

**CPC****COOPERATIVE PATENT CLASSIFICATION****D01H**

**SPINNING OR TWISTING** (unwinding, paying-out, forwarding, winding or coiling filamentary material not intimately associated with spinning or twisting [B65H](#); cores, formers, supports or holders for coiled or wound material, e.g. bobbins [B65H](#); twisting oakum [D01G 35/00](#); crimping or curling of fibres, filaments or yarns [D02G 1/00](#); making chenille [D03D](#), [D04D 3/00](#); testing yarns, rovings, slivers, fibres, or fibre webs [G01](#))

**Kinds or types of spinning or twisting machines; Drafting machines or arrangements; Twisting arrangements**

- D01H 1/00**      **Spinning or twisting machines in which the product is wound-up continuously** (open-end spinning machines [D01H 4/00](#); {doubling of yarns [B65H 54/00+T](#); doubled, plied or cabled threads [D02G 3/28](#), e.g. using hollow spindles [D02G 3/283](#); spin-twisting [D02G 3/281](#); threads with alternately "S" and "Z" direction of twist, e.g. self-twist process, [D02G 3/286](#); wrapping strands of filaments or staple fibres by a binder yarn [D02G 3/38](#)})
- D01H 1/003**      . {Twisting machines in which twist is imparted from the supply packages, e.g. up twist}
- D01H 1/006**      . {Twisting machines in which twist is imparted at the paying-out and take-up stations}
- D01H 1/02**      . ring type {(arrangements with two or more spinning or twisting devices in combination [D01H 7/90](#))}
- D01H 1/025**      . . {with a condensing device between drafting system and spinning unit}
- D01H 1/04**      . flyer type
- D01H 1/06**      . cap type
- D01H 1/08**      . cup, pot or disc type, in which annular masses of yarn are formed by centrifugal action
- D01H 1/10**      . for imparting multiple twist, e.g. two-for-one twisting
- D01H 1/101**      . . {in which multiple twist is imparted at the take-up stations}
- D01H 1/103**      . . . {Two-for-one twisting}
- D01H 1/105**      . . {Arrangements using hollow spindles, i.e. the yarns are running through the spindle of the unwound bobbins}
- D01H 1/106**      . . . {Two-for-one twisting}
- D01H 1/108**      . . . . {for two or more supply bobbins one on top of the other}
- D01H 1/11**      . Spinning by false-twisting {(twisting by false-twisting [D01H 7/92](#); [D02G 3/28](#); increasing the strength of a roving or sliver by false-twisting [D01H 7/92](#), during drafting [D01H 5/28](#))}
- D01H 1/115**      . . using pneumatic means
- D01H 1/14**      . Details (drafting arrangements [D01H 5/00](#); twisting arrangements [D01H 7/00](#))
- D01H 1/16**      . . Framework; Casings; Coverings {Removal of heat; Means for generating overpressure of air against infiltration of dust; Ducts for electric cables}
- D01H 1/162**      . . . {for ring type}
- D01H 1/164**      . . . {for flyer type}

