Title (en)

APPARATUS FOR COMPACTING A CONTINUOUS TEXTILE SUBSTRATE BY MEANS OF ELASTIC BELT

Title (de)

VORRICHTUNG ZUM VERDICHTEN EINES ENDLOSEN TEXTILBANDS DANK EINES ELASTISCHEN GURTS

Title (fr)

DISPOSITIF DE COMPACTAGE D'UNE BANDE TEXTILE PAR LE BIAIS D'UNE COURROIE ÉLASTIQUE

Publication

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Application

EP 20179929 A 20200615

Priority

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Abstract (en)

The invention relates to an apparatus for compacting a continuous textile substrate (T) by means of elastic belt. The apparatus (1) comprises: - a heatable rotating cylinder (10); - an endless belt (20) movable along a closed path to support and transport the textile substrate (T) in contact with a side surface portion (10a) of said heatable rotating cylinder (10), said belt being elastically deformable in elongation; - a roller system (31, 32, 33, 34, 35) on which said belt (20) is wound in an elongation pretensioning state. The roller system comprises a plurality of idle return rollers (33, 34, 35) and a plurality of motorized rollers (31, 32) operable so as to make said belt (20) slide along said closed path imposing on said belt an additional elongation tension state at a first section (T1) of said path extending - with respect to an advancement direction (X) of the belt - upstream of a second section (T2) of said path in which said belt (20) is maintained in contact with the rotating cylinder. The apparatus (1) comprises means (40) for guiding the textile substrate (T) between the belt (20) and said heatable cylinder (10) along said second section (T2) of said path. The roller system comprises a motorized drive roller (31), a motorized brake roller (32), a first idle return roller (33), which is arranged between said motorized brake roller and said motorized brake roller, and a second idle return roller (34). The first section (T1) of the path extends between the motorized brake roller (32) and the motorized drive roller (31), passing in partial winding around the first idle return roller (33), while the second section (T2) of the path extends between the motorized drive roller (31) and the second idle return roller (34). The closed path is completed by a third section (T3) extending between the second idle return roller (34) and the motorized brake roller (32). In use along the third section (T3) of the path, the belt (20) is in a relaxed tension state with respect to the first section (T1) of the path.

IPC 8 full level

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Citation (search report)

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