

## 2.17 40225 WEAVING PREPARATION

### UNIT-1 WINDING

- 1.1 Types of packages.
- 1.2 Slow speed upright spindle winding machine. (Brief idea)
- 1.3 Traversing mechanisms (Rotary, Reciprocating, Multispeed)
- 1.4 Uses and limitations of slow speed winding machines and essentials of high speed winding machines.
- 1.5 High speed and super high speed warp winding machines- Cone winder or reckoner, Schlaphorst and Auto Coner, B-C spooler
- 1.6 Study of various types of slub catchers, traversing devices, tensioning devices, ribbon formation and methods of eliminating them. Full package stop motions. Commonly occurring faults in warp winding, their causes and remedies.
- 1.7 Norms for slub catcher setting and tension levels.
- 1.8 Different types of high speed pin winding machines with special reference to Leeson pin winder.
- 1.9 Different types of automatic pin winding machines with special reference to a modern pin winder.
- 1.10 Bunch building mechanisms.
- 1.11 Commonly occurring faults in pin winding, their causes and remedies.

### UNIT-2 WARPING

- 2.1 Introduction to various ways of warping.
- 2.2 Types of creel.
- 2.3 Sectional warping machine.
- 2.4 Slow speed and high speed beam warping machines.
- 2.5 Stop motions. Measuring motions and tensioning devices.
- 2.6 Commonly occurring faults in warping and their causes and

### UNIT-3 SIZING

- 3.1 Object of warp sizing.
- 3.2 Introduction to various methods of sizing.
- 3.3 Study of slasher sizing machine- Warp sheet passage.
- 3.4 Detailed study of sizing machine, measuring and marking motion, beam creels, brake guide and tension rollers, sizing and squeezing rollers, drying cylinders, steam trap, sow box construction, leasing rods, adjustable comb, drive, beam pressing motion, slipping friction motion, change wheel drive.
- 3.5 Improvements made in the improved type of slashers with conventional cylinders.
- 3.6 Multicylinders and hot air sizing machines with special reference to drying unit, passage of warp on the machine. Merits and demerits of slasher, multi cylinder and hot air sizing machines.
- 3.8 Various kinds of sizing ingredients used for cotton, polyester, viscose and their blends.

3.9 Preparation of size paste for light medium and heavy size for cotton and man-made fibres blends, Lapping and Migration.

3.10 Manual and mechanical methods of drawing-inland knotting, twisting of warp.

3.11 Commonly occurring faults in sizing, drawing in denting and knotting.

**Reference Books:**

1. Industrial Practices in Weaving Preparatory by Mukesh Kumar Singh
2. Handbook of Weaving by Sabit Adanur

