

Title (en)

Device for thermal coating of cylinder interiors for crankcases

Title (de)

Vorrichtung für das thermische Beschichten von Zylinderinnenflächen bei Kurbelgehäusen

Title (fr)

Dispositif de revêtement thermique de surfaces intérieures de cylindres dans des carters

Publication

**EP 2455510 A2 20120523 (DE)**

Application

**EP 11189585 A 20111117**

Priority

DE 102010060652 A 20101118

Abstract (en)

The device for thermal coating of cylinder interiors (10) for crankcases (12), comprises a workpiece support (16) adapted on the crankcase, coating tools (39) insertable in the cylinder interiors, a vacuum source connecting a suction device (28) with the cylinder interiors, and a suction opening (30), which surrounds a tool shaft (38) carrying the coating tools. The suction device is arranged to the front side of the cylinder interiors. The tool shaft is led through the suction device, is rotatably placed and is sealed via a rotary seal over the suction device. The device for thermal coating of cylinder interiors (10) for crankcases (12), comprises a workpiece support (16) adapted on the crankcase, coating tools (39) insertable in the cylinder interiors, a vacuum source connecting a suction device (28) with the cylinder interiors, and a suction opening (30), which surrounds a tool shaft (38) carrying the coating tools. The suction device is arranged to the front side of the cylinder interiors. The tool shaft is led through the suction device, is rotatably placed, and is sealed via a rotary seal over the suction device. The part of the suction device is a ring, which surrounds the extraction opening and slopes downwards to the crankcase turning away for the suction opening. The suction device comprises two-piece suction housing, with which the parts are separated and the tool shaft is arranged in the parting line. A second suction device is intended as an integral part of the workpiece support, and has suction holes, of which each suction hole is arranged in one of the cylinders of the crankcase. The suction hole is located at the free end of a tubular centre piece in the crankcase. The outer contour of the centre piece is adapted on the interior contours of the crankcase. The workpiece support is rotatable between a first and a second coating position. A left cylinder series is arranged in the first coating position and a right cylinder series, V engine or double V engine is arranged in the second coating position. A removable filter is arranged in the suction device.

Abstract (de)

Vorgeschlagen wird eine Vorrichtung für das thermische Beschichten von Zylinderinnenflächen (10) bei Kurbelgehäusen (12), mit einer an das Kurbelgehäuse (12) angepassten Werkstückaufnahme (16) sowie mit einem in den Bereich mindestens einer der Zylinderinnenflächen (10) einföhrbaren Beschichtungswerkzeug (39). Die Vorrichtung weist eine mit einer Unterdruckquelle verbundene, der Stirnseite (11) der Zylinderinnenfläche (10) gegenüberliegend angeordnete Absaugeinrichtung (28) mit einer zu der Zylinderinnenfläche (10) hin gerichteten Absaugöffnung (30) auf und die Absaugöffnung (30) umgibt einen das Beschichtungswerkzeug (39) tragenden Werkzeugschaft (38) ringförmig.

IPC 8 full level

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CPC (source: EP)

**B05B 13/0636** (2013.01); **B05B 14/00** (2018.01); **C23C 4/12** (2013.01); **C23C 4/137** (2016.01); **C23C 4/16** (2013.01); **B05B 7/20** (2013.01); **B05B 7/22** (2013.01); **B05B 13/069** (2013.01)

Citation (applicant)

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