Abstract (en)
[origin: EP2386365A1] The operation process for a finishing line for rolling a strip, comprises acquainting (S1) an actual parameter and a targeted parameter to a control computer for the finishing line at a time point, to which a first strip point of the strip still presents itself before the finishing line, for the first strip point and a number of second and third strip points of the strip, and characterizing the respective actual parameter for the actual energy content of the respective strip points and the respective targeted parameter for the targeted energy content of the respective strip points. The operation process for a finishing line for rolling a strip, comprises acquainting (S1) an actual parameter and a targeted parameter to a control computer for the finishing line at a time point, to which a first strip point of the strip still presents itself before the finishing line, for the first strip point, a number of second strip points and a number of third strip points of the strip, characterizing the respective actual parameter for the actual energy content of the respective strip points and the respective targeted parameter for the targeted energy content of the respective strip points for each strip point, relating the respective actual parameter to a location above the finishing line for each strip point, relating the respective targeted parameter to a location behind the finishing line for each strip point, where the second strip points run after the first strip point and the third strip points run before the first strip point, determining (S2) a guide parameter by the control computer based on a specific determinative instructions before running the first strip points in the finishing line for the first strip point and a part of the second strip points, determining (S4) a guide speed by the control computer based on the guide parameter determined for the respective strip point, operating (S5) the finishing line at the time point of the entry of the respective strip points in the finishing line with the respective guide speed, and entering the actual parameter and the targeted parameter of the strip points occurring to the time point respectively in the finishing line and the actual parameter and the targeted parameter of the strip points occurring to the time point already in the finishing line in their determinative instructions for the respective guide parameter. The control computer determines each of the guide parameters based on the individual guide parameters, each of which is related to one of the strip points, whose actual parameter and the targeted parameter enter in the determination of the respective guide parameter. The control computer determines the individual guide parameter for each strip point, so that a respective expectation parameter matches with the corresponding targeted parameter. The respective expectation parameter is characterized for an expected energy content, which assumes the respective strip point at the location behind of the finishing line, to which the respective corresponding targeted parameter is related, when the control computer operates the finishing line during the entire passage of the respective strip points through the finishing line with a guide speed corresponding to the individual guide parameter. The control computer initially sets the guide parameters as preliminary values for the determination of the guide parameters, and determines the expectation parameter for the first strip point and a part of the second and third strip points. Each expectation parameter is characterized for the expected energy content, where the guide speeds correspond to the set guide parameters. The control computer varies the set guide parameters, so that a time function is optimized, in which the operation of the differences of the expectation parameters receives from the corresponding targeted parameters. Additionally a penalty term, by which the change of the guide speed is penalized, receives in the time function. The control computer previously creates a data field, in which the control computer for the possible guide speeds and actual parameters consigns the expectation parameter resulting itself with the respective possible guide speed for the respective possible actual parameter, determines the guide parameter for the strip points under the use of the data fields, and determines the expectation parameter for a part of the strip points, where the expectation parameter is characterized for the expected energy content, which is expected for the respective strip point at the location behind the finishing line, to which the corresponding targeted parameter is related, on the basis of the guide speeds, with which the control computer operates the finishing line during the entire passage of the respective strip points through the finishing line. After the passage of the respective strip points, a measuring parameter receives through the finishing line, where the measuring parameter is characterized for the actual energy content of the respective strip points at the location behind the finishing line, to which the corresponding targeted parameter is related. Independent claims are included for: (1) a computer program; and (2) a finishing line for rolling the strip.