

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. uptwist}
- 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
- D01H 7/00** **Spinning or twisting arrangements** ([for open-end spinning D01H 4/00](#))
- D01H 7/02 . . for imparting permanent twist

- D01H 7/04 . . Spindles ({bearings for hollow spindles [D01H 7/88](#)}; spindle bearings, supports therefor, in general [F16C](#))
- D01H 7/041 . . . {Spindles with sliding contact bearings ([D01H 7/045](#) takes precedence)}
- D01H 7/042 . . . {Spindles with rolling contact bearings ([D01H 7/045](#) takes precedence)}
- D01H 7/044 . . . {Spindles with fluid bearings}
- D01H 7/045 . . . {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 [F16F 15/00](#))}
- D01H 7/047 {with springs}
- D01H 7/048 {with means using plastic deformation of members}
- D01H 7/06 . . . Stationary spindles with package-holding sleeves
- D01H 7/08 . . . Mounting arrangements
- D01H 7/10 Spindle supports; Rails; Rail supports, e.g. poker guides
- D01H 7/12 Bolsters; Bearings
- D01H 7/14 Holding-down arrangements
- D01H 7/16 . . . Arrangements for coupling bobbins or like to spindles
- D01H 7/18 . . . Arrangements on spindles for suppressing yarn balloons ([thread guards or protectors D01H 1/42](#))
- D01H 7/20 . . . Lubricating arrangements
- D01H 7/22 . . . Braking arrangements
- D01H 7/2208 {using mechanical means}
- D01H 7/2216 {with one or two manually actuated shoe-brakes acting on a part of the whorl}
- D01H 7/2225 {the braking means surrounding nearly the whole periphery of the whorl}
- D01H 7/2233 {by suppressing the driving means, e.g. by declutching}
- D01H 7/2241 {the belt being moved off the driven whorl}
- D01H 7/225 {and the spindle being braked simultaneously}
- D01H 7/2258 {the pivoted spindle being pulled off the belt}
- D01H 7/2266 {and braked simultaneously}
- D01H 7/2275 {using hydraulically or pneumatically operated brakes}
- D01H 7/2283 {using electromagnetically operated brakes}
- D01H 7/2291 {characterised by the control of braking means, e.g. operated by a yarn break-detector or tension device}
- D01H 7/24 . . Flyer or like arrangements ([multiple-twist arrangements D01H 7/86](#))
- D01H 7/26 . . . Flyer constructions
- D01H 7/28 arranged to guide material over exterior of legs
- D01H 7/30 with guide channels formed in legs, e.g. slubbing flyers
- D01H 7/32 with pressing devices
- 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 . Counting, measuring, recording or registering devices (in general, see the appropriate subclass of Section G, e.g. {[G01B 21/12](#), [G01N 33/36](#)})

- D01H 15/00** **Piecing arrangements** (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 . {for false-twisting spinning machines}
- D01H 15/004 . {for centrifugal spinning machines}
- D01H 15/007 . for two-for-one twisting machines
- D01H 15/013 . Carriages travelling along the machines

- D01H 17/00** **Hand tools** (cop-tube applying apparatus [D01H 9/12](#))

D01H 17/02 . Arrangements for storing ring travellers; Devices for applying travellers to rings

D01H 2700/00 Spinning or twisting machines; Drafting devices

- D01H 2700/01 . Preparatory spinning machines
- D01H 2700/20 . Spinning mules; Transmissions
- D01H 2700/202 . . Carriages or their movement; Lubrication
- D01H 2700/205 . . Spindles or spindle control in spinning mules
- D01H 2700/207 . . Yarn delivery rollers; Drawing systems for spinning mules; Silver rollers
- D01H 2700/21 . Piecing or cleaning in spinning mules
- D01H 2700/22 . Winding devices for spinning mules
- D01H 2700/24 . Spinning or twisting machines of different kinds
- D01H 2700/242 . . Spinning or twisting devices wherein twist is created during winding
- D01H 2700/245 . Conception or fabrication of drafting cylinders
- D01H 2700/247 . Guiding means for veil or sliver on drafting systems