

## **SITRA IN-HOUSE PROJECTS**

### **1999**

ASSESSMENT OF MATURITY OF INDIAN COTTONS

MEASUREMENT OF TRASH CONTENT BY HVI

HIGH VOLUME TESTING FOR COTTON SELECTION AND BALE MANAGEMENT

ASSESSMENT OF YARN HAIRINESS

A SURVEY OF THE QUALITY OF YARNS PRODUCED FROM MAN-MADE FIBRES AND THEIR BLENDS

RATING OF YARN QUALITY AGAINST SITRA NORMS

DIMENSIONAL PROPERTIES OF MILANGE KNITTED FABRIC

STUDIES ON AZOIC DYES AS PER ECO SPECIFICATIONS

INVESTIGATION ON DYEINGS CONTAINING HEAVY METALS

EFFECT OF WET PROCESSING ON THE MECHANICAL PROPERTIES OF SPUN YARNS

DEVELOPMENT OF LOW COST DYEING MACHINE AND A SUITABLE DYEING TECHNIQUE FOR THE PRODUCTION OF DENIM FABRIC IN THE DECENTRALISED POWERLOOM SECTOR

DESIGN AND DEVELOPMENT OF NEW SPINDLE DRIVE "SITRA ENERSPIN"

DESIGN AND DEVELOPMENT OF ENERGY EFFICIENT FANS FOR TEXTILE INDUSTRY

DEVELOPMENT OF AN ELECTRONIC DEVICE TO INTERFACE WITH THE EXISTING DOBBY

CALIBRATION OF TEXTILE TESTING INSTRUMENTS

27TH PRODUCTIVITY SURVEY IN SPINNING - SEPTEMBER 1998

INTER-MILL SURVEY OF COSTS AND PROFITS FOR THE YEARS 1996-97 and 1997-98

JOINT NORMS IN SPINNING

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : 3RD AND 4TH INTER-MILL STUDIES OF KEY FACTORS

STUDY ON ENERGY CONSERVATION IN AUTOCONERS

STUDY ON POWER QUALITY IN TEXTILE MILLS

INDUSTRIAL DISPUTES IN TEXTILE MILLS

A STUDY ON VOLUNTARY RETIREMENT SCHEME IN TEXTILE MILLS

DEVELOPMENT OF A HIGH SPEED RING FRAME FOR JUTE SPINNING

### **2000**

CALIBRATION OF HIGH VOLUME INSTRUMENT BY HVI CALIBRATION COTTON

INTER LABORATORY TEST OF COTTON FIBRES

FIBRE-YARN RELATIONSHIPS USING NEWER FIBRE PROPERTIES LIKE MEAN LENGTH, UPPER HALF MEAN LENGTH AND UNIFORMITY INDEX MEASURED BY HVI TEST SYSTEM

INFLUENCE OF FIBRE PROPERTIES ON LOW STRESS MECHANICAL PROPERTIES OF AIR JET AND RING SPUN YARNS

DEVELOPMENT OF WOVEN ARTERIAL PROSTHETIC GRAFT

DETERMINATION OF METAL CONTENT IN COTTON FIBRES AND ITS EFFECT ON WET PROCESSING

DEVELOPMENT OF AN ECONOMY MODEL COMPUTERISED SINGLE YARN STRENGTH TESTER.

DEVELOPMENT OF A DEVICE FOR MEASURING PNEUMAFIL SUCTION PRESSURE IN RING SPINNING AND SIMPLEX FRAMES.

DEVELOPMENT OF A DEVICE TO TEST THE MOTOR OVERLOAD RELAY.

