Title (en)

Flame testing oven

Title (de)

Brandprüfofen

Title (fr)

Four de vérification d'incendie

Publication

EP 2058615 A2 20090513 (DE)

Application

EP 08105078 A 20080819

Priority

DE 202007015622 U 20071109

Abstract (en)

The fire testing furnace for the fire behavior of building materials and -component, comprises an open chamber, in which the fire testing takes place, and a tipping frame (2) arranged at the open chamber, an operating device (10) intended for moving the tipping frame along the movable axis, and two slide rails (6). The tipping frame contains another operating device (14) for controllably tilting the tipping frame and the open chamber around a tiltable axis. The open chamber is arranged over a rotational drive around an axis turnable on the tipping frame. The fire testing furnace for the fire behavior of building materials and -component, comprises an open chamber, in which the fire testing takes place, and a tipping frame (2) arranged at the open chamber, an operating device (10) for moving the tipping frame along the movable axis, and two slide rails (6). The tipping frame contains another operating device (14) for controllably tilting the tipping frame and the open chamber around a tiltable axis. The open chamber is arranged over a rotational drive around an axis turnable on the tipping frame. The operating devices (10, 14) are controllably operatable separately from each other or together. The operating devices are gear rack/pinion units, by which a drivable pinion intervenes in a gear rack. The gear rack for a longitudinal shift of the frame on a sliding rail and/or a gear rim is provided with a pinion gear for tilting. The gear rim for tilting the tipping device is aligned with its crown gear axis aligned to a tilt axis of the tipping device. The gear rack is arranged on the slide rails and on the tipping frame of the drivable pinion. The rotational axis of the rotating device is arranged parallely to the shifting axis and/or shifting device of the operating device. The tipping frame is formed in cross-section in an L-shape, through which a long tipping frame area (3) and a small tipping frame area (4) are formed. The tipping frame area is formed from parallely arranged steel profiles. The fire testing furnace has a glide rail and/or a mounting rail, on which the tipping frame is formed with the tipping frame area in directly or indirectly overlying manner. The tipping frame is shiftably arranged along the rails with the operation device on the glide- and/or the mounting rail. The piston cylinder unit is guided on the rails and/or a base, on which the rails are arranged with a first bearing (12). A second bearing (13) and/or joint is present on the tipping frame on the lower side of the lower tipping frame area and in a surface of an edge, which is formed by the tipping frame surfaces, and on which the operation device is guided. The operation device comprises a first bearing and/or joint on the floor of the positioning surface and is guided with a second bearing on to the tipping frame surface. The second bearing is removed from the bearing in an area of the tipping frame surface and is removed with respect to the length of the tipping frame surface in relation to the L-shaped design more than half of the stretch of the total angle of the tipping frame surface. The tipping frame is guided with bearings in the slide rails. A cross girder is intended, on which the steel beam of the tipping frame surface is formed. A roll intervenes into the rails by the cross bars. Additional rolls are engaged in the rails so that the tipping device is guided on both sides of the slide rails. The tilting frame surface has a carrying mechanism for the rolls on the lower side and above the rails. The rolls are arranged in the area of a free end removed from the bearing.

Abstract (de)

Die Erfindung betrifft einen Brandprüfofen mit einem Ofenraum (26), in dem Brandprüfungen durchführbar sind, und einem Kipprahmen (2), an dem der Ofenraum (26) angeordnet ist, wobei der Kipprahmen (2) zumindest eine Betätigungseinrichtung (14) umfasst, mit der der Kipprahmen (2) und der Ofenraum (26) um eine Kippachse gesteuert kippbar sind.

IPC 8 full level

CPC (source: EP)

B65G 7/08 (2006.01); F27B 17/02 (2006.01); G01N 25/00 (2006.01)

Cited by

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