

CPC**COOPERATIVE PATENT CLASSIFICATION****B29B****PREPARATION OR PRETREATMENT OF THE MATERIAL TO BE SHAPED; MAKING GRANULES OR PREFORMS; RECOVERY OF PLASTICS OR OTHER CONSTITUENTS OF WASTE MATERIAL CONTAINING PLASTICS****B29B 7/00**

Mixing; Kneading ({ for preparation of dough [A21C 1/00](#); } in general [B01F](#); combined with calendering [B29C 43/24](#), with injection [B29C 45/46](#), with extrusion [B29C 47/36](#))

- B29B 7/002 . { Methods (chemical aspects [C08J 3/00](#)) }
- B29B 7/005 . . { for mixing in batches }
- B29B 7/007 . . { for continuous mixing }

- B29B 7/02 . non-continuous, with mechanical mixing or kneading devices, i.e. batch type
- B29B 7/04 . . with non-movable mixing or kneading devices
- B29B 7/06 . . with movable mixing or kneading devices
- B29B 7/08 . . . shaking, oscillating or vibrating
- B29B 7/085 { by means of axially movable pistons }
- B29B 7/10 . . . rotary
- B29B 7/103 { with rollers or the like in casings }
- B29B 7/106 { using rotary casings }
- B29B 7/12 . . . with single shaft
- B29B 7/125 { having a casing closely surrounding the rotor, e.g. for masticating rubber (with more than one shaft [B29B 7/183](#)); Rotors therefor ([B29B 7/14](#), [B29B 7/16](#) take precedence) }
- B29B 7/14 with screw or helix
- B29B 7/16 with paddles or arms
- B29B 7/18 . . . with more than one shaft
- B29B 7/183 { having a casing closely surrounding the rotors, e.g. of Banbury type (with single shaft [B29B 7/125](#)) }
- B29B 7/186 { Rotors therefor }
- B29B 7/20 with intermeshing devices, e.g. screws
- B29B 7/22 . . Component parts, details or accessories; Auxiliary operations
- B29B 7/24 . . . for feeding
- B29B 7/242 { in measured doses }
- B29B 7/244 { of several materials }
- B29B 7/246 { in mixers having more than one rotor and a casing closely surrounding the rotors, e.g. with feeding plungers }
- B29B 7/248 { with plungers for introducing the material, e.g. from below ([B29B 7/246](#) takes precedence) }
- B29B 7/26 . . . for discharging, e.g. doors
- B29B 7/263 { from the underside in mixers having more than one rotor and a casing closely surrounding the rotors }

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| B29B 7/266 | | { using sliding doors } |
| B29B 7/28 | ... | for measuring, controlling or regulating, e.g. viscosity control ({ B29B 7/242 takes precedence }) |
| B29B 7/283 | .... | { measuring data of the driving system, e.g. torque, speed, power } |
| B29B 7/286 | .... | { measuring properties of the mixture, e.g. temperature, density (B29B 7/283 takes precedence) } |
| B29B 7/30 | . | continuous, with mechanical mixing or kneading devices |
| B29B 7/32 | .. | with non-movable mixing or kneading devices |
| B29B 7/325 | ... | { Static mixers (in general B01F 5/0602) } |
| B29B 7/34 | .. | with movable mixing or kneading devices |
| B29B 7/36 | ... | shaking, oscillating or vibrating |
| B29B 7/365 | .... | { by means of axially movable pistons } |
| B29B 7/38 | ... | rotary (B29B 7/52 takes precedence) |
| B29B 7/385 | .... | { fluid mixers } |
| B29B 7/40 | .... | with single shaft |
| B29B 7/401 | ..... | { having a casing closely surrounding the rotor, e.g. with a plunger for feeding the material (B29B 7/407 , B29B 7/42 take precedence) } |
| B29B 7/402 | ..... | { using a rotor-stator system with intermeshing elements, e.g. teeth (B29B 7/408 , B29B 7/404 take precedence) } |
| B29B 7/404 | ..... | { with feeding or valve actuating means, e.g. with cleaning means } |
| B29B 7/405 | ..... | { Mixing heads (B29B 7/404 , B29B 7/42 take precedence; mixing heads without moving stirrer B29B 7/7457) } |
| B29B 7/407 | ..... | { with a casing closely surrounding the rotor, e.g. with conical rotor } |
| B29B 7/408 | ..... | { with mixing elements on a rotor co-operating with mixing elements, perpendicular to the axis of the rotor, fixed on a stator } |
| B29B 7/42 | ..... | with screw or helix |
| B29B 7/421 | ..... | { with screw and additionally other mixing elements on the same shaft, e.g. paddles, discs, bearings, rotor blades of the Banbury type } |
| B29B 7/422 | ..... | { with screw sections co-operating, e.g. intermeshing, with elements on the wall of the surrounding casing } |
| B29B 7/423 | ..... | { and oscillating axially (in general B01F 11/0057) } |
| B29B 7/424 | ..... | { with conical screw surrounded by conical casing } |
| B29B 7/425 | ..... | { with screw surrounded by a casing provided with grooves or cavities } |
| B29B 7/426 | ..... | { with consecutive casings or screws, e.g. for charging, discharging, mixing } |
| B29B 7/427 | ..... | { with independently driven screws rotating about the same axis, e.g. oscillating axially; with axially oscillating screws (B29B 7/423 takes precedence) } |
| B29B 7/428 | ..... | { Parts or accessories, e.g. casings, feeding or discharging means } |
| B29B 7/429 | ..... | { Screws (B29B 7/421 takes precedence) } |
| B29B 7/44 | ..... | with paddles or arms |
| B29B 7/46 | .... | with more than one shaft |
| B29B 7/465 | | { each shaft comprising rotor parts of the Banbury type in addition to screw parts } |

