

**CPC****COOPERATIVE PATENT CLASSIFICATION****B28C**

**PREPARING CLAY; PRODUCING MIXTURES CONTAINING CLAY OR CEMENTITIOUS MATERIAL, e.g. PLASTER** ( preparing material for foundry moulds [B22C 5/00](#))

**NOTE**

In this subclass, the following terms or expressions are used with the meanings indicated:

"cement" or "mixtures of cement with other substance" includes plaster;

"clay" includes like ceramic compositions.

**B28C 1/00**

**Apparatus or methods for obtaining or processing clay** ( filtration in general [B01D](#) ; separation of solids from solids [B03](#) , [B07](#) ; chemical part [C04B](#) ; by mining or quarrying [E21C 41/16](#) , [E21C 41/26](#) , [E21C 47/10](#))

**B28C 1/003**

. { Plant; Methods }

**B28C 1/006**

.. { Methods }

**B28C 1/02**

. for producing or processing clay suspensions, { e.g. slip } ( producing or processing suspensions in general [B01](#))

**B28C 1/04**

.. Producing suspensions, e.g. by blunging { or mixing; with means for removing stones }

**B28C 1/06**

.. Processing suspensions { i.e. after mixing }

**B28C 1/08**

... Separating suspensions, e.g. for obtaining clay, for removing stones; { Cleaning clay slurries }

**B28C 1/082**

.... { Dewatering ([B28C 1/088](#) takes precedence ) ; Using sieves }

**B28C 1/084**

.... { De-aerating }

**B28C 1/086**

.... { Washing }

**B28C 1/088**

.... { by centrifugal force }

**B28C 1/10**

. for processing clay-containing substances in non-fluid condition ( clay slurries [B28C 1/02](#)); { Plants }

**B28C 1/12**

.. Storing and conditioning in storage; Specially adapted storage spaces or devices for their filling or emptying; { Tower structures for the storage of clay } ( feeding clay to shaping apparatus [B28B 13/00](#))

**B28C 1/14**

.. specially adapted for homogenising, comminuting or conditioning clay in non-fluid condition or for separating undesired admixtures therefrom ( processes involving conversion to a slurry [B28C 1/02](#) ; conditioning in storage [B28C 1/12](#) ; comminuting in general [B02C](#) ; chemical features in eliminating iron or lime [C04B](#))

**B28C 1/16**

... for homogenising, e.g. by mixing, kneading; { forcing through slots }

**B28C 1/18**

... for comminuting { clay lumps }

**B28C 1/182**

.... { by forcing the clay through screens or slots, e.g. using screw or rolls }

B28C 1/185	.....	{ on cylindrical or conical surfaces, e.g. on rotating drums }
B28C 1/187	....	{ using co-operating rotating elements, e.g. cutters }
B28C 1/20	...	for separating undesired admixed bodies, { e.g. stones }
B28C 1/203	....	{ by forcing the clay through screens or slots, e.g. having exchangeable screens or slots }
B28C 1/206	.....	{ on cylindrical or conical surfaces, e.g. on rotating drums }
B28C 1/22	...	combined with means for conditioning by heating, humidifying, or vacuum treatment, { by cooling, by sub-atmospheric pressure treatment }
B28C 1/222	....	{ by moistening, e.g. by steam }
B28C 1/225	....	{ by degassing, de-aerating }
B28C 1/227	....	{ by heating, drying }

**Guidance heading:** **Mixing clay or cement with other material** ( general arrangement or layout of plant [B28C 9/00](#) ; mixers in general [B01F](#) ; concrete paving mixers combined with distributing devices [E01C 19/00](#) ; machines for preparing mixtures of road-metal with bitumen [E01C 19/10](#))

#### **NOTE**

In groups [B28C 3/00](#) to [B28C 7/00](#) , the following term is used with the meaning indicated:

- "mixing" includes preliminary mixing, e.g. of some of the ingredients final mixing, and agitating the mixture to prevent segregation thereof

