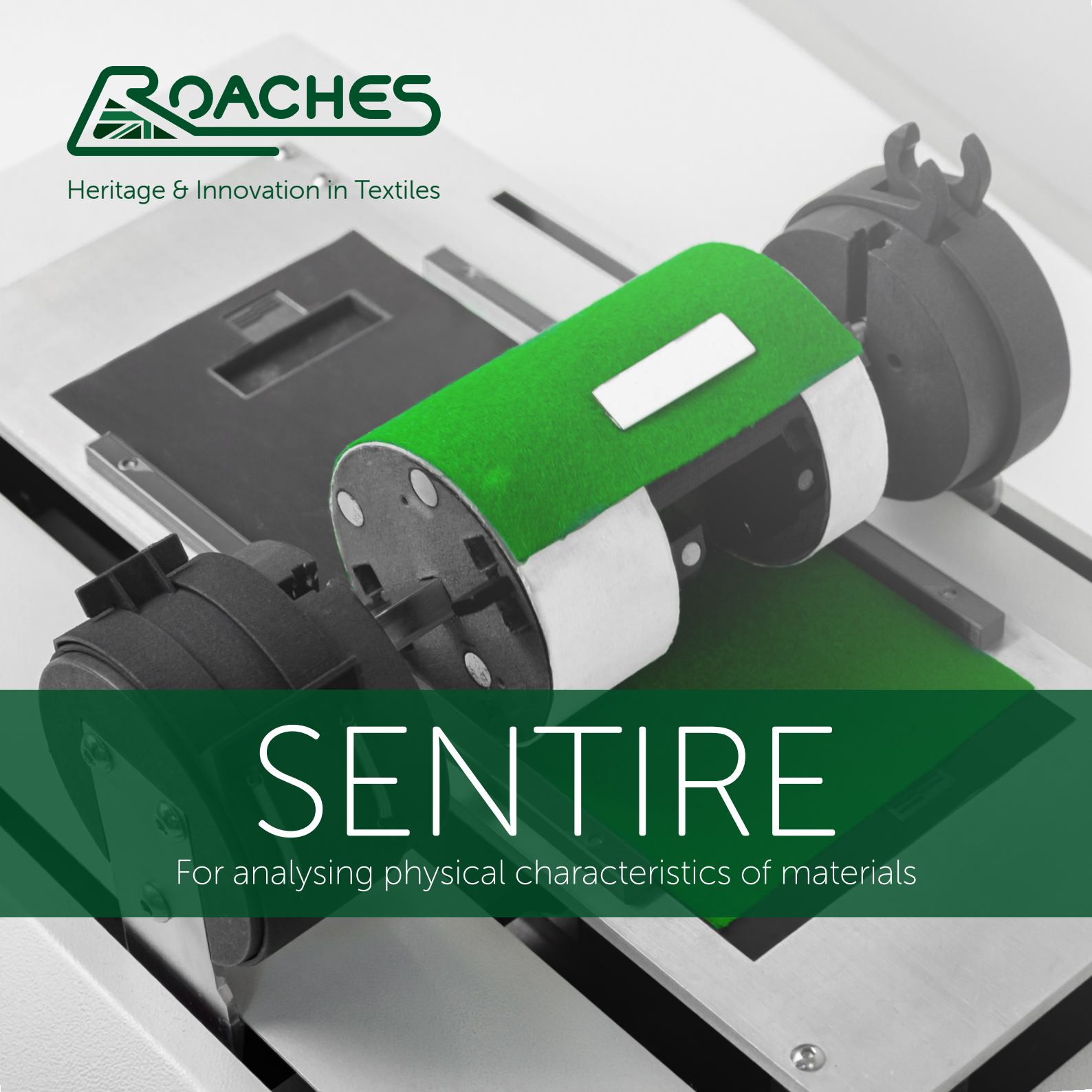
ROACHES

Heritage & Innovation in Textiles



SENTIRE

For analysing physical characteristics of materials

The **feel of materials** is a critical factor across industries, including textiles, medical, apparel, home furnishings, and automotive

ACADEMIC VALIDATION

The Sentire machine is the result of rigorous research and development led by academic professionals at the forefront of their fields.

