

Title (en)  
Device for hardening rails

Title (de)  
Einrichtung zum Härten von Schienen

Title (fr)  
Dispositif de durcissement de rails

Publication  
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Application  
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Abstract (en)  
[origin: CA2652329A1] The invention relates to a device for hardening of rails, in particular profiled track rails, each optionally having a different cross-sectional shape and a length of more than 50 meters, by cooling at least a portion of the respective rail cross section over the entire length of the rail in a coolant, comprising transverse shunting means in the area of a roller gear, straightening means and manipulation grippers for conveying the rail in the device, at least one positioning means, each with a basin and/or trough with coolant and cooling bed. To create a device with which high quality rails can be manufactured economically with a high throughput and with a great reliability, it is proposed according to the present invention that the manipulation gripper should be formed from a plurality of identically shaped aligned tongs (30) that can be operated to have the same movement, each having gripper arms (31, 31') which are shaped with centering parts (312, 312') for an axial alignment of the head (12) of the rail and with gripper parts (311, 311') for a cross-sectionally aligned holding of the rail base, and a precision introduction of the rail (1) into the positioning means (4) and securing of same therein are made possible and/or the positioning means (4) has a plurality of holding components (40) aligned horizontally with supporting rigs (41) for the base (11) of a rail (1) introduced in a hanging position, said base (11) being securable on the supporting rigs (41) by releasable chucking elements (42) and/or hold-down devices so that it is secured from distortion in the axial rail (1) and/or at least basins (5) are arranged horizontally at the same height side-by-side so they are axially parallel with positioning means (4), and the part of the coolant (50) that can be used for rail hardening in the basin (5) has a depth which exceeds the height of the largest rail profile by at least 10% and/or the basin (5) and the supporting rigs (41) and the releasable chucking means (42) for the base (11) of the hanging rail (1) of all the components of the positioning means (4) can be moved in a controlled manner relative to one another vertically at the same time for introducing the rail into the coolant, and a respective vertical holding position and duration of same are adjustable.

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