<b>B28C 3/00</b>	<b>Apparatus or methods for mixing clay with other substances</b> ( producing clay suspensions <a href="#">B28C 1/02</a> )
<b>B28C 5/00</b>	<b>Apparatus or methods for producing mixtures of cement with other substances, e.g. slurries, mortars, porous or fibrous compositions</b> ( controlling the mixing apparatus and supplying the ingredients <a href="#">B28C 7/00</a> { separating cement from waste concrete <a href="#">B03B 9/063</a> })
B28C 5/003	. { Methods for mixing ( <a href="#">B28C 5/386</a> , <a href="#">B28C 5/402</a> take precedence )}
B28C 5/006	.. { involving mechanical aspects }
B28C 5/02	. without using driven mechanical means effecting the mixing ( <a href="#">B28C 5/48</a> takes precedence )
B28C 5/023	.. { using a flexible mat or bag }
B28C 5/026	.. { Mixing guns or nozzles; Injector mixers ( applying plaster by gas pressure <a href="#">E04F 21/12</a> ; both conveying and distributing concrete <a href="#">E04G 21/04</a> ; conveying concrete <a href="#">B65G 53/32</a> ; accelerating or decelerating material flow in troughs or tubes <a href="#">B65G 53/58</a> )}

- B28C 5/04      ..      Gravitational mixing; Mixing by intermingling streams of ingredients ([B28C 5/026 takes precedence](#) ) ; ingredients projected by fluid pressure [B28C 5/06](#))
- B28C 5/06      ..      the mixing being effected by the action of a fluid ( in combination with driven mechanical means, producing cellular concrete [B28C 5/38](#))
- B28C 5/08      .      using driven mechanical means affecting the mixing ([B28C 5/40](#) , [B28C 5/42](#) , [B28C 5/48](#) take precedence; in combination with the action of a fluid [B28C 5/38](#))
- B28C 5/0806      ..      { Details; Accessories }
- B28C 5/0812      ...      { Drum mixer cover, e.g. lid }
- B28C 5/0818      ...      { Charging or discharging gates or chutes; Sealing means }
- B28C 5/0825      ...      { Drum insulating means }
- B28C 5/0831      ...      { Drives or drive systems, e.g. toothed racks, winches ([B28C 7/0876](#) takes precedence )}
- B28C 5/0837      ....      { Drives for mixers of the tilted-drum type ([B28C 5/085](#) takes precedence )}
- B28C 5/0843      ....      { Drives for drums rotating about a horizontal axis and supported by rotating rollers ([B28C 5/085](#) takes precedence )}
- B28C 5/085      ....      { Hydraulic drives }
- B28C 5/0856      ...      { Supporting frames or structures, e.g. supporting wheels }
- B28C 5/0862      ..      { Adaptations of mixing containers therefor, e.g. use of material, coatings }
- B28C 5/0868      ..      { Mixing apparatus in which a mixing container is hoisted along an inclined or vertical track during mixing to discharge at a higher level }
- B28C 5/0875      ..      { Mixing in separate stages involving different containers for each stage }
- B28C 5/0881      ..      { having a stator-rotor system with intermeshing teeth or cages }
- B28C 5/0887      ..      { provided with sieves or filters }
- B28C 5/0893      ..      { Mobile mixing devices, e.g. hanging }
- B28C 5/10      ..      Mixing in containers not actuated to effect the mixing
- B28C 5/12      ...      with stirrers sweeping through the materials { ,e.g. with incorporated feeding or discharging means or with oscillating stirrers }
- B28C 5/1207      ....      { with means for elevating the stirrer, e.g. out of the containers }
- B28C 5/1215      ....      { Independent stirrer-drive units, e.g. portable or mounted on a wheelbarrow }
- B28C 5/1223      ....      { discontinuously operating mixing devices, e.g. with consecutive containers }
- B28C 5/123      .....      { with pressure or suction means for discharging }
- B28C 5/1238      ....      { for materials flowing continuously through the mixing device and with incorporated feeding or discharging devices ( feeding or discharging devices per se [B28C 5/0818](#))}
- B28C 5/1246      .....      { with feeding devices ([B28C 5/1276](#) , [B28C 5/1292](#) take precedence )}
- B28C 5/1253      .....      { with discharging devices ([B28C 5/1276](#) , [B28C 5/1292](#) take precedence )}
- B28C 5/1261      .....      { Applying pressure for discharging ( applying pressure during mixing [B28C 5/462](#))}
- B28C 5/1269      .....      { for making cellular concrete ( in general [B28C 5/381](#))}

