conveying and handling equipment for the textile industry (for robots, see 15.5.1; for specific transport equipment, see Chapters 1 to 10)
13.1.2	General hand conveying equipment (for specific transport equipment, see Chapters 1 to 10)
13.1.3	Accessories for transport and handling equipment
13.2	Warehouses and warehousing systems
13.2.1	Turnkey warehousing systems
13.2.2	Warehouses for bobbin pallets
13.2.3	Warehouses for fabric rolls
13.2.4	Warehouse handling equipment
13.2.5	Warehouse belt conveyors and sortation devices
13.2.6	Warehouse hanging garment conveyors and sortation devices
13.2.7	Racking, shelving, storage
13.2.8	Accessories for warehouses and warehousing systems

13.3 Equipment for packing, labelling and sample preparation and accessories

- 13.3.1 Handling, packing, labelling and marking machines for yarns and fabrics
- 13.3.2 Handling, packing, labelling and marking machines for the garment making industry
- 13.3.3 Machines for preparation of textile samples
- 13.3.4 Accessories for equipment for packing, labelling and sample preparation



Chapter 14

Equipment For Recycling, Waste Reduction And Pollution Prevention And Accessories

14.1 Equipment for textile recycling

- 14.1.1 Recycling of bottle flakes
- 14.1.2 Dryers of bottle flakes
- 14.1.3 Re-granulating equipment for tapes, fibres and nonwoven production waste
- 14.1.4 Textile sorting systems
- 14.1.5 Chemical recycling technology
- 14.1.6 Other recycling systems (for fibre and fabric reclamation lines, see 1.1.13 and 1.2.6)

14.2 Equipment for waste water treatment

14.3 Equipment for the separation of solid, fluid and gaseous substances from exhaust air and exhaust water

14.4 Heat recovery systems

14.5 Equipment for waste management

14.6 Other equipment for waste reduction and pollution prevention (for fibre and fabric reclamation lines, see 1.1.13 and 1.2.6)

14.7 Accessories for equipment for recycling, waste reduction and pollution prevention



Chapter 15

Software And Automation For Design, Data Monitoring, Processing And Integrated Production

15.1 Electronic design software and engineering systems (CAD, CAE)

- 15.1.1 Electronic systems for the spinning and winding industry
- 15.1.2 Electronic systems for the nonwovens industry
- 15.1.3 Electronic systems for the weaving industry
- 15.1.4 Electronic systems for the knitting industry
- 15.1.5 Electronic systems for the dyeing, printing and finishing industry
- 15.1.6 Electronic systems for laboratory testing and measuring
- 15.1.7 Electronic systems for the embroidery and braiding industry

15.2 Software and systems for data monitoring and processing (CAM, including controls)

- 15.2.1 Data monitoring and control systems for the spinning and winding industry
- 15.2.2 Data monitoring and control systems for the nonwovens industry
- 15.2.3 Data monitoring and control systems for the weaving industry
- 15.2.4 Data monitoring and control systems for the knitting industry
- 15.2.5 Data monitoring and control systems for the dyeing, printing and finishing industry
- 15.2.6 Data monitoring and control systems for laboratory testing and measuring
- 15.2.7 Data monitoring and control systems for the embroidery, braiding and garment making industry

15.3 Software systems for knowledge management, production management and supply chain management

- 15.3.1 Software for knowledge management
- 15.3.2 Software systems for Supply Chain Management (SCM) in textile networks
- 15.3.3 Software for Enterprise Resource Planning (ERP), Product Lifecycle Management (PLM) and Production Planning and Scheduling (PPS)
- 15.3.4 Warehouse and logistics management systems
- 15.3.5 Environmental management systems
- 15.3.6 Quality management systems

15.4 Digital platforms

- 15.4.1 Digital platforms and network solutions for textile and clothing production
- 15.4.2 Digital platforms for procurement of textile materials
- 15.4.3 B2C platforms for retail

15.5 Automation of production processes

- 15.5.1 Robots
- 15.5.2 Equipment for virtual reality and augmented reality
- 15.5.3 Other equipment for automation
- 15.5.4 Services for automation of production processes

15.6 Tracking and tracing of products

- 15.6.1 Electronic Article Numbering (EAN) systems, bar coding systems
- 15.6.2 Radio Frequency Identification (RFID) systems, transponder systems (for RFID labels for the garment industry, see 10.5.8)
- 15.6.3 Traceability services and platforms
- 15.6.4 Other systems for tracking and tracing of products



Chapter 16

Colourants And Chemical Auxiliaries For The Textile Industry

16.1 Colourants and chemical auxiliaries relating to the spinning and winding industry

- 16.1.1 Dyes and pigments relating to the spinning and winding industry
- 16.1.2 Masterbatches and other chemical auxiliaries relating to the spinning and winding industry

16.2 Colourants and chemical auxiliaries relating to the nonwovens industry

- 16.2.1 Dyes and pigments relating to the nonwovens industry
- 16.2.2 Masterbatches and other chemical auxiliaries relating to the nonwovens industry

16.3 Colourants and chemical auxiliaries relating to the weaving industry

- 16.3.1 Dyes and pigments relating to the weaving industry
- 16.3.2 Chemical auxiliaries relating to the weaving industry

16.4 Colourants and chemical auxiliaries relating to the knitting industry

- 16.4.1 Dyes and pigments relating to the knitting industry
- 16.4.2 Chemical auxiliaries relating to the knitting industry

