

ECLA EUROPEAN CLASSIFICATION

- B29D** **PRODUCING PARTICULAR ARTICLES FROM PLASTICS OR FROM SUBSTANCES IN A PLASTIC STATE** ([making granules B29B9/00](#); [making preforms B29B11/00](#))
- B29D1/00** **Producing articles with screw-threads**
- [B29D1/00B](#) . [N: fibre reinforced]
- B29D5/00** **Producing elements of slide fasteners; Combined making and attaching of elements of slide fasteners** [C1106]
- [B29D5/02](#) . the fasteners having separate interlocking members
- [B29D5/04](#) . the interlocking members being formed by continuous meander of filamentary material
- [B29D5/06](#) . the interlocking members being formed by continuous helix
- [B29D5/08](#) . the interlocking members being formed by profiled or castellated edge of a stringer
- [B29D5/10](#) . the interlocking members being formed by continuous profiled strip
- B29D7/00** **Producing flat articles, e.g. films or sheets** ([B29D24/00](#) takes precedence)
- [B29D7/01](#) . Films or sheets
- B29D11/00** **Producing optical elements, e.g. lenses or prisms** ([grinding or polishing of optical elements B24B](#); [constructional form of optical elements G02B](#); [N: optical parts of spectacles [G02C7/00](#)]) [M1208]
- [B29D11/00C](#) . [N: Production of simple or compound lenses] [C1112]
- [B29D11/00C2](#) . . [N: with non-spherical faces, e.g. toric faces]
- [B29D11/00C3](#) . . [N: Bifocal lenses; Multifocal lenses]
- [B29D11/00C4](#) . . [N: Production of contact lenses] [C1112]
- [B29D11/00C4B](#) . . . [N: composed of parts with dissimilar composition ([B29D11/00C4C](#) takes precedence)] [C9501]
- [B29D11/00C4C](#) . . . [N: characterised by the shape or surface condition of the edge, e.g. flashless, burrless, smooth] [N9501]
- [B29D11/00C4D](#) . . . [N: Hydrating contact lenses] [N9503]
- [B29D11/00C4E](#) . . . [N: enabling passage of fluids, e.g. oxygen, tears, between the area under the lens and the lens exterior] [N9508]
- [B29D11/00C4F](#) . . . [N: methods for matching the anterior surface of the contact lens to the shape of an eyeball] [N9704]
- [B29D11/00C4G](#) . . . [N: for delivering compositions, e.g. drugs to the eye] [N1110]
- [B29D11/00C4H](#) . . . [N: covering a large part of the cornea] [N1110]

