Title (en)

METHOD FOR DETERMINING THE WEAR STATE OF A TOOL, AND DEVICE FOR SAID METHOD

Title (de

VERFAHREN ZUR BESTIMMUNG EINES VERSCHLEISSZUSTANDES EINES WERKZEUGS UND VORRICHTUNG HIERFÜR

Title (fr)

PROCÉDÉ POUR DÉTERMINER UN ÉTAT D'USURE D'UN OUTIL ET DISPOSITIF CORRESPONDANT

Publication

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Application

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Abstract (en)

[origin: WO2023036828A1] The invention relates to a method for determining the wear state of a tool (2) and/or at least one cutting edge (3). A test measurement is carried out on at least one sacrificial workpiece (11, 21) by means of a test machining process in a new state of the tool (2) or of the at least one cutting edge (3), wherein the test machining process is monitored by means of at least one measuring device comprising at least one sensor (12), and measurement values of the test measurement can be stored in a storage device (13). After workpieces (4) have been machined by the tool (2) or by the at least one cutting edge (3) in a defined manner, at least one additional test measurement is carried out on the sacrificial workpiece (11, 21) by means of a test machining process which is monitored by the measuring device comprising the at least one sensor (12). The wear state of the tool (2) and/or of the at least one cutting edge (3) is determined using the ascertained measurement values. The tool (2) is moved relative to the sacrificial workpiece (11, 21) at a defined feed rate and in a defined feed direction (32), and the sensor (12) records a force exerted onto the sacrificial workpiece (11, 21) by the tool (2), the direction of the recorded force being oriented at a defined angle relative to the feed direction (32).

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