

Chemical

Dimensional Stability, Water Repellency, Melting Point, Emulsifier (O/E ratio & water content, Resistance to Hardness, Acidity, Alkalinity) Identification of fibre in blends (Qualitative and Quantitative), Test for JBO, Residual starch in fabric, Determination of pH, Estimation of non-fibrous matters, Alkali content, Acid value, Saponification value, Water hardness, Viscosity, Chloride content, Wettability, Residual Chlorine in textile fabric, Flammability test (LOI index), Resistance to flame (for vinyl coated fabric), Test for Gum, Test for Tamarind Kernel Powder (TKP), Fastness to Light, Wash, Rubbing (or crock), Perspiration, Brightness Index

Eco-parameters

Testing for :- Amines, Pesticides, PCP, Formaldehyde, heavy metals, Hydrocarbon / Unsaponifiable matters, Toxic chemicals like PAH

Jute Composites

Thickness, Density, Water absorption (2hr. soaking / 24 hr. soaking) , Thickness swelling (2hr. soaking / 24 hr. soaking), Flexural strength and Modulus (Instron), Tensile strength and Modulus (Instron), Dynamic mechanical analysis (DMA), Differential Scanning Calorimetry (DSC), Thermo Gravimetric Analysis (TGA), Izod impact test, Shear test.

Biological

Bacterial count, Fungal count, Pectinase activity, Cellulase activity, Hemicellulase activity, Protease activity, Rot-resistance and Anti-mildew agents, Testing of damaged samples, Testing of Disinfectants, Sizing antiseptics, Bacteriological examination of water, Special test on Microbial load, Soil Burial test / Biodegradability

For more information about service and support, Contact us

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TECHNICAL BROCHURE

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Indian Jute Industries' Research Association

Preamble

Indian Jute Industries' Research Association (IJIRA), an internationally reputed premier Research Institution on jute was established way back in 1937, adopting its initial name as Indian Jute Mills Association Research Institute (IJMARI). In the year 1966, IJMARI was renamed as IJIRA and was registered under West Bengal Societies Registration Act of 1961 as autonomous cooperative research organization. Since inception IJIRA has grown as a truly world class research institute on jute. In the reality of rapidly changing international scenario, where jute is poised for massive diversified applications, IJIRA is continuing its leading role in proper harmony with globalization of commerce and business and demand for eco-friendly products.

Services Available at IJIRA

Technical Services and Technology Transfer

- Development of Productivity Norms
- Assessment of man-machine productivity ratio
- Machinery auditing and maintenance
- Interfirm comparison
- Techno-economic assessment of Project proposals related to both large & small scale jute sectors
- Energy management & Energy Norms for jute products
- Process Control & Product Quality Improvement
- Waste management
- Development of site specific Jute Geo-textiles & Jute Agro-textiles
- Quality Assurance of Food Grade Jute Products
- Audit for Energy and Environment
- Productivity and quality improvement in Sack Sewing & Finishing
- HRD programs
- Diagnostic study and machine balancing
- Optimisation of sliver evenness through improved gauging
- Improvement of spinning & weaving productivity
- Optimisation of Power requirement of individual machine
- Introduction of improved Inventory Control System
- Loom tuning and Sirdar training
- Quality assessment and improvement
- CAD/CAM System for Machinery Development
- IT Enabled Services
 - Domain Registration
 - Hosting
 - Website Design & Development
 - E-mail Solution
 - Networking
 - Corporate Presentations
 - Training & Demonstration
 - Troubleshooting & Logistic Support

Testing Services

- Physical
- Chemical
- Eco-Parameters
- Jute Composites
- Biological

Item wise details of Testing facilities available at IJIRA

Physical

Fibre

Bundle strength (tenacity), Fibre fineness (Airflow method) /linear density, moisture, Colour (Brightness) & Lusture, Jute Grading

Sliver

Grist, irregularity, Avg. fibre length (Beard method), Fibre length Distribution (by Almeter), Single fibre fineness (Vbroscope)

Yarn

Grist, Mass CV%, Tensile Test, Quality Ratio, Breaking Elongation, Strength CV%, Abrasion Resistance, Twist, Crimp of Yarn, Flexural Rigidity

Fabric

Breaking Strength and Elongation, Bursting strength, Ballactic Work of Rupture, Abrasion Resistance, Air Permeability, Tensile test (Instron), Cloth analysis (Threads/dm, Length, Width), Weight per unit area (GSM), Thickness, Water Permeability, Dimentional Stability, Flexural rigidity

Bag

Fabric strength, Seam Strength, Cloth Analysis & Dimension

Geo-textiles/ Agrotexiles

Tensile properties, Water Permeability for Bitumenised cloth and all other physical, mechanical and hydraulic properties of geotextile and agrotextile.

Non-wovens

Thickness, Tensile Strength and Elongation, Trapeziodal Tear Strength, Air & Water Permeability.

Card Pin

Dimensions, Impact strength