B29D11/00C4N	. . .	[N: made by rotational casting] [N9804]
B29D11/00C4Y	. . .	[N: Auxiliary operations, e.g. removing oxygen from the mould, conveying moulds from a storage to the production line in an inert atmosphere] [N9705]
B29D11/00C4Y2	. . . .	[N: Curing of the contact lens material] [N9705] [C1110]
B29D11/00C4Y2B	. . . . .	[N: wherein the lens material is not fully polymerized, e.g. by leaving an unpolymerized volume] [N1110]
B29D11/00C4Y2C	. . . . .	[N: Differential curing, e.g. by differential radiation] [N1110]
B29D11/00C4Y2C2	. . . . .	[N: Movable masks or shutters, e.g. to vary the exposure] [N1110]
B29D11/00C4Y4	. . . . .	[N: Conveying moulds] [N1110]
B29D11/00C4Y4B	. . . . .	[N: using carrier plates] [N1110]
B29D11/00C4Y5	. . . . .	[N: Demoulding, e.g. separating lenses from mould halves] [N1110]
B29D11/00C4Y5B	. . . . .	[N: using cooling means] [N1110]
B29D11/00C4Y5C	. . . . .	[N: using heating means] [N1110]
B29D11/00C4Y5D	. . . . .	[N: using prying means] [N1110]
B29D11/00C4Y6	. . . . .	[N: Transferring contact lenses] [N1110]
B29D11/00C4Y6B	. . . . .	[N: using a vacuum suction gripper] [N1110]
B29D11/00C4Y7	. . . . .	[N: Removing impurities from contact lenses, e.g. leaching] [N1110]
B29D11/00C4Z	. . .	[N: Plants for the production of contact lenses] [N9705]
B29D11/00C5	. .	[N: Fresnel lenses]
B29D11/00C6	. .	[N: Lenticular sheets (B29D11/00C5 takes precedence)]
B29D11/00C6A	. . .	[N: made by a rotating cylinder] [N1110]
B29D11/00C6B	. . .	[N: Producing lens arrays] [N1110]
B29D11/00C6C	. . .	[N: Producing lens wafers] [N1110]
B29D11/00C7	. .	[N: Production of lenses with markings or patterns] [C1112]
B29D11/00C7B	. . .	[N: having particular surface properties, e.g. a micro pattern] [N1110]
B29D11/00C7B2	. . . .	[N: by making depressions in the lens surfaces] [N1110]
B29D11/00C7C	. . .	[N: having nano size structures or features, e.g. fillers] [N1110]
B29D11/00C8	. .	[N: with a refractive index gradient] [N9501]
B29D11/00C9	. .	[N: Production of microlenses (lenticular sheets B29D11/00C6)] [N9506] [C1112]
B29D11/00C9B	. . .	[N: by moulding lenses in holes through a substrate] [N1110]
B29D11/00C9C	. . .	[N: Local shaping by heating, e.g. local irradiation causing expansion] [N1110]
B29D11/00C9D	. . .	[N: Producing solid immersion lenses [SIL]] [N1110]
B29D11/00C10	. .	[N: Producing compound lenses] [N1110]
B29D11/00C20	. .	[N: made by moulding between two mould parts which are not in direct contact with one another, e.g. comprising a seal between or on the edges (B29D11/00C2 to B29D11/00C8 , B29D11/00C21 , B29D11/00C22 take precedence)] [N9501] [C9705]
B29D11/00C21	. .	[N: Plants for the production of simple or compound lenses (B29D11/00C4Z takes precedence)] [N9705]
B29D11/00C22	. .	[N: Auxiliary operations, e.g. machines for filling the moulds (B29D11/00C4Y takes precedence)] [N9705]
B29D11/00C22B	. . .	[N: Curing the lens material] [N9705]
B29D11/00C22D	. . .	[N: Changing a shape by remelting] [N1110]
B29D11/00C22F	. . .	[N: Adjusting the refractive index e.g. after implanting] [N1110]

- B29D11/00C23 . . [N: made by rotational casting ([B29D11/00C4N](#) takes precedence)] [N9804]
- B29D11/00C25 . . [N: Moulds for lenses ([moulds for plastic articles in general B29C33/00](#))] [N1110]
- B29D11/00C25B . . . [N: Double sided moulds] [N1110]
- B29D11/00C25C . . . [N: having means for aligning the front and back moulds] [N1110]
- B29D11/00C25C2 [N: to make toric lenses] [N1110]
- B29D11/00C25D . . . [N: Reusable moulds] [N1110]
- B29D11/00C25E . . . [N: Consisting of two mould halves joined by an annular gasket] [N1110]
- B29D11/00C25F . . . [N: Feeding arrangements] [N1110]
- B29D11/00C25G . . . [N: with surfaces formed by films] [N1110]
- B29D11/00C25H . . . [N: with deformable mould walls, e.g. to make lenses with different shapes] [N1110]
- B29D11/00C25J . . . [N: wherein the mould forms part of the final package for lenses] [N1110]
- B29D11/00C25K . . . [N: with means to engage flash, e.g. HEMA ring] [N1110]
- B29D11/00C25K2 [N: and removing the flash or HEMA ring] [N1110]

- B29D11/00D . [N: Mirrors]

- B29D11/00E . [N: Production of reflex reflectors] [C1112]
- B29D11/00E2 . . [N: moulded by partially embedding reflective elements, e.g. glass beads, into the surface of a support, e.g. to make prefabricated road markings ([dispensing reflective beads on road markings in situ E01C23/16B](#))] [N9704]
- B29D11/00E3 . . [N: Moulds for reflex reflectors ([moulds for plastic articles in general B29C33/00](#))] [N1110]

- B29D11/00F . [N: Production of filters] [C1112]
- B29D11/00F2 . . [N: polarizing] [N1110]
- B29D11/00F4 . . [N: photochromic] [N1110]

- B29D11/00G . [N: Production of light guides] [C1112]
- B29D11/00G2 . . [N: Supports for light guides]
- B29D11/00G3 . . [N: with a refractive index gradient] [N9501]
- B29D11/00G4 . . [N: combined with lenses] [N1110]
- B29D11/00G5 . . [N: having an intermediate layer between core and cladding] [N1110]
- B29D11/00G6 . . [N: by shrinking the sleeve or cladding onto the core] [N1110]
- B29D11/00G10 . . [N: involving preforms for the manufacture of light guides][N9708][C0607]