B28C 5/1276	.....	{ with consecutive separate containers with rotating stirring and feeding or discharging means }
B28C 5/1284	.....	{ having a feeding hopper and consecutive vertical or inclined mixing container fed at its upper part }
B28C 5/1292	.....	{ with rotating stirring and feeding or discharging means fixed on the same axis, e.g. in an inclined container fed at its lower part }
B28C 5/14	....	the stirrers having motion about a horizontal or substantially horizontal axis {( with feeding or discharging means <a href="#">B28C 5/12</a> )}
B28C 5/141	.....	{ with container tiltable or elevatable for emptying }
B28C 5/142	.....	{ the stirrer shaft carrying screw-blades }
B28C 5/143	.....	{ for materials flowing continuously through the mixing device }
B28C 5/145	.....	{ with several mixing chambers arranged one after the other }
B28C 5/146	.....	{ with several stirrers with parallel shafts in one container ( <a href="#">B28C 5/145</a> takes precedence )}
B28C 5/147	.....	{ the material being moved perpendicularly to the axis of the shafts }
B28C 5/148	.....	{ the stirrer shaft carrying a plurality of radially extending mixing bars }
B28C 5/16	....	the stirrers having motion about a vertical or steeply inclined axis {( with feeding or discharging means <a href="#">B28C 5/12</a> )}
B28C 5/161	.....	{ in containers tiltable for emptying in containers with inclined axes }
B28C 5/163	.....	{ in annularly-shaped containers }
B28C 5/165	.....	{ with stirrers having planetary motion }
B28C 5/166	.....	{ Pan-type mixers }
B28C 5/168	.....	{ with stirrers having planetary motion }
B28C 5/18	..	Mixing in containers to which motion is imparted to effect the mixing
B28C 5/1806	...	{ rotating about an inclined axis ( about a steeply inclined axis <a href="#">B28C 5/26</a> )}
B28C 5/1812	....	{ with rotating mixing tools }
B28C 5/1818	....	{ Mobile or portable devices, e.g. on a wheelbarrow ( <a href="#">B28C 5/1887</a> takes precedence )}
B28C 5/1825	...	{ Mixers of the tilted-drum type, e.g. mixers pivotable about an axis perpendicular to the axis of rotation for emptying }
B28C 5/1831	....	{ to be mounted on a tractor }
B28C 5/1837	....	{ provided with feeding means, e.g. hoisting skips ( <a href="#">B28C 5/1831</a> , <a href="#">B28C 5/185</a> , <a href="#">B28C 5/1856</a> take precedence )}
B28C 5/1843	....	{ having several drums }
B28C 5/185	....	{ having driven stirrers, e.g. driven from underneath }
B28C 5/1856	....	{ Details or parts, e.g. drums ( drives <a href="#">B28C 5/0831</a> )}
B28C 5/1862	.....	{ Construction of drum, e.g. provided with mixing blades }
B28C 5/1868	.....	{ with mixing elements held stationary }
B28C 5/1875	.....	{ Tilting means; Locks or brakes therefor }
B28C 5/1881	....	{ the mixing drums being tilted otherwise than about a fixed axis perpendicular to the axis of rotation of the drum, e.g. by means of a set of links ( <a href="#">B28C 5/08B1</a> , <a href="#">B28C 5/08B3</a> , <a href="#">B28C 5/08B5</a> , <a href="#">B28C 5/08B10</a> take precedence )}