- D01H 1/166 . . . {for two-for-one type}
- D01H 1/168 . . . {Arrangements for the sound-dampening of the machines (in general [G10K 11/00](#))}
- D01H 1/18 . . Supports for supply packages
- D01H 1/183 . . . {Overhead suspension devices}
- D01H 1/186 . . . {for supplying from cans}
- D01H 1/20 . . Driving or stopping arrangements (for open-end spinning machines [D01H 4/12](#), [D01H 4/20](#), [D01H 4/42](#); safety devices [D01H 13/14](#))
- D01H 1/22 . . . for rollers {of drafting machines; Roller speed control} (regulating or varying draft [D01H 5/32](#))
- D01H 1/24 . . . for twisting {or spinning} arrangements, e.g. spindles (braking arrangements for spindles [D01H 7/22](#); interrelated flyer and bobbin drive mechanisms [D01H 7/50](#))
- D01H 1/241 . . . . driven by belt
- D01H 1/242 . . . . driven by toothed wheels
- D01H 1/243 . . . . driven by friction discs
- D01H 1/244 . . . . each spindle driven by an electric motor
- D01H 1/26 . . . . with two or more speeds; with variable-speed arrangements
- D01H 1/28 . . . for two or more machine elements possessing different characteristics but in operative association
- D01H 1/30 . . . . with two or more speeds; with variable-speed arrangements
- D01H 1/305 . . . . . {Speed control of the spindles in response to the displacements of the ring rail}
- D01H 1/32 . . . for complete machines
- D01H 1/34 . . . . with two or more speeds; with variable-speed arrangements {e.g. variation of machine speed according to growing bobbin diameter (responsive to reduction in material tension [D01H 13/16](#))}
- D01H 1/36 . . Package-shaping arrangements, e.g. building motions {e.g. control for the traversing stroke of ring rails; Stopping ring rails in a predetermined position}
- D01H 1/365 . . . {for flyer type}
- D01H 1/38 . . Arrangements for winding reserve lengths of yarn on take-up packages {or spindles}, e.g. transfer tails
- D01H 1/385 . . . {Removing waste reserve lengths from spindles}
- D01H 1/40 . . Arrangements for connecting continuously-delivered material to bobbins or the like
- D01H 1/42 . . Guards or protectors for yarns or threads, e.g. separator plates, anti-ballooning devices (anti-ballooning devices on spindles [D01H 7/18](#))
- D01H 1/422 . . . {Separator plates}
- D01H 1/425 . . . {Anti-ballooning rings}
- D01H 1/427 . . . {Anti-ballooning cylinders, e.g. for two-for-one twist machine (with combined cleaning effect [D01H 11/00](#))}
- D01H 3/00 Spinning or twisting machines in which the product is wound-up intermittently, e.g. mules**
- D01H 3/02 . Details (drafting arrangements [D01H 5/00](#); twisting arrangements [D01H 7/00](#))

- D01H 3/04
  - . . Carriages; Mechanisms effecting carriage movements
- D01H 3/06
  - . . . Carriages; Carriage rails; Squaring motions
- D01H 3/08
  - . . . Drawing-out or taking-in motions
- D01H 3/10
  - . . . Moving-creel arrangements, e.g. for twiners
- D01H 3/12
  - . . Package-shaping motions; Faller arrangements
- D01H 3/14
  - . . Roller-driving arrangements ([drafting arrangements of general application in spinning machines D01H 5/18](#))
- D01H 3/16
  - . . Spindle-driving arrangements ([spindles, spindle bearings, spindle supports D01H 7/04](#))
- D01H 3/18
  - . . . Tin rollers; Driving arrangements intimately associated with tin rollers
- D01H 3/20
  - . . . Spindle-driving arrangements during drawing-out or backing-off
- D01H 3/22
  - . . . Spindle-driving arrangements during taking-in
- D01H 3/24
  - . . . . Quadrant motions; Nosing motions
- D01H 3/26
  - . . Driving or stopping arrangements not otherwise provided for; Locking motions ([safety devices D01H 13/14](#)) {[Control of machines](#)}

**D01H 4/00**      **Open-end spinning machines or arrangements for imparting twist to independently moving fibres separated from slivers; Piecing arrangements therefor; Covering endless core threads with fibres by open-end spinning techniques** {([arrangements with two or more spinning or twisting devices of different types in combination D01H 7/90](#))}

**NOTE**

In this group, the expression "open-end spinning" covers such expressions as "break spinning", "ringless spinning", "rotor spinning" and "friction spinning", but does not cover the expression "spinning by false-twisting"

