

Title (en)

METHOD AND APPARATUS FOR LASER DEPOSITION WELDING

Title (de)

VERFAHREN UND ANLAGE ZUM LASERAUFTRAGSSCHWEISSEN

Title (fr)

PROCÉDÉ ET INSTALLATION DE SOUDAGE DE RECHARGEMENT PAR LASER

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2022248311A1] The invention relates to a method for coating a rotating surface region (12) of a workpiece (14) by laser deposition welding, wherein a pulverulent coating material (22), prior to impinging on the workpiece (14), is melted in a laser beam (18) directed at the surface region (12), wherein a spatially resolved intensity profile of thermal radiation (30) emitted by the workpiece (14) is captured, wherein at least one property of the intensity profile is compared with at least one predefined target value, and wherein at least one parameter of the coating process is altered depending on a result of the comparison. The invention furthermore relates to an apparatus (10) for coating a rotating surface region (12) of a workpiece (14) by laser deposition welding, comprising a laser device (16) for directing a laser beam (18) at the surface region (12), a nozzle (20) for blowing coating material (22) into the laser beam (18), a rotation device (24) for rotating the workpiece (14), a camera (28) for recording an intensity profile of thermal radiation (30) emitted by the workpiece (14), and a control device (32) configured to compare at least one property of the intensity profile with at least one predefined target value and to alter at least one parameter of a coating process depending on a result of the comparison.

IPC 8 full level

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