

SECTION D — TEXTILES; PAPER

D02 YARNS; MECHANICAL FINISHING OF YARNS OR ROPES; WARPING OR BEAMING

Note(s) [2014.01]

In this class, the following terms are used with the meanings indicated:

- "fibre" means a relatively-short, elongated member of natural or man-made material;
- "filament" means an endless or quasi-endless, elongated member of natural or man-made material;
- "yarn" means a unitary assembly of fibres, usually produced by spinning;
- "thread" means an assembly of yarns or filaments, usually produced by twisting;
- "synthetic" fibres or filaments means fibres or filaments or the like manufactured from synthesising polymers or small molecules. Examples are polyamide, acrylic, polyester or carbon fibres;
- "artificial" fibres or filaments means fibres or filaments or the like manufactured by man from natural polymers or their derivatives. Examples are regenerated cellulosic fibres or semi-synthetic fibres;
- "man-made" fibres or filaments means fibres or filaments which are manufactured by man including "synthetic" or "artificial" fibres.

D02G CRIMPING OR CURLING FIBRES, FILAMENTS, YARNS, OR THREADS; YARNS OR THREADS

Note(s)

Attention is drawn to the Note following the title of class D02.

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|------|--|------|---|
| 1/00 | Producing crimped or curled fibres, filaments, yarns or threads, giving them latent characteristics (yarns <i>per se</i> D02G 3/00; during formation of man-made filaments, threads or the like D01D 5/22; general aspects of chemical treatment D06M) [1, 2006.01] | 3/10 | • • Yarns or threads formed from collagenous materials, e.g. catgut [1, 2006.01] |
| 1/02 | • by twisting, fixing the twist and backtwisting, i.e. by imparting false twist [1, 2006.01] | 3/12 | • • Threads containing metallic filaments or strips [1, 2006.01] |
| 1/04 | • • Devices for imparting false twist [1, 2006.01] | 3/14 | • • Horse-hair threads [1, 2006.01] |
| 1/06 | • • • Spindles [1, 2006.01] | 3/16 | • • Yarns or threads made from mineral substances [1, 2006.01] |
| 1/08 | • • • Rollers [1, 2006.01] | 3/18 | • • • from glass or the like [1, 2006.01] |
| 1/10 | • using knife edges, e.g. heated knife edges, for edge crimping [1, 2006.01] | 3/20 | • • • from asbestos [1, 2006.01] |
| 1/12 | • using stuffer boxes [1, 2006.01] | 3/22 | • Yarns or threads characterised by constructional features [1, 2006.01] |
| 1/14 | • using grooved rollers or gear-wheel-type members [1, 2006.01] | 3/24 | • • Bulked yarns or threads, e.g. formed from staple fibre components with different relaxation characteristics [1, 2006.01] |
| 1/16 | • using jets or streams of turbulent gases, e.g. air, steam [1, 2006.01] | 3/26 | • • with characteristics dependent on the amount or direction of twist [1, 2006.01] |
| 1/18 | • by combining fibres, filaments, or yarns, having different shrinkage characteristics [1, 2006.01] | 3/28 | • • • Doubled, plied, or cabled threads [1, 2006.01] |
| 1/20 | • Combinations of two or more of the above-mentioned operations or devices; After-treatments for fixing crimp or curl [1, 2006.01] | 3/30 | • • • Crêped or other highly-twisted yarns or threads [1, 2006.01] |
| 3/00 | Yarns or threads, e.g. fancy yarns; Processes or apparatus for the production thereof, not otherwise provided for (for producing crimped or curled yarns D02G 1/00) [1, 2006.01] | 3/32 | • • Elastic yarns or threads [1, 2006.01] |
| 3/02 | • Yarns or threads characterised by the material or by the materials from which they are made [1, 2006.01] | 3/34 | • • Yarns or threads having slubs, knops, spirals, loops, tufts, or other irregular or decorative effects, i.e. effect yarns [1, 2006.01] |
| 3/04 | • • Blended or other yarns or threads containing components made from different materials [1, 2006.01] | 3/36 | • • Cored or coated yarns or threads (elastic yarns or threads D02G 3/32) [1, 2006.01] |
| 3/06 | • • Threads formed from strip material other than paper [1, 2006.01] | 3/38 | • • Threads in which fibres, filaments, or yarns are wound with other yarns or filaments (covering endless core threads with fibres by using open-end spinning techniques D01H 4/00) [1, 2006.01] |
| 3/08 | • • Paper yarns or threads [1, 2006.01] | 3/40 | • • Yarns in which fibres are united by adhesives; Impregnated yarns or threads [1, 2006.01] |
| | | 3/42 | • • Chenille threads [1, 2006.01] |
| | | 3/44 | • Yarns or threads characterised by the purpose for which they are designed [1, 2006.01] |
| | | 3/46 | • • Sewing-cottons or the like [1, 2006.01] |

D02G

3/48 • • Tyre cords [1, 2006.01]

D02H WARPING, BEAMING, OR LEASING

Note(s)

Attention is drawn to the Note following the title of class D02.

