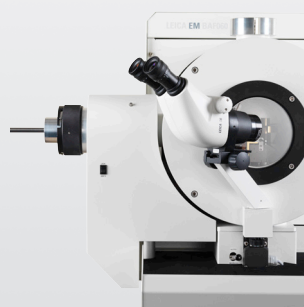
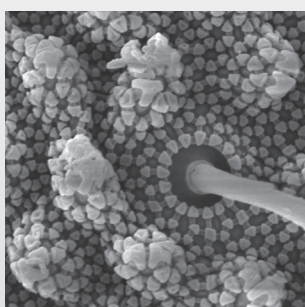


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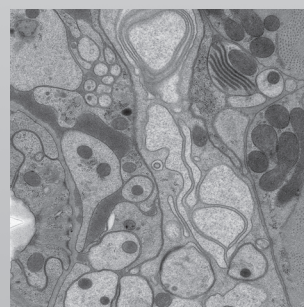
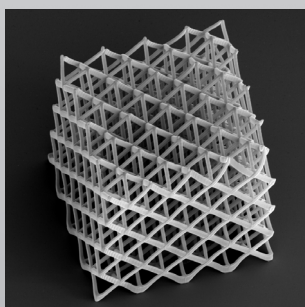
Application Note

Paper samples

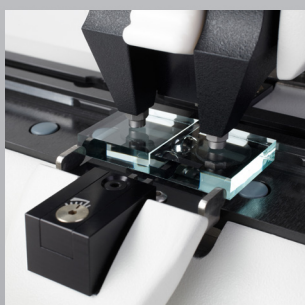
Sample Preparation for SEM

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Ion beam slope cutting (cross polishing)

Paper samples

A coated paper sample has been prepared with ion beam slope cutting in order to test the procedure with regard to its applicability.

PREPARATION CONDITIONS

Mechanical pre-preparation

Cut out a piece of paper using a razor blade or a scissors.

