

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 conveyers
- 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)

B28C

- 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
- 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]