- D01H 4/02
  - . imparting twist by a fluid, e.g. air vortex
- D01H 4/04
  - . imparting twist by contact of fibres with a running surface
- D01H 4/06
  - . . co-operating with suction means ([D01H 4/08, D01H 4/16 take precedence](#))
- D01H 4/08
  - . . Rotor spinning, i.e. the running surface being provided by a rotor
- D01H 4/10
  - . . . Rotors
- D01H 4/12
  - . . . Rotor bearings; Arrangements for driving or stopping ([control therefor D01H 4/42](#))
- D01H 4/14
  - . . . . Rotor driven by an electric motor
- D01H 4/16
  - . . Friction spinning, i.e. the running surface being provided by a pair of closely spaced friction drums, e.g. at least one suction drum {([false twisting with friction drums D01H 1/11](#))}
- D01H 4/18
  - . . . Friction drums, e.g. arrangement of suction holes
- D01H 4/20
  - . . . Drum bearings; Arrangements for driving or stopping ([control therefor D01H 4/42](#))
- D01H 4/22
  - . . Cleaning of running surfaces
- D01H 4/24
  - . . . in rotor spinning
- D01H 4/26
  - . . . in friction spinning
- D01H 4/28
  - . using electrostatic fields

- D01H 4/30 . Arrangements for separating slivers into fibres; Orienting or straightening fibres, {e.g. using guide-rolls}
- D01H 4/32 . . using opening rollers {(stopping of rovings or slivers [D01H 13/18](#))}
- D01H 4/34 . . using air-jet streams
- D01H 4/36 . . with means for taking away impurities
- D01H 4/38 . Channels for feeding fibres to the yarn forming region
- D01H 4/40 . Removing running yarn from the yarn forming region, e.g. using tubes
- D01H 4/42 . Control of driving or stopping
- D01H 4/44 . . in rotor spinning
- D01H 4/46 . . in friction spinning
- D01H 4/48 . Piecing arrangements; Control therefor {(stopping roving [D01H 13/18](#))}
- D01H 4/50 . . for rotor spinning
- D01H 4/52 . . for friction spinning
  
- D01H 5/00** **Drafting machines or arrangements {Threading of roving into drafting machine}** (arrangements in which draft is dependent on linear movement of take-up spindles, e.g. in mules, [D01H 3/00](#); devices for combing or orienting fibres for open-end spinning machines [D01H 4/30](#); {increasing the strength of a roving or sliver by false-twisting [D01H 7/92](#), during drafting [D01H 5/28](#), after drafting and before spinning according to groups [D01H 1/02](#) to [D01H 1/08](#), [D01H 7/90](#); depositing materials in cans after drafting [B65H 54/76 + T](#)})
- D01H 5/005 . {Arrangements for feeding or conveying the slivers to the drafting machine}
- D01H 5/02 . Gill boxes or other drafting machines employing fallers or like pinned bars (lubricating fibres in gill boxes [D01G 29/00](#))
- D01H 5/04 . . with pinned bars actuated by screw members
- D01H 5/06 . . . Intersecting gill boxes
- D01H 5/08 . . with bars connected by links, chains, or the like
- D01H 5/10 . . with pinned bars unconnected with each other but actuated through pressure of one against another
- D01H 5/12 . . Details
- D01H 5/14 . . . Pinned bars
- D01H 5/16 . . . Framework; Casings; Coverings
- D01H 5/18 . Drafting machines or arrangements without fallers or like pinned bars
- D01H 5/20 . . in which fibres are controlled by contact with stationary or reciprocating surfaces
- D01H 5/22 . . in which fibres are controlled by rollers only
- D01H 5/24 . . . with porcupines or like pinned rotary members
- D01H 5/26 . . in which fibres are controlled by one or more endless aprons
- D01H 5/28 . . in which fibres are controlled by inserting twist during drafting {(spinning by false-twisting [D01H 1/11](#)); mules [D01H 3/00](#); {twisting by false-twisting [D01H 7/92](#)}; constructions of false-twist devices [D02G 1/04](#)}
- D01H 5/30 . . incorporating arrangements for severing continuous filaments, e.g. in direct spinning (converting tows to slivers or yarns [D01G 1/06](#))
- D01H 5/32 . . Regulating or varying draft

