

B28 WORKING CEMENT, CLAY, OR STONE

B28C PREPARING CLAY; PRODUCING MIXTURES CONTAINING CLAY OR CEMENTITIOUS MATERIAL, E.G. PLASTER (preparing material for foundry moulds B22C 5/00)

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

- “cement” or “mixtures of cement with other substances” includes plaster;
- “clay” includes like ceramic compositions.

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)	5/04	. . . Gravitational mixing; Mixing by intermingling streams of ingredients (ingredients projected by fluid pressure B28C 5/06)
1/02	. for producing or processing clay suspensions (producing or processing suspensions in general B01)	5/06	. . . the mixing being effected by the action of a fluid (in combination with driven mechanical means B28C 5/38)
1/04	. . . Producing suspensions, e.g. by blunging	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) [5]
1/06	. . . Processing suspensions	5/10	. . . Mixing in containers not actuated to effect the mixing
1/08	. . . Separating suspensions, e.g. for obtaining clay, for removing stones (filtration in general B01D; separation of solids from solids B03, B07)	5/12	. . . with stirrers sweeping through the materials
1/10	. for processing clay-containing substances in non-fluid condition (clay slurries B28C 1/02)	5/14	 the stirrers having motion about a horizontal or substantially horizontal axis
1/12	. . . Storing and conditioning in storage; Specially adapted storage spaces or devices for their filling or emptying (feeding clay to shaping apparatus B28B 13/00)	5/16	 the stirrers having motion about a vertical or steeply inclined axis
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)	5/18	. . . Mixing in containers to which motion is imparted to effect the mixing
1/16	. . . for homogenising, e.g. by mixing, kneading	5/20	. . . rotating about a horizontal or substantially horizontal axis during mixing, e.g. without independent stirrers
1/18	. . . for comminuting	5/22	 with stirrers held stationary
1/20	. . . for separating undesired admixed bodies	5/24	 with driven stirrers
1/22	. . . combined with means for conditioning by heating, humidifying, or vacuum treatment	5/26	. . . rotating about a vertical or steeply inclined axis during the mixing
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)		5/28	 without independent stirrers
In groups B28C 3/00 B28C 7/00, the following term is used with the meaning indicated:		5/30	 with stirrers held stationary
– “mixing” includes preliminary mixing, e.g. of some of the ingredients, final mixing, and agitating the mixture to prevent segregation thereof.		5/32	 with driven stirrers
3/00	Apparatus or methods for mixing clay with other substances (producing clay suspensions B28C 1/02)	5/34	. . . Mixing on or by conveyers
5/00	Apparatus or methods for producing mixtures of cement with other substances, e.g. slurries, mortars, porous or fibrous compositions (controlling the mixing apparatus and supplying the ingredients B28C 7/00)	5/36	. . . Endless-belt mixers
5/02	. without using driven mechanical means effecting the mixing (B28C 5/48 takes precedence) [5]	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
		5/40	. Mixing specially adapted for preparing mixtures containing fibres
		5/42	. Apparatus specially adapted for being mounted on vehicles with provision for mixing during transport (vehicle aspect B60P 3/16)
		5/44	. Apparatus specially adapted for drive by muscle power
		5/46	. Arrangements for applying super- or sub-atmospheric pressure during mixing; Arrangements for cooling or heating during mixing
		5/48	. wherein the mixing is effected by vibrations (mixers with vibrating mechanisms in general B01F 11/00) [5]

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

- 7/02 . Controlling the operation of the mixing
- 7/04 . Supplying or proportioning the ingredients
- 7/06 . . Supplying the solid ingredients, e.g. by means of endless conveyers or jiggling conveyers
- 7/08 . . . by means of scrapers or skips
- 7/10 . . . by means of rotary members

- 7/12 . . Supplying or proportioning liquid ingredients
 - 7/14 . Supply means incorporated in or mounted on mixers
 - 7/16 . Discharge means
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9/00 General arrangement or layout of plant [2]

- 9/02 . for producing mixtures of clay or cement with other materials [2]
- 9/04 . the plant being mobile (B28C 5/42 takes precedence) [2]