

Title (en)

COMPUTER-AIDED METHOD FOR DIMENSIONING A FORMWORK ARRANGEMENT TO BE ADDITIVELY MANUFACTURED, AND DEVICE FOR CARRYING OUT THE METHOD

Title (de)

COMPUTERGESTÜTZTES VERFAHREN ZUR DIMENSIONIERUNG EINER ADDITIV ZU FERTIGENDEN SCHALUNGSANORDNUNG SOWIE EINRICHTUNG ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)

PROCÉDÉ ASSISTÉ PAR ORDINATEUR DE DIMENSIONNEMENT D'UN AGENCEMENT DE COFFRAGE À FABRIQUER DE MANIÈRE ADDITIVE ET DISPOSITIF PERMETTANT LA MISE EN OEUVRE DU PROCÉDÉ

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Application

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Abstract (en)

[origin: WO2021078739A1] The invention relates to a computer-aided method and to a device for dimensioning a formwork arrangement to be additively manufactured, comprising a formwork skin (6), which is made of a soluble material and is provided with an outer reinforcing structure (7), for the at least partial production of concrete elements (1), comprising the following steps: provision (A) of a CAD wireframe model (1') of the concrete element (1) to be produced; calculation (B) of a formwork skin (6) which is of a uniform thickness and surrounds the concrete element (1); input (C) of geometrical parameters of an outer reinforcing structure (7) for the formwork skin (6) via a user interface (200); loading-appropriate adaptation (D) of the reinforcing structure (7') calculated from said parameters and following the outer contour of the formwork skin (6); combination (H) of the loading-appropriately adapted, contour-following reinforcing structure (7') with the formwork skin (6) to create a 3D printing model that can be printed in one piece.

IPC 8 full level

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CPC (source: EP)

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