- D01H 5/34 . . . by manual adjustments
- D01H 5/36 . . . according to a pre-arranged pattern, e.g. to produce slubs
- D01H 5/38 . . . in response to irregularities in material; {Measuring irregularities}
- D01H 5/385 . . . . {employing hydraulic or pneumatic time-delay devices}
- D01H 5/40 . . . . employing mechanical time-delay devices
- D01H 5/42 . . . . employing electrical time-delay devices
- D01H 5/44 . . Adjusting drafting elements, e.g. altering ratch
- D01H 5/46 . . Loading arrangements
- D01H 5/48 . . . using weights
- D01H 5/50 . . . using springs
- D01H 5/505 . . . . {for top roller arms}
- D01H 5/52 . . . using fluid pressure
- D01H 5/525 . . . . {for top roller arms}
- D01H 5/54 . . . using magnetic arrangements
- D01H 5/56 . . Supports for drafting elements (saddles or top roller arms forming essential components of weighting arrangements [D01H 5/48](#))
- D01H 5/565 . . . {Top roller arms}
- D01H 5/58 . . Arrangements for traversing drafting elements (traversing arrangements for roving guides [D01H 13/06](#))
- D01H 5/60 . . Arrangements maintaining drafting elements free of fibre accumulations
- D01H 5/62 . . . Non-rotary cleaning pads or plates; Scrapers
- D01H 5/625 . . . . {in cooperation with suction or blowing means}
- D01H 5/64 . . . Rollers or aprons with cleaning surfaces
- D01H 5/645 . . . . {in cooperation with suction or blowing means}
- D01H 5/66 . . . Suction devices {exclusively; ([D01H 5/625](#) and [D01H 5/645](#) take precedence; in cooperation with thread breakage detecting means [D01H 13/1691](#))}
- D01H 5/68 . . . . Suction end-catchers
- D01H 5/70 . . Constructional features of drafting elements
- D01H 5/72 . . . Fibre-condensing guides (guides for slivers, rovings, or yarns applicable solely for spinning, twisting, curling, or crimping purposes [D01H 13/04](#); {combined with false twisting before drafting or before spinning according to groups [D01H 1/02](#) to [D01H 1/08](#) : [D01H 7/92](#)})
- D01H 5/74 . . . Rollers {or roller bearings}
- D01H 5/76 . . . . Loose-boss assemblies
- D01H 5/78 . . . . with flutes or other integral surface characteristics
- D01H 5/80 . . . . with covers; Cots or covers
- D01H 5/82 . . . . Arrangements for coupling roller sections
- D01H 5/84 . . . . Porcupines
- D01H 5/86 . . . Aprons; Apron supports; Apron tensioning arrangements
- D01H 5/88 . . . . Cradles; Tensors