- B29D11/00H . [N: Optical laminates]

- [N: **Note**
Classification in this group must be supplemented, in so far as any product is concerned, by classification in [B32B](#)
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- B29D11/00J . [N: Production of other optical elements not provided for in [B29D11/00C-B29D11/00H](#)] [C1112]
- B29D11/00J2 . . [N: Connectors for light guides]
- B29D11/00J4 . . [N: Branching elements for light guides]

- B29D11/00J5 . . [N: Producing diffraction gratings] [N1110]
- B29D11/00J6 . . [N: Producing hyperlenses, superlenses or "perfect" lenses] [N1110]
- B29D11/00J7 . . [N: Producing optical films] [N1110]
- B29D11/00J8 . . [N: Producing diffusers] [N1110]
- B29D11/00J9 . . [N: Producing lenses combined with electronics, e.g. chips] [N1110]
- B29D11/00J9B . . . [N: Producing electro-active lenses or lenses with energy receptors, e.g. batteries or antennas] [N1110]
- B29D11/00J9B2 [N: with energy receptors for wireless energy transmission] [N1110]
- B29D11/00J10 . . [N: Producing non-circular, e.g. elliptic lenses] [N1110]
- B29D11/00J11 . . [N: Producing zero power lenses] [N1110]
- B29D11/00J12 . . [N: Producing cylindrical lenses] [N1110]

- B29D11/00K . . [N: Applying coatings; tinting; colouring (printing, marking or copying processes B41M; identification in general [G09F3/00](#); producing decorative effects in general B44C; positioning or marking of lenses [B24B13/005C](#))] [C1112]
- B29D11/00K2 . . [N: on light guides]
- B29D11/00K3 . . [N: Spin coating] [N1110]
- B29D11/00K6 . . [N: colouring or tinting] [N1110]
- B29D11/00K6B . . . [N: on the surface] [N1110]
- B29D11/00K6D . . . [N: full body; edge-to-edge] [N1110]
- B29D11/00K7 . . [N: on lens surfaces for colouring or tinting (printing or marking in general [B41M](#))]

- B29D11/00L . . [N: Combined cutting and grinding thereof]
- B29D11/00L10 . . [N: where the lens material is mounted in a support for mounting onto a cutting device, e.g. a lathe, and where the support is of machinable material, e.g. plastics] [N9804]

- B29D11/00M . . [N: Measuring, controlling or regulating] [N1110]
- B29D11/00M2 . . [N: using microprocessors or computers] [N1110]
- B29D11/00M2B . . . [N: using CNC machining to make mould surfaces] [N1110]
- B29D11/00M4 . . [N: Inspecting lenses] [N1110]
- B29D11/00M4B . . . [N: while still attached to the mould] [N1110]

- B29D11/02 . . Artificial eyes from organic plastic material [N: (implantable eye parts, artificial eyes [A61F2/14](#))] [C1106]
- B29D11/02B . . [N: Implants for natural eyes]
- B29D11/02B2 . . . [N: Comprising more than one lens] [N1110]

- B29D12/00** **Producing frames**

- B29D12/02 . . Spectacle frames (constructional form [G02C](#))

- B29D15/00** **Producing gear wheels or similar articles with grooves or projections, e.g. control knobs**

- B29D16/00** **Producing articles with corrugations ([B29D23/18](#) takes precedence)**