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| B29B 7/48 | | with intermeshing devices, e.g. screws |
| B29B 7/481 | | { provided with paddles, gears or discs (B29B 7/482 takes precedence) } |
| B29B 7/482 | ..... | { provided with screw parts in addition to other mixing parts, e.g. paddles, gears, discs } |
| B29B 7/483 | ..... | { the other mixing parts being discs perpendicular to the screw axis } |
| B29B 7/484 | ..... | { with two shafts provided with screws, e.g. one screw being shorter than the other (B29B 7/482 takes precedence) } |
| B29B 7/485 | ..... | { with three or more shafts provided with screws } |
| B29B 7/486 | ..... | { with screws surrounded by a casing provided with grooves or cavities } |
| B29B 7/487 | ..... | { with consecutive casings or screws, e.g. for feeding, discharging, mixing } |
| B29B 7/488 | ..... | { Parts, e.g. casings, sealings; Accessories, e.g. flow controlling or throttling devices (discharging B29B 7/582 ; feeding B29B 7/60) } |
| B29B 7/489 | ..... | { Screws (B29B 7/482 takes precedence) } |
| B29B 7/50 | .... | with rotary casing |
| B29B 7/52 | ... | with rollers or the like, e.g. calenders |
| B29B 7/523 | .... | { co-operating with casings } |
| B29B 7/526 | ..... | { with two or more rollers } |
| B29B 7/54 | .... | with a single roller co-operating with a stationary member { other than the casing } |
| B29B 7/56 | .... | with co-operating rollers { e.g. with repeated action, i.e. the material leaving a set of rollers being reconducted to the same set or being conducted to a next set } |
| B29B 7/562 | ..... | { with means for axially moving the material on the rollers } |
| B29B 7/564 | ..... | { at least one of the rollers being provided with helicoidal grooves or ridges, e.g. followed by axial extrusion } |
| B29B 7/566 | ..... | { provided with means to take material away from a set of rollers and to reconduct it to the same set; provided with endless belts, e.g. which can be in or out of cooperation with at least one of the rollers } |
| B29B 7/568 | ..... | { with consecutive sets of rollers or a train of rollers } |
| B29B 7/58 | .. | Component parts, details or accessories; Auxiliary operations |
| B29B 7/582 | ... | { for discharging, e.g. doors } |
| B29B 7/584 | ... | { for mixers with rollers, e.g. wedges, guides, pressing means, thermal conditioning } |
| B29B 7/586 | .... | { Drives } |
| B29B 7/588 | .... | { cutting devices, e.g. movable cutting devices (scrapers for stripping the material from rollers B29B 7/645) } |
| B29B 7/60 | ... | for feeding, e.g. end guides for the incoming material {(B29B 7/7615 takes precedence; feeding predetermined amounts for mixing in general B01F 15/0216) } |
| B29B 7/603 | .... | { in measured doses, e.g. proportioning of several materials } |
| B29B 7/606 | .... | { specially adapted for feeding calenders or the like } |
| B29B 7/62 | ... | Rollers, e.g. with grooves (B29B 7/564 takes precedence) |
| B29B 7/625 | | { provided with cooling or heating means } |