<b>D01H 7/00</b>	<b>Spinning or twisting arrangements (for open-end spinning <a href="#">D01H 4/00</a>)</b>
<a href="#">D01H 7/02</a>	<ul style="list-style-type: none"> <li>for imparting permanent twist</li> </ul>
<a href="#">D01H 7/04</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Spindles ({bearings for hollow spindles <a href="#">D01H 7/88</a>}; spindle bearings, supports therefor, in general <a href="#">F16C</a>)</li> </ul> </li> </ul>
<a href="#">D01H 7/041</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{Spindles with sliding contact bearings (<a href="#">D01H 7/045</a> takes precedence)}</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/042</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{Spindles with rolling contact bearings (<a href="#">D01H 7/045</a> takes precedence)}</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/044</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{Spindles with fluid bearings}</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/045</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{Spindles provided with flexible mounting elements for damping vibration or noise, or for avoiding or reducing out-of-balance forces due to rotation (in general <a href="#">F16F 15/00</a>)}</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/047</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{with springs}</li> </ul> </li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/048</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{with means using plastic deformation of members}</li> </ul> </li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/06</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Stationary spindles with package-holding sleeves</li> </ul> </li> </ul>
<a href="#">D01H 7/08</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Mounting arrangements</li> </ul> </li> </ul>
<a href="#">D01H 7/10</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Spindle supports; Rails; Rail supports, e.g. poker guides</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/12</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Bolsters; Bearings</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/14</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Holding-down arrangements</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/16</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Arrangements for coupling bobbins or like to spindles</li> </ul> </li> </ul>
<a href="#">D01H 7/18</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Arrangements on spindles for suppressing yarn balloons (<a href="#">thread guards or protectors</a> <a href="#">D01H 1/42</a>)</li> </ul> </li> </ul>
<a href="#">D01H 7/20</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Lubricating arrangements</li> </ul> </li> </ul>
<a href="#">D01H 7/22</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Braking arrangements</li> </ul> </li> </ul>
<a href="#">D01H 7/2208</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{using mechanical means}</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/2216</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{with one or two manually actuated shoe-brakes acting on a part of the whorl}</li> </ul> </li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/2225</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{the braking means surrounding nearly the whole periphery of the whorl}</li> </ul> </li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/2233</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{by suppressing the driving means, e.g. by declutching}</li> </ul> </li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/2241</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{the belt being moved off the driven whorl}</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/225</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{and the spindle being braked simultaneously}</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/2258</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{the pivoted spindle being pulled off the belt}</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/2266</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{and braked simultaneously}</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/2275</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{using hydraulically or pneumatically operated brakes}</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/2283</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{using electromagnetically operated brakes}</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/2291</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{characterised by the control of braking means, e.g. operated by a yarn break-detector or tension device}</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/24</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Flyer or like arrangements (<a href="#">multiple-twist arrangements</a> <a href="#">D01H 7/86</a>)</li> </ul> </li> </ul>
<a href="#">D01H 7/26</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Flyer constructions</li> </ul> </li> </ul>
<a href="#">D01H 7/28</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>arranged to guide material over exterior of legs</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/30</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>with guide channels formed in legs, e.g. slubbing flyers</li> </ul> </li> </ul> </li> </ul>
<a href="#">D01H 7/32</a>	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>with pressing devices</li> </ul> </li> </ul> </li> </ul> </li> </ul>

- D01H 7/34 . . . . with haul pulleys or like arrangements
- D01H 7/36 . . . . with traversing devices
- D01H 7/38 . . . . Ring flyers
- D01H 7/40 . . . . Flyer supports, e.g. rails
- D01H 7/42 . . . . Arrangements coupling flyers to spindles
- D01H 7/44 . . . . Drag arrangements for bobbins or flyers
- D01H 7/46 . . . . Devices attached to, or integral with, flyers for temporarily increasing twist in material passing to them
- D01H 7/48 . . . . Eyes or like guiding arrangements ([D01H 7/46 takes precedence](#))
- D01H 7/50 . . . . Interrelated flyer and bobbin drive mechanisms, e.g. winding-on motions for cotton-roving frames ([variation of machine speed according to growing bobbin diameter D01H 1/34](#)); package-building mechanisms [D01H 1/36](#))
- D01H 7/52 . . . . Ring-and-traveller arrangements
- D01H 7/54 . . . . with fixed rings
- D01H 7/56 . . . . with freely-rotatable rings; with braked or dragged rings; {[Lubricating arrangements therefor](#)}
- D01H 7/565 . . . . {[with fluid bearings](#)}
- D01H 7/58 . . . . with driven rings; {[Bearings or braking arrangements therefor](#)}
- D01H 7/585 . . . . {[by fluid driving means](#)}
- D01H 7/60 . . . . Rings or travellers; Manufacture thereof not otherwise provided for ([hand tools for applying travellers to rings D01H 17/02](#)) {[Cleaning means for rings](#)}
- D01H 7/602 . . . . {[Rings](#)}
- D01H 7/604 . . . . {[Travellers](#)}
- D01H 7/606 . . . . . {[Driving means for travellers](#)}
- D01H 7/608 . . . . . {[Cleaning means for travellers](#)}
- D01H 7/62 . . . . Arrangements providing lubricant for travellers
- D01H 7/64 . . . . Ring supports, e.g. ring rails ([poker guides or other rail supports D01H 7/10](#))
- D01H 7/66 . . . . Cap arrangements
- D01H 7/68 . . . . Cap constructions
- D01H 7/70 . . . . Arrangements for supporting caps on spindles
- D01H 7/72 . . . . Bobbin-supporting arrangements, e.g. bobbin rails ([poker guides or other rail supports D01H 7/10](#))
- D01H 7/74 . . . . Cup or like arrangements
- D01H 7/76 . . . . Rotary discs
- D01H 7/78 . . . . Constructions of cups, e.g. spinning boxes
- D01H 7/80 . . . . . adapted to collect wet yarns
- D01H 7/82 . . . . Casings or guards for rotary cups or the like
- D01H 7/84 . . . . Spindles or yarn carriers for co-operation with rotary cups ([removing yarn from centrifugal cups on to yarn carriers D01H 9/06](#))