- B29D17/00** **Producing carriers of records containing fine grooves or impressions, e.g. disc records for needle playback, cylinder records (recording sound or other information using formed grooves or the equivalent [G11B](#)); Producing record discs from master stencils [\[C9501\]](#)**
- [B29D17/00B](#) . [\[N: Producing phonograph records\]](#)
- [B29D17/00C](#) . [\[N: Producing optically read record carriers, e.g. optical discs\] \[\\[N9609\\]\]\(#\)](#)
- [B29D17/00C20](#) . . [\[N: Forming the relief pattern on a support larger than the record\] \[\\[N9609\\]\]\(#\)](#)
- B29D19/00** **Producing buttons or semi-finished parts of buttons**
- [B29D19/04](#) . by cutting, milling, turning, stamping, or perforating moulded parts; Surface treatment of buttons
- [B29D19/06](#) . . Devices for feeding semi-finished parts to the processing machines
- [B29D19/08](#) . . Making holes in buttons or in semi-finished parts thereof
- B29D21/00** **Producing hair combs or similar toothed or slotted articles**
- [B29D21/04](#) . by sawing, milling, cutting, or similar operations
- [B29D21/06](#) . Polishing
- B29D22/00** **Producing hollow articles (tubular articles [B29D23/00](#); pneumatic tyres [B29D30/00](#)) [\[M1106\]](#)**
- [B29D22/00C](#) . [\[N: Containers for packaging, storing or transporting, e.g. bottles, jars, cans, barrels, tanks\]](#)
- [B29D22/00C2](#) . . [\[N: Hot water bottles\]](#)
- [B29D22/02](#) . Inflatable articles [\[N1106\]](#)
- [B29D22/02B](#) . . [\[N: Air springs; Air bellows \(construction of fluid springs \[F16F9/00\]\(#\)\)\] \[\\[N1106\\]\]\(#\)](#)
- [B29D22/02D](#) . . [\[N: Ring shaped inner tubes with ends \(endless inner tubes \[B29D23/24\]\(#\)\)\] \[\\[N1106\\]\]\(#\)](#)
- [B29D22/04](#) . Spherical articles, e.g. balls ([B29D 22/02](#) takes precedence) [\[N1106\]](#)
- B29D23/00** **Producing tubular articles ([B29D24/00](#) takes precedence)**
- [B29D23/00T](#) . [\[N: Pipes; Pipe joints \(pleated hoses \[B29D23/18\]\(#\)\)\] \[\\[N1106\\]\]\(#\)](#)
- [B29D23/00T2](#) . . [\[N: Pipe joints, e.g. straight joints\] \[\\[N1106\\]\]\(#\)](#)
- [B29D23/00T2E](#) . . . [\[N: provided with electrical wiring\] \[\\[N1106\\]\]\(#\)](#)
- [B29D23/00T2G](#) . . . [\[N: Elbows\] \[\\[N1106\\]\]\(#\)](#)
- [B29D23/00T2T](#) . . . [\[N: T-joints\] \[\\[N1106\\]\]\(#\)](#)
- [B29D23/14](#) . Cigar or cigarette holders
- [B29D23/18](#) . Pleated [\[N: or corrugated\]](#) hoses

- B29D23/20** . Flexible squeeze tubes, e.g. for cosmetics
- B29D23/24** . Endless tubes, e.g. inner tubes for pneumatic tyres [N: (producing ring shaped inner tubes with ends [B29D22/02D](#); inflatable inner tubes for tyres [B60C5/00](#))] [N1106]
- B29D24/00** **Producing articles with hollow walls** [N: ([B29D99/00D2](#) takes precedence)] [M1106]
- B29D24/00B** . [N: formed of hollow ridges or ribs, e.g. separate ridges; continuous corrugated structure ([B29D24/00C4](#) takes precedence)]
- B29D24/00C** . [N: formed with structures, e.g. cores placed between two plates or sheets, e.g. partially filled (totally filled [B29D99/00C3](#))] [M1106]
- B29D24/00C2** . . [N: the structure having vertical or oblique ribs]
- B29D24/00C3** . . [N: the structure having joined ribs, e.g. honeycomb]
- B29D24/00C3B** . . . [N: and a chamfered edge] [N9509]
- B29D24/00C4** . . [N: the structure having hollow ridges, ribs or cores]
- B29D25/00** **Producing frameless domes**
- B29D28/00** **Producing nets or the like, [N: e.g. meshes, lattices] (by knotting D04G)**
- B29D28/00B** . [N: Reticulated structure comprising reinforcements of substantial or continuous length]
- B29D29/00** **Producing belts or bands**
- B29D29/06** . Conveyer belts
- B29D29/08** . Toothed driving belts
- B29D29/08B** . . [N: Double-toothed driving belts]
- B29D29/10** . Driving belts having wedge-shaped cross-section
- B29D29/10B** . . [N: Multi-ribbed driving belts]
- B29D29/10C** . . [N: Cogged driving belts]
- B29D30/00** **Producing pneumatic or solid tyres or parts thereof** (producing inner tubes [B29D23/24](#); constructional form of tyres or parts thereof [B60C](#); connection of valves to inflatable elastic bodies [B60C29/00](#); testing of tyres [G01M17/02](#)) [C1106]
- B29D30/00B** . [N: Pretreatment of tyres or parts thereof, e.g. preheating, irradiation, precuring]
- B29D30/00D** . [N: Handling tyres or parts thereof, e.g. supplying, storing, conveying ([B29D30/26B](#) takes precedence; loading and unloading vulcanizing presses [B29D30/06B2](#))] [C0610]
- B29D30/00E** . [N: General arrangement or lay-out of plants for the processing of tyres or parts thereof (Round cores or cylindrical drums arranged for a single sequence of tire building operations [B29D30/10](#), [B29D30/20](#); Vulcanization presses [B29D30/06B](#))] [N0610]