JARI LENGTH MEASURING INSTRUMENT

SITRA's VISCOSITY CUP

FIBRE SAMPLE OPENER

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : 5TH AND 6TH INTER-MILL STUDY OF KEY FACTORS

INTER-MILL STUDY ON POWER CONSUMPTION

WORKING CAPITAL STATUS IN SPINNING MILLS IN 1996-97 AND 1997-98

STUDY ON ENERGY CONSERVATION IN AUTOCONERS

ECONOMICS OF ENERGY EFFICIENT EQUIPMENT

STUDY ON ENERGY CONSERVATION IN TWO-FOR-ONE TWISTERS

STUDY ON POWER QUALITY IN TEXTILE MILLS - HARMONIC ANALYSIS IN GENERATORS

## **2001**

DEVELOPMENT OF ASTM YARN APPEARANCE STANDARD ON EIB FOR FINE YARNS

YARN ENGINEERING IN AIR-JET SPINNING - APPLICATION OF NEURAL NETWORK DEVELOPMENT OF ASTM GRADE FOR FINE YARNS

A NEW EXTRA WEFT DESIGNING ON HANDLOOMS

CHARACTERISATION OF SOLID WASTE FROM THE TEXTILE EFFLUENT

STUDY OF DIMENSIONAL STABILITY OF DOUBLE LACOSTE KNITTED FABRICS

DESIGN AND DEVELOPMENT OF AN AUTOMATIC JACQUARD CARD PUNCHING MACHINE

28TH PRODUCTIVITY SURVEY IN SPINNING - SEPTEMBER 2000

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : AN INTER-MILL STUDY OF KEY FACTORS  
- 6TH AND 7TH STUDIES

INTER-MILL SURVEY OF COSTS AND PROFITS FOR 1998 - 1999 AND 1999 - 2000

STAFFING PATTERN IN SPINNING MILLS

CONVERSION OF EXISTING JUTE FLYER SPINNING FRAME FOR IMPROVED PERFORMANCE

## **2002**

DEVELOPMENT OF A TECHNOLOGY PACKAGE FOR SPECIALITY POLYESTER FIBRES

IMPACT OF FLUORESCENCE VALUES OF COTTON AND MAN-MADE FIBRES ON FIBRE AND YARN CHARACTERISTICS

MANUFACTURE OF PAPER BOARDS AND FUEL BRIQUETTES USING PINEAPPLE LEAVES

MEASUREMENT OF YARN DIAMETER AND TWIST BY IMAGE ANALYSIS

AN INTER-MILL STUDY OF QUALITY OF COTTON YARN

A STUDY ON THE KNITTING PERFORMANCE AND QUALITY CHARACTERISTICS OF COMPACT SPUN YARN AND FABRIC

FABRIC OBJECTIVE MEASUREMENT FOR GARMENT INDUSTRIES - SITRA DEVELOPMENTS

AN INSTRUMENT FOR ENERGY MONITORING IN TEXTILE MILLS - SITRA ENERTIME INTEGRATOR

A DEVICE FOR CALIBRATION OF NILOMETER IN SPINNING MILLS - SITRA NILOCALIBRATOR

FINANCIAL PERFORMANCE OF SPINNING MILLS

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : AN INTER-MILL STUDY OF KEY FACTORS  
- 8TH AND 9TH STUDIES

## **2003**

FLUORESCENCE VALUES OF COTTON AND ITS IMPACT ON SHADE VARIATION AND STREAKY DYEING

DYNAMIC TENSILE PROPERTIES OF YARN AND PREDICTION OF YARN BEHAVIOUR DURING MECHANICAL PROCESSING

APPLICATION OF ARTIFICIAL NEURAL NETWORKS FOR PREDICTING RING YARN PROPERTIES AND PROCESS PARAMETERS

A NEW METHODOLOGY TO ARRIVE AT COMBING EFFICIENCY USING SINGLE FIBRE LENGTH DATA AND NEP REMOVAL EFFICIENCY

ONLINE MONITORS OF YARN CONTAMINATION ON WEFT KNITTING AND WINDING MACHINES

DEVELOPMENT OF PROTECTIVE FABRICS USING FRICTION SPINNING MACHINE

PREDICTION OF KNITTED FABRIC SHRINKAGE USING ARTIFICIAL NEURAL NETWORK

SITRA'S 29TH PRODUCTIVITY SURVEY IN SPINNING, CONE WINDING AND REELING - SEPTEMBER 2002

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : AN INTER-MILL STUDY OF KEY FACTORS  
- 10TH AND 11TH STUDIES

FINANCIAL AND OPERATIONAL STRENGTHS AND WEAKNESSES OF SPINNING MILLS FOR  
REHABILITATION OF POTENTIALLY VIABLE SPINNING MILLS

