Title (en)

CONSTRUCTED CRANKSHAFT HAVING BEARING JOURNALS WHICH ARE PRESSED INTO CRANK WEBS

Title (de

GEBAUTE KURBELWELLE MIT IN KURBELWANGEN EINGEPRESSTEN LAGERZAPFEN

Title (fr)

VILEBREQUIN ASSEMBLÉ MUNI DE TOURILLONS INTRODUITS DANS LES JOUES DE VILEBREQUIN

Publication

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Application

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Abstract (en)

[origin: WO2016008838A1] The present invention relates to a constructed crankshaft having bearing journals (10) which are configured for mounting the crankshaft in a bearing seat or for receiving a connecting rod on the crankshaft, and having crank webs (11), in which receiving openings (12) are made, with the result that connecting sections (13) which are configured on the end sides of the bearing journals (10) are pressed into the receiving openings (12), wherein the receiving openings (12) have a toothing system (14), which toothing systems adjoin, on the inner side and substantially axially parallel in the receiving openings (12), an inlet-side centring shoulder (15) of the receiving openings (12), and wherein the connecting sections (13) have a substantially circumferential knurling profile (16), on which a plastic deformation which is caused by the toothing system (14) and is formed at least in regions is produced by way of the inserting of the connecting sections (13) into the receiving openings (12). It is provided according to the invention that the material of the crank web (11) has a strength, at least in the region of the centring shoulder (15), which is at least 80 N/mm2 higher than the strength of the material in the knurling profile (16) in the connecting sections (13) of the bearing journals (10).

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