- B29D30/00Z . [N: Accessories, details or auxiliary operations not otherwise provided for] [N1112]
- B29D30/02 . Solid tyres
- B29D30/04 . Resilient fillings for rubber tyres; Filling tyres therewith
- B29D30/06 . Pneumatic tyres or parts thereof [N: (e.g. produced by casting, moulding, compression moulding, injection moulding, centrifugal casting)]
- B29D30/06B . . [N: Vulcanising tyres; Vulcanising presses for tyres]
- B29D30/06B1 . . . [N: the vulcanising medium being in direct contact with the tyre]
- B29D30/06B2 . . . [N: Loading or unloading the presses]
- B29D30/06B3 . . . [N: Vulcanising presses characterised by moulds integral with the presses having radially movable sectors]
- B29D30/06B4 . . . [N: Vulcanising moulds not integral with vulcanising presses]
- B29D30/06B4B [N: with radially movable sectors]
- B29D30/06B5 . . . [N: After-treatment specially adapted for vulcanising tyres] [C9608]
- B29D30/06B5B [N: Cooling during post cure inflation; Post cure inflators used therefor] [N9608]
- B29D30/06B6 . . . [N: Devices for inserting vulcanising cores, i.e. bladders, into the tyres; Closing the press in combination herewith] [M1112]
- B29D30/06B7 . . . [N: Devices for removing vulcanising cores, i.e. bladders, from the tyres; Opening the press in combination herewith] [M1112]
- B29D30/06B8 . . . [N: Tyre-vulcanising presses with two or more moulds, e.g. stacked upon each other] [M1112]
- B29D30/06B11 . . . [N: Flexible cores therefor, e.g. bladders, bags, membranes, diaphragms (elastic cores or mandrels for shaping of plastics [B29C33/50B](#); bags for isostatic pressing in compression moulding [B29C43/12](#), [B29C43/36D](#))] [N0908]
- B29D30/06B12 . . . [N: Rigid cores therefor, e.g. annular or substantially toroidal cores (cores for building tyres [B29D30/12](#); drums for building tyres [B29D30/24](#))] [N1112]
- B29D30/06B99 . . . [N: Accessories, details or auxiliary operations] [N1112]
- B29D30/06D . . [N: Injection moulding specially adapted for tyres or parts thereof (injection moulding in general [B29C45/00](#))]
- B29D30/06F . . [N: Centrifugal casting specially adapted for tyres or parts thereof (centrifugal casting in general [B29C39/08](#))]
- B29D30/06Z . . [N: Parts of pneumatic tyres; accessories, auxiliary operations] [N1112]
- B29D30/06Z3 . . . [N: Incorporating auto-repairing or self-sealing arrangements or agents on or into tyres (auto-repairing or self-sealing arrangements or agents [B29C73/16](#); puncture preventing arrangements [B60C19/12](#))] [N1112]
- B29D30/08 . . Building tyres
- B29D30/10 . . . on round cores, i.e. the shape of the core is approximately identical with the shape of the completed tyre
- B29D30/12 Cores
- B29D30/14 Rolling-down or pressing-down the layers in the building process
- B29D30/16 Applying the layers; Guiding or stretching the layers during application [N: applying tread bands to carcasses [B29D30/58](#); retreading [B29D30/54](#)] [C0607]
- B29D30/16B [N: by feeding a sheet perpendicular to the core axis and joining the ends to form an annular element (bending sheets and joining the edges

