

VEER NARMAD SOUTH GUJARAT UNIVERSITY

B.E. IV (TEXTILE TECHNOLOGY) Semester -VIII

TT - 802 PROCESS CONTROL IN WEAVING

Teaching Scheme : (No. Of Contact Hrs.)			Theory Exams		Prac./Quiz/Viva/Exam		Grand Total
Theory	Tut.	Pract.	Duration (Hrs)	Marks	Sem. End Exam.	Cont.Int. Evaluation	
3	-	2	3	100	30	20	150

Theory:

1. Object and scope for process control in weaving.
2. Controls for machine stoppage, productivity and quality in winding, warping, sizing, drawing in, pirn winding and weaving department.
3. Standard norms for settings, speeds and production rates.
4. Control of fabric quality: fabric defects, causes and remedies.
5. Control and norms of hard waste in various processes.
6. Importance and types of maintenance. Maintenance schedule for winding, warping, sizing and loom shed.
7. Calculation pertaining to production, efficiency and machine allocation in winding warping, pirn winding, sizing and weaving, including size addition and size losses in sizing.
8. Process control for Man Made Filament and blend yarns from winding to loom shed.
9. Norms for process controls in weaving (ATIRA,BITRA,SITRA, NITRA).

References:

- (1) ATIRA : Process Control in Weaving, 1995 edition, Mahajan Publ.
- (2) ATIRA/BTRA/SITRA/NITRA : Norms for the Textile Industry- Weaving
NITRA, 1989
- (3) BTRA : Loomshed, BTRA, 1986.

PROCES CONTROL IN WEAVING

LIST OF PRACTICALS

1. Control of yarn content / diameter on pirn.
2. Study of end breakage rate on winding machine.
3. Setting of parameters for mechanical and electronic yarn clearers for running different counts on winding machine.
4. Study of end breakage rate on warping machine.
5. Calculation of stretch % on sizing machine.
6. Calculation of size % and size add-on on sizing machine.
7. Calculation of slippage on different looms.
- 8 Study of warp and weft breakages on loom.
9. Study of occurrence of different fabric defects on different looms and their remedial measures.
10. Preventive maintenance schedule of all the machine in the weaving department.