

Title (en)

METHOD FOR DETECTING DAMAGE TO A COMPRESSOR

Title (de)

VERFAHREN ZUR ERKENNUNG VON SCHÄDEN AN EINEM VERDICHTER

Title (fr)

PROCÉDÉ DE DÉTECTION DES DOMMAGES SUR UN COMPRESSEUR

Publication

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Application

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Abstract (en)

[origin: WO2020249461A1] The invention relates to a method for identifying damage on a compressor having an intake side and a discharge side, comprising the following steps: (i) detecting measurement data of the intake pressure (p1) and intake temperature (T1) measurement variables on the intake side, as well as end pressure (p2) and end temperature (T2) on the discharge side; (ii) determining a calculated end temperature (T2b), a calculated intake temperature (T1b), a calculated end pressure (p2b) or a calculated intake pressure (p1b) as a target variable, representing a good operating state of the compressor, as a function of the measurement data of max. three of the measurement variables (p1, T1, p2, T2); (iii) determining a comparison variable from at least one of the measurement variables (p1, T1, p2, T2) not used in step (ii); (iv) comparing the comparison variable and the target variable as a gauge of damage to the compressor; wherein the target variable determined in step (ii) is determined according to a model of the isentropic compression, taking into consideration the isentropic exponent (κ) of the gas to be compressed and a correction factor (η), and the correction factor (η) is adjusted on the basis of measurement data.

IPC 8 full level

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