

PART II

FABRIC FINISHING

Finishing is the last manufacturing step in the production of textile fabrics. As an integral part of wet processing, *Finishing* is the operation where the final fabric properties are developed. Finishing is not restricted to wet processing alone since any operation for improving the appearance or usefulness of a fabric after it leaves the loom or knitting machine can be considered a finishing step. *Finish* can be either chemicals that change the fabric's aesthetic and/or physical properties or changes in texture or surface characteristics brought about by physically manipulating the fabric with mechanical devices. It can also be a combination of the two.

Finishing is commonly divided into two categories, *Chemical and Mechanical*. In chemical finishing, water is used as the medium for applying the chemicals. Heat is used to drive off the water and to activate the chemicals. Mechanical finishing is considered a dry operation even though moisture and chemicals are often needed to successfully process the fabric. Mechanical devices are used in both categories - the major distinction between the two is what caused the desired fabric change, the chemical or the machine?

Today's finisher deals with many points of concerns since he is responsible for the ultimate quality of the fabric. Among the points of concerns are those that deal with chemistry, i.e. reactions with the fabric, safe handling of bulk quantities of hazardous chemicals, worker safety and environmental issues involving air and water discharges. Another point of concern deals with the machines used to process the fabric and controlling them to produce first quality goods. Still another point of concern deals with economic factors, i.e. chemical and process costs, output, certification of quality and timely delivery of products to customers.

The chapters that follow will review both the chemical and mechanical aspects of fabric finishing. All of the points of concerns will be considered in this section. The material will be divided into Chemical Finishing and Mechanical Finishing.