

Title (en)
HEATING METHOD FOR HEATING A CALENDER ROLL

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Application
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US 1035787 A 19870203

Abstract (en)
[origin: EP0277905A2] A heating apparatus (10) is disclosed for heating a calender roll (12). The heating apparatus (10) utilizes heat supplied by induction heating and from a heat transfer medium. The heating apparatus (10) includes heating channels defined by the roll (12). The channels extend through the roll (12) such that the heat transfer medium is permitted to flow through the channels so that heat is transferred from the transfer medium to the roll (12). An induction heater (14) is disposed adjacent to the external surface (24) of the roll (12) and extends along substantially the entire length of the roll (12) such that when the induction heater (14) is energized, heat is induced in the region of the external surface (24) of the roll (12) for supplementing the amount of heat transferred from the heating medium so that the temperature of the external surface (24) of the roll (12) is increased to a level which, in the absence of the induction heater (14), would cause excessive shell stress. Furthermore, the temperature level is attainable without the hazards associated with the use of a heat transfer medium operating at least at such temperature level.

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CPC (source: EP)
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