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| B29B 7/64 | ... | Stripping the material from the rollers |
| B29B 7/645 | | { by means of a scraper moving in the axial direction of the rollers } |
| B29B 7/66 | ... | Recycling the material ({ B29B 7/566 takes precedence }) |
| B29B 7/68 | ... | Positioning of rollers |
| B29B 7/70 | ... | Conditioning of rollers, e.g. cleaning |
| B29B 7/72 | ... | Measuring, controlling or regulating |
| B29B 7/722 | .... | { Safety devices } |
| B29B 7/724 | .... | { for continuous roller mixers, e.g. calenders (B29B 7/722 takes precedence) } |
| B29B 7/726 | .... | { Measuring properties of mixture, e.g. temperature or density (B29B 7/724 takes precedence) } |
| B29B 7/728 | .... | { Measuring data of the driving system, e.g. torque, speed, power, vibration (B29B 7/724 takes precedence) } |
| B29B 7/74 | . | using other mixers or combinations of { mixers, e.g. of } dissimilar mixers; { Plant } |
| B29B 7/7404 | .. | { Mixing devices specially adapted for foamable substances (B29B 7/76 takes precedence) } |
| B29B 7/7409 | ... | { with supply of gas } |
| B29B 7/7414 | .... | { with rotatable stirrer, e.g. using an intermeshing rotor-stator system (B29B 7/7423 takes precedence) } |
| B29B 7/7419 | .... | { with static or injector mixer elements } |
| B29B 7/7423 | ..... | { preceded or followed by rotatable stirring device } |
| B29B 7/7428 | .... | { Methodical aspects } |
| B29B 7/7433 | ... | { Plants } |
| B29B 7/7438 | .. | { Mixing guns, i.e. hand-held mixing units having dispensing means (B29B 7/761 , B29B 7/7678 take precedence) } |
| B29B 7/7442 | ... | { with driven stirrer } |
| B29B 7/7447 | ... | { including means for feeding the components } |
| B29B 7/7452 | ... | { for mixing components by spraying them into each other; for mixing by intersecting sheets } |
| B29B 7/7457 | .. | { Mixing heads without moving stirrer (B29B 7/7438 , B29B 7/76 take precedence) } |
| B29B 7/7461 | .. | { Combinations of dissimilar mixers } |
| B29B 7/7466 | .. | { Combinations of similar mixers } |
| B29B 7/7471 | .. | { Mixers in which the mixing takes place at the inlet of a mould, e.g. mixing chambers situated in the mould opening } |
| B29B 7/7476 | .. | { Systems, i.e. flow charts or diagrams; Plants } |
| B29B 7/748 | ... | { Plants (B29B 7/7433 , B29B 7/7485 , B29B 7/7495 take precedence) } |
| B29B 7/7485 | ... | { with consecutive mixers, e.g. with premixing some of the components } |
| B29B 7/749 | .... | { with stirring means for the individual components before they are mixed together } |
| B29B 7/7495 | ... | { for mixing rubber } |
| B29B 7/76 | .. | { Mixers } with stream-impingement mixing head |
| B29B 7/7605 | ... | { having additional mixing arrangements (B29B 7/7673 takes precedence) } |
| B29B 7/761 | ... | { of gun-type, i.e. hand-held units having dispensing means (B29B 7/7678 takes precedence) } |

- B29B 7/7615 ... { characterised by arrangements for controlling, measuring or regulating, e.g. for feeding or proportioning the components }
- B29B 7/7621 { involving introducing a gas or another component in at least one of the components }
- B29B 7/7626 { using measuring chambers of piston or plunger type ([B29B 7/7621](#) takes precedence; for mixing in general [B01F 15/0454](#)) }
- B29B 7/7631 ... { Parts; Accessories ([B29B 7/7684](#) takes precedence) }
- B29B 7/7636 { Construction of the feed orifices, bores, ports }
- B29B 7/7642 { Adjustable feed orifices, e.g. for controlling the rate of feeding }
- B29B 7/7647 { Construction of the mixing conduit module or chamber part }
- B29B 7/7652 { Construction of the discharge orifice, opening or nozzle }
- B29B 7/7657 { Adjustable discharge orifices, openings or nozzle openings, e.g. for controlling the rate of dispensing }
- B29B 7/7663 ... { the mixing head having an outlet tube with a reciprocating plunger, e.g. with the jets impinging in the tube }
- B29B 7/7668 { having a second tube intersecting the first one with the jets impinging in the second tube }
- B29B 7/7673 { having additional mixing arrangements ([B29B 7/7668](#) takes precedence) }
- B29B 7/7678 { of the gun type, i.e. hand-held units }
- B29B 7/7684 { Parts; Accessories }
- B29B 7/7689 { Plunger constructions }
- B29B 7/7694 { comprising recirculation channels; ducts formed in the plunger }
- B29B 7/78 .. by gravity, e.g. falling particle mixers

