Title (en)

Process for manufacturing an object made from a steel sheet and enameled in direct mode

Title (de)

Herstellungsverfahren eines Gegenstandes aus Stahlblech, der direkt-Emailliert wird

Title (fr)

Procédé de préparation d'un objet en tôle d'acier émaillé en mode direct

Publication

EP 0866147 B1 20020410 (FR)

Application

EP 98400466 A 19980227

Priority

FR 9703452 A 19970321

Abstract (en)

[origin: EP0866147A1] Sheet steel is pickled in acid and then given a coating which protects it against corrosion, serves as a lubricating agent during subsequent shaping and is removed by degreasing before nickel-plating and enamelling of the final article. When applied to specific steel sheet 1 mm thick, the coating will withstand 10 cycles of heat and humidity according to DIN50017 without the steel showing any sign of rust. Its lubricating ability is such that a pressed flat bottomed dish 90 mm in diameter, pickled and then coated may be further pressed to a depth of 25 mm by a punch of diameter 50 mm moving at 1.6 mms/sec without rupture up to a force of 65 kN. The coating can be completely removed by immersion in a bath containing 35 g/l sodium metasilicate, 16 g/l trisodic phosphate and 2 g/l nitriloacetic acid at 60 degrees C for 3 mins, followed by immersion in water for 1 min and spraying therewith for 0.5 min.

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CPC (source: EP US)

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