

Title (en)
HONING METHOD AND HONING TOOL

Title (de)
HONVERFAHREN UND HONWERKZEUG

Title (fr)
PROCÉDÉ DE RODAGE ET OUTIL DE RODAGE

Publication
EP 2976184 B2 20201111 (DE)

Application
EP 14708570 A 20140310

Priority
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Abstract (en)
[origin: WO2014146919A1] In a honing method for machining the internal surface of a bore in a workpiece with the aid of at least one honing operation, during a honing operation an expandable honing tool is moved up and down within the bore in order to produce a reciprocating movement in the axial direction of the bore and at the same time is rotated in order to produce a rotary movement superimposed on the reciprocating movement. In the process, a bottle-shaped bore is produced, said bore having a first bore section with a first diameter after a bore inlet, a second bore section with a second diameter greater than the first diameter away from the bore inlet, and a transition section having a continuous transition from the first diameter to the second between the first and the second bore section. In this case, during at least one honing operation use is made of an annular tool (200) which has at least one annular cutting unit (220) with a plurality of radially adjustable cutting-material bodies that are distributed around the circumference of a tool body and are formed as honing segments that are wide in the circumferential direction and narrow in the axial direction, wherein an axial length, measured in the axial direction, of the honing segments is less than the width measured in the circumferential direction and the axial length of the cutting region equipped with cutting-material bodies is less than the effective outside diameter of the honing tool. The method is particularly suitable for honing cylinder running surfaces in the production of cylinder blocks or cylinder liners for reciprocating piston machines.

IPC 8 full level
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CPC (source: EP US)
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