

Title (en)

HEAVY CUTTING NOZZLE FOR CUTTING STEEL WORKPIECES IN PARTICULAR

Title (de)

STARKSCHNEIDDÜSE ZUM SCHNEIDEN INSBESONDERE VON STAHLWERKSTÜCKEN

Title (fr)

BUSE DE DÉCOUPE PUISSANTE POUR LA DÉCOUPE EN PARTICULIER DE PIÈCES D'UVRE EN ACIER

Publication

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Application

EP 11718956 A 20110329

Priority

EP 2011054841 W 20110329

Abstract (en)

[origin: WO2012130290A1] A heavy cutting nozzle (1) for cutting workpieces of steel and workpieces (200) of iron alloys, particularly slabs, ingots and billets, has a nozzle body (2) with a thread (4) for fastening to a cutting torch (100). The heavy cutting nozzle (1) also comprises a centrally arranged cutting oxygen channel (5), a multiplicity of heating gas channels (10) arranged concentrically thereto on a specific inner pitch circle (10.1) and a multiplicity of heating oxygen channels (11) arranged concentrically thereto on a further middle pitch circle (11.1), wherein the outflow openings of the media channels (5, 10, 11) open out in a clearance (7) enclosed by the nozzle body (2). The clearance (7) enclosed by the nozzle body (2) is formed by the outflow openings of the media channels (5, 10, 11) for cutting oxygen, heating oxygen and heating gas in an angular, conical or approximately semicircular manner in relation to the outlet end thereof and in this way has the effect that the media flowing out are diverted at the inclined or curved outlet surfaces (F) towards the centre of the nozzle, and swirl with the surrounding air at a further distance (B) away from the heavy cutting nozzle (1) outside the nozzle body (2).

IPC 8 full level

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