- B29B 7/80 . Component parts, details or accessories; Auxiliary operations ([B29B 7/22](#), [B29B 7/58](#) take precedence, { cleaning mixers [B01F 15/00019](#) })
- B29B 7/801 .. { Valves }
- B29B 7/802 .. { Constructions or methods for cleaning the mixing or kneading device (cleaning in general [B08B](#)) }
- B29B 7/803 ... { Cleaning of mixers of the gun type, stream-impingement type, mixing heads }
- B29B 7/805 { Cleaning of the mixing conduit, module or chamber part }
- B29B 7/806 { Cleaning of the discharge opening, e.g. orifice of the dispenser }
- B29B 7/807 { Cleaning of the central body of the plunger }
- B29B 7/808 { Cleaning of the plunger tip }
- B29B 7/82 .. Heating or cooling
- B29B 7/823 ... { Temperature control }
- B29B 7/826 ... { Apparatus therefor }
- B29B 7/84 .. Venting or degassing { ;Removing liquids, e.g. by evaporating components }
- B29B 7/842 ... { Removing liquids in liquid form }
- B29B 7/845 ... { Venting, degassing or removing evaporated components in devices with rotary stirrers }
- B29B 7/847 { Removing of gaseous components before or after mixing }
- B29B 7/86 .. for working at sub- or superatmospheric pressure ([B01F 13/06](#) takes precedence) }
- B29B 7/88 .. Adding charges, { i.e. additives }

- B29B 7/885 . . . { with means for treating, e.g. milling, the charges } ([B29B 7/905](#) takes precedence)]
- B29B 7/90 . . . Fillers or reinforcements { e.g. fibres }
- B29B 7/905 { with means for pretreatment of the charges or fibres }
- B29B 7/92 Wood chips or wood fibres
- B29B 7/94 . . . Liquid charges
- B29B 7/945 { involving coating particles }

B29B 9/00 **Making granules** (in general [B01J](#); chemical aspects [C08J 3/12](#))

- B29B 9/02 . by dividing preformed material
- B29B 9/04 . . in the form of plates or sheets
- B29B 9/06 . . in the form of filamentary material, e.g. combined with extrusion
- B29B 9/065 . . . { under-water, e.g. underwater pelletizers }
- B29B 9/08 . by agglomerating smaller particles
- B29B 9/10 . by moulding the material, i.e. treating it in the molten state
- B29B 9/12 . characterised by structure or composition
- B29B 9/14 . . fibre-reinforced
- B29B 9/16 . Auxiliary treatment of granules

B29B 11/00 **Making preforms** ([B29C 61/06](#) takes precedence; { combined with blow-moulding [B29C 49/02](#), with thermoforming [B29C 51/02](#); making preforms for manufacturing of light guides [B29D 11/00721](#) })

- B29B 11/02 . by dividing preformed material, e.g. sheets, rods
- B29B 11/04 . by assembling preformed material
- B29B 11/06 . by moulding the material
- B29B 11/08 . . Injection moulding
- B29B 11/10 . . Extrusion moulding
- B29B 11/12 . . Compression moulding
- B29B 11/14 . characterised by structure or composition
- B29B 11/16 . . comprising fillers or reinforcement {([non-woven fabrics per se D04H 1/00](#), [D04H 3/00](#))}

B29B 13/00 **Conditioning or physical treatment of the material to be shaped** (chemical aspects [C08J 3/00](#)) { heating, cooling or curing during shaping [B29C 35/00](#); Thermal after-treatment [B29C 71/02](#) }

- B29B 13/007 . { Treatment of sinter powders }
- B29B 13/02 . by heating ([B29B 13/06](#), [B29B 13/08](#) take precedence)

- B29B 13/021 .. { Heat treatment of powders }
- B29B 13/022 .. { Melting the material to be shaped }
- B29B 13/023 .. { Half-products, e.g. films, plates }
- B29B 13/024 ... { Hollow bodies, e.g. tubes or profiles }
- B29B 13/025 { Tube ends }

- B29B 13/04 . by cooling { (cooling moulded articles or half products [B29C 35/16](#)) }
- B29B 13/045 .. { of powders or pellets }

- B29B 13/06 . by drying ([B29B 13/08](#) takes precedence; { drying moulded articles or half products [B29C 37/0092](#) })
- B29B 13/065 .. { of powder or pellets }

- B29B 13/08 . by using wave energy or particle radiation

- B29B 13/10 . by grinding, e.g. by triturating; by sieving; by filtering

B29B 15/00 **Pretreatment of the material to be shaped, not covered by groups [B29B 7/00](#) to [B29B 13/00](#)**

- B29B 15/02 . of crude rubber, gutta-percha, or similar substances (tapping latex [A01G](#); Chemical aspects [C08C](#))
- B29B 15/023 .. { Breaking up rubber bales }
- B29B 15/026 .. { Baling of rubber }
- B29B 15/04 .. Coagulating devices
- B29B 15/06 .. Washing devices