		B29C53/42)] [N0607]
B29D30/16C	. . . . .	[N: by sliding a preformed tubular layer over the core] [N0607]
B29D30/16D	. . . . .	[N: by feeding a continuous band and winding it spirally, i.e. the band is fed without relative movement along the core axis, to form an annular element (winding and joining, spirally in general B29C53/56B)] [N0607]
B29D30/16E	. . . . .	[N: by feeding a continuous band and winding it helically, i.e. the band is fed while being advanced along the core axis, to form an annular element (winding and joining, helically in general B29C53/58)] [N0607]
B29D30/16F	. . . . .	[N: by feeding a continuous band and moving it back and forth (zig-zag) to form an annular element] [N0607]
B29D30/16G	. . . . .	[N: by feeding cut-to-length pieces in a direction perpendicular to the core axis and in a plane parallel to the core axis, and placing the pieces side-by-side to form an annular element] [N0607]
B29D30/16H	. . . . .	[N: by feeding cut-to-length pieces in a direction parallel to the core axis and placing the pieces side-by-side to form an annular element] [N0607]
B29D30/16K	. . . . .	[N: by feeding cut-to-length pieces in a direction inclined with respect to the core axis and placing the pieces side-by-side to form an annular element] [N0607]
B29D30/18	. . . . .	Fitting the bead-rings or bead-cores; Folding the textile layers around the rings or cores
B29D30/20	. . . . .	by the flat-tyre method, i.e. building on cylindrical drums
B29D30/22	. . . . .	Breaker plies being applied in the unexpanded state
B29D30/24	. . . . .	Drums
B29D30/24B	. . . . .	[N: for manufacturing substantially cylindrical tyre components without cores or beads, e.g. treads or belts] [C9602]
B29D30/24B2	. . . . .	[N: and with mechanisms for folding layers]
B29D30/24C	. . . . .	[N: for manufacturing substantially cylindrical tyre components with cores or beads, e.g. carcasses (mechanisms for folding layers around cores or blads per se B29D30/32)] [N9602]
B29D30/24C2	. . . . .	[N: Drums for the single stage building process, i.e. the building-up of the cylindrical carcass and the toroidal expansion of it are realised on the same drum (expansion to a toroidal shape B29D30/36)] [N9602]
B29D30/24C3	. . . . .	[N: Drums for the multiple stage building process, i.e. the building-up of the cylindrical carcass is realised on one drum and the toroidal expansion is realised after transferring on another drum (expansion to a toroidal shape B29D30/36)] [N9602]
B29D30/24C3B	. . . . .	{7 dots} [N: Arrangements for the first stage only, e.g. means for radially expanding the drum to lock the beads (B29D30/24C2 takes precedence)] [N9602]
B29D30/24C4	. . . . .	[N: Drums of the undercut type without toroidal expansion, e.g. with provisions for folding down the plies, for positioning the beads under the surface of the drum] [N9602]
B29D30/26	. . . . .	Accessories or details, e.g. membranes, transfer rings [M1106]
B29D30/26B	. . . . .	[N: Devices for transferring annular tyre components during the building-up stage, e.g. from the first stage to the second stage building drum] [N9602]
B29D30/28	. . . . .	Rolling-down or pressing-down the layers in the building process
B29D30/30	. . . . .	Applying the layers; Guiding or stretching the layers during application [N: applying tread bands to carcasses B29D30/58; retreading B29D30/54] [C0607]

