

Title (en)

INSTALLATION AND METHOD FOR PRODUCING A METALLIC COATING ON A BOREHOLE WALL

Title (de)

VERFAHREN UND ANLAGE ZUR METALLISCHEN BESCHICHTUNG EINER BOHRUNGSWAND

Title (fr)

PROCÉDÉ ET INSTALLATION DE REVÊTEMENT MÉTALLIQUE D'UNE PAROI D'ALÉSAGE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2021209190A1] The invention relates to a method and a system for applying a metal coating to a bore wall of a bore in a workpiece by means of atmospheric plasma spraying, wherein: a coating lance having an anode and a cathode is inserted axially into the bore and is rotated about its longitudinal axis; an arc into which a plasma gas mixture is introduced and ionised is generated between the anode and the cathode; a plasma flow is generated; a coating powder is fed into the plasma flow; and the plasma flow comprising the particles is sprayed onto the bore wall and a coating is formed on the bore wall. According to the invention, the coating lance is inserted into the bore at an axial feed speed and is rotated at a rotational speed of 420 rpm to 520 rpm and, at a volumetric flow rate of plasma gas mixture of 30 l/min to 70 l/min, coating powder is injected at a feed rate of 90 g/min to 130 g/min.

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