- D01H 7/86
  - • Multiple-twist arrangements, e.g. two-for-one twisting devices {Threading of yarn; Devices in hollow spindles for imparting false twist}
- D01H 7/862
  - • • {Arrangements for holding the bobbin in a fixed position}
- D01H 7/864
  - • • {Coupling devices between the fixed and the rotative parts}
- D01H 7/866
  - • • {Means to facilitate the unwinding of yarn}
- D01H 7/868
  - • • {Yarn guiding means, e.g. guiding tubes}
- D01H 7/88
  - • Hollow-spindle arrangements (D01H 7/86 takes precedence)
- D01H 7/90
  - • Arrangements with two or more {spinning or} twisting devices {of different types} in combination ({D01H 1/006}, D01H 7/86, D01H 7/88 take precedence)
- D01H 7/92
  - for imparting transient twist {i.e. false twist (D01H 1/11 takes precedence)}
- D01H 7/923
  - • {by means of rotating devices}
- D01H 7/926
  - • {by means of traversing devices}

**Common features or details of, or accessories for, spinning or twisting machines of various kinds or types** (drafting arrangements D01H 5/00; twisting arrangements D01H 7/00)

- D01H 9/00**

**Arrangements for replacing or removing bobbins, cores, receptacles, or completed packages at paying-out or take-up stations** (arrangements of general interest in the winding of filamentary material {B65H 67/00 } ) {;  
**Combination of spinning-winding machine}**
- D01H 9/001
  - {Bobbin-taking arrangements}
- D01H 9/003
  - • {Graspers operating under the action of a fluid}
- D01H 9/005
  - {for removing empty packages or cans and replacing by completed (full) packages or cans at paying-out stations; also combined with piecing of the roving}
- D01H 9/006
  - • {for two-for-one twist type machines}
- D01H 9/008
  - • {for cans}
- D01H 9/02
  - for removing completed take-up packages and replacing by bobbins, cores, or receptacles at take-up stations; Transferring material between adjacent full and empty take-up elements
- D01H 9/04
  - • Doffing arrangements integral with spinning or twisting machines
- D01H 9/043
  - • • {for cap type machines}
- D01H 9/046
  - • • {for flyer type machines}
- D01H 9/06
  - • • Removing yarn from centrifugal cups on to yarn carriers
- D01H 9/08
  - • Doffing arrangements independent of spinning or twisting machines
- D01H 9/10
  - • • Doffing carriages; {Loading carriages with cores}
- D01H 9/12
  - • • Manual cop-tube applying apparatus; Stands for cop-tube applying apparatus
- D01H 9/14
  - • for preparing machines for doffing of yarns, {e.g. raising cops prior to removal} (stop motions responsive to delivery of a measured length of material D01H 13/24)
- D01H 9/16
  - • Yarn-severing arrangements, {e.g. for cutting transfer tails; Separating of roving in flyer}



- D01H 9/18
  - for supplying bobbins, cores, receptacles, or completed packages to, or transporting from, paying-out or take-up stations ([D01H 9/10](#) takes precedence); {Arrangements to prevent unwinding of roving from roving bobbins (transporting full yarn bobbins to subsequent machines [B65H 67/06+T](#))}
- D01H 9/182
  - . {Overhead conveying devices}
- D01H 9/185
  - . {Transporting cans}
- D01H 9/187
  - . {on individual supports, e.g. pallets}
- D01H 11/00**

