

Title (en)

METHOD AND DEVICE FOR HARDENING SURFACES OF A CRANKSHAFT OR CAMSHAFT

Title (de)

VERFAHREN UND VORRICHTUNG ZUM HÄRTEN VON FLÄCHEN EINER KURBEL- ODER NOCKENWELLE

Title (fr)

PROCEDE ET DISPOSITIF POUR DURCIR DES SURFACES DE VILEBREQUIN OU D'ARBRE A CAMES

Publication

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Application

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Abstract (en)

[origin: WO0063447A2] The invention relates to a method and device for hardening surfaces (10, 11, 12; 39, 40, 41) of a crankshaft (K) or camshaft (N), said surfaces being adjacently arranged in axis direction (A). According to the invention, the surfaces (10, 11, 12; 39, 40, 41) to be hardened are inductively heated by an inductor (14, 15, 16; 33, 34, 35) individually allocated thereto and are quenched after heating, whereby at least two adjacently arranged surfaces (10, 11, 12; 39, 40, 41) to be hardened are simultaneously heated. The aim of the invention is to make it possible to simultaneously harden closely adjacent surfaces while decreasing the risk of a defective hardening. To this end, the invention provides that, during simultaneous heating of the surfaces (10, 11, 12; 39, 40, 41) to be hardened, the inductor (14, 15, 16; 33, 34, 35) that is individually allocated to one of the surfaces (10, 11, 12; 39, 40, 41) is operated with a frequency (F1, F2; F3, F4) that differs from that of the inductor (10, 11, 12; 39, 40, 41) allocated to the immediately adjacent surface (10, 11, 12; 39, 40, 41) to be hardened.

IPC 1-7

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IPC 8 full level

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