

Development of Speciality Paper is an Art: Overlay Paper from Indigenous Raw Material: *Acacia Tortalis* Part- XVI

Dhram Dutt, Tyagi C H, Upadhyaya J. S. and Swarnima

ABSTRACT

Indian pulp and paper industries are facing multifarious problems in which raw materials shortage is one of them. Paper technocrats are manufacturing only traditional grades of paper in which profit margin is limited due to tough competition. Paper mills have their own manufacturing standards due to variation in availability of raw materials and they keep their standards secret. Keeping this in view, a study was undertaken to explore the possibility of manufacturing of highly specialized paper i.e., overlay paper from locally available *Acacia tortalis*. The top layer of decorative laminates is made up of overlay paper and provides protection to decorative laminates against abrasion layer. The most important properties for overlay paper are water klemn, wet strength, and castor oil penetration. The special requirement for overlay paper is highly uniform porosity, a reasonably good formation, cleanliness, and light resistance. This paper does not require addition of filler because the paper should become transparent after impregnation with melamine formaldehyde and letting the appearance of the decorative laminate paper come through. However, it requires particularly high resistance to abrasion; hence an extremely hard crystallized alumina is added.

Key Words: *Acacia tortalis*, Overlay paper, Water klemn, COP, Melamine formaldehyde, Corundum, Wear resistance, Decorative laminates.