

CARPET LAMINATION USING HOTMELT AS ADHESIVE

Myriam Vanneste, Ine De Vilder

Nowadays the search for new environmental friendly materials and processing techniques is very prominent. Within this framework Centexbel explored whether hotmelts can be used within the textile industry, with special emphasis on carpets.

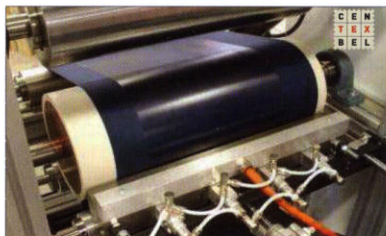
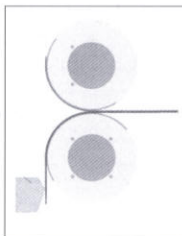
Hotmelts are 100% polymer systems which are applied as a melt onto the substrate. The final strength of the polymer is acquired by cooling down. Since no water or solvent is present, no subsequent evaporation process is needed. Due to this ecological and economical advantage hotmelts are commonly used as adhesives in a lamination process for different substrates like paper, nonwovens or polymer films.

The replacement of the currently used two layer latex system (precoat & backing) for carpet lamination by a one layer hotmelt was the ultimate goal in the project.

To achieve this goal a good penetration of the hotmelt into the piles is required to obtain a good pile and fibre bonding and also good adhesive properties to ensure the necessary adhesion of the carpet to the felt.

From an ecological point of view the possible to use hotmelt for lamination of carpet is an interesting route to produce a fully recyclable carpet consisting out of only one type of material. The use of hotmelts provides an answer to this need.

CENTEXBEL
Belgian Textile Research Center
Address:
Technologiepark 7
BE-9052 Zwijnaarde
Tel.: +32 9 220 41 51
Fax.: +32 9 220 49 55
e-mail: myriam.vanneste@centexbel.be



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