

Natural Fibers Department

COTTON - MERCERIZATION

In the process involved in upgrading of fabrics, especially cotton, the fibers are treated so that they can be subsequently dyed, printed and dressed. Mercerization is, in this context, aimed at giving the fabric greater gloss, elasticity, chemical reactivity, etc.

The mercerization plant consists of a series of tanks in which the fabric is passed.

In these plants the chemical-physical analyses carried out by automatic analyzers are aimed at automatic control of the continuous process.

We have installed a type of automatic analyzer which checks this production process.

A mercerization plant can be represented as shown in the figure below:

PROCESSES INVOLVED:

The mercerization process

The bath through which the fabric is passed consists of a caustic soda solution having a concentration that varies depending on the effect required. The soda from the storage tanks must be diluted before being passed to the mercerization phase.

The dilution usually takes place in the mercerization bath.

During the process, new caustic soda must be added to keep the concentration in the bath constant; it is therefore necessary to measure the concentration of the bath.

For continuous checking of this parameter the **UR20** refractometer, having a scale expressed in **Baumé degrees**, is used, fitted in recirculation on the mercerization bath.