B28C 5/1887	....	{ Mobile or portable devices, e.g. for use by do-it-yourself enthusiasts }
B28C 5/1893	...	{ the mixing drum being rotated by pulling it over the ground; the mixing drum or the stirrer being driven by movement of the wheel of a vehicle }
B28C 5/20	...	rotating about a horizontal or substantially horizontal axis during mixing, e.g. without independent stirrers
B28C 5/2009	....	{ with multi-compartment drums }
B28C 5/2018	....	{ Transportable containers, e.g. on a wheelbarrow, to be fixed totally or partly in a mixer, e.g. for rotation therewith }
B28C 5/2027	....	{ using spiral-shaped mixing drums }
B28C 5/2036	....	{ with the material travelling through the mixer, the discharge being opposite the feed inlet (B28C 5/2072 , B28C 5/22 , B28C 5/24 take precedence ) }
B28C 5/2045	....	{ Parts or components ( drives B28C 5/0831) }
B28C 5/2054	.....	{ Drums, e.g. provided with non-rotary mixing blades (B28C 5/2009 takes precedence ) }
B28C 5/2063	.....	{ Drums consisting of axially displaceable halves; Drums having discharging opening on their cylindrical part, e.g. the drum rotating in opposite direction for mixing or for discharging; Drums having a cylindrical part not being a surface of revolution }
B28C 5/2072	.....	{ Feeding or discharging mechanisms }
B28C 5/2081	.....	{ Chutes pivotable about an axis parallel to the plane of the inlet or outlet opening }
B28C 5/209	.....	{ Chutes rotatable about an axis parallel to the drum axis }
B28C 5/22	....	with stirrers held stationary, { e.g. the material forming a ring zone by centrifugal force }
B28C 5/24	....	with driven stirrers
B28C 5/26	...	rotating about a vertical or steeply inclined axis during the mixing, { e.g. comprising a flat bottomplate rotating about a vertical axis, co-operating with blades or stirrers }
B28C 5/28	....	without independent stirrers
B28C 5/30	....	with stirrers held stationary
B28C 5/32	....	with driven stirrers
B28C 5/325	.....	{ with several stirrer shafts }
B28C 5/34	..	Mixing on or by conveyers { e.g. by belts or chains provided with mixing elements }
B28C 5/36	...	Endless-belt mixers { i.e. for mixing while transporting the material on an endless belt, e.g. with stationary mixing elements }
B28C 5/365	....	{ Mixing with driven mixing elements while transporting the mixture on an endless belt }
B28C 5/38	.	wherein the mixing is effected both by the action of a fluid and by directly-acting driven mechanical means, e.g. stirring means; { Producing cellular concrete }
B28C 5/381	..	{ Producing cellular concrete (B28C 5/1269 takes precedence; producing foam B01F 3/04446 , B01F 3/04992) }
B28C 5/383	...	{ comprising stirrers to effect the mixing }
B28C 5/385	....	{ Stirrers specially adapted therefor }
B28C 5/386	...	{ Plants; Systems; Methods }

- B28C 5/388 . . . . { Methods }
- B28C 5/40 . Mixing specially adapted for preparing mixtures containing fibres
- B28C 5/402 . . { Methods }
- B28C 5/404 . . { Pre-treatment of fibres }
- B28C 5/406 . . . { and mixing with binding material }
- B28C 5/408 . . { by spraying fibres and binding material }
- B28C 5/42 . Apparatus specially adapted for being mounted on vehicles with provision for mixing during transport ( { [B28C 5/1893](#) takes precedence; mounted on a wheelbarrow [B28C 5/1215](#) , [B28C 5/1818](#) , [B28C 5/2018](#) ; } vehicle aspect [B60P 3/16](#) )
- B28C 5/4203 . . { Details; Accessories }
- B28C 5/4206 . . . { Control apparatus; Drive systems, e.g. coupled to the vehicle drive-system }
- B28C 5/421 . . . . { Drives ( in general [B28C 5/0831](#) ) }
- B28C 5/4213 . . . . . { Hydraulic drives ([B28C 5/4217](#) takes precedence ) }
- B28C 5/4217 . . . . . { Drives in combination with drum mountings; Drives directly coupled to the axis of rotating drums }
- B28C 5/422 . . . . { Controlling or measuring devices ([B28C 5/4227](#) takes precedence ) }
- B28C 5/4224 . . . . . { Roll-over prevention }
- B28C 5/4227 . . . . { Transmission control mechanisms }
- B28C 5/4231 . . . { Proportioning or supplying water ( in general [B28C 7/12](#) ) }
- B28C 5/4234 . . . { Charge or discharge systems therefor }
- B28C 5/4237 . . . . { Charging, e.g. hoppers }
- B28C 5/4241 . . . . . { having self-charging means, e.g. skips, scoops or buckets, picking up the material from the ground }
- B28C 5/4244 . . . . { Discharging; Concrete conveyer means, chutes or spouts therefor ( in general [B28C 7/168](#) ) }
- B28C 5/4248 . . . . . { using chutes ( combined with transporting belts [B28C 5/4255](#) , combined with pumps or screws [B28C 5/4258](#) ) }
- B28C 5/4251 . . . . . { telescopic or foldable chutes }
- B28C 5/4255 . . . . . { using transporting belts, e.g. mounted on a foldable frame }
- B28C 5/4258 . . . . . { using pumps or transporting screws }
- B28C 5/4262 . . . { Closures; Sealing mechanisms ([B28C 5/4237](#) takes precedence ) }
- B28C 5/4265 . . . { Mounting means for drums; Support frames }
- B28C 5/4268 . . . { Drums, e.g. provided with non-rotary mixing blades ( drums for concrete mixers with horizontal axis [B28C 5/2054](#) ) }
- B28C 5/4272 . . { with rotating drum rotating about a horizontal or inclined axis, e.g. comprising tilting or raising means for the drum ([B28C 5/4279](#) takes precedence ) }
- B28C 5/4275 . . . { with a drum rotating about a horizontal axis, e.g. perpendicular to the longitudinal axis of the vehicle }
- B28C 5/4279 . . { with rotating drum and independently-rotating mixing tools }
- B28C 5/4282 . . { with moving mixing tools in a stationary container }
- B28C 5/4286 . . . { with mixing screw-blades }