## **2004**

INDIAN AND IMPORTED COTTONS - TRENDS IN FIBRE QUALITY (APRIL 2002 TO MARCH 2003)

A TECHNIQUE TO MEASURE THE DRAPABILITY OF FABRICS USING IMAGE ANALYSIS

A STUDY ON THE MANUFACTURE OF HEAVY DENSITY FABRICS

YARN QUALITY REQUIREMENTS FOR DIFFERENT TYPE OF LOOMS

ENZYMATIC SCOURING

METHOD DEVELOPMENT, OPTIMISATION AND VALIDATION OF OEKO TEX PARAMETERS

DEVELOPMENT OF AN INTELLIGENT MONITORING AND INFORMATION SYSTEM FOR COMBERS - SITRA  
CIM

DEVELOPMENT OF A SAMPLE CONDITIONING SYSTEM - SITRA FASTCON

DEVELOPMENT OF A SINGLE YARN STRENGTH TESTER - SITRA TENSOCCLASSIC

DESIGN AND DEVELOPMENT OF A COMPRESSED AIR CONSUMPTION ANALYSER

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : AN INTER-MILL STUDY OF KEY FACTORS  
- 12TH AND 13TH STUDIES

DEVELOPMENT OF AN ENERGY EFFICIENT SYSTEM FOR WATER COOLING TOWERS IN TEXTILE  
INDUSTRY - SITRA ENERCOOL

## **2005**

INDIAN AND IMPORTED COTTONS - TRENDS IN FIBRE QUALITY (APRIL 2003 TO MARCH 2004)

AN INTER-MILL STUDY OF QUALITY OF MAN-MADE FIBRE YARNS AND BLENDED YARNS

INFLUENCE OF YARN CONDITIONING ON COTTON YARN PROPERTIES

INFLUENCE OF COTTON FIBRE BLENDING ON SPUN YARN QUALITY

AN INVESTIGATION ON THE PERFORMANCE OF ELI-TWIST YARN DURING HIGH SPEED WEAVING  
AND KNITTING AND FABRIC PROPERTIES

A STUDY ON THE MANUFACTURE OF FABRICS MADE OUT OF BAMBOO YARNS

IMPROVEMENT OF LIGHT FASTNESS OF REACTIVE DYED COTTON TEXTILES

INTER-MILL STUDY OF TWO-FOR-ONE TWISTERS

INTER-MILL SURVEY OF OPERATIVES EMPLOYMENT PATTERN IN SPINNING MILLS

30TH PRODUCTIVITY SURVEY IN SPINNING, CONE WINDING AND REELING

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : AN INTER-MILL STUDY OF KEY FACTORS  
- 14TH AND 15TH STUDIES

AN INTER-MILL STUDY OF KEY FACTORS RELATED TO ENERGY UTILISATION IN SPINNING MILLS

## **2006**

QUALITY UPDATE FOR INDIAN AND IMPORTED COTTONS (OCTOBER 2004 TO SEPTEMBER 2005)

AN INTER-MILL STUDY OF QUALITY OF COTTON YARNS (22ND YARN QUALITY SURVEY)

STUDIES ON SPINNING BEHAVIOUR AND ANTI-FUNGAL PROPERTIES OF BAMBOO FIBRES

A STUDY ON THE TENSILE AND HAIRINESS CHARACTERISTICS OF MANIFOLD RING SPUN YARNS

WEAK SPOTS ANALYSIS IN SPUN YARNS

SPINNING PROCESS VARIABLES INFLUENCING 'DEVIATION RATE' IN YARN MASS

A STUDY ON THE COST AND THE QUALITY OF FABRICS IMPORTED BY THE GARMENT INDUSTRY VIS-  
À-VIS THAT OF FABRICS SOURCED WITH IN THE COUNTRY

