

Title (en)  
METHOD FOR PRODUCING HOT-ROLLED HOLLOW PROFILED ELEMENTS HAVING A RECTANGULAR CROSS-SECTION AND SMALL EDGE RADII

Title (de)  
VERFAHREN ZUR HERSTELLUNG WARMGEWALZTER HOHLPROFILE MIT RECHTECKIGEM QUERSCHNITT UND MIT KLEINEN KANTENRADIEN

Title (fr)  
PROCÉDÉ DE FABRICATION DE PROFILÉS CREUX À PETITS RAYONS D'ARÊTES PAR LAMINAGE À CHAUD

Publication  
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Application  
**EP 10752278 A 20100812**

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Abstract (en)  
[origin: WO2011023167A2] The invention relates to a method for producing hot-rolled hollow profiled elements made of steel having a rectangular or square cross-section, wherein a substantially round pipe blank produced seamlessly by hot rolling or cold-rolled and welded and having a defined nominal outside diameter is first produced and then is formed into a hollow profiled element having the required cross-section at a forming temperature and the visible edges C1 and C2 of the hollow profiled elements have a value  $= 1.5 \times t$  ( $t$  = wall thickness). For a specified profiled element cross-section, the pipe blank to be inserted into the profile rolling mill has a nominal outside diameter that is determined from a reduction ratio of the pipe blank to be achieved and the hollow profiled element dimensions to be achieved, wherein the reduction ratio lies in a range from -2% to -13% and is determined according to the following formula: reduction ratio  $R$  [%] =  $[(2 \times (H + W)) - p \times D] \times 100 \% [2 \times (H + W)]$ .

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