

Title (en)

MANUFACTURING TOOL, METHOD FOR DETERMINING A STATE OF WEAR, AND USE OF A PNEUMATIC SENSOR

Title (de)

FERTIGUNGSWERKZEUG, VERFAHREN ZUM BESTIMMEN EINES VERSCHLEISSZUSTANDS UND VERWENDUNG EINES PNEUMATISCHEN SENSORS

Title (fr)

OUTIL D'USINAGE, PROCÉDÉ POUR DÉTERMINER UN ÉTAT D'USURE ET UTILISATION D'UN CAPTEUR PNEUMATIQUE

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Abstract (en)

[origin: WO2023006753A1] The invention relates to a manufacturing tool (1), in particular a forming tool and/or a cutting tool. The manufacturing tool (1) comprises an active element (2), mounted so as to be movable along its longitudinal axis (L), with a distal end formed as a processing portion (6), in particular as a forming portion and/or cutting portion. Furthermore, the manufacturing tool (1) comprises a passive element (3; 4; 5) with a recess (9). The recess (9) has a cross-sectional contour which corresponds to the cross-sectional contour of the processing portion (6), and into which the processing portion (6) passes during operation of the manufacturing tool (1). Moreover, the manufacturing tool (1) comprises at least one pneumatic sensor (7) received on or in the passive element (3; 4; 5). The pneumatic sensor (7) has a sensing region which extends into the recess (9). The at least one pneumatic sensor (7) senses a stagnation pressure within the recess (9). Finally, the manufacturing tool (1) comprises an evaluation unit by means of which a state of wear of the processing portion (6) is deduced from the sensed stagnation pressure. The invention also relates to a method for determining a state of wear and to the use of a pneumatic sensor.

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