

Title (en)

COOLING AGGREGATE AND METHOD FOR COOLING HOTROLLED ROLLING STOCK WITH/WITHOUT DIRECT PATENTING IN PRESSWATER

Publication

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Application

EP 87710010 A 19870807

Priority

DE 3626741 A 19860807

Abstract (en)

[origin: EP0266302A1] The cooling aggregate and method according to the invention are used for cooling shaped and hot-rolled rolling stock of steel or metal running through at rolling speed. According to the application, the heat extraction involving many known and still unknown imponderables is carried out, during the cooling of hot-rolled rolling stock, in a cooling aggregate with preferably three pressure spaces, as shown in Figures 1, 3 and 10, in order thereby effectively to avoid the danger of an unstable heat extraction, as shown in Figures 5 and 7. The particular actual cooling temperature is brought to the desired cooling temperature by varying the quantity of pressure water flowing into the convection pressure space (1), as a result of which the fraction of pressure water in relation to the vapour fraction in the pressure-water/vapour mixture in the evaporation pressure spaces is either reduced or increased, thereby reducing or increasing the heat extraction and consequently increasing or reducing the cooling temperature. By means of this cooling aggregate and method, it is possible to increase the heat extraction per dm³ of pressure water considerably, with the result that the uniformity of cooling is improved and the quantity of pressure water to be used per ton of finished rolling stock can be lowered by 50 to 80%, as shown in Figure 11, and at the same time to carry out the cooling in such a way that no detectable undesirable structural constituents dependent on quality and caused by the cooling form in the finished rolling stock. <IMAGE>

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