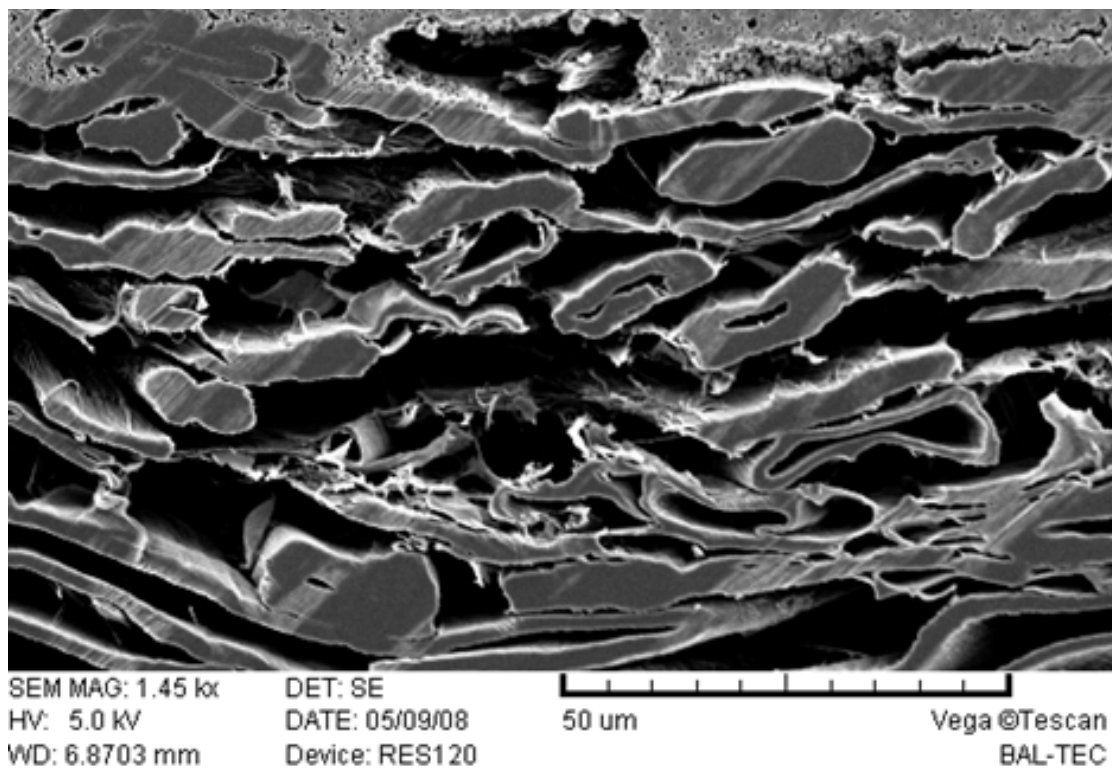
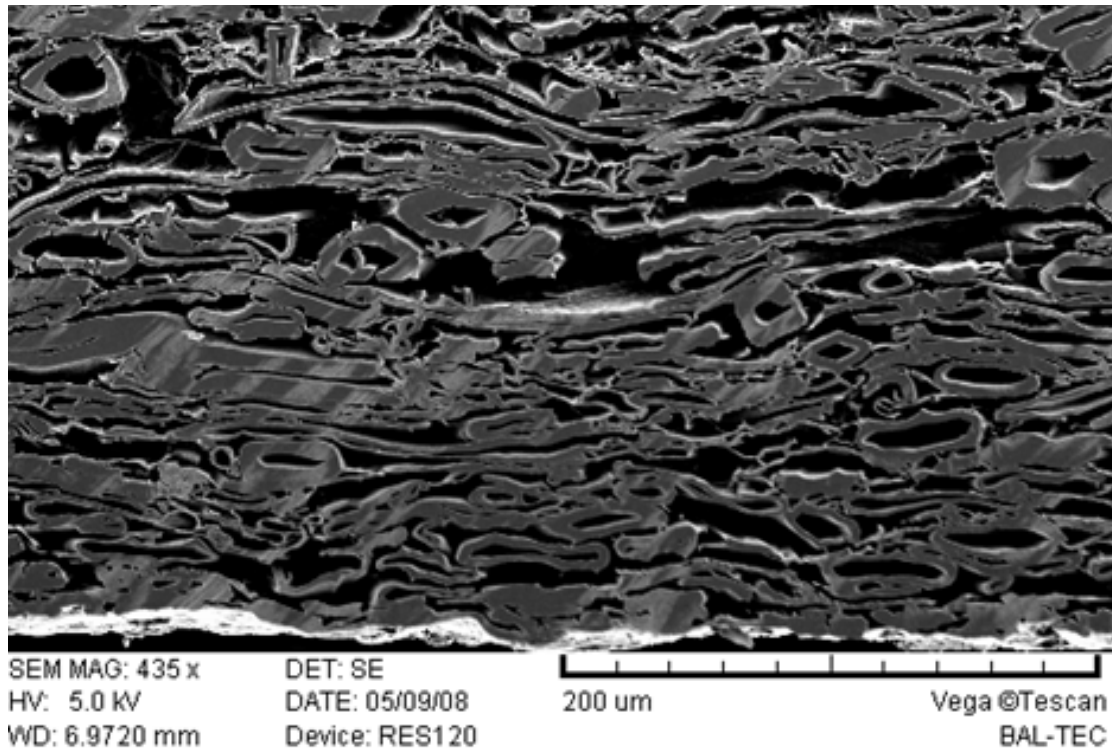
The cut should be free of any paper fibres.

Ion milling

Sample holder:	90°-Sloped cutting holder
Acceleration voltage:	7 kV
Milling time:	3 h
Sample movement:	Oscillation (65°)

RESULTS

With the use of ion beam slope cutting a cross section of paper could be prepared. On the basis of this sample processing, it was possible to show the largely unaffected original structure of the thermally-sensitive paper in the scanning electron microscope. Due to the parallel ion incidence with respect to the cut surface, the original structure was not modified. The scanning electron microscope images show a cross-section through coated paper. The surface, the coating and the fibre structure of the paper are easily recognizable.



SEM images of a cross section of a soft card board

RELATED PRODUCTS



Leica EM RES102

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