

Title (en)

FLATNESS-MEASURING APPARATUS FOR MEASURING THE FLATNESS OF A METAL STRIP

Title (de)

PLANHEITSMESSVORRICHTUNG ZUR MESSUNG DER PLANHEIT EINES METALLISCHEN BANDES

Title (fr)

DISPOSITIF DE MESURE DE PLANÉITÉ CONÇU POUR MESURER LA PLANÉITÉ D'UNE BANDE MÉTALLIQUE

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Application

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Abstract (en)

[origin: WO2020259912A1] The invention relates to a flatness-measuring apparatus (1) for measuring the flatness of a metal strip, comprising a measuring roller (2) which has a roller axis (a) and is designed for contact with the strip for the purpose of measuring flatness, wherein the measuring roller (2) is connected to a cooling system (3) by means of which the measuring roller (2) can be cooled. The aim of the invention is to maintain a high level of measuring precision even at high temperatures and in particular in hot-rolling systems. This aim is achieved in that the cooling system (3) has a nozzle bar (4) which extends in parallel with the roller axis (a), wherein: at least one spray nozzle, preferably a number of spray nozzles (5), is arranged on the nozzle bar (4), by means of which spray nozzles cooling medium can be sprayed out onto the surface of the measuring roller (2) in a spray-out direction (b); the spray-out direction (b) meets a surface portion (6) of the measuring roller (2); and the angle (α) between the spray-out direction (b) and the tangent (t) to the measuring roller (2) is smaller than 30° at the location of the surface portion (6).

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