

PIGMENT COATED PAPER

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CHAPTER 1

INTRODUCTION

The advancing technologies of printing and packaging have placed greater demands on the surface on the paper sheet. To meet the more stringent requirements, many paper surfaces are coated with suitable formulation to provided improved gloss, slickness, color, printing detail and brilliance (Smook, 1989).

Coated paper was first developing commercially in about 1852 because of the demand for better printing result. As it was first made, a thin layer of clay and glue was applied by hand to the surface of a web of paper, which was then dried and calendered. In the middle 1890s, casein began to replaced glue as an adhesive than starch was found to be satisfactory to certain grades and now very large quantities of it use. In 1947 sytrene-butadine was introduced, to be used with either starch or casein and it was the forerunner of a number of synthetic adhesive, which often the sole binder (Macdonald, 1969).

Coated paper or surface treatment is a broad term for the addition of dry or wet strength additives with or without pigment. Surface treatments have as objectives a better print quality of uncoated offset papers or improved base-coat quality for second-stage coating. Another important objective is reduction in costs by higher filler content or by inexpensive pulps, where loss of strength is recouped by surface treatment (Macdonald, 1970).