

Title (en)

Automated system to package and remove rolls of metallic wire wound on reels

Title (de)

Automatisiertes System zum Verpacken und Entfernen von auf Haspeln gewickelten Metaldrahtrollen

Title (fr)

Système automatisé à emballer et enlever des couronnes de fils métalliques enroulées sur des bobines

Publication

EP 0444311 B2 19990825 (EN)

Application

EP 90125474 A 19901224

Priority

IT 8332390 A 19900131

Abstract (en)

[origin: EP0444311A1] Automated system to package and remove rolls of metallic wire, the system (10) being fitted downstream of a plant carrying out hot or cold drawing or rolling of metallic wire which may have a round, oval, three-lobed, hexagonal, rectangular, square, etc. section and is wound in rolls (34) on reels (12), preferably of a type which can be dismantled, on a winding machine (11) located immediately downstream of the drawing or rolling plants, the reels (12) which can be dismantled having to undergo an operation to tie the rolls (34) before their end use, the system comprising the following operational units: a winding machine (11) that comprises an automatic control system (17) for the start-up and ending of fully automated winding of the metallic wire, the automatic winding machine (11) being equipped with a three-positional rotary platform (13) for three reels (12) being processed, the three positions corresponding to a first station (position A) to wind the metallic wire on a reel (12), a second station to tie (position B) the already wound reel (12) and a third station (position C) to remove the already tied reel (12), an auxiliary device (15) for the tying, which cooperates with the winding machine (11) in the tying station (position B) and is suitable to engage and rotate the reel (12) at pre-set angles; the system comprising also the following further operational units: a device (16) for the automatic handling of reels, which cooperates with the winding machine (11) in the reel removal station (position C) and is suitable to transfer the reels (12) to the successive processing steps; a reel clamping device (31) which operates in a reel dismantling station (position D) located downstream of the winding machine (11) and is suitable to receive the reel (12) brought from the reel removal station (position C) by means of the handling device (16) and to retain momentarily a flange (30) withdrawn from the reel (12), and a device (35) to receive and discharge the roll (34) of wire, this device operating in a discharge station (position E) and being suitable to receive and support the roll (34) of wire discharged from the reel (12) by means of the handling device (16), the handling device (16) being also able to run in succession and alternately along the path from the reel removal station (position C) to the roll discharge station (position E), and viceversa, so as to dismantle and reassemble respectively a reel (12) of a type which can be dismantled. i

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CPC (source: EP)

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Cited by

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