- B28C 5/4289 . . . { with stirrers rotating about a vertical axis }
- B28C 5/4293 . . . { with reciprocating or oscillating stirrers }
- B28C 5/4296 . . { mounted on a tractor or on a tractor wheel ( for tilted-drum type mixers [B28C 5/1831](#) ; charging thereof [B28C 5/4237](#)) }
  
- B28C 5/44 . Apparatus specially adapted for drive by muscle power
  
- B28C 5/46 . Arrangements for applying super- or sub-atmospheric pressure during mixing; Arrangements for cooling or heating during mixing, { e.g. by introducing vapour }
- B28C 5/462 . . { Mixing at sub- or super-atmospheric pressure ([B28C 5/1261](#) takes precedence ) }
- B28C 5/464 . . . { at sub-atmospheric pressure }
- B28C 5/466 . . { Heating, e.g. using steam }
- B28C 5/468 . . { Cooling, e.g. using ice }
  
- B28C 5/48 . wherein the mixing is effected by vibrations ( mixers with vibrating mechanisms in general [B01F 11/00](#))
- B28C 5/485 . . { with reciprocating or oscillating stirrers; Stirrers therefor ([B28C 5/4293](#) takes precedence ) }
  
- B28C 7/00** **Controlling the operation of apparatus for producing mixtures of clay or cement with other substances; Supplying or proportioning the ingredients for mixing clay or cement with other substances; Discharging the mixture** {([B28C 5/42](#) takes precedence; feeding material in general [B65G](#) ; proportioning in general [G01F](#) , [G01G](#) ; controlling in general [G05](#)) }
  
- B28C 7/0007 . { Pretreatment of the ingredients, e.g. by heating, sorting, grading, drying, disintegrating; Preventing generation of dust }
- B28C 7/0015 . . { Tagging of the ingredients, e.g. by using ingredient identification means like RFID or labels }
- B28C 7/0023 . . { by heating or cooling ( during mixing [B28C 5/46](#)) }
- B28C 7/003 . . . { Heating, e.g. using steam }
- B28C 7/0038 . . . { Cooling, e.g. using ice }
  
- B28C 7/0046 . { Storage or weighing apparatus for supplying ingredients ([B28C 7/04](#) takes precedence ) }
- B28C 7/0053 . . { Storage containers, e.g. hoppers, silos, bins ([B28C 7/0084](#) takes precedences ) }
- B28C 7/0061 . . . { Storage container plant }
- B28C 7/0069 . . . { having compartments }
- B28C 7/0076 . . . { Parts or details thereof, e.g. opening, closing or unloading means }
- B28C 7/0084 . . { Storage containers or silos mounted on, or specially adapted for transport by, vehicles; Means for erecting containers or silos }
- B28C 7/0092 . . { Stationary storage means having elements to divide the ground in sectors }
  
- B28C 7/02 . Controlling the operation of the mixing
- B28C 7/022 . . { by measuring the consistency or composition of the mixture, e.g. with supply of a missing component }