- B29D30/30B [N: by feeding a sheet perpendicular to the drum axis and joining the ends to form an annular element (bending sheets and joining the edges B29C53/42)] [N0607]
- B29D30/30C [N: by sliding a preformed tubular layer over the drum] [N0607]
- B29D30/30D [N: by feeding a continuous band and winding it spirally, i.e. the band is fed without relative movement along the drum axis, to form an annular element (winding and joining, spirally in general B29C53/56B)] [N0607]
- B29D30/30E [N: by feeding a continuous band and winding it helically, i.e. the band is fed while being advanced along the drum axis, to form an annular element (winding and joining, helically in general B29C53/58)] [N0607]
- B29D30/30F [N: by feeding a continuous band and moving it back and forth (zig-zag) to form an annular element] [N0607]
- B29D30/30G [N: by feeding cut-to-length pieces in a direction perpendicular to the drum axis and in a plane parallel to the drum axis, and placing the pieces side-by-side to form an annular element] [N0607]
- B29D30/30H [N: by feeding cut-to-length pieces in a direction parallel to the drum axis and placing the pieces side-by-side to form an annular element] [N0607]
- B29D30/30K [N: by feeding cut-to-length pieces in a direction inclined with respect to the drum axis and placing the pieces side-by-side to form an annular element] [N0607]
- B29D30/32 Fitting the bead-rings or bead-cores; Folding the textile layers around the rings or cores
- B29D30/34 by jointly covering two bead-rings, located parallel to each other at a distance apart, with fabric or cord layers
- B29D30/36 Expansion of tyres in a flat form [N: i.e. expansion to a toroidal shape independently of their building-up process], e.g. of tyre built by the flat-tyre method or by jointly covering two bead-rings [C9602]
- B29D30/38 Textile inserts, e.g. cord or canvas layers, for tyres (making woven fabrics D03D); Treatment of inserts prior to building the tyre (pretreatment of inserts B29B15/00; manufacture of layers comprising fibrous parallel reinforcements of substantial or continuous length B29C70/20) [C0901]
- B29D30/40 Chemical pretreatment of textile inserts before building the tyre
- B29D30/42 Endless textile bands without bead-rings
- B29D30/44 Stretching or treating the layers before application on the drum (during application B29D30/30)
- B29D30/46 Cutting textile inserts to required shape
- B29D30/48 Bead-rings or bead-cores (from wire B21F37/00); Treatment thereof prior to building the tyre
- B29D30/50 Covering, e.g. by winding, the separate bead-rings or bead-cores with textile material, e.g. with flipper strips (folding textile layers around bead-rings or bead-cores B29D30/18, B29D30/32; jointly covering bead-rings or bead cores B29D30/34)
- B29D30/52 Unvulcanised treads, e.g. on used tyres; Retreading (apparatus for forming [N: treads by extrusion B29C47/00; apparatus for] vulcanising treads B29C35/02; apparatus characterised by the means for holding wheels or parts thereof B60B30/00) [C1106]
- B29D30/54 Retreading
- B29D30/54B [N: using envelopes or membranes provided with sealings for curing] [N9501]
- B29D30/56 Retreading with prevulcanised tread [N: (B29D30/54B takes precedence)] [C9501]

- B29D30/58 . . . Applying bands of rubber treads, i.e. applying camel backs
- B29D30/60 by winding narrow strips
- B29D30/62 by extrusion or injection of the tread on carcass
- B29D30/64 . . . Tyre spreaders
- B29D30/66 . . . Moulding treads on to tyre casings, e.g. non-skid treads with spikes
- B29D30/68 . . . Cutting profiles into the treads of tyres
- B29D30/70 . . Annular breakers
- B29D30/72 . . Side-walls

B29D33/00 Producing bushes for bearings [N1103]

B29D35/00 Producing footwear [N1003]

[N: **Notes** [N1003]

1. Classification is made in this group if the moulding technique is of interest.
 2. The assembling of individual parts by mechanical joining is classified in subclass A43D, e.g. by gluing shoe parts [A43D25/00](#)
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- B29D35/00B . [N: by injection moulding; Apparatus therefor] [N1003]
- B29D35/00B2 . . [N: Moulds] [N1003]
- B29D35/00B2B . . . [N: Last constructions; Mountings therefor] [N1003]
- B29D35/00B2C . . . [N: with displaceable sole plates] [N1003]
- B29D35/00B2D . . . [N: Sealing means for the mould cavity] [N1003]

- B29D35/00C . [N: by compression moulding, vulcanising or the like; Apparatus therefor] [N1003]
- B29D35/00C2 . . [N: Moulds] [N1003]
- B29D35/00C2B . . . [N: Last constructions; Mountings therefor] [N1003]
- B29D35/00C2C . . . [N: with displaceable sole plates] [N1003]
- B29D35/00C2D . . . [N: Sealing means for the mould cavity] [N1003]

- B29D35/02 . made in one piece using a moulding technique, e.g. by injection moulding or casting [N1003]
- B29D35/04 . . having multilayered parts [N1003]

- B29D35/06 . having soles or heels formed and joined on to preformed uppers using a moulding technique, e.g. by injection moulding, pressing and vulcanising [N1003]
- B29D35/06B . . [N: by injection moulding] [N1003]
- B29D35/06B2 . . . [N: using means to bond the moulding material to the preformed uppers] [N1003]
- B29D35/06B3 . . . [N: using particular materials for the preformed uppers] [N1003]
- B29D35/06C . . [N: by compression moulding, vulcanising or the like] [N1003]
- B29D35/06C2 . . . [N: using means to bond the moulding material to the preformed uppers] [N1003]
- B29D35/06C3 . . . [N: using particular materials for the preformed uppers] [N1003]
- B29D35/08 . . having multilayered parts [N1003]

