

Title (en)

METHOD AND DEVICE FOR WINDING METAL STRIPS ONTO A COILING MANDREL

Title (de)

VERFAHREN UND VORRICHTUNG ZUM AUFWICKELN VON METALLBÄNDERN AUF EINEN WICKELDORN

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR ENROULER DES BANDES MÉTALLIQUES SUR UN MANDRIN DE BOBINAGE

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Application

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Abstract (en)

[origin: US2010083720A1] The invention relates to a method and a device for winding metal strips (13) onto a coiling mandrel (4) which is disposed in a coiler shaft (3) and to which the metal strip is fed by a driver (2) encompassing a bottom and a top drive roller (6, 7) in a driver frame (5). A bench (11) is provided below the metal strip (13) for guiding purposes while a strip switch (17) and a swiveling shaft flap (19) are arranged above the metal strip, the shaft flap (19) adjoining the strip switch (17) to the vicinity of the coiling mandrel. In order to regulate the driver (2) in such a way by measuring the strip tension that the strip run allows the metal strip (13) to be coiled into a straight-edged coil (14), the longitudinal tensile strength applied to the metal strip (13) by the driver (2) to control the strip run through the driver is determined by means of a strip tension measuring device (10) which is mounted on the driver frame (5), in a pivot located shortly behind the bottom drive roller (7), and can be swiveled into the metal strip (13) from below. Said strip tension measuring device (10) is composed of a first lever arm (10a) that is mounted in a pivot at the rear of the driver frame (5) as well as a second lever arm (10b) which is hingedly mounted at the front of the first lever arm (10a) and the forward end of which is provided with a roller (23). A force measuring means (24) is placed between the first lever arm (10a) and the second lever arm (10b).

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