

Title (en)

METHOD AND DEVICE FOR THE OPTIMIZED PRODUCTION OF HELICAL SPRINGS ON AUTOMATIC SPRING-WINDING MACHINES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR OPTIMIERTEN HERSTELLUNG VON SCHRAUBENFEDERN AUF FEDERWINDEAUTOMATEN

Title (fr)

PROCEDE ET DISPOSITIF DE PRODUCTION OPTIMISEE DE RESSORTS HELICOIDaux SUR DES MACHINES AUTOMATIQUES A ENROULER LES RESSORTS

Publication

EP 0796158 B1 19980527 (DE)

Application

EP 95942014 A 19951206

Priority

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Abstract (en)

[origin: WO9617701A1] The object of the invention is to develop a method and device which enable high levels of precision to be attained whilst simultaneously minimizing waste in spring manufacture even when the values of the wire parameters fluctuate. To this end, the wire parameters are determined before and after winding, and the measurement results are used directly for adjusting the position of the winding pins or rollers and/or of the pitch wedge. The wire is guided in a loop (S) between the unwinding device (A) and the feed device (Z), the lateral deflection of the wire loop (S) being detected by a recognition unit (E1) and the unwinding device (A) performing an additional movement controlled by the recognition unit (E1). The invention is suitable for continuously checking and correcting defects occurring in spring wires in order to optimize the production of helical springs on automatic spring-winding machines.

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WO 9617701 A1 19960613; DE 59502367 D1 19980702; EP 0796158 A1 19970924; EP 0796158 B1 19980527; ES 2119507 T3 19981001; JP H10511311 A 19981104; US 5865051 A 19990202

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