

Title (en)
METHOD FOR PRODUCING COMPONENTS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON BAUTEILEN

Title (fr)
PROCEDE DE FABRICATION DE COMPOSANTS

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Application
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Abstract (en)
[origin: WO2006111241A1] The invention relates to a method for producing components based on calcium-silicate-hydrates (C-S-H-phases). Said method consists of the following steps: a) an aqueous suspension made of solids, which contains calcium oxide CaO and silicon dioxide SiO₂, is produced, the molar ratio Ca: Si being a value selected from between 0.5:1.0 to 2.5:1.0, b) the aqueous suspension is ground without increasing the temperature to higher than 100 °C, thus forming nanocrystalline C-S-H-phases, c) the aqueous phase is separated, d) the residual, which contains the nanocrystalline C-S-H-phases, is extracted and dried and a powdery product is obtained, e) the dried powder is filled into a mould and impinged upon with pressure and then the powder is compressed into a structural component, f) the mould is removed. The inventive method is used to synthesise nanocrystalline cement hydrate phases having a specifically adapted surface charge, for producing completely hydrated C-S-H-phases having defined compositions and surface charges as base material for producing binding agents and for producing totally hydrated, dried cement hydrates as initial material for binding a structural component which is to be bound to cement.

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