

**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 ( { <a href="#">B28C 5/026</a> takes precedence } ; ingredients projected by fluid pressure <a href="#">B28C 5/06</a> )
B28C 5/06	.. the mixing being effected by the action of a fluid ( in combination with driven mechanical means, producing cellular concrete <a href="#">B28C 5/38</a> )
B28C 5/08	. using driven mechanical means affecting the mixing ( <a href="#">B28C 5/40</a> , <a href="#">B28C 5/42</a> , <a href="#">B28C 5/48</a> take precedence; in combination with the action of a fluid <a href="#">B28C 5/38</a> )

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 ( <a href="#">B28C 7/0876</a> takes precedence ) }
B28C 5/0837	....	{ Drives for mixers of the tilted-drum type ( <a href="#">B28C 5/085</a> takes precedence ) }
B28C 5/0843	....	{ Drives for drums rotating about a horizontal axis and supported by rotating rollers ( <a href="#">B28C 5/085</a> 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 <a href="#">B28C 5/0818</a> ) }
B28C 5/1246	.....	{ with feeding devices ( <a href="#">B28C 5/1276</a> , <a href="#">B28C 5/1292</a> take precedence ) }
B28C 5/1253	.....	{ with discharging devices ( <a href="#">B28C 5/1276</a> , <a href="#">B28C 5/1292</a> take precedence ) }
B28C 5/1261	.....	{ Applying pressure for discharging ( applying pressure during mixing <a href="#">B28C 5/462</a> ) }
B28C 5/1269	.....	{ for making cellular concrete ( in general <a href="#">B28C 5/381</a> ) }
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 {( <a href="#">with feeding or discharging means 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 ( <a href="#">about a steeply inclined axis 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 ( <a href="#">drives 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 ( <a href="#">B28C 5/2072</a> , <a href="#">B28C 5/22</a> , <a href="#">B28C 5/24</a> take precedence ) }
B28C 5/2045	....	{ Parts or components ( <a href="#">drives B28C 5/0831</a> ) }
B28C 5/2054	.....	{ Drums, e.g. provided with non-rotary mixing blades ( <a href="#">B28C 5/2009</a>

		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 ( <a href="#">B28C 5/1269</a> takes precedence; producing foam <a href="#">B01F 3/04446</a> , <a href="#">B01F 3/04992</a> ) }
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 ( { <a href="#">B28C 5/1893</a> takes precedence; mounted on a wheelbarrow <a href="#">B28C 5/1215</a> , <a href="#">B28C 5/1818</a> , <a href="#">B28C 5/2018</a> ; } vehicle aspect <a href="#">B60P 3/16</a> )
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 <a href="#">B28C 5/0831</a> ) }
B28C 5/4213	.....	{ Hydraulic drives ( <a href="#">B28C 5/4217</a> 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 ( in general **B28C 5/12D** ) }
- 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 multicompartment 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 }