



SparkMed
Engineering Division

Product Catalogue



Textile Air Engineering

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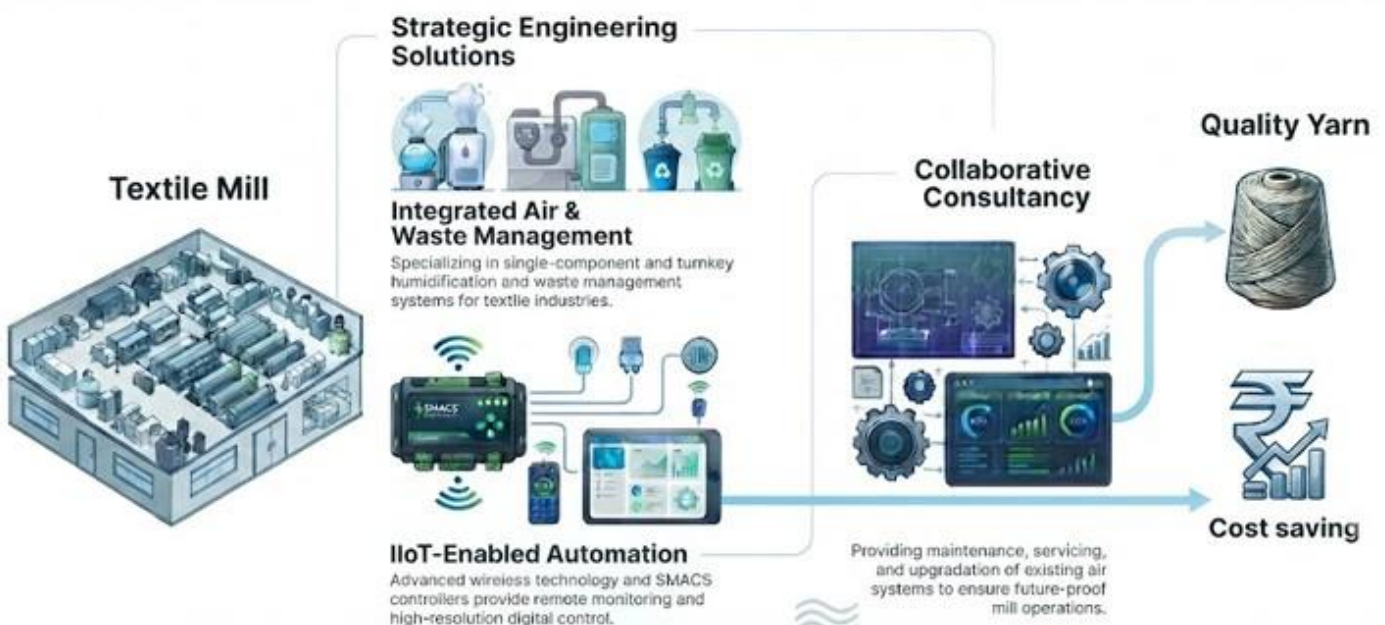
SparkMed Air Engineering

SparkMed is an ISO-certified engineering and manufacturing group based in Coimbatore, India, delivering integrated solutions across three specialized divisions: **Sparkmed Lifesciences, Engineering, and Valves & Actuators.**

Committed to rigorous quality systems and precision craftsmanship, we bring together high-performance industrial climate and waste-management systems. Backed by in-house engineering and development.



