

Title (en)
FOOLPROOF NOZZLE EXCHANGE DEVICE AND NOZZLE UNIT

Title (de)
FEHLERSICHERE DÜSENAUSTAUSCHVORRICHTUNG UND DÜSENEINHEIT

Title (fr)
DISPOSITIF D'ÉCHANGE DE BUSE INFAILLIBLE ET UNITÉ DE BUSE

Publication
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Application
EP 12723376 A 20120515

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Abstract (en)
[origin: EP2524748A1] The present invention concerns a nozzle unit (1) for use in a nozzle exchange device (100) in a continuous metal casting apparatus, said nozzle exchange device (100) being of the type comprising a loading opening and guiding means (7) for sliding the nozzle unit through said opening into casting position with respect to the nozzle exchange device, wherein said nozzle unit (1) comprises a nozzle plate (1) made of a refractory material clad in a metal can. In order to prevent said plate from being presented to the loading opening with the wrong orientation, i.e., with the trailing edge (2d) first, said plate is provided with at least one lug (6) at or adjacent the trailing edge (2d), said at least one lug (6) being transverse to said first major axis (X1) and extending substantially beyond the perimeter defining the base of the prism such that the loading opening (16) allows engagement of the base (2c, 2d) of the nozzle plate (2) but not of the at least one lug (6). The flexural yield point or ultimate flexural force of said at least one lug (6) is comprised between 10 and 2000 kgf (100 N and 20 kN), which is too high for an operator to reach by hand, but which can be handled very easily by a hydraulic, mechanical, or pneumatic arm (31) which can thus bend or break said at least one lug (6) to push the plate into its casting position, only if loaded with its leading edge first.

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