

Title (en)
METHOD AND DEVICE FOR PRODUCING CONCRETE COMPONENTS

Title (de)
VERFAHREN UND EINE VORRICHTUNG ZUR HERSTELLUNG VON BETONBAUTEILEN

Title (fr)
PROCÉDÉ ET DISPOSITIF POUR LA FABRICATION DE PIÈCES EN BÉTON

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Application
EP 17730467 A 20170614

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Abstract (en)
[origin: WO2017220408A1] In the method according to the invention for producing concrete components, carbon fibers pretensioned using tensile stress or tensile-loadable fibers of at least one textile fabric made of carbon fibers are embedded into a concrete matrix. At least one textile fabric which is made of carbon fiber bundles (8) is inserted into a molding tool (4). The carbon fiber bundles (8) are introduced into two receiving elements (1), which are arranged at two diametrical end faces of the molding tool (4) and which can be connected to the end walls of the molding tool (4) or to the molding tool, through respective through-holes (3) at a distance to one another such that cavities within the receiving element (1) are filled with a fast curing mineral-based viscous compound or a fast curing polymer. After the compound or the polymer has been cured, tensile forces are applied to at least one end face in the direction of the longitudinal axis of the carbon fiber bundles (8) at one or both receiving element(s) (1) by means of a pulling device (7). While the tensile forces are being applied, the interior of the molding tool (4) is subsequently completely filled with viscous concrete. After the concrete is cured, the tensile forces of the pretensioned carbon fiber bundles (8) are mostly transmitted to the solidified concrete, and the concrete component can then be removed.

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