ART2™

Technical Data*

Basic installation
- Modules for testing Length, Strength, Mic, Colour & Trash
- Configuration : **LSMC, LSMCT, LSMCG**
- BaleSMART : Software for Bale Management
- Rh and Room Temperature measurement
- Moisture Measurement

Additional Options
- Trash - Optical or Gravimetric
- Bar Code Reader

Application range
- Cotton fibre samples from bales
  (140 samples/hr with one operator)

Measuring principle
- Length and Length uniformity   : Optical
- Bundle Strength and Elongation : CRE Principle
- Moisture   : Electrical
- Micronaire   : Airflow
- Colour   : Optical
- Surface Trash   : Optical
- Gravimetric Trash   : Gravimetric

Key technology
- Flat sampling
- Automatic Micronaire measurement
- Automatic Gravimetric Trash measurement

User Interface
- System and Module testing
- Configurable reports
- Quality Trend and Comparison

Calibration
- Length, Length Uniformity and Strength by USDA cotton
- Micronaire calibration by USDA Cotton & Metal Plug
- Colour and Trash calibration by the standard USDA Tiles

* Subject to change without Prior notice

Output Parameters

Numerical Results:

Length properties
- UHML, ML and UI

Strength properties
- Bundle strength in g/tex and elongation%

Fineness properties
  Micronaire value in µg/ inch

Colour properties
- % Reflectance (Rd), Yellowness (+b) and
  Colour grade

Optical Trash properties
- Surface: Trash count, % Trash area & Leaf
  grade

Moisture
- % Regain

Estimation
- Short Fibre Index (SFI), Maturity Ratio,
  RiSi & RoSi

Graphical Results:
- Fibrogram and Force Elongation graph

Ambient Condition
- Relative Humidity : 65 ± 2%
- Temperature : 21 ± 1°C
  (27 ± 1°C for Tropical Conditions)

Power consumption
- Single Phase 1.2 KVA
- Three Phase 2.5 KVA (Gravimetric Trash)

Compressed air consumption
- 30 m³/hr at 6-7 Bar

PREMIER

ART2™

Fully Automatic

High Volume Cotton Tester

Premier Presence

- International Sales Office & Works
- Sales & Service Resource Centres

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iQ

intelligent QUALITY

ART 2 ™

Adopts, Contemporary Testing Methods

PREMIER ART 2 (Automatic Rapid Tester) is a fully automatic High Volume Cotton Tester designed and developed for testing all the important fibre properties. It has a fully automatic sample preparation and transport mechanism, thereby eliminating the operator influence

PREMIER ART 2 Configuration:

- Length and Length Uniformity
- Bundle Strength
- Elongation
- Micronaire
- Maturity Ratio
- Colour
- Moisture Measurement
- BaleSMART

Additional Options:
- Trash - Optical or Gravimetric
- Bar Code Reader

Flat Sampling Technology	Helps in preparation of a uniform and consistent fibre sample by applying uniform pressure on the cotton flocks for testing
Moisture Measurement	Automatic Moisture measurement ensures the exact moisture content of the samples at the time of testing
BaleSMART	User friendly application software for Bale Management simplifies the bale lay-down procedure to ensure consistent quality. Plays an important role in the mixing cost
Gravimetric Trash	The automatic Gravimetric Trash measurement provides precise results. The entire sequence of collection and weighment of Trash automatic within one passage of material
Testing Speed	Upto 140 Samples per hour with one operator, about. 1000 tests / 8 hour shift.

Key Technology	Function	Benefit
Patented Flat sampling	Preparation of uniform and consistent fibre sampling by applying uniform pressure on the cotton flocks for consecutive tests	Reliable representation of the population
Automatic Micronaire measurement	Automatic sample weighment, disposal and precise engineering calibration	Rapid and accurate output
Automatic Gravimetric Trash	Elimination of multiple passes, auto trash collection and weighment	Precise, fast and user friendly measurement

System Testing

An independent test report provides comprehensive information about Length, Length Uniformity, Strength, Elongation, Micronaire and Colour. The additional information on Maturity, Short Fibre and Spinning Index helps to evaluate a specific variety during purchase.

Suitable for

- Classing, Ginners, Traders and Spinners
- Short, Long and ELS varieties
- Span and Mean length mode

Outstanding Performance. In-built Automation.

PREMIER ART 2 incorporates innovative technology to deliver a superior performance. The patented flat sampling ensures reliable representation of the population. The use of metal plugs for engineering calibration enhances the reliability of micronaire results. The full function automatic Gravimetric Trash module is the world's first measurement connectable as an option to High Volume Cotton Tester

Flat sampling

"Flat sampling" technology enables uniform beard from the cotton flocks for the measurement of Length and Strength. A hand full of cotton sample in the tray is automatically transferred to the comb region where the sample is pressed on the perforated sheet with a uniform pressure. The movement of the comb carriage is supported by a lead ball screw and is driven by a servo motor to ensure a precise movement of the fibre beard into the optics zone
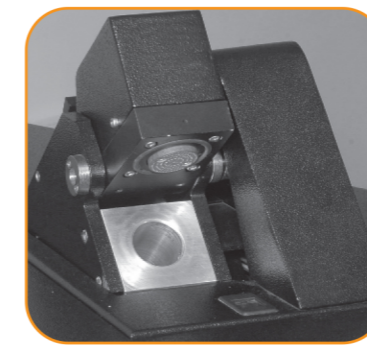
Automatic Micronaire Module

The Automatic Micronaire module ensures that the entire series of Micronaire measurement viz; sample weighment, measurement and disposal are carried out automatically without the influence of the operator. The engineering calibration by metal plug ensures the reliability of results
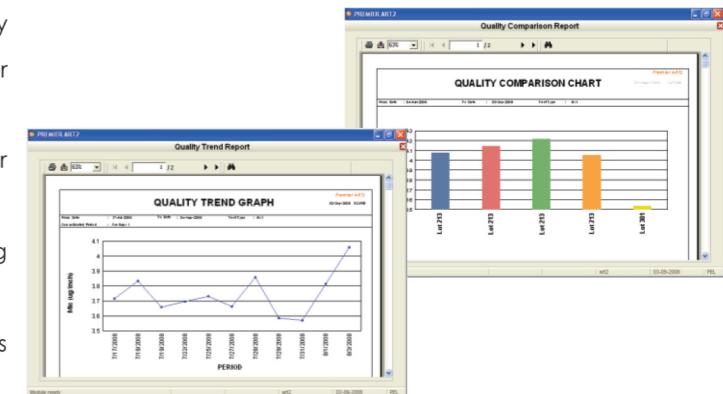
Quality Analysis

PREMIER ART 2 comes with exclusively designed user friendly screens for Comparison and Trend analysis

Enable to analyse trends across days for selected parameters

Provides information at a glance for mixing control

Enable to compare the performances between mixes

Global Quality Standards

Uses USDA Calibration cotton and tiles for instrument calibration to assure international standards for precision accuracy

Our global presence ensures the reliability of results with the equipment across the world by regular participation in International round trials conducted by ICA Bremen and CSITC.