

Title (en)

TOOL STEEL FOR HOT WORKING, TOOL FOR HOT WORKING AND PLUG FOR PRODUCING SEAMLESS PIPE

Title (de)

WERKZEUGSTAHL ZUM WARMUMFORMEN, WERKZEUG ZUM WARMUMFORMEN UND DORN ZUR HERSTELLUNG VON NAHTLOSEN ROHREN

Title (fr)

ACIER A OUTILS POUR FORMAGE A CHAUD, OUTIL POUR FORMAGE A CHAUD ET MANDRIN DESTINE A LA PRODUCTION DE TUYAUX SANS SOUDURE

Publication

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Application

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Priority

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Abstract (en)

A hot tool steel, having a favorable adhesion and the lubricity of an oxide scale formed on its surface and having high strength. The hot tool steel consists of C: 0.05 to 0.5%, Si: 0.1 to 1%, Mn: 1.6 to 3.5%, Ni: 0.05 to 0.5%, Mo: 2 to 5%, W: 2 to 5%, Cu: 0.05 to 0.5%, and the balance Fe and impurities. The hot tool steel preferably contains further one or more of Cr, Co, REM, Ti, Nb, V, Zr and B. The tool made of the hot tool steel is covered on its surface with the oxide scale of 50 to 1500 μm thickness. The typical example of the tool is a piercing plug for manufacturing seamless pipes.

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