

Title (en)
MANUFACTURING METHOD FOR PIERCING PLUG

Title (de)
HERSTELLUNGSVERFAHREN FÜR DURCHSTECHSTECKER

Title (fr)
PROCÉDÉ DE FABRICATION POUR POINÇON DE PERÇAGE

Publication
EP 2857545 B1 20180613 (EN)

Application
EP 13800967 A 20130419

Priority

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- JP 2013002657 W 20130419

Abstract (en)
[origin: EP2857545A1] Provided is a method for producing a plug for use in a piercing-rolling mill for producing a seamless steel tube/pipe, and the method for producing the plug includes a shotblasting step of carrying out shotblasting on a surface of the plug, and an arc-spraying step of performing arc-spraying of a spray wire so as to form a film on a surface of a base metal of the plug to which the shotblasting is applied. In the arc-spraying step, the arc-spraying is carried out by using, as the spray wire, a cored wire whose iron sheath tube is filled with at least low-thermal conductive particles (e.g. ZrO₂ particles) having lower thermal conductivity than that of iron oxide among iron particles and low-thermal conductive material, so as to form the film containing iron oxide, Fe and low-thermal conductive particles. Accordingly, it is possible to form the film having enhanced insulation performance, and to produce the plug capable of ensuring the steady enhancement of the durability life of the plug during the piercing-rolling.

IPC 8 full level
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CPC (source: CN EP US)
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WO 2013161175 A1 20131031 - NIPPON STEEL & SUMITOMO METAL CORP [JP] & EP 2845656 A1 20150311 - NIPPON STEEL & SUMITOMO METAL CORP [JP]

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