

## Introduction of Jigger dyeing

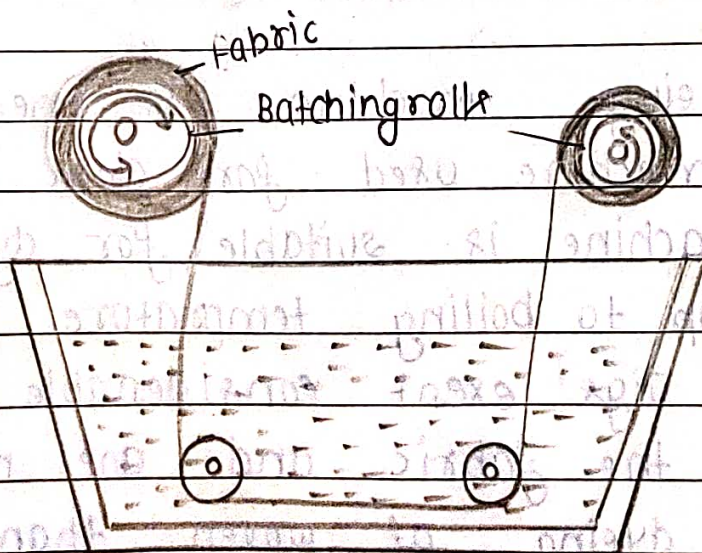
Jigger dyeing machine is one of the oldest dyeing machine used for cloth dyeing operations. Jigger machine is suitable for dyeing of woven fabrics, up to boiling temperature without any creasing. Jigs exert considerable lengthwise tension on the fabric and are more suitable for the dyeing of woven than knitted fabric.

Since the fabric is handled in open-width a jig is very suitable for fabrics which crease when dyed in rope form.

## Jigger dyeing Machine-

The jigger dyeing machine consists of a small tub and two drawing rollers located above the dye bath. First the fabric is wound around one of the rollers known as let-off roller. During the process of dyeing the fabric is passed through the dye bath & rewound onto the second roller or known as take-up roller. When all the fabric is passed through the dye bath the direction of movement is reversed. This would be repeated for a number of cycles until the dyeing is completed. In this machine, dyeing tension is imparted across the length of the fabric during the process of dyeing.

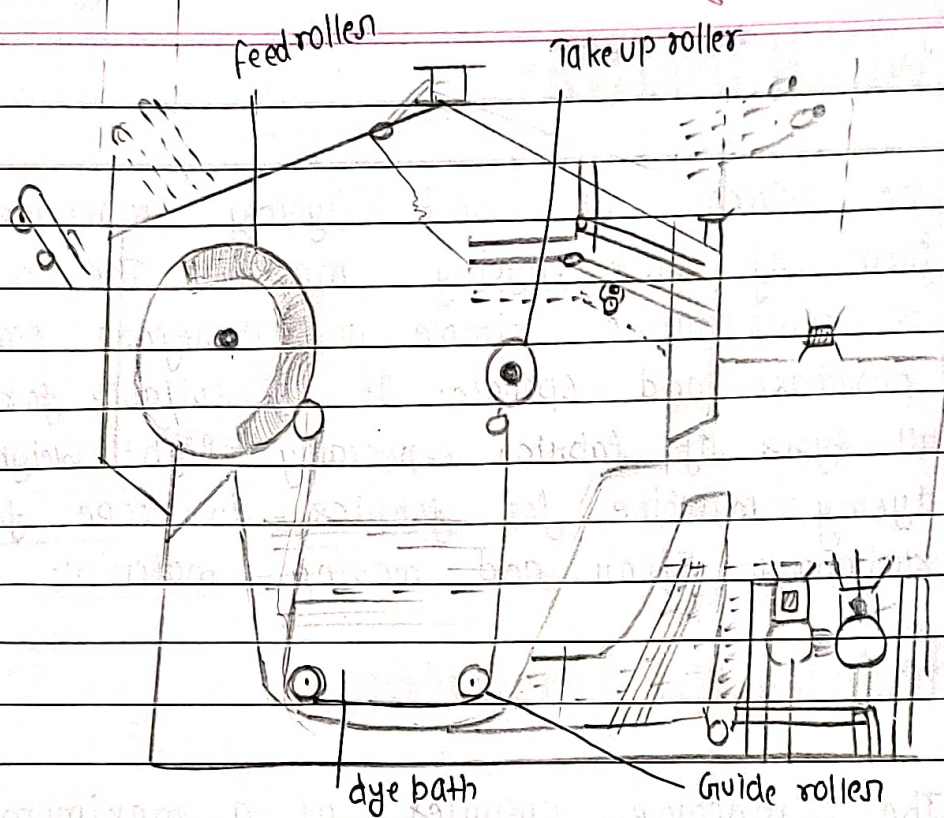
Knitted and stretch woven fabric cannot be dyed in this machine:



(Limitation of Jigger Dyeing)

# (Jigger dyeing machine)

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- Jigs exert considerable lengthwise tension on the fabric & are more suitable for the dyeing of woven than knitted fabrics.
- In textile preparation due to the swelling and dissolution of size, this makes the fabric slippery and unstable in roll form.
- The low liquor ratio makes washing off difficult.
- There is little mechanical action in a jig machine and it is less suitable where vigorous scouring is required before dyeing.

Moir effect or water marks may arise on some acetate and nylon fabric because of pressure flattening the structure of the roller fabric.