IMPROVEMENT OF LIGHT FASTNESS OF REACTIVE DYED COTTON TEXTILES

DEVELOPMENT OF A PHYSICO CHEMICAL METHODS FOR THE DETERMINATION OF FLAX IN A FLAX/  
COTTON BLEND

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : AN INTER-MILL STUDY OF KEY FACTORS  
- 16TH AND 17TH STUDIES

A STUDY ON PACKING MATERIALS COST IN SPINNING MILLS

AN INTER-MILL SURVEY OF COSTS AND PROFITS FOR 2000 - 01 TO 2004 - 05

COSTING SOFTWARE FOR SPINNING MILLS

## **2007**

QUALITY UPDATE FOR INDIAN AND IMPORTED COTTONS (OCTOBER 2005 TO SEPTEMBER 2006)

AN INTER-MILL STUDY OF QUALITY OF COTTON YARNS (23RD YARN QUALITY SURVEY)

A STUDY ON THE FACTORS INFLUENCING YARN QUALITY CHANGE DURING HIGH SPEED WINDING

A STUDY ON THE PROCESSING PERFORMANCE OF BT COTTONS

EVALUATION OF KNITTING BEHAVIOUR USING ANTIFICIAL NEURAL NETWORK

MANUFACTURE OF VALUE ADDED PRODUCTS USING SILK / COTTON BLENDED YARNS

IMPROVED CATALYTIC OXIDATION OF TEXTILE WASTE WATER TOWARDS ZERO SLUDGE

31st PRODUCTIVITY SURVEY IN SPINNING, CONE WINDING AND REELING

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : AN INTER-MILL STUDY OF KEY FACTORS  
- 18TH AND 19TH STUDIES

## **2008**

QUALITY UPDATE FOR INDIAN AND IMPORTED COTTONS (OCTOBER 2006 TO SEPTEMBER 2007)

SITRA INTER-LABORATORY PROFICIENCY TEST

APPLICATION OF NANO FINISH ON FABRICS MADE OUT OF COMPACT AND CONVENTIONAL RING SPUN YARNS

A COMPARISON OF PROPERTIES OF YARNS PRODUCED ON DIFFERENT COMPACT SPINNING SYSTEMS

OPTIMUM TWIST IN ROVING BASED ON FIBRE PROPERTIES AND ROVING HANK

OPTIMISATION OF ROLL SPACE SETING IN SLIVER LAP,RIBBON LAP AND COMBER DRAW BOX

A STUDY ON THE COMFORT PROPERTIES AND DYEING CHARACTERISTICS OF FABRICS MADE OUT OF COMPACT YARNS

DEVELOPMENT OF BANDAGES USING BAMBOO FIBRES

A COMPARATIVE STUDY ON THE TECHNICAL PERFORMANCE OF DIFFERENT MAKES OF DRAW FRAME AUTO LEVELERS

DESIGN AND DEVELOPMENT OF HIGH PERFORMANCE REEL FOR TEXTILE MILLS

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : AN INTER-MILL STUDY OF KEY FACTORS - 20TH AND 21ST STUDIES

MODERNISATION IN SPINNING MILLS

## **2009**

QUALITY UPDATE FOR INDIAN AND IMPORTED COTTONS (OCTOBER 2007 TO SEPTEMBER 2008)

INTER-MILL STUDY OF QUALITY OF COTTON YARNS

STUDIES ON GASSING AND MERCERISING OF COMBED COTTON YARNS AND PROCESS OPTIMISATION FIBRE YARN RELATIONSHIPS FOR COMPACT SPUN MATERIALS

TWIST FOR MAXIMUM STRENGTH AND TWIST CONTRACTION IN COMPACT YARNS

FIBRE-YARN RELATIONSHIPS FOR COMPACT SPUN MATERIALS

STUDIES ON BARRIER PROPERTIES OF SURGICAL APPARELS USED IN HOSPITALS

DESIGN AND DEVELOPMENT OF AN INSTRUMENT TO ASSESS THE BACTERIAL FILTRATION CHARACTERISTICS OF MEDICAL FABRICS

COSTS, OPERATIONAL PERFORMANCE AND YARN QUALITY : AN INTER-MILL STUDY OF KEY FACTORS - 22ND AND 23RD STUDIES

32ND PRODUCTIVITY SURVEY IN SPINNING MILLS 2008

VIDEO CASSETTE / CDS ON WORK METHODS FOR SPINNING MILL OPERATIVES