**Arrangements for confining or removing dust, fly, or the like** (cleaning of running surfaces in open-end spinning machines [D01H 4/22](#); separation in general [B01D](#); cleaning in general [B08B](#); air-conditioning [F24F](#), e.g. by filtering [F24F 3/16](#))
- D01H 11/001
  - {Hand tools used for cleaning the machines}
- D01H 11/003
  - . {with a rotary pin}
- D01H 11/005
  - {with blowing and/or suction devices (in general [A47L 7/00](#); in cooperation with thread breakage detecting means [D01H 13/1691](#))}
- D01H 11/006
  - . {travelling along the machines}
- D01H 11/008
  - {with static field means}
- D01H 13/00**

**Other common constructional features, details or accessories** (for open-end spinning [D01H 4/00](#))
- D01H 13/005
  - {Service carriages travelling along the machines (characteristics relating to the apparatus supported by the carriage, see relevant groups, e.g. [D01H 9/005](#), [D01H 9/10](#), [D01H 13/145](#), [D01H 15/00](#))}
- D01H 13/02
  - Roller arrangements not otherwise provided for
- D01H 13/04
  - Guides for slivers, rovings, or yarns; Smoothing dies (fibre-condensing guides [D01H 5/72](#); {means to facilitate the unwinding of yarn in multiple-twist arrangements [D01H 7/866](#)})
- D01H 13/045
  - . {Guide tube}
- D01H 13/06
  - . Traversing arrangements
- D01H 13/08
  - Twist arresters
- D01H 13/10
  - Tension devices
- D01H 13/102
  - . {Regulating tension by regulating delivery of yarn from supply package ([D01H 13/108](#) takes precedence)}
- D01H 13/104
  - . {Regulating tension by devices acting on running yarn and not associated with supply or take-up devices}
- D01H 13/106
  - . . {for double-twist spindle}
- D01H 13/108
  - . {Regulating tension by regulating speed of driving mechanisms of unwinding, paying-out, forwarding, winding or depositing devices, e.g. automatically in response to variations in tension}
- D01H 13/12
  - Arrangements preventing snarls or inadvertent doubling of yarns (suction end-catchers [D01H 5/68](#))
- D01H 13/14
  - Warning or safety devices, e.g. automatic fault detectors, stop motions; {Monitoring the entanglement of slivers in drafting arrangements}; (safety devices of general application [F16P](#); indicating devices of general application [G08B](#))
- D01H 13/145
  - . {set on carriages travelling along the machines; Warning or safety devices pulled along the working unit by a band or the like}