- B29B 15/08 . of reinforcements or fillers (chemical aspects [C08J](#), K)
- B29B 15/10 .. Coating or impregnating { independently of the moulding or shaping step }
(applying liquids in general [B05](#))

NOTE

Where the coating or impregnating is combined with moulding the documents are classified in [B29C 53/8066](#), **[B29C 67/14C](#)**

- B29B 15/105 ... { of reinforcement of definite length with a matrix in solid form e.g. powder, fibre or sheet form (calendering [B29C 70/506](#)) }
- B29B 15/12 ... of reinforcements of indefinite length
- B29B 15/122 { with a matrix in liquid form, e.g. as melt, solution or latex }
- B29B 15/125 { by dipping }
- B29B 15/127 { by spraying }
- B29B 15/14 of filaments or wires

B29B 17/00 **Recovery of plastics or other constituents of waste material containing plastics; ({ volume reduction of waste plastics, e.g. by mechanical compacting or melting disposal of solid waste [B09B](#); } chemical recovery [C08J 11/00](#))**

- B29B 17/0005 . { Direct recuperation and re-use of scrap material during moulding operation, i.e.

- feed-back of used material }
- B29B 17/0026 . { by agglomeration or compacting }
- B29B 17/0036 . . { of large particles, e.g. beads, granules, pellets, flakes, slices }
- B29B 17/0042 . . { for shaping parts, e.g. multilayered parts with at least one layer containing regenerated plastic }
- B29B 17/0047 . . { Compacting complete waste articles }
- B29B 17/0052 . . . { Hollow articles, e.g. bottles }
- B29B 17/02 . Separating plastics from other materials
- B29B 17/0206 . . { Selectively separating reinforcements from matrix material by destroying the interface bound before desintegrating the matrix to particles or powder, e.g. from tires or belts }
- B29B 17/021 . . . { using local heating of the reinforcement }
- B29B 17/04 . Disintegrating plastics, { e.g. by milling } ([B29B 9/02](#), [B29B 11/02](#), [B29B 13/10](#), { [B29B 17/02](#) } take precedence)
- B29B 17/0404 . . { to powder }
- B29B 17/0408 . . . { using cryogenic systems }
- B29B 17/0412 . . { to large particles, e.g. beads, granules, flakes, slices }
- B29B 2009/00** **Making granules** (in general [B01J](#); chemical aspects [C08J 3/12](#))
- B29B 2009/12 . characterised by structure or composition
- B29B 2009/125 . . Micropellets, microgranules, microparticles
- B29B 2009/16 . Auxiliary treatment of granules
- B29B 2009/161 . . Absorbing, i.e. introducing a gas, a liquid or a solid material into the granules
- B29B 2009/163 . . Coating, i.e. applying a layer of liquid or solid material on the granule
- B29B 2009/165 . . Crystallizing granules
- B29B 2009/166 . . Deforming granules to give a special form, e.g. spheroidizing, rounding
- B29B 2009/168 . . Removing undesirable residual components, e.g. solvents, unreacted monomers; Degassing
- B29B 2013/00** **Conditioning or physical treatment of the material to be shaped** ([chemical aspects C08J 3/00](#)) { heating, cooling or curing during shaping [B29C 35/00](#); Thermal after-treatment [B29C 71/02](#) }
- B29B 2013/002 . Extracting undesirable residual components, e.g. solvents, unreacted monomers, from material to be moulded
- B29B 2013/005 . Degassing undesirable residual components, e.g. gases, unreacted monomers, from material to be moulded
- B29B 2013/02 . by heating ([B29B 13/06](#), [B29B 13/08](#) take precedence)
- B29B 2013/023 . . { Half-products, e.g. films, plates }
- B29B 2013/026 . . . Obtaining a uniform temperature over the whole surface of films or tubes

- B29B 2013/027 . . . Obtaining a temperature gradient over the surface of films or tubes
- B29B 2013/028 . . . Obtaining a temperature gradient across the wall thickness of plates or tubes

- B29B 2017/00** **Recovery of plastics or other constituents of waste material containing plastics; ({**
volume reduction of waste plastics, e.g. by mechanical compacting or melting disposal of
solid waste [B09B](#); } chemical recovery [C08J 11/00](#))

- B29B 2017/001 . Pretreating the materials before recovery
- B29B 2017/0015 .. Washing, rinsing
- B29B 2017/0021 .. Dividing in large parts

- B29B 2017/0026 . { by agglomeration or compacting }
- B29B 2017/0031 .. Melting the outer surface of compressed waste, e.g. for forming briquets by
expelling the compressed waste material through a heated tool
- B29B 2017/0047 .. { Compacting complete waste articles }
- B29B 2017/0052 ... { Hollow articles, e.g. bottles }
- B29B 2017/0057 Externally powered deformation tools, e.g. tools being part of relatively big
non domestic installations, powered by motors
- B29B 2017/0063 Manually driven deformation tools, e.g. tools being part of domestic
installations
- B29B 2017/0068 Softening the hollow articles by heat and causing permanent deformation
- B29B 2017/0073 Removing caps or labels during deformation
- B29B 2017/0078 Maintaining the deflated state, e.g. by mounting original screw lids after
deformation
- B29B 2017/0084 Deflating the hollow articles by vacuum; Details of the nozzles used in the
vacuum generating devices.