This expertise ensures a foundation of scientific rigor and evidence-based design, providing you with a solution you can trust.

BENEFITS

- Streamline quality control process
- Minimize textile waste
- Logistical cost reduction
- Determine Pass/Fail status through tolerance analysis
- Equipped to handle wovens, non-wovens and knitted fabrics

CERTAINTY IN FABRIC HANDLE

Sentire provides an objective and universal language for fabric handle, empowering consistent quality control through precise and reliable material specifications.

The automated loading, robust calibration set-up and high-tech approach make the repeatability and reliability of the machine, a real testament to what can be achieved when working with the unpredictable nature of textiles.

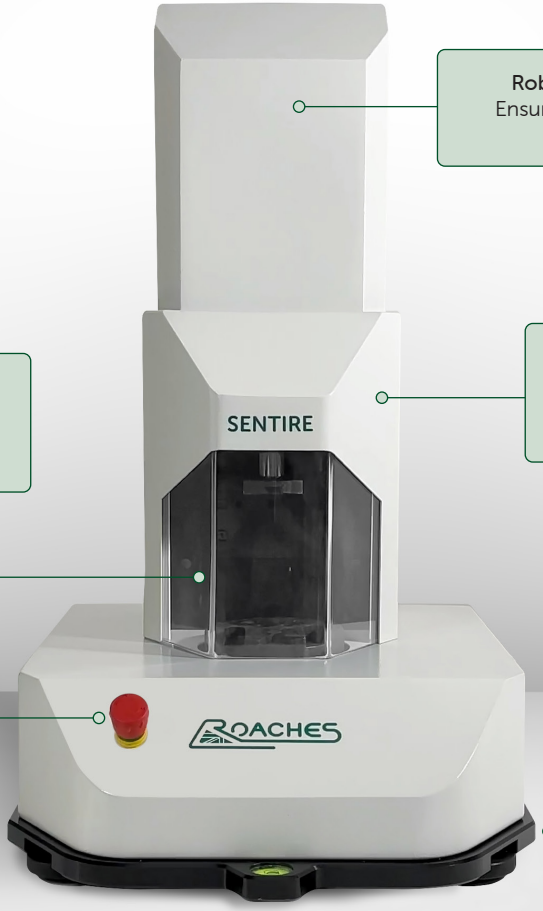
Robust Centre Column:
Ensures stability and sensor safeguarding

Protective Casing:
Prevent test interruptions as well as any entanglement during testing

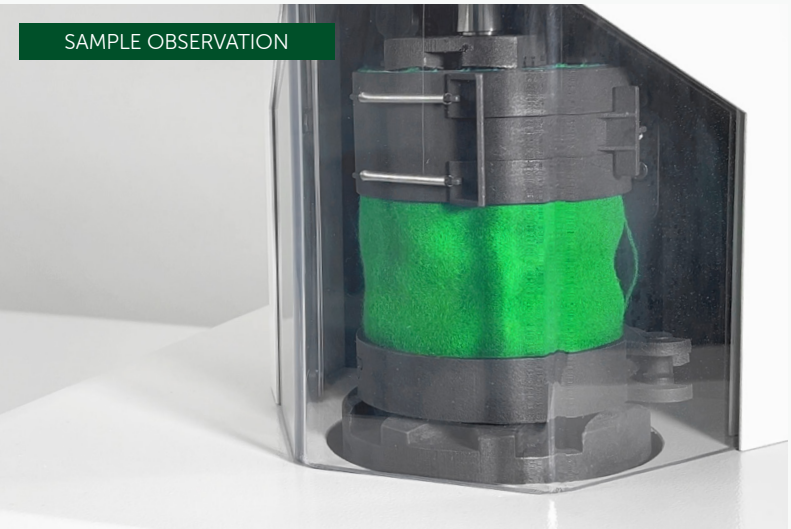
Direct Sample Observation:
Check your sample as the handle test progresses

Solid & Level:
Stable operation with adjustable levelling

Emergency Stop:
Immediate system shutdown



SAMPLE OBSERVATION



LOAD STATION

REPORTING

The Sentire offers a comprehensive reporting function that quantifies the tactile properties of fabrics. Sentire generates a detailed report encompassing seven key indices.

