



TEXTURED YARN TECHNOLOGY

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IIT Delhi

PRE-REQUISITES : Should have knowledge of Fibres, manufacturing of manmade fibres

INTENDED AUDIENCE : Students, teachers and persons working in textile industry, especially in man-made fibre industry

INDUSTRIES APPLICABLE TO : No industry in particular, however, the manmade fibre industry should value

COURSE OUTLINE :

This course would cover the fundamentals of twist texturing of fully drawn yarns. The need and the solutions that emerged because of material challenges and machine limitations leading to the evolution of draw-texturing and friction texturing. Emergence of Air - jet texturing, interlacement and bulked continuous yarns is also covered. Hi-bulkyarns principles and production of the same. Also covered would be the interesting possibilities of using solvents and chemicals to produce textured yarns.

ABOUT INSTRUCTOR :

Prof. Kushal Sen is currently a Professor in the Department of Textile Technology, IIT Delhi. Areas of specialization include textile chemical processing, texturing, and structure-property correlation.

COURSE PLAN :

Week 1: Introduction , general classification of textured yarns

Week 2: False twist texturing, principles mechanism

Week 3: False twist texturing process parameters

Week 4: Draw-texturing, need

Week 5: Draw –texturing process parameters

Week 6: Friction texturing principles

Week 7: Friction texturing NCV drives

Week 8: Air Jet Texturing

Week 9: Air jet Texturing process parameters

Week 10: Interlacement; need and principles , Bulked continuous filament (BCF) yarns

Week 11: Hi-bulk yarns, principle and processes

Week 12: Solvent and chemical texturing