

Title (en)
Deflection compensated roll

Title (de)
Biegeeinstellwalze

Title (fr)
Rouleau de déviation compensée

Publication
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Application
EP 13169860 A 20130530

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Abstract (en)
[origin: EP2808445A1] The invention relates to a method for controlling vibrations of a fiber web machine, in particular of a calender, which fiber web machine comprises at least one roll (10), which comprises a shaft (12A) and shaft ends (12), a shell (10A) and at least one loading element (20) for loading the shell (10A) located in pressure pockets of the shaft (12A), which roll (10) forms a nip (N) with another roll (11). The method comprises designing at least one roll (10) of the fiber web machine by vibration modeling simultaneously combining limitations of static loading and providing optimal amplitude of movement in the at least one loading element or roll support element of at least one roll (10) in the / in those natural frequency / frequencies that cause nip pressure or nip load variation in the nip (N) such that maximum damping is generated in nip vibration. The invention also relates to a deflection compensated roll which comprises damping means (24, 26) for at least one loading element (20) of the deflection compensated roll (10) for damping vibration of the shell (10A) of the roll, which damping means comprise a spring element (26) and a damping element (24).

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