Subclass index

CREELS..... 1/00
WARPING; BEAMING; WARPING AND BEAMING COMBINED..... 3/00, 5/00, 7/00
LEASING..... 9/00
OTHER MACHINES AND METHODS..... 11/00
DETAILS OF MACHINES..... 13/00

1/00	Creels, i.e. apparatus for supplying a multiplicity of individual threads [1, 2006.01]	13/06	• • • mechanical [1, 2006.01]
		13/08	• • • electrical [1, 2006.01]
3/00	Warping machines [1, 2006.01]	13/10	• • responsive to thread-measuring devices, e.g. stopping the machine when required length of warp has been wound [1, 2006.01]
5/00	Beaming machines [1, 2006.01]	13/12	• Variable-speed driving mechanisms [1, 2006.01]
5/02	• combined with apparatus for sizing or other treatment of warps (sizing <u>per se</u> D06B) [1, 2006.01]	13/14	• • controlled automatically by tension in the warp [1, 2006.01]
7/00	Combined warping and beaming machines [1, 2006.01]	13/16	• Reeds, combs, or other devices for determining the spacing of threads [1, 2006.01]
9/00	Leasing [1, 2006.01]	13/18	• • with adjustable spacing [1, 2006.01]
9/02	• Lease rods or bands [1, 2006.01]	13/20	• • with fixed spacing [1, 2006.01]
11/00	Methods or apparatus not provided for in groups D02H 1/00-D02H 9/00, e.g. for cleaning the warp [1, 2006.01]	13/22	• Tensioning devices [1, 2006.01]
		13/24	• • for individual threads [1, 2006.01]
		13/26	• • for threads in warp form (controlling the driving of beams, or the like, to keep tension constant D02H 13/14) [1, 2006.01]
13/00	Details of machines of the other groups of this subclass [1, 2006.01]	13/28	• Warp beams (cloth beams D03D 49/20) [1, 2006.01]
13/02	• Stop motions [1, 2006.01]	13/30	• • with flanges [1, 2006.01]
13/04	• • responsive to breakage, slackness, or excessive tension of threads, with detectors for individual threads or small groups of threads [1, 2006.01]	13/32	• • • adjustable [1, 2006.01]
		13/34	• • sectional [1, 2006.01]
		13/36	• • Means for attaching warp to beam [1, 2006.01]
		13/38	• Storage racks for beams [1, 2006.01]

D02J FINISHING OR DRESSING OF FILAMENTS, YARNS, THREADS, CORDS, ROPES, OR THE LIKE (curling or crimping D02G; by treatment with liquids, gases or vapours D06B; finishing other than by liquid treatment, of yarns in warp or sheet form D06C; for chemical matters, see D06L, D06M, D06P, D06Q; treatment during rope-making, apparatus for treating ropes auxiliary to rope-making D07B)

Note(s)

Attention is drawn to the Note following the title of class D02.

Subclass index

MODIFYING THE STRUCTURE, FORM, OR SURFACE..... 1/00, 3/00
REMOVING UNDESIRABLE BODIES..... 7/00
COMBINATIONS OF ABOVE PROCESSES NOT COVERED BY ONE SINGLE GROUP..... 11/00
HEATING OR COOLING OPERATIONS NOT SPECIFIC TO ONE OF THE ABOVE PROCESSES..... 13/00

1/00	Modifying the structure or properties resulting from a particular structure; Modifying, retaining, or restoring the physical form or cross-sectional shape,	e.g. by use of dies or squeeze rollers (modifying only the surface D02J 3/00) [1, 2006.01]	
		1/02	• Bulking, e.g. looping (by crimping, by curling D02G) [1, 2006.01]

- 1/04 • Compacting [1, 2006.01]
- 1/06 • Imparting irregularity, e.g. slubbing or other non-uniform features, e.g. high- and low-shrinkage or strengthened and weakened sections [1, 2006.01]
- 1/08 • Interlacing constituent filaments without breakage thereof, e.g. by use of turbulent air streams [1, 2006.01]
- 1/12 • Modifying stretch/bulk properties of textured yarns or the like by after-treatment [1, 2006.01]
- 1/14 • Rendering uniform or evening non-uniform features [1, 2006.01]
- 1/16 • Rubbing or similar working, e.g. to redistribute or remove fibres [1, 2006.01]
- 1/18 • Separating or spreading [1, 2006.01]
- 1/20 • Stressing or stress-relieving, e.g. by vibration or subjection to electrostatic stress or electric discharge [1, 2006.01]
- 1/22 • Stretching or tensioning, shrinking or relaxing, e.g. by use of overfeed and underfeed apparatus, or preventing stretch (stretch spinning D01D 5/12) [1, 2006.01]
- 3/00 Modifying the surface [1, 2006.01]**
- 3/02 • by abrading, scraping, scuffing, cutting, or nicking (preliminary roughening of fibres, e.g. for spinning, D01G 3/00) [1, 2006.01]
- 3/04 • by brushing [1, 2006.01]
- 3/06 • by polishing, e.g. glazing, glossing [1, 2006.01]
- 3/08 • • by compressing, e.g. by calendering or ironing [1, 2006.01]
- 3/10 • by indenting [1, 2006.01]
- 3/12 • by removing projecting ends of fibres [1, 2006.01]
- 3/14 • • by shearing [1, 2006.01]
- 3/16 • • by singeing [1, 2006.01]
- 3/18 • Treating with particulate, semi-solid, or solid substances, e.g. wax (during package formation B65H 71/00; waxing yarns or the like as incidental measures during spinning or twisting D01H 13/30) [1, 2006.01]
- 7/00 Cleaning, e.g. removing dust, loose fibres, charred ends** (in combination with the shearing, singeing, or otherwise removing of projecting fibre ends D02J 3/12, D02J 3/14, D02J 3/16) [1, 2006.01]
- 11/00 Combinations, not covered by any one of groups D02J 1/00-D02J 7/00, of processes provided for in such groups; Plant for carrying-out such combinations of processes [1, 2006.01]**
- 13/00 Heating or cooling the yarn, thread, cord, rope, or the like, not specific to any one of the processes provided for in this subclass** (heating, cooling, or drying during spinning or twisting D01H; drying of yarns, or the like, in general F26B) [1, 2006.01]