

Title (en)

METHOD AND SYSTEM FOR GRINDING THE EXTERIOR OF SHAFT PARTS BETWEEN TIPS

Title (de)

VERFAHREN UND SYSTEM ZUM AUSSENSCHLEIFEN VON WELLENTHEILEN ZWISCHEN SPITZEN

Title (fr)

PROCÉDÉ ET SYSTÈME DE RECTIFICATION EXTÉRIEURE D'ÉLÉMENTS D'ARBRE ENTRE DES POINTES

Publication

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Application

**EP 16715325 A 20160408**

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Abstract (en)

[origin: WO2016166036A1] The invention relates to a method for grinding the exterior of a shaft part (10) with rotationally symmetrical sections and bases which have centering bores and which define a reference longitudinal axis and rotational axis of the shaft part. In the method according to the invention, the shaft part (10) to be ground is held between tips (11, 14) which engage into the centering bores during the grinding process using a grinding disk (1), and the shaft part is additionally supported on the rotationally symmetrical sections by means of a support device (2, 2', 3, 35). Furthermore, the current diameter values of the rotationally symmetrical sections of the shaft part (10) are measured and transmitted to a controller, by means of which the support device (2, 2', 3, 35) is updated with respect to the measured diameter values while continuously supporting the rotationally symmetrical sections until the target dimensions of the shaft part (10) are achieved. The invention additionally relates to a system for carrying out the method, consisting of a grinding machine and such a shaft part (10). The grinding machine belonging to the system has a support device (2, 2', 3, 35) with a first and a second support unit, which can be moved relative to each other and dependent on each other. The measurement signals of the current diameter of the rotationally symmetrical section of the shaft part (10) are forwarded to a controller by means of the measuring device (21), and the first and the second support unit (2, 2', 3, 35) can be constantly updated with respect to the current diameter of the rotationally symmetrical section on the basis of the measurement signals such that the shaft part (10) is doubly supported by the support units (2, 2', 3, 35) opposite the grinding disk (1) and by tips (11, 14) which are in engagement with the shaft part.

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