SECTION B — PERFORMING OPERATIONS; TRANSPORTING

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)

Note(s)

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)

1/02 • for producing or processing clay suspensions (producing or processing suspensions in general B01)

1/04 • • Producing suspensions, e.g. by blunging

1/06 • • Processing suspensions

1/08 • • • Separating suspensions, e.g. for obtaining clay, for removing stones (filtration in general B01D; separation of solids from solids B03, B07)

1/10 • for processing clay-containing substances in non-fluid condition (clay slurries B28C 1/02)

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)

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)

1/16 • • • for homogenising, e.g. by mixing, kneading

1/18 • • • for comminuting

1/20 • • • for separating undesired admixed bodies

1/22 • • • combined with means for conditioning by heating, humidifying, or vacuum treatment

Mixing clay or cement with other material

Note(s)

In groups B28C 3/00-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.

3/00 Apparatus or methods for mixing clay with other substances (producing clay suspensions B28C 1/02; general arrangement or layout of plant B28C 9/00)

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; general arrangement or layout of plant B28C 9/00)

5/02 • without using driven mechanical means effecting the mixing (B28C 5/48 takes precedence) **[5]**

5/04 • • Gravitational mixing; Mixing by intermingling streams of ingredients (ingredients projected by fluid pressure B28C 5/06)

5/06 • • the mixing being effected by the action of a fluid (in combination with driven mechanical means B28C 5/38)

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]**

5/10 • • Mixing in containers not actuated to effect the mixing

5/12 • • • with stirrers sweeping through the materials

5/14 • • • • the stirrers having motion about a horizontal or substantially horizontal axis

5/16 • • • • the stirrers having motion about a vertical or steeply inclined axis

5/18 • • Mixing in containers to which motion is imparted to effect the mixing

5/20 • • • rotating about a horizontal or substantially horizontal axis during mixing, e.g. without independent stirrers

5/22 • • • • with stirrers held stationary

5/24 • • • • with driven stirrers

5/26 • • • rotating about a vertical or steeply inclined axis during the mixing

5/28 • • • • without independent stirrers

5/30 • • • • with stirrers held stationary

5/32 • • • • with driven stirrers

5/34 • • Mixing on or by conveyors

5/36 • • • Endless-belt mixers

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 conveyors or jigging conveyors

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

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]**