

CENTEXBEL STRENGTHENS ITS ACTIVITY IN COATING AND TEXTILE FINISHING

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The past two years, Centexbel has invested in an expansion of its technological platform for coating and textile finishing. Older machines were replaced, new technologies were introduced and also the peripheral equipment was updated. Centexbel can now support developments on

different scales of the development process: from batch coating with grams of materials to limited continuous production to semi-industrial production. Centexbel has equipment for each step in the research and development chain, for a large variety of processes.

For the batch production, in 2011 Centexbel will have replaced all the older equipment for coating and impregnation by new equipments. The new Mathis coating and impregnation equipment enables a more accurate control of application and heat treatment of the samples.

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It also has more flexibility to allow a better design of the processing conditions.



Fig. 1: the new Mathis coating and impregnation equipment

Next to thermal curing, Centexbel has UV curing possibilities and IR heating. Samples can be pre-treated by corona or plasma technology. Other application techniques are screen printing on a printing table and in 2011 a spray system will also be installed to spray different types of liquids (from low to high viscous liquids) onto the textile structures.

A next step in the development chain is the continuous process. Also for this, Centexbel has replaced on older continuous unit by a new Matex coating line. This line works on a width of 50 cm and is equipped with coating and impregnation possibilities. The equipment can be used in combination with corona or plasma treatment and in the future, it can be further extended with a large variety of technologies, as e.g. UV curing, lamination, embossing,...



Fig. 2: the new Matex coating line

A second continuous lab-line is the hotmelt equipment. This machine also works on a fabric width of 50 cm. It can be used both for different types of fabrics and for carpets.

For the last step in the development chain before actual production, Centexbel has a pilot coating line, which is equipped with a pad mangle for dip-coating and impregnation, a corona treatment, a screen printing unit, a foam applicator, a coating head, a powder scatter unit, and IR field, laminating units and a hot air oven.

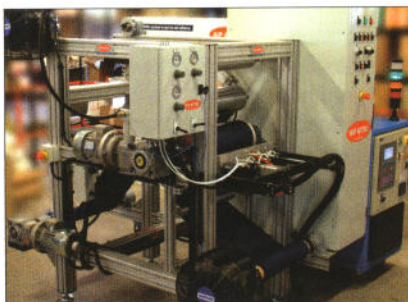


Fig. 3: the new hotmelt equipment

Next to fabric coating and finishing, Centexbel has also raised a platform for the treatment of yarns by dip-coating or kiss roll coating. The yarns can be pre-treated by corona and can be cured by heat, IR heat and UV curing. A variety of products can be applied, based from low-viscous water-based products to viscous pastes.

The peripheral equipment is also extended with e.g. more accurate Brookfield viscosimetre, equipment for production of pastes in vacuum systems, different types of frames for fabrics and paper to allow transfer coating and mixers for small and large amounts of pastes.

Centexbel has currently a group of nine research scientists which work on coating and finishing activities. Current fields of research are for instance UV-curable & sol-gel applications, hotmelt technology, nanotechnology (CNT and nano-Ag), bio-based coatings.

Besides collective research, Centexbel can collaborate with private partners in these fields or on related topics. Centexbel can help you in the search for funding your project on a regional, national or European level.

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