- B29D35/08B . . . [N: by injection moulding] [N1003]
- B29D35/08B2 [N: injecting first the outer sole part] [N1003]
- B29D35/08B3 [N: using exchangeable mould elements] [N1003]
- B29D35/08C [N: by compression moulding, vulcanising or the like] [N1003]
- B29D35/08C2 [N: forming first the outer sole part] [N1003]
- B29D35/08C3 [N: using exchangeable mould elements] [N1003]

- B29D35/10 having preformed soles or heels joined on to preformed uppers using a moulding technique, e.g. by feeding or injecting plastics material between the parts to be joined [N1003]

- B29D35/12 Producing parts thereof, e.g. soles, heels, uppers, by a moulding technique [N1003]
- B29D35/12B . . . [N: Soles] [N1003]
- B29D35/12C . . . [N: Heels] [N1003]
- B29D35/12D . . . [N: Uppers] [N1003]
- B29D35/12M . . . [N: Moulds or apparatus therefor] [N1003]
- B29D35/14 . . . Multilayered parts [N1003]
- B29D35/14B [N: Soles] [N1003]
- B29D35/14C [N: Heels] [N1003]
- B29D35/14D [N: Uppers] [N1003]
- B29D35/14M [N: Moulds or apparatus therefor] [N1003]

- B29D99/00** **Subject matter not provided for in other groups of this subclass** [N: (not used, see subgroups)] [N1103] **üC1203**

- B29D99/00B . . . [N: Producing profiled members, e.g. beams] [N1103]
- B29D99/00B2 . . . [N: having a variable cross-section] [N1103]

- B29D99/00C . . . [N: Producing wall or panel-like structures, e.g. for hulls, fuselages, or buildings (articles with hollow walls [B29D24/00](#))] [N1103]
- B29D99/00C2 . . . [N: provided with ridges or ribs, e.g. joined ribs] [N1103]
- B29D99/00C2B [N: with filled hollow ridges] [N1103]
- B29D99/00C3 . . . [N: provided with plain or filled structures, e.g. cores, placed between two or more plates or sheets, e.g. in a matrix] [N1103]

- B29D99/00D . . . [N: Producing blades or the like, e.g. blades for turbines, propellers, or wings] [N1103]
- B29D99/00D2 . . . [N: hollow blades] [N1103]

- B29D99/00E . . . [N: Producing rolling bodies, e.g. rollers, wheels, pulleys or pinions (bushes for bearings [B29D33/00](#); gear wheels [B29D15/00](#))] [N1103]
- B29D99/00E2 . . . [N: rollers or cylinders having an axial length of several times the diameter, e.g. for embossing, pressing, or printing] [N1103]

- B29D99/00F . . . [N: Producing countertops] [N1103]

- B29D99/00G . . . [N: Producing plain balls (hollow balls [B29D22/04](#))] [N1103] [M1106]

- B29D99/00H . . . [N: Producing rods (connecting-rods formed from fiber-reinforced resins [F16C7/00F](#))]

N1103]

- B29D99/00J . [N: Producing membranes] [N1103]
- B29D99/00K . [N: Producing sealings ([B29D99/00Q2](#) takes precedence)] [N1103]
- B29D99/00L . [N: Producing floor coverings] [N1103]
- B29D99/00M . [N: Producing casings, e.g. accumulator cases] [N1103]
- B29D99/00N . [N: Producing wearing apparel] [N1103]
- B29D99/00N3 . . [N: Gloves] [N1103]
- B29D99/00N4 . . [N: Masks, e.g. gas masks] [N1103]
- B29D99/00N5 . . [N: Bathing caps] [N1103]
- B29D99/00P . [N: Producing filamentary materials] [N1103]
- B29D99/00Q . [N: Producing articles in the form of closed loops, e.g. rings ([B29D29/00](#) takes precedence)] [N1103]
- B29D99/00Q2 . . [N: for sealing purposes] [N1103]
- B29D99/00R . [N: Producing honeycomb structures ([consisting of porous ceramic ware C04B38/00B](#))] [N1103]
- B29D99/00T . [N: Producing upholstery articles, e.g. cushions, seats ([B29C63/02C](#) takes precedence)] [N1103]
- B29D99/00V . [N: Producing closure members for containers, e.g. closure caps or stoppers] [N1103]