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TECHNICAL TUESDAYS

TOPIC: HTHP Beam Dyeing Machine

REF: TT/ Aug 2016/ WK 4

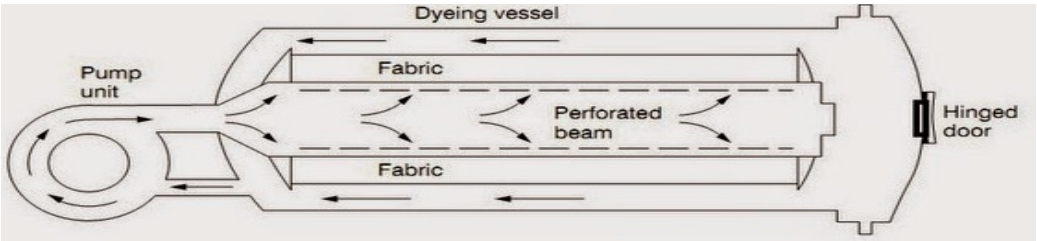
HTHP beam dyeing machine:

The beam dyeing machine operates with the same principle as that of the package dyeing machine. It can be effectively used to dye yarn or fabric.

The working process of the HTHP beam dyeing machine is described below:

Fabric or yarn in open width is rolled onto a perforated beam. The beam is then subsequently slid into a vessel that is closed and pressurized. The colour impregnates the fabric as the dye liquor is allowed to continue to circulate through the perforations in the beam. Usually the beam machine is designed in such a manner so as to hold a single beam or multiple beams performing in a batch.

Flow of the liquor usually follows in the in-to-out direction, a reversed flow direction can also be incorporated, but on doing so causes certain complications during the process. Out-to-in flow process can cause compression of the material causing flattening and glazing, particularly on the inner layers of the material. Hence, the in-to-out flow is found to be the optimum liquor flow direction.



Advantages & features:

1. Loading and unloading of the fabric is easy and the time required for dyeing is short.
2. Dyeing possibilities in open width form.
3. Highly efficient for fabrics that tend to crease, extend or abrade while in motion during the machine dyeing process.
4. De-aeration process is essential to avoid pale dyed spots.
5. An incorporated wetting agent helps to eliminate air bubbles within the fabric roll.
6. During the process the material is stationary and the liquor is motion.
7. The HTHP beam dyeing machine can dye on both Fabric and yarn in beam form.

Wishing you a great week ahead!

Technical Tuesdays is a knowledge sharing initiative by Resil Chemicals Private Limited

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