- D01H 13/16 . . responsive to reduction in material tension, failure of supply, or breakage, of material
- D01H 13/1608 . . . {where the paying-out and take-up stations are stopped at one and the same time}
- D01H 13/1616 . . . {characterised by the detector}
- D01H 13/1625 . . . . {Electro-mechanical actuators}
- D01H 13/1633 . . . . {Electronic actuators}
- D01H 13/1641 . . . . . {Capacitor sensing means}
- D01H 13/165 . . . . . {Photo-electric sensing means}
- D01H 13/1658 . . . . {Associated actuators with mutual actuation, e.g. for two or more running yarns}
- D01H 13/1666 . . . . {Lighting or luminous devices making easier the setting of the breakage of yarns}
- D01H 13/1675 . . . . . {Pencil of rays on side of machines}
- D01H 13/1683 . . . . {Pneumatic sensing means}
- D01H 13/1691 . . . {Thread breakage detector means associated with pneumatic cleaning devices, e.g. suction of broken end of yarn}
- D01H 13/18 . . . stopping supply only
- D01H 13/181 . . . . {by stopping supply packages}
- D01H 13/182 . . . . {by raising or lifting of one of the drafting cylinders, e.g. by removing of the loading means}
- D01H 13/183 . . . . {the yarn moving out of its normal path, e.g. by lateral diverting}
- D01H 13/185 . . . . {a plate moving in the nip of drafting or guiding cylinders}
- D01H 13/186 . . . . {guiding or drafting cylinders moving by gravity when a yarn breakage occurs}
- D01H 13/187 . . . . {using means stopping the driving of the drafting, guiding cylinders, e.g. friction clutches}
- D01H 13/188 . . . . {by cutting or clamping yarns or rovings}
- D01H 13/20 . . responsive to excessive tension or irregular operation of apparatus
- D01H 13/22 . . responsive to presence of irregularities in running material
- D01H 13/24 . . responsive to delivery of a measured length of material, completion of winding of a package or filling of a receptacle
- D01H 13/26 . Arrangements facilitating the inspection or testing of yarns or the like in connection with spinning or twisting
- D01H 13/28 . Heating or cooling arrangements {for yarns (removal of heat from machines [D01H 1/16](#))}
- D01H 13/30 . Moistening, sizing, oiling, waxing, colouring, or drying yarns or the like as incidental measures during spinning or twisting
- D01H 13/302 . . {Moistening, e.g. for wet spinning}
- D01H 13/304 . . {Conditioning during spinning or twisting (for carding or combing [D01G 99/005](#))}
- D01H 13/306 . . {by applying fluids, e.g. steam or oiling liquids}
- D01H 13/308 . . {by applying solids, e.g. wax}

D01H 13/32	<ul style="list-style-type: none"><li>Counting, measuring, recording or registering devices (in general, see the appropriate subclass of Section G, e.g. {G01B 21/12, G01N 33/36})</li></ul>
D01H 15/00	<b>Piecing arrangements</b> (for open-end spinning machines D01H 4/48; in machines for producing textile fabrics, see the appropriate subclasses); {Automatic end-finding, e.g. by suction and reverse package rotation; Devices for temporarily storing yarn during piecing (piecing of rovings in combination with replacing of completed packages or cans D01H 9/005)}
D01H 15/002	<ul style="list-style-type: none"><li>{for false-twisting spinning machines}</li></ul>
D01H 15/004	<ul style="list-style-type: none"><li>{for centrifugal spinning machines}</li></ul>
D01H 15/007	<ul style="list-style-type: none"><li>for two-for-one twisting machines</li></ul>
D01H 15/013	<ul style="list-style-type: none"><li>Carriages travelling along the machines</li></ul>
D01H 17/00	<b>Hand tools</b> (cop-tube applying apparatus D01H 9/12)
D01H 17/02	<ul style="list-style-type: none"><li>Arrangements for storing ring travellers; Devices for applying travellers to rings</li></ul>
D01H 2700/00	<b>Spinning or twisting machines; Drafting devices</b>
D01H 2700/01	<ul style="list-style-type: none"><li>Preparatory spinning machines</li></ul>
D01H 2700/20	<ul style="list-style-type: none"><li>Spinning mules; Transmissions</li></ul>
D01H 2700/202	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>Carriages or their movement; Lubrication</li></ul></li></ul>
D01H 2700/205	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>Spindles or spindle control in spinning mules</li></ul></li></ul>
D01H 2700/207	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>Yarn delivery rollers; Drawing systems for spinning mules; Silver rollers</li></ul></li></ul>
D01H 2700/21	<ul style="list-style-type: none"><li>Piecing or cleaning in spinning mules</li></ul>
D01H 2700/22	<ul style="list-style-type: none"><li>Winding devices for spinning mules</li></ul>
D01H 2700/24	<ul style="list-style-type: none"><li>Spinning or twisting machines of different kinds</li></ul>
D01H 2700/242	<ul style="list-style-type: none"><li><ul style="list-style-type: none"><li>Spinning or twisting devices wherein twist is created during winding</li></ul></li></ul>
D01H 2700/245	<ul style="list-style-type: none"><li>Conception or fabrication of drafting cylinders</li></ul>
D01H 2700/247	<ul style="list-style-type: none"><li>Guiding means for veil or sliver on drafting systems</li></ul>