- B28C 7/024      ...      { by measuring properties of the mixture, e.g. moisture, electrical resistivity, density }
- B28C 7/026      ...      { by measuring data of the driving system, e.g. rotational speed, torque, consumed power }
- B28C 7/028      ..      { by counting the number of revolutions performed, or by measuring the mixing time }
- B28C 7/04      .      Supplying or proportioning the ingredients { [\(B28C 7/022 takes precedence; forming a predetermined ratio of the components to be mixed, in general B01F 15/04\)](#) }
- B28C 7/0404      ..      { Proportioning }
- B28C 7/0409      ...      { taking regard of the moisture content of the solid ingredients; Moisture indicators }
- B28C 7/0413      ...      { two or more flows in predetermined ratio }
- B28C 7/0418      ...      { control systems therefor }
- B28C 7/0422      ..      { Weighing predetermined amounts of ingredients, e.g. for consecutive delivery }
- B28C 7/0427      ...      { using a charging-skip, to be hoisted or tilted, provided with weight-indicating means }
- B28C 7/0431      ...      { using a weighing belt or the like }
- B28C 7/0436      ...      { Weighing means specially adapted for use in batching plants }
- B28C 7/044      ...      { Weighing mechanisms specially adapted therefor; Weighing containers ( [other containers B28C 7/0046](#)) }
- B28C 7/0445      ...      { using a weighing receptacle, the feeding thereof being automatically suspended after a predetermined weight has been obtained ([B28C 7/045 takes precedence](#)) }
- B28C 7/045      ...      { using a weighing receptacle movable between several positions, e.g. moving vertically, horizontally or rotating about an axis ([B28C 7/0427 takes precedence](#)) }
- B28C 7/0454      ..      { Volumetric measuring devices, e.g. for consecutively delivering predetermined volumes of ingredients }
- B28C 7/0459      ...      { the ingredients being first supplied into measuring chambers, e.g. containers or skips }
- B28C 7/0463      ....      { Measuring chambers or containers therefor ( [other containers B28C 7/0046](#)) }
- B28C 7/0468      ....      { the measuring chambers being provided on a rotating drum }
- B28C 7/0472      ...      { for continuous feeding, e.g. by controlling the velocity of a transporting belt or the thickness of the ingredients on the belt or by regulating the outlet of a hopper ([B28C 7/0477 takes precedence](#)) }
- B28C 7/0477      ...      { by using conveyer screws }
- B28C 7/0481      ..      { Plant for proportioning, supplying or batching ([B28C 7/0436](#) , [B28C 7/0811 take precedence; plant in general B28C 9/00](#)) }
- B28C 7/0486      ...      { the plant being mobile }
- B28C 7/049      ....      { and broken-down for transport }
- B28C 7/0495      .....      { with a frame carrying the supplying, proportioning or batching elements, movable between a horizontal transport position and an inclined working position }



- B28C 7/06 .. Supplying the solid ingredients, e.g. by means of endless conveyers or jiggling conveyers
- B28C 7/061 ... { from stationary storage means having elements for dividing the ground sectorially ([B28C 7/0811](#) takes precedence )}
- B28C 7/062 ... { with a pneumatic or hydraulic conveyer }
- B28C 7/064 ... { Supply from sacks; Sack openers }
- B28C 7/065 ... { with a pivotable charging-bin ([B28C 7/068](#) takes precedence )}
- B28C 7/067 ... { by means of stationary hoppers, chambers or bins from which the material is fed gravitationally, e.g. having agitating means therein ( hoppers or bins per se [B28C 7/0053](#))}
- B28C 7/068 ... { having means to elevate or hoist a charging-bin or container }
- B28C 7/08 .. by means of scrapers or skips
- B28C 7/0805 .... { by means of a barrow or the like }
- B28C 7/0811 .... { from stationary storage means having elements for dividing the ground sectorially }
- B28C 7/0817 .... { on an endless chain }
- B28C 7/0823 .... { using manually-operated cable-pulled drag shovels ([B28C 7/0841](#) takes precedence )}
- B28C 7/0829 ..... { using reciprocating cable-suspended drag shovels }
- B28C 7/0835 .... { using skips to be hoisted along guides or to be tilted, to charge working-site concrete mixers ( proportioning by means of a skip [B28C 7/0427](#) , [B28C 7/0459](#))}
- B28C 7/0841 ..... { having mechanisms to fill the skip in its lowest position, e.g. by drag shovels, from a hopper }
- B28C 7/0847 ..... { the skips being hoisted along vertical or inclined guides }
- B28C 7/0852 ..... { and being tilted in their upmost position for discharging them at their upper side }
- B28C 7/0858 ..... { the skips being tilted ([B28C 7/0852](#) takes precedence )}
- B28C 7/0864 ..... { about a fixed axis }
- B28C 7/087 ..... { Parts; Accessories, e.g. safety devices }
- B28C 7/0876 ..... { Drives therefor, e.g. winches, hydraulic drives }
- B28C 7/0882 ..... { Skips }
- B28C 7/0888 ..... { Vibration devices, e.g. for facilitating the emptying of the skips }
- B28C 7/0894 .... { Parts, e.g. winches }
- B28C 7/10 ... by means of rotary members { ,e.g. inclinable screws }
- B28C 7/12 .. Supplying or proportioning liquid ingredients
- B28C 7/122 ... { by means of a measuring chamber, e.g. container }
- B28C 7/124 .... { for use with a skip }
- B28C 7/126 ... { Supply means, e.g. nozzles }
- B28C 7/128 .... { Nozzles; Valves; Valve-actuating means }
- B28C 7/14 . Supply means incorporated in, or mounted on, mixers
- B28C 7/16 . Discharge means, { e.g. with intermediate storage of fresh concrete }

