

Title (en)

METHOD FOR WEAR DETECTION AND PREDICTIVE WEAR PROGNOSIS OF ELECTROMECHANICAL ACTUATORS IN RELATION TO THE OPERATING TIME OF A MACHINE WITH COMBUSTION ENGINE

Title (de)

VERFAHREN ZUR VERSCHLEISSERKENNUNG UND PRÄDIKTIVEN VERSCHLEISSPROGNOSE VON ELEKTROMECHANISCHEN AKTUATOREN ZUR BETRIEBSZEIT EINER MASCHINE MIT VERBRENNUNGSMOTOR

Title (fr)

PROCÉDÉ DE DÉTECTION D'USURE ET DE PRONOSTIC PRÉDICTIF D'USURE D'ACTIONNEURS ÉLECTROMÉCANIQUES PAR RAPPORT AU TEMPS DE FONCTIONNEMENT D'UNE MACHINE À MOTEUR À COMBUSTION INTERNE

Publication

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Application

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Abstract (en)

[origin: WO2019242876A1] 1. Method for wear detection and predictive wear prognosis of electromechanical actuators in relation to the operating time of a machine with combustion engine 2. A method for wear detection and predictable wear prognosis of electromechanical actuators (in particular throttle flap, exhaust-gas recirculation valve, exhaust-gas flap and overpressure valve at the turbocharger, or others) in relation to the operating time of a machine with combustion engine with at least one engine control unit, comprising a first measuring method for identifying the actuator wear in the form of movement profiles and the number of different actuator movements within individual movement profiles, wherein the number of different actuator movements is compared with reference data, and a second measuring method which identifies production errors through stimulation of the electromechanical actuators with a step change and measurement and evaluation of the step change response, or the settling time of the actual position in relation to the setpoint position.

IPC 8 full level

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