Translate Touch into Numbers:
Obtain precise **numerical values** that objectively define a fabric's unique touch and feel.

Analysis at Your Fingertips:
Generate quantitative handle analysis at any point in the production process, providing **data instantaneously**.

Virtual Quality Confirmation:
Establish a shared understanding of fabric quality through **objective numerical indices**, bridging the gap between manufacturer and customer.

Understand Process Impact:
Gain critical insights into how **different production stages** influence the final fabric handle.

ROACHES

Material ID: 5_Roaches_fabric_QW

Sample Information

Product Name	Manufacturer	Weight (gsm)	Thickness (mm)	Comment
Roaches_fabric	Roaches	199	1.1	New Roaches Fabric

Testing Information

Machine ID	Number of Specimen(Warp)	Number of Specimen(Weft)	Operator
21699	compression x 1 + twist x 1 + friction x 1 Firmness x 4	compression x 1 + twist x 1 + friction x 1	Demo

Fabric Tactile Indices

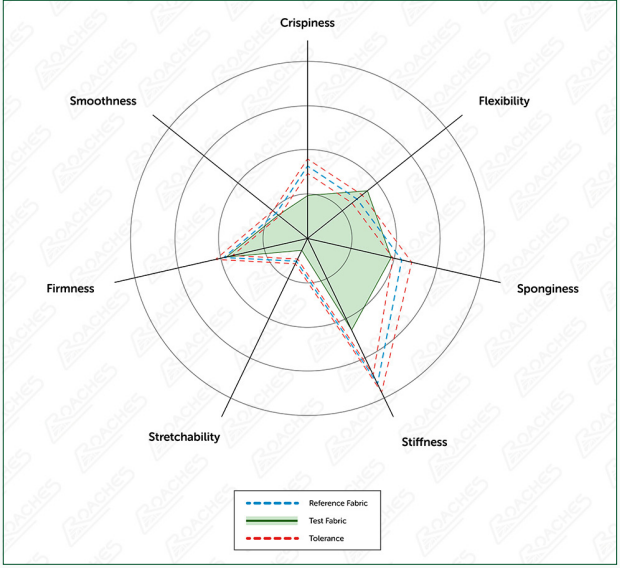
Indice	Indice Value
Cr (%)	4.47
Fl (%)	3.94
Sp (%)	6.04
Sf (J/g)	10
St (%/N)	1.58
Fr (mm/N)	5.36
Sm	2.48

Directly Compare:
Effortlessly compare your reference fabric with the test fabric, providing an immediate visual and objective **assessment of handle**.

Define Your Standards:
Establish precise tolerance parameters, based on the reference fabric or user-defined settings.

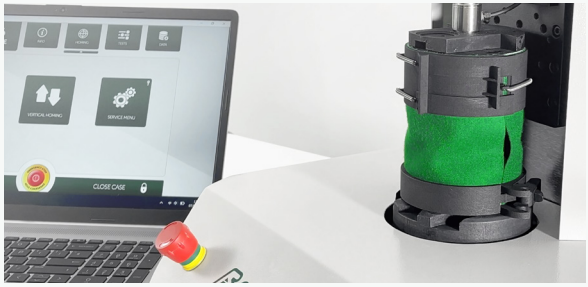
Pinpoint Inconsistencies:
Clearly visualise areas where **fabric consistency** deviates, enabling swift identