

**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.

<b>1/00</b>	<b>Producing crimped or curled fibres, filaments, yarns, or threads, giving them latent characteristics</b> (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)	<b>3/10</b>	. . Yarns or threads formed from collagenous materials, e.g. catgut
		3/12	. . Threads containing metallic filaments or strips
		3/14	. . Horse-hair threads
1/02	. by twisting, fixing the twist and backtwisting, i.e. by imparting false twist	3/16	. . Yarns or threads made from mineral substances
1/04	. . Devices for imparting false twist	3/18	. . . from glass or the like
1/06	. . . Spindles	3/20	. . . from asbestos
1/08	. . . Rollers	3/22	. Yarns or threads characterised by constructional features
1/10	. using knife edges, e.g. heated knife edges, for edge crimping	3/24	. . Bulkied yarns or threads, e.g. formed from staple fibre components with different relaxation characteristics
1/12	. using stuffer boxes	3/26	. . with characteristics dependent on the amount or direction of twist
1/14	. using grooved rollers or gear-wheel-type members	3/28	. . . Doubled, plied, or cabled threads
1/16	. using jets or streams of turbulent gases, e.g. air, steam	3/30	. . . Crêped or other highly-twisted yarns or threads
1/18	. by combining fibres, filaments, or yarns, having different shrinkage characteristics	3/32	. . Elastic yarns or threads
1/20	. Combinations of two or more of the above-mentioned operations or devices; After-treatments for fixing crimp or curl	3/34	. . Yarns or threads having slubs, knops, spirals, loops, tufts, or other irregular or decorative effects, i.e. effect yarns
<b>3/00</b>	<b>Yarns or threads, e.g. fancy yarns; Processes or apparatus for the production thereof, not otherwise provided for</b> (for producing crimped or curled yarns D02G 1/00)	3/36	. . Cored or coated yarns or threads (elastic yarns or threads D02G 3/32)
3/02	. Yarns or threads characterised by the material or by the materials from which they are made	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)
3/04	. . Blended or other yarns or threads containing components made from different materials	3/40	. . Yarns in which fibres are united by adhesives; Impregnated yarns or threads
3/06	. . Threads formed from strip material other than paper	3/42	. . Chenille threads
3/08	. . Paper yarns or threads	3/44	. Yarns or threads characterised by the purpose for which they are designed
		3/46	. . Sewing-cottons or the like
		3/48	. . Tyre cords

**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		OTHER MACHINES AND METHODS.....	11/00
BEAMING COMBINED .....	3/00; 5/00; 7/00	DETAILS OF MACHINES .....	13/00

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

<b>1/00</b>	<b>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)</b>	<b>1/06</b>	. Imparting irregularity, e.g. slubbing or other non-uniform features, e.g. high- and low-shrinkage or strengthened and weakened sections
		<b>1/08</b>	. Interlacing constituent filaments without breakage thereof, e.g. by use of turbulent air streams
<b>1/02</b>	. Bulking, e.g. looping (by crimping, by curling D02G)	<b>1/12</b>	. Modifying stretch/bulk properties of textured yarns or the like by after-treatment
<b>1/04</b>	. Compacting	<b>1/14</b>	. Rendering uniform or evening non-uniform features

1/16	• Rubbing or similar working, e.g. to redistribute or remove fibres	3/16	• . . by singeing
1/18	• Separating or spreading	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)
1/20	• 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)	7/00	<b>Cleaning, e.g. removing dust, loose fibres, charred ends</b> (in combination with the shearing, singeing, or otherwise removing of projecting fibre ends D02J 3/12, D02J 3/14, D02J 3/16)
3/00	<b>Modifying the surface</b>	11/00	<b>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</b>
3/02	• by abrading, scraping, scuffing, cutting, or nicking (preliminary roughening of fibres, e.g. for spinning, D01G 3/00)	13/00	<b>Heating or cooling the yarn, thread, cord, rope, or the like, not specific to any one of the processes provided for in this subclass</b> (heating, cooling, or drying during spinning or twisting D01H; drying of yarns, or the like, in general F26B)
3/04	• by brushing		
3/06	• by polishing, e.g. glazing, glossing		
3/08	• . . by compressing, e.g. by calendering or ironing		
3/10	• by indenting		
3/12	• by removing projecting ends of fibres		
3/14	• . . by shearing		