TECHNICAL TUESDAYS

TOPIC: Salt-Free Dyeing

REF: TT/ NOV 2015/ WK 3

Why is salt used in dyeing?

When cellulosic fibres come in contact with water, they produce negative charges due to the ionization of the hydroxyl group. Most dye classes that are suitable for cotton are anionic in nature. The negative charges on the fibre repel anionic dyes in the dye bath. By adding salt, the negative charges can be reduced and dye exhaustion on the fibre can be increased.

What is salt-free dyeing?

It is the process of increasing the cationcity of the cotton fibre without using salt and making the cotton fibre suitable for enhanced exhaustion of dyes.

Advantages of salt-free dyeing:

- Elimination of salts, an electrolyte.
- Maximum fixation of dyes.
- Minimum hydrolysis of dyes.
- Low volume of water requirement during the wash off process.
- Increases the reactivity of reactive dyes.
- Increases wash and rubbing fastness.
- Environment friendly.
- Significant savings in process costs.

Wishing you a great week ahead!

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