Title (en)

METHOD AND DEVICE FOR ORIENTING MAGNETISABLE PARTICLES IN A KNEADABLE MATERIAL

Title (de)

VORRICHTUNG UND VERFAHREN ZUM AUSRICHTEN MAGNETISIERBARER PARTIKEL IN EINEM PASTÖSEN MATERIAL

Title (fr)

PROCEDE ET DISPOSITIF POUR ORIENTER DES PARTICULES MAGNETISABLES DANS UNE MATIERE PATEUSE

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Application

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Abstract (en)

[origin: US2006244168A1] The invention relates to a method and device for orienting magnetisable particles (4) in a kneadable material (3), in particular steel fibres or rings in unhardened concrete by means of an orienting body (1) provided with a non-magnetic wall comprising a front face section (1 a) and a rear face section (1 b). A kneadable material (33) and the front face section (1 a) of the orientation body (1) are first and foremost displaced with respect to each other. The orientation body (1) is also provided with a magnetic unit (2) which is disposed on the internal side of said front face section (1 a) and generates a periodically variable magnetic field acting on the kneadable material in order to orient the magnetisable particles (4). Said invention is characterised in that said magnetic field is divided into at least two areas (III) containing the partial fields exhibiting different forces and/or different directions of force lines. The partial field of the first area (I) applies long trajectory orientation and attractive forces on the particles, the partial field of the second area (II) releasing orientedly positioned particles.

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