

# AMLT09 MECHANICS OF LEATHER MACHINES

## UNIT-1 MECHANICS OF LEATHER MACHINERY

- 1.1 Wood- Characteristics/ specification/ requirement matching use.
- 1.2 Rubber- Quality requirement at different stages of leather machines; specification and testing; maintenance.
- 1.3 Knives used, their characteristics, their constituents, and their preparation and optimum usages, their varied functioning.
- 1.4 Variation of speeds of different rollers and their justification matching requirement of leather making.
- 1.5 Electronics as applied and devices in different leather machinery, timer device. Surface coating devices. Insulation.
- 1.6 Different heating systems and economic usage depending upon the final results; thermostatic controls.
- 1.7 Varieties of pumps used in tannery, effluent treatment system.
- 1.8 Driving systems- varied load factors, economic system.
- 1.9 Conveyors. Lubrications and lubricants.
- 1.10 Clutch mechanism, Crank slider, lever mechanism,
- 1.11 Balancing and vibration- their application in high speed bladed cylinder and machines,
- 1.12 Mechanism of cutting and slicking action of helical bladed cylinder,
- 1.13 Bush, ball and roller bearings, cam, springs and their application and function in tannery machines.

## UNIT-2 HYDRAULIC & PNEUMATIC SYSTEMS

- 2.1 Hydraulic & pneumatic steering mechanism for leather machinery.
- 2.2 Air compressors, blowers and dust control equipment used in tannery,
- 2.3 Drying mechanism and dryers used in tannery.

### Reference Books:

1. Leather Technician's Handbook – J. H. Sharphouse, Leather Producers' Association, Northampton, 1971.
2. Lecture Notes on Leather – P. S. Venkatchalam, CLRI, Chennai, 1964. 03. Different Catalogues issued by different Leather Machinery producers.