

Title (en)
PROCESS FOR PRODUCING SEAMLESS PIPE

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES NAHTLOSEN ROHRS

Title (fr)
PROCÉDÉ DE PRODUCTION DE TUYAU SANS SOUDURE

Publication
EP 2008733 A1 20081231 (EN)

Application
EP 06730223 A 20060328

Priority
JP 2006306275 W 20060328

Abstract (en)
A process for producing a seamless pipe characterized by including a continuous casting step in which a round billet material having a carbon content of not more than 0.1% by mass and having an outside diameter exceeding 300 mm is cast so that the whole of a central circular region, in terms of cross section, which has a diameter of at least 60 mm may be constituted of an equiaxed crystal structure. Further, in the process for seamless-pipe production, the round billet obtained from the billet material as cast produced in the above continuous casting step may be pierced/rolled with a piercing/rolling machine under conditions in which the ratio of the number of billet rotations to the billet outer diameter draft is set in the suitable range according to the ratio of the gorge portion diameter to the inlet diameter at the inclined rolls, thereby giving a seamless pipe reduced in the incidence of inner surface flaws. Furthermore, as a piercing plug, a suitably configured plug, having a substantially round column-shaped front rolling section with a spherical tip face, may be used, so that Mannesmann fracture and circumferential shear strains are significantly inhibited and no billet onset-engagement failure occurs at all. This process for seamless-pipe production makes it possible to produce a seamless pipe much more improved in inner surface quality with exceedingly high productivity.

IPC 8 full level
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EP 2008733 A1 20081231; **EP 2008733 A4 20110518**; **EP 2008733 B1 20131106**; CN 101410195 A 20090415; CN 101410195 B 20110406; WO 2007110930 A1 20071004

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