

Title (en)

Method of protecting rod-like elements gathered in tray while handling the tray

Title (de)

Verfahren zum Schutz von stabförmigen Elementen auf einem Schragen während der Handhabung des Schragens

Title (fr)

Procédé de protection d'éléments de type tige rassemblés dans un récipient plateau lors de la manipulation du récipient

Publication

EP 1941805 B1 20101027 (EN)

Application

EP 07460035 A 20071206

Priority

PL 38137606 A 20061221

Abstract (en)

[origin: EP1941805A1] The rod-like elements (3) shall be prevented from translocations inside a tray (2) so as to protect them against damage on the tray (2) handling during a rotary operation on unloading device (1), the tray (2) filled up with rod-like elements (3) being fed to the unloading device (7) with its open side upwards. The tray (2) is locked up in the unloading device (1) and rotated through about 180° and the rod-like elements (3) move out of the tray (2) by gravity or mechanically to the next operating workstations. A segment support (6) holds the rod-like elements (3). The support (6) consists of independent segments (7) positioned so that their lengths are parallel to the rod-like elements (3). The support 6 is connected to the unloading device (1), wherein each segment (7) can freely move on over a plane perpendicular to the back wall of the tray (2). During feeding the tray (2), the segments (7) enter the tray (2) interior from above till they contact the rod-like elements (3) and copy the natural layout of the rod-like elements (3) in the tray (2). Then all the rod-like elements (3) become locked up. After the tray (2) together with the segments (7) and the immobilized rod-like elements (3) is rotated, the segments (7) are displaced together with rod-like elements (3) to one common level and then removed. The number of segments (7) is compatible with the assumed precision of copying the natural layout of the elements (3) in the tray (2). The support 6 can also consist of one segment (7). All the segments (7) of the support 6 can be equal. They hold the rod-like elements (3) along their entire length.

IPC 8 full level

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CPC (source: EP)

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Cited by

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