



## DEVELOPMENTS IN RESIN FINISHING – PART V

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### Auxiliaries in Resin finishing

Every resin-finishing recipe contains surface active agents or surfactants such as emulsifying agents, wetting agents and stabilizers. These agents are necessary to ensure that the fabric is wet thoroughly during padding and to stabilize the finishing solution. Generally, the non-ionic surfactants are used in resin finishing.

Beside surfactants, there are other auxiliaries too used in resin finishing. The aim of using these auxiliaries is to minimize the adverse effects of the crosslinking agent. Softeners or smoothing agent is one of the main auxiliaries used in resin finishing. These agents are not only used to improve the handle of the fabric, but also to minimize the loss in tear strength and abrasion resistance.

Other auxiliaries used in resin finishing are stiffening, water-repellents, etc. These are mainly added to impart specific properties to the fabric.

### Processes of Resin finishing

The different processes of resin-finishing on fabric and garments are:

- **Dry resin finishing Process** - Dry resin finishing process is the commonly used one. In this process, the fabric is cured in a dry state. After padding, the fabric is dried on the stenter and then cured.
- **Wet resin finishing Process** - In wet resin finishing, the reaction takes place when the fabric is in a wet and fully swollen state. Finishing recipe contains a strong mineral acid. This process is less popular because of its various shortcomings.
- **Pre cure Process** - Cross linking in the pre cure process is carried out in the dry state. In this method, blends of synthetic and cellulosic fibers are finished with permanent creases. The cellulosic component undergoes resin-finishing by the dry resin finishing process. After making the garments, the finished garment is shaped by heat setting the synthetic fibers at high temperature and under high pressure in special ironing presses.



- **Post cure Process** - It is the most significant permanent-press method. The fabric is treated as in standard dry resin finishing process but not cured. The treated fabric is subsequently made up into garments and provided with pleats in the steam press before being cured.
- **Dip-dry Process** - The dip-dry process is a special case of the permanent-press or post cure process. The fabric is first made up into garments, which are dipped to impregnate them in the finishing solution. The garment is then dried, ironed and cured.
- **Spray Process on denims** - This process is applied on denim to give special effect to the garment. The resin solution is sprayed onto the garment during tumbling in a rotational device. In another method, the garment is hanged to be inflated in a spraying chamber and the resin solution is sprayed.

.....To be continued.....

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UNSCRAMBLE THE JUMBLE WORDS
XILIAUARIES
ACTSURFANT
BERFI
MENCISPE

Last week`s Answers: 1) FINISHED 2) CATEGORY 3) TWIST 4) RECOVERY

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