Our Capabilities



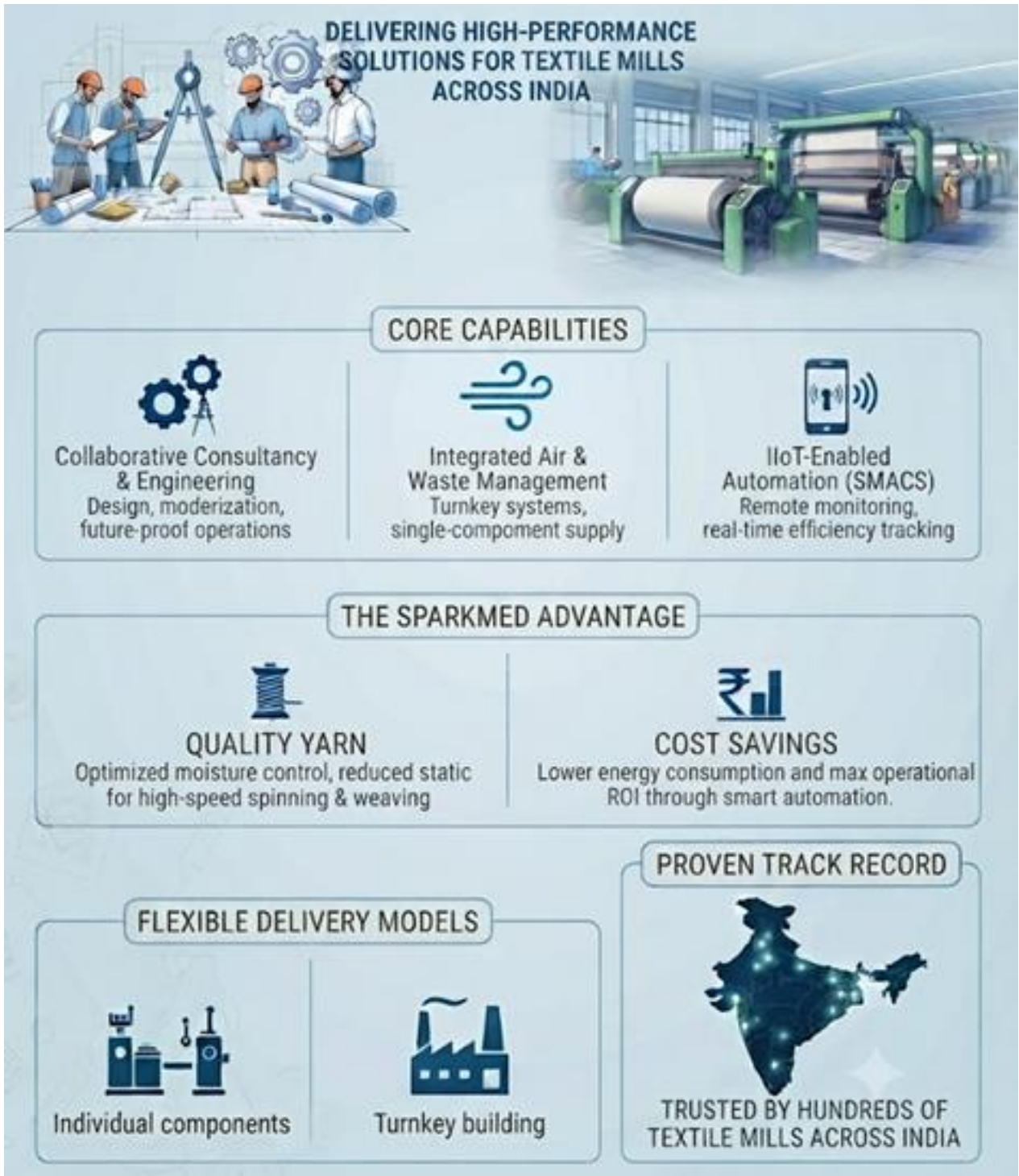
SparkMed Air Engineering

Turnkey and Modernization of Humidification System



From Concept to Lump-Sum Turnkey Execution

SparkMed delivers complete, high-performance solutions for textile mills across India, backed by hundreds of proven success stories. Covering everything from expert **collaborative consultancy** and system upgrades to full-scale **lump-sum turnkey projects**, we ensure your facility achieves optimal climate control, superior yarn quality, and maximum profitability..



SparkMed Air Engineering Product Portfolio

Discover our advanced range of **textile air engineering and humidification systems**, engineered specifically to optimize manufacturing efficiency and indoor climate control within modern textile mills. By maintaining precise temperature and relative humidity levels while ensuring rigorous air filtration and dust control, our solutions protect sensitive yarn and fiber properties, reduce breakage, and enhance overall productivity.