- B28C 7/161 .. { with storage reservoirs for temporarily storing the fresh concrete; Charging or discharging devices therefor }
- B28C 7/162 .. { by means of conveyers, other than those comprising skips or containers, e.g. endless belts, screws, air under pressure }
- B28C 7/163 ... { using a pump }
- B28C 7/165 .... { using a fluid, e.g. gas ([B28C 5/06](#) , [B28C 5/1261](#) take precedence )}
- B28C 7/166 ..... { comprising a lock rotor with pockets for feeding determined quantities of material from a hopper into the driving fluid }
- B28C 7/167 ... { by means of a screw conveyer }
- B28C 7/168 ... { Discharging chutes for concrete mixers }
  
- B28C 9/00** **General arrangement or layout of plant** {([B28C 7/0061](#) , [B28C 7/0481](#) take precedence )}
  
- B28C 9/002 . { Mixing systems, i.e. flow charts or diagrams; Making slurries; Involving methodical aspects; Involving pretreatment of ingredients; Involving packaging }
- B28C 9/004 .. { Making slurries, e.g. with discharging means for injecting in a well or projecting against a wall }
  
- B28C 9/006 . { comprising a multicompartiment silo with the mixing device, e.g. a mixing screw, fitted directly at the underside of the silo, e.g. with proportioning means at the exit of the silo }
  
- B28C 9/008 . { Plant adapted for mixing materials lying on the ground, e.g. in sectors ([B28C 9/0436](#) takes precedence )}
  
- B28C 9/02 . for producing mixtures of clay or cement with other materials
  
- B28C 9/04 . the plant being mobile, { e.g. mounted on a carriage or a set of carriages } ([B28C 5/42](#) , { [B28C 9/004](#) , [B28C 9/006](#) }take precedence)
- B28C 9/0409 .. { and broken-down for transport ([B28C 9/0445](#) takes precedence )}
- B28C 9/0418 ... { with a storage silo movable between a horizontal transport position and a vertical working position }
- B28C 9/0427 ... { with a frame carrying the supplying and mixing elements movable between a horizontal transport position and an inclined working position }
- B28C 9/0436 .. { Plant adapted for mixing material lying in sectors on the ground }
- B28C 9/0445 ... { and broken-down for transport }
- B28C 9/0454 .. { Self-contained units, i.e. mobile plants having storage containers for the ingredients ([B28C 9/0472](#) , [B28C 9/0481](#) take precedence )}
- B28C 9/0463 ... { with a mixing discharge trough with a free end, e.g. provided with a mixing screw or pivotable about a vertical or horizontal axis }
- B28C 9/0472 .. { provided with two or more carriages for storing the ingredients or for the mixing device, e.g. transportable on rails }
- B28C 9/0481 .. { with means for loading the material from ground level to the mixing device, e.g. with an endless conveyer or a charging skip ([B28C 9/0436](#) takes precedence )}
- B28C 9/049 ... { with at least a storage compartment for one of the ingredients }