

Title (en)

METHOD FOR MANUFACTURING PIERCING PLUG

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES DURCHSTECHSTECKERS

Title (fr)

PROCÉDÉ DE FABRICATION D'UN MANDRIN DE PERÇAGE

Publication

EP 2845655 B1 20180801 (EN)

Application

EP 13782357 A 20130319

Priority

- JP 2012098448 A 20120424
- JP 2013001858 W 20130319

Abstract (en)

[origin: EP2845655A1] A method for producing a plug for use in a piercing rolling mill for producing a seamless steel tube/pipe includes an arc-spraying step of melting iron wires, and spraying molten material thereof onto a surface of a base metal of a plug by use of an arc-spray gun, so as to form a film containing oxide and Fe on the surface of the base metal of the plug. In the arc-spraying step, the surface of the base metal of the plug is divided into plural sections along an axial direction of the plug (for example, two sections: the tip end portion and the body portion), and in turn, the arc-spraying is separately carried out in each of the plural sections while an intersection angle between the center line of a spraying stream from the arc-spray gun and the surface of the plug base metal is maintained within a range of 35 degrees to 90 degrees. This method secures firm adhesiveness of the arc-sprayed film formed on the surface of the plug, and realizes steady enhancement of durability life of the plug.

IPC 8 full level

B21B 19/04 (2006.01); **B21B 25/00** (2006.01); **C23C 4/06** (2016.01); **C23C 4/131** (2016.01)

CPC (source: EP US)

B21B 19/04 (2013.01 - EP US); **B21B 25/00** (2013.01 - EP US); **C23C 4/06** (2013.01 - EP US); **C23C 4/131** (2016.01 - EP US)

Citation (examination)

"HANDBOOK IF THERMAL SPRAY TECHNOLOGY", 1 June 2005, ISBN: 978-0-87170-795-6, article DAVIS J R: "Coating Structures, Properties, and Materials", pages: 47 - 53, XP055412786

Cited by

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DOCDB simple family (publication)

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