Our Products



Air Washers

High-efficiency evaporative cooling, precise humidity control, and continuous air cleaning Washers



Rotary Drum Filters

Continuous, automated filtration of fine dust and lint ensuring superior air purity and efficient waste collection.



Dust Collectors

Reliable, high-efficiency extraction and containment of fibrous waste and particulate matter in mills



Fans & Dampers

Heavy-duty industrial fans and precision control dampers for reliable, energy-efficient airflow distribution



Sensors & Display

High-efficiency Temperature and Humidity Sensors, LED Board display units



Fiber Compactor

Fiber compactor and separator to streamline waste processing, reduce volume & recover



Smart Controllers

IIoT enabled Smart controller for textile humidification systems with LAN/Mobile connectivity



Remote Monitoring

Online Remote monitoring App for mill environment control and visibility with History logs.

**Comprehensive Turnkey Solutions for Textile Humidification with Our
Unmatched Product Range**

Air Washers



Engineered for rigorous industrial and textile mill environments, the **SparkMed Air Washer** delivers precision climate control, efficient evaporative cooling, and optimal moisture regulation. Designed as a standalone supply unit or as a core component of our turnkey humidification projects, it ensures stable atmospheric conditions essential for high-speed manufacturing.

- High Efficiency Performance
- Advanced Drift Elimination
- Dual Functionality
- Flexible Integration

Rotary Drum Filter



Continuous self-cleaning **SparkMed filtration** units engineered to separate fine dust and lint from heavy return air streams in textile plants.

- Filtration Media : Fine Synthetic Mesh/Perf SS Screen
- Cleaning Mechanism : Cont Suction Nozzle/Sweeping
- Drum Speed : Adjustable with Gear Motor
- Air Resistance : Low Pressure (<50 Pa)
- Drive Power : High Energy efficient Gear Motor

Dust Collectors



High-capacity **SparkMed baghouse and cyclone** dust collection systems ensuring clean plant interiors and adherence to environmental emission norms.

- Collection Efficiency : 99.9% down to 3 micron size
- Filter Bag Material : Needle felt Polyester/Anti Static
- Cleaning System: Pulse jet automated air cleaning
- Casing Construction : Heavy gauge welded steel plate with epoxy coating
- Air Flow Volume : Customized from 3,000 to 50,000 CFM

Integrated **Sparkmed Fiber Collector and Compactor** system designed to extract, collect, and compress loose textile waste fibers and lint from blow room and carding filtration setups.

Compression Ratio : up to 5:1 volume Reduction
Handling Capacity : up to 500 kg/hr waste processing
Drive Mechanism : Heavy duty hydraulic or Pneumatic
Filter Medium : Perf SS screen with auto cleaning
Discharge Mode : Continuous Bagging / Baling option



Fiber Compactor



Rotary Drum Filter

SparkMed Aerodynamically balanced axial and centrifugal fans paired with motorized/manual control dampers for precise pressure and airflow management.

Fan Type : Aerofoil Axial Flow / Centrifugal Backward Curved

Impeller Material : Cast Aluminium / Balanced Steel Alloy

Static Pressure : Up to 1500 Pa

Damper Operation : Motorized Actuator (0-100% modulation) or Manual Linkage

Drive Configuration : Direct Drive or Belt Driven Options

Sparkmed Precision field instrumentation units providing high-accuracy feedback loops for relative humidity, ambient temperature, and pressure differentials.

Temperature Accuracy : $\pm 0.5^{\circ}\text{C}$ (Range: 0°C to 60°C)

Humidity Accuracy : $\pm 1.5\%$ RH (Range: 0% to 100% RH)

Output Signals : 4-20mA, 0-10V, or Modbus RTU (RS485)

Enclosure Rating : IP65 dust and moisture protected housing

Power Supply : 24V DC loop powered



Dust Collectors

