

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

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

- “fibre” means a relatively-short, elongated member of natural or artificial material;
- “filament” means an endless or quasi-endless, elongated member of natural or artificial material;
- “yarn” means a unitary assembly of fibres, usually produced by spinning;
- “thread” means an assembly of yarns or filaments, usually produced by twisting.

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

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

<p>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 artificial filaments, threads, or the like D01D 5/22; general aspects of chemical treatment D06M)</p> <p>1/02 . by twisting, fixing the twist and backtwisting, i.e. by imparting false twist</p> <p>1/04 . . Devices for imparting false twist</p> <p>1/06 . . . Spindles</p> <p>1/08 . . . Rollers</p> <p>1/10 . using knife edges, e.g. heated knife edges, for edge crimping</p> <p>1/12 . using stuffer boxes</p> <p>1/14 . using grooved rollers or gear-wheel-type members</p> <p>1/16 . using jets or streams of turbulent gases, e.g. air, steam</p> <p>1/18 . by combining fibres, filaments, or yarns, having different shrinkage characteristics</p> <p>1/20 . Combinations of two or more of the above-mentioned operations or devices; After-treatments for fixing crimp or curl</p> <p>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)</p> <p>3/02 . Yarns or threads characterised by the material or by the materials from which they are made</p> <p>3/04 . . Blended or other yarns or threads containing components made from different materials</p> <p>3/06 . . Threads formed from strip material other than paper</p> <p>3/08 . . Paper yarns or threads</p>	<p>3/10 . . Yarns or threads formed from collagenous materials, e.g. catgut</p> <p>3/12 . . Threads containing metallic filaments or strips</p> <p>3/14 . . Horse-hair threads</p> <p>3/16 . . Yarns or threads made from mineral substances</p> <p>3/18 . . . from glass or the like</p> <p>3/20 . . . from asbestos</p> <p>3/22 . Yarns or threads characterised by constructional features</p> <p>3/24 . . Bulked yarns or threads, e.g. formed from staple fibre components with different relaxation characteristics</p> <p>3/26 . . with characteristics dependent on the amount or direction of twist</p> <p>3/28 . . . Doubled, plied, or cabled threads</p> <p>3/30 . . . Crêped or other highly-twisted yarns or threads</p> <p>3/32 . . Elastic yarns or threads</p> <p>3/34 . . Yarns or threads having slubs, knops, spirals, loops, tufts, or other irregular or decorative effects, i.e. effect yarns</p> <p>3/36 . . Cored or coated yarns or threads (elastic yarns or threads D02G 3/32)</p> <p>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)</p> <p>3/40 . . Yarns in which fibres are united by adhesives; Impregnated yarns or threads</p> <p>3/42 . . Chenille threads</p> <p>3/44 . Yarns or threads characterised by the purpose for which they are designed</p> <p>3/46 . . Sewing-cottons or the like</p> <p>3/48 . . Tyre cords</p>
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D02H WARPING, BEAMING, OR LEASING

Note

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

Subclass Index

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

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

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

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

Subclass Index

MODIFYING THE STRUCTURE, FORM, OR SURFACE	1/00, 3/00	COMBINATIONS OF ABOVE PROCESSES NOT COVERED BY ONE SINGLE GROUP	11/00
REMOVING UNDESIRABLE BODIES	7/00	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)	1/06	. Imparting irregularity, e.g. slubbing or other non-uniform features, e.g. high- and low-shrinkage or strengthened and weakened sections
1/02	. Bulking, e.g. looping (by crimping, by curling D02G)	1/08	. Interlacing constituent filaments without breakage thereof, e.g. by use of turbulent air streams
1/04	. Compacting	1/12	. Modifying stretch/bulk properties of textured yarns or the like by after-treatment
		1/14	. Rendering uniform or evening non-uniform features

- 1/16 . Rubbing or similar working, e.g. to redistribute or remove fibres
- 1/18 . Separating or spreading
- 1/20 . Stressing or stress-relieving, e.g. by vibration or subjection to electrostatic stress or electric discharge
- 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)
- 3/00 Modifying the surface**
- 3/02 . by abrading, scraping, scuffing, cutting, or nicking (preliminary roughening of fibres, e.g. for spinning, D01G 3/00)
- 3/04 . by brushing
- 3/06 . by polishing, e.g. glazing, glossing
- 3/08 . . by compressing, e.g. by calendaring or ironing
- 3/10 . by indenting
- 3/12 . by removing projecting ends of fibres
- 3/14 . . by shearing
- 3/16 . . by singeing
- 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)
- 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)
- 11/00 Combinations, not covered by any one of groups D02J 1/00 to D02J 7/00, of processes provided for in such groups; Plant for carrying-out such combinations of processes**
- 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)