

Title (en)

Method to bind packages of metallic mesh and apparatus which employs the method.

Title (de)

Verfahren zum Binden von Packungen von metallischem Gitterwerk und Vorrichtung zur Durchführung dieses Verfahrens.

Title (fr)

Procédé pour ligaturer des emballages de treillis métalliques et machine pour la mise en oeuvre dudit procédé.

Publication

EP 0442142 B1 19940216 (EN)

Application

EP 90125428 A 19901224

Priority

IT 8332890 A 19900212

Abstract (en)

[origin: EP0442142A1] Method to bind packages of metallic mesh, the binding being carried out by the insertion of binding elements normally into lateral links of the meshes and being completed by the reciprocal twisting of the ends of the binding elements, the packages of metallic mesh arriving from plants which produce and stack the metallic meshes or from any system that conveys the meshes, the method comprising the following working steps: the halting at a binding position of the package (11) of metallic mesh arriving on a suitable conveyor means, the insertion of straight free segments of a preset and determinable length of a binding element (20) into preselected links of the package (11), such segments having their ends protruding from the two sides of the package (11), the bending of such ends of the binding elements (20) towards the outside of the package (11) in opposite directions so as to form a portion of the binding element (20) on the outside of the package (11) and substantially parallel to a segment of the binding element (20) located on the inside of the links, such portion comprising partially superimposed segments of those ends, the gripping and clamping of the partially superimposed segments, the twisting of the partially superimposed segments, the unclamping of the partially superimposed segments so as to release the tension induced in the binding element (20) during the twisting step, and removal of the package (11) thus bound, these working steps being capable of being carried out at the same time or in succession at a plurality of points arranged for the binding of the package (11), the length of the inserted segment of the binding element being fully capable of being preset according to the height of the package (11) to be bound. Apparatus (10) to bind packages (11) of metallic mesh, the binding being carried out by the insertion of binding elements (20) normally into lateral links of the meshes and being completed by reciprocal twisting of the ends of the binding elements (20), the packages (11) of metallic mesh arriving from plants which produce and stack the metallic meshes or from any system that conveys the meshes, the apparatus (10) employing the above method and consisting of the following main working assemblies: a structure (14) to support a movable trolley unit (15) able to move in relation to the package (11) being bound, an assembly (17) able to move in relation to the movable trolley unit (15) and bearing means to straighten (19), draw (22) and shear (23) the binding element (20), means (24-32) to bend the binding element (20), guide means (31) for the bent segments of the binding element (20), and an assembly (27) to unite the binding element (20), this assembly (27) bearing movable gripper means (29) and movable twisting means (28). g

IPC 1-7

B65B 27/08; **B65B 13/02**

IPC 8 full level

B65B 13/02 (2006.01); **B65B 27/08** (2006.01)

CPC (source: EP)

B65B 13/02 (2013.01); **B65B 27/08** (2013.01)

Cited by

AT406454B; EP1504996A3

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR LI LU NL SE

DOCDB simple family (publication)

EP 0442142 A1 19910821; **EP 0442142 B1 19940216**; AT E101568 T1 19940315; DE 69006712 D1 19940324; DE 69006712 T2 19940707; ES 2050929 T3 19940601; IT 1238991 B 19930917; IT 9083328 A0 19900212; IT 9083328 A1 19910813

DOCDB simple family (application)

EP 90125428 A 19901224; AT 90125428 T 19901224; DE 69006712 T 19901224; ES 90125428 T 19901224; IT 8332890 A 19900212