- B29B 2017/0089 . Recycling systems, wherein the flow of products between producers, sellers and
consumers includes at least a recycling step, e.g. the products being fed back to the
sellers or to the producers for recycling purposes

- B29B 2017/0094 . Mobile recycling devices, e.g. devices installed in truck trailers

- B29B 2017/02 . Separating plastics from other materials
- B29B 2017/0203 .. Separating plastics from plastics
- B29B 2017/0213 .. Specific separating techniques
- B29B 2017/0217 ... Mechanical separating techniques; devices therefor
- B29B 2017/022 Grippers, hooks, piercing needles, fingers, e.g. mounted on robots
- B29B 2017/0224 Screens, sieves
- B29B 2017/0227 Vibratory or shaking tables
- B29B 2017/0231 Centrifugating, cyclones
- B29B 2017/0234 using gravity, e.g. separating by weight differences in a wind sifter
- B29B 2017/0237 using density difference
- B29B 2017/0241 in gas, e.g. air flow
- B29B 2017/0244 in liquids
- B29B 2017/0248 Froth flotation, i.e. wherein gas bubbles are attached to suspended particles
in an aerated liquid

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| B29B 2017/0251 | | Hydropulping for converting the material under the influence of water into a slurry, e.g. for separating laminated plastic from paper |
| B29B 2017/0255 | ... | using different melting or softening temperatures of the materials to be separated |
| B29B 2017/0258 | .... | using heated surfaces for selective softening or melting of at least one plastic ingredient |
| B29B 2017/0262 | ... | using electrical characteristics |
| B29B 2017/0265 | .... | Electrostatic separation |
| B29B 2017/0268 | ... | Separation of metals |
| B29B 2017/0272 | .... | Magnetic separation |
| B29B 2017/0275 | ... | using chemical sensors, e.g. analysing gasified constituents |
| B29B 2017/0279 | ... | Optical identification, e.g. cameras or spectroscopy |
| B29B 2017/0282 | ... | using information associated with the materials, e.g. labels on products |
| B29B 2017/0286 | ... | Cleaning means used for separation |
| B29B 2017/0289 | .... | Washing the materials in liquids |
| B29B 2017/0293 | ... | Dissolving the materials in gases or liquids |
| B29B 2017/0296 | .... | Dissolving the materials in aqueous alkaline solutions, e.g. NaOH or KOH |
| B29B 2017/04 | . | Disintegrating plastics, { e.g. by milling } (B29B 9/02 , B29B 11/02 , B29B 13/10 , { B29B 17/02 } take precedence) |
| B29B 2017/0416 | .. | Cooling the plastics before disintegration, e.g. freezing |
| B29B 2017/042 | .. | Mixing disintegrated particles or powders with other materials, e.g. with virgin materials |
| B29B 2017/0424 | .. | Specific disintegrating techniques; devices therefor |
| B29B 2017/0428 | ... | Jets of high pressure fluid |
| B29B 2017/0432 | .... | Abrasive blasting, i.e. the jets being charged with abrasives |
| B29B 2017/0436 | ... | Immersion baths |
| B29B 2017/044 | ... | Knives |
| B29B 2017/0444 | ... | Cutting wires, e.g. vibrating wires |
| B29B 2017/0448 | ... | Cutting discs |
| B29B 2017/0452 | .... | the discs containing abrasives |
| B29B 2017/0456 | ... | Pressing tools with calibrated openings, e.g. in sizing plates, for disintegrating solid materials |
| B29B 2017/046 | ... | Extruder as pressing tool with calibrated die openings for forming and disintegrating pasty or melted material |
| B29B 2017/0464 | ... | Solid state shear extrusion pulverisation |
| B29B 2017/0468 | ... | Crushing, i.e. disintegrating into small particles |
| B29B 2017/0472 | ... | Balls or rollers in a container |
| B29B 2017/0476 | ... | Cutting or tearing members, e.g. spiked or toothed cylinders or intermeshing rollers |
| B29B 2017/048 | ... | Cutter-compactors, e.g. of the EREMA type |
| B29B 2017/0484 | ... | Grinding tools, roller mills or disc mills |
| B29B 2017/0488 | ... | Hammers or beaters |
| B29B 2017/0492 | ... | Projecting the material on stationary or moving impact surfaces or plates |
| B29B 2017/0496 | ... | Pyrolysing the materials |