16.5 Colourants and chemical auxiliaries relating to the dyeing and finishing industry

- 16.5.1 Dyes and pigments relating to the dyeing and finishing industry
- 16.5.2 Chemical auxiliaries relating to the dyeing and finishing industry

16.6 Colourants and chemical auxiliaries relating to the printing industry

- 16.6.1 Dyes and pigments relating to the printing industry
- 16.6.2 Chemical auxiliaries relating to the printing industry

16.7 Colourants and chemical auxiliaries relating to the embroidery, braiding and garment making industry

- 16.7.1 Dyes and pigments relating to the embroidery, braiding and garment making industry
- 16.7.2 Chemical auxiliaries relating to the embroidery, braiding and garment making industry



Chapter 17

Equipment And Products To Ensure Machinery And Plant Operations

- 17.1 Antistatic equipment
- 17.2 Lubricating equipment, including mixers and lubricants/oils
- 17.3 Power transmission equipment: electrical motors and drives
- 17.4 Air conditioning plants
- 17.5 Air humidifiers
- 17.6 Air compressors
- 17.7 Steam generators
- 17.8 Specialised lighting and lighting fixtures
- 17.9 Safety equipment to protect workers [e.g. work clothes, ear protectors, safety devices]
- 17.10 Other equipment and products to ensure machinery and plant operations



Chapter 18

Services For The Textile, Garment Making And Other Textile Processing Industry

18.1 Technical information sources

- 18.1.1 Technical publications (including online publications)

18.2 Other related services

- 18.2.1 Creative services for palette development, fabric and garment design
- 18.2.2 Textile and garment logistics
- 18.2.3 Pre-retail services
- 18.2.4 Industrial plant planning
- 18.2.5 Textile recycling companies (for recycling equipment, see Chapter 14)
- 18.2.6 Testing and verification services
- 18.2.7 Textile industry consultants
- 18.2.8 Leasing and financing services



Chapter 19

Research And Innovation

19.1	Universities, colleges and other educational institutions for the textile industry
19.2	Research institutions for textiles, technical textiles and garments
19.3	Research institutions for environmental studies
19.4	Standardisation organisations
19.5	Councils for the environment
19.6	Network of textile research organisations



Chapter 20

Fibres, Yarns And Fabrics

20.1 Natural fibres: animal fibres

20.1.1	Wool
20.1.2	Silk
20.1.3	Cashmere
20.1.4	Mohair
20.1.5	Alpaca
20.1.6	Other animal fibres

20.2 Natural fibres: plant fibres

20.2.1	Cotton
20.2.2	Flax
20.2.3	Hemp
20.2.4	Jute
20.2.5	Organic fibres
20.2.6	Other plant fibres

20.3 Man-made fibres

20.3.1	Acrylic fibres
20.3.2	Polyester fibres
20.3.3	Polyamide fibres
20.3.4	Polypropylene fibres
20.3.5	Polyethylene fibres
20.3.6	Elastane fibres
20.3.7	Aramid fibres
20.3.8	Carbon fibres
20.3.9	Glass fibres
20.3.10	Nanofibres
20.3.11	Regenerated cellulosic fibres
20.3.12	Other specialty fibres

20.4 Technical fibres

20.4.1	Construction and civil engineering industry
20.4.2	Agricultural industry
20.4.3	Transportation industry
20.4.4	Medical industry
20.4.5	Sports industry
20.4.6	Military and personal protection industry
20.4.7	Other technical fibres

20.5 Natural yarns: animal fibres

- 20.5.1 Wool yarns
- 20.5.2 Silk yarns
- 20.5.3 Cashmere yarns
- 20.5.4 Mohair yarns
- 20.5.5 Alpaca yarns
- 20.5.6 Yarns from other animal fibres
- 20.5.7 Blended yarns

20.6 Natural yarns: plant fibres

- 20.6.1 Cotton yarns
- 20.6.2 Linen yarns
- 20.6.3 Hemp yarns
- 20.6.4 Jute yarns
- 20.6.5 Yarns from other plant fibres
- 20.6.6 Blended yarns
- 20.6.7 Organic yarns

20.7 Synthetic yarns

- 20.7.1 Acrylic yarns
- 20.7.2 Polyester yarns
- 20.7.3 Polyamide yarns
- 20.7.4 Polypropylene yarns
- 20.7.5 Polyethylene yarns
- 20.7.6 Elastane blended yarns
- 20.7.7 Other blended synthetic yarns
- 20.7.8 Regenerated cellulosic yarns
- 20.7.9 Specialty industrial yarns
- 20.7.10 Other specialty yarns

20.8 Technical yarns

- 20.8.1 Construction industry and civil engineering industry
- 20.8.2 Agricultural industry
- 20.8.3 Transportation industry
- 20.8.4 Medical industry
- 20.8.5 Sports industry
- 20.8.6 Military and personal protection industry
- 20.8.7 Other technical yarns

20.9 Recycled fibres and yarns

- 20.9.1 Recycled animal fibres
- 20.9.2 Recycled plant fibres
- 20.9.3 Recycled synthetic fibres
- 20.9.4 Yarns from recycled animal fibres
- 20.9.5 Yarns from recycled plant fibres
- 20.9.6 Recycled synthetic yarns

20.10 Fabrics

- 20.10.1 Woven fabrics
- 20.10.2 Nonwoven fabrics
- 20.10.3 Knitted fabrics