B29B 2911/00 **Indexing scheme related to making preforms for blow-moulding bottles or the like**
 (not used)

- B29B 2911/14 . Layer configuration, geometry, dimensions or physical properties of preforms for blow-moulding bottles or the like (not used)
- B29B 2911/14006 .. layer configuration (not used)
- B29B 2911/14013 ... monolayered
- B29B 2911/1402 at neck portion
- B29B 2911/14026 at flange portion
- B29B 2911/14033 at body portion
- B29B 2911/1404 at bottom portion
- B29B 2911/14046 ... multilayered
- B29B 2911/14053 at neck portion
- B29B 2911/1406 partially
- B29B 2911/14066 at flange portion
- B29B 2911/14073 partially
- B29B 2911/1408 at body portion
- B29B 2911/14086 partially
- B29B 2911/14093 at bottom portion
- B29B 2911/141 partially
- B29B 2911/14106 having at least one layer
- B29B 2911/14113 having at least two layers
- B29B 2911/1412 having at least three layers
- B29B 2911/14126 having more than three layers
- B29B 2911/14133 having at least one layer being injected
- B29B 2911/1414 having at least two layers being injected
- B29B 2911/14146 having at least three layers being injected
- B29B 2911/14153 having more than three layers being injected
- B29B 2911/1416 having at least one layer being extruded
- B29B 2911/14166 having at least two layers being extruded
- B29B 2911/14173 having at least three layers being extruded
- B29B 2911/1418 having more than three layers being extruded
- B29B 2911/14186 having at least one layer being thermoformed
- B29B 2911/14193 having at least two layers being thermoformed
- B29B 2911/142 having at least three layers being thermoformed
- B29B 2911/14206 having more than three layers being thermoformed
- B29B 2911/14213 having at least one layer being compression moulded
- B29B 2911/1422 having at least two layers being compression moulded
- B29B 2911/14226 having at least three layers being compression moulded
- B29B 2911/14233 having more than three layers being compression moulded
- B29B 2911/1424 having at least one layer being applied using techniques not covered by [B29B 2911/14133](#) to [B29B 2911/14213](#)

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|-----------------|-------|---|
| B29B 2911/14246 | | having at least two layers being applied using said techniques |
| B29B 2911/14253 | ..... | having at least three layers being applied using said techniques |
| B29B 2911/1426 | ..... | having more than three layers being applied using said techniques |
| B29B 2911/14266 | ..... | Type of said techniques not covered by B29B 2911/14133 to B29B 2911/14213 |
| B29B 2911/14273 | ..... | Spray coating |
| B29B 2911/1428 | ..... | Dip coating |
| B29B 2911/14286 | ..... | Powder coating |
| B29B 2911/14293 | ..... | Casting |
| B29B 2911/143 | .... | Interaction between at least two layers |
| B29B 2911/14306 | ..... | by welding |
| B29B 2911/14313 | ..... | by using adhesives |
| B29B 2911/1432 | .. | Geometry (not used) |
| B29B 2911/14326 | ... | Variable wall thickness |
| B29B 2911/14333 | ... | Variable diameter |
| B29B 2911/1434 | ... | Ribs or protrusions |
| B29B 2911/14346 | ... | Internal separating wall |
| B29B 2911/14353 | ... | Special shape |
| B29B 2911/1436 | .... | Special overall shape |
| B29B 2911/14366 | ..... | Conical |
| B29B 2911/14373 | ..... | Axially asymmetrical |
| B29B 2911/1438 | ..... | Elliptic or oval cross-section shape |
| B29B 2911/14386 | ..... | Rectangular cross-section shape |
| B29B 2911/14393 | ..... | Hexagonal cross-section shape |
| B29B 2911/144 | ..... | Shape allows stacking or nesting |
| B29B 2911/14406 | .... | Special shape of specific parts of preform |
| B29B 2911/14413 | ..... | Special lip, i.e. very top of preform neck |
| B29B 2911/1442 | ..... | Special neck |
| B29B 2911/14426 | ..... | Wide-mouth |
| B29B 2911/14433 | ..... | Closure retaining means |
| B29B 2911/1444 | ..... | Threads |
| B29B 2911/14446 | ..... | Interrupted threads |
| B29B 2911/14453 | ..... | Inner threads |
| B29B 2911/1446 | ..... | No threads |
| B29B 2911/14466 | ..... | Tamper-evident band retaining ring |
| B29B 2911/14473 | ..... | Special flange |
| B29B 2911/1448 | ..... | Special body |
| B29B 2911/14486 | ..... | Special bottom |
| B29B 2911/14493 | ..... | Special sprue, i.e. injection mark |
| B29B 2911/145 | | Special pinch-off portion |
| B29B 2911/14506 | ... | Auxiliary parts or inserts |
| B29B 2911/14513 | | Handle |

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| B29B 2911/1452 | | Closure |
| B29B 2911/14526 | | Transport means |
| B29B 2911/14533 | | Dispensing spout |
| B29B 2911/1454 | .... | Parts to assist orientation of preform, e.g. in mould |
| B29B 2911/14546 | ..... | at neck portion |
| B29B 2911/14553 | ..... | at flange portion |
| B29B 2911/1456 | ..... | at body portion |
| B29B 2911/14566 | ..... | at bottom portion |
| B29B 2911/14573 | .... | Preform, i.e. neck, flange, body and bottom, made of several individual parts |
| B29B 2911/1458 | ..... | Finish neck ring |
| B29B 2911/14586 | .. | Mentioned dimensions (not used) |
| B29B 2911/14593 | ... | Wall thickness |
| B29B 2911/146 | .... | of the lip, i.e. the very top of the preform neck |
| B29B 2911/14606 | .... | of the neck |
| B29B 2911/14613 | .... | of the threads |
| B29B 2911/1462 | .... | of the tamper-evident band retaining ring |
| B29B 2911/14626 | .... | of the flange |
| B29B 2911/14633 | .... | of the body |
| B29B 2911/1464 | .... | of the bottom |
| B29B 2911/14646 | .... | of a layer |
| B29B 2911/14653 | ... | Diameter, D |
| B29B 2911/1466 | .... | of the lip, i.e. the very top of the preform neck |
| B29B 2911/14666 | .... | of the neck |
| B29B 2911/14673 | .... | of the threads |
| B29B 2911/1468 | .... | of the tamper-evident band retaining ring |
| B29B 2911/14686 | .... | of the flange |
| B29B 2911/14693 | .... | of the body |
| B29B 2911/147 | .... | of the bottom |
| B29B 2911/14706 | .... | of a layer |
| B29B 2911/14713 | ... | Height, length, L |
| B29B 2911/1472 | .... | of the lip, i.e. the very top of the preform neck |
| B29B 2911/14726 | .... | of the neck |
| B29B 2911/14733 | .... | of the threads |
| B29B 2911/1474 | .... | of the tamper-evident band retaining ring |
| B29B 2911/14746 | .... | of the flange |
| B29B 2911/14753 | .... | of the body |
| B29B 2911/1476 | .... | of the bottom |
| B29B 2911/14766 | .... | of a layer |
| B29B 2911/14773 | ... | Ratio L/D |
| B29B 2911/1478 | ... | Angle |
| B29B 2911/14786 | | of the lip, i.e. the very top of the preform neck |
| B29B 2911/14793 | | of the neck |

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| B29B 2911/148 | | of the threads |
| B29B 2911/14806 | | of the tamper-evident band retaining ring |
| B29B 2911/14813 | .... | of the flange |
| B29B 2911/1482 | .... | of the body |
| B29B 2911/14826 | .... | of the bottom |
| B29B 2911/14833 | .... | of a layer |
| B29B 2911/1484 | ... | Curvature, e.g. radius |
| B29B 2911/14846 | .... | of the lip, i.e. the very top of the preform neck |
| B29B 2911/14853 | .... | of the neck |
| B29B 2911/1486 | .... | of the threads |
| B29B 2911/14866 | .... | of the tamper-evident band retaining ring |
| B29B 2911/14873 | .... | of the flange |
| B29B 2911/1488 | .... | of the body |
| B29B 2911/14886 | .... | of the bottom |
| B29B 2911/14893 | .... | of a layer |
| B29B 2911/149 | .. | Mentioned values not covered by B29B 2911/14586 |
| B29B 2911/14906 | ... | Crystallinity |
| B29B 2911/14913 | .... | at the neck portion |
| B29B 2911/1492 | .... | at the flange portion |
| B29B 2911/14926 | .... | at the body portion |
| B29B 2911/14933 | .... | at the bottom portion |
| B29B 2911/1494 | ... | Surface roughness |
| B29B 2911/14946 | .... | at the neck portion |
| B29B 2911/14953 | .... | at the flange portion |
| B29B 2911/1496 | .... | at the body portion |
| B29B 2911/14966 | .... | at the bottom portion |
| B29B 2911/14973 | ... | Optical properties |
| B29B 2911/1498 | ... | Weight |
| B29B 2911/14986 | ... | Composition |
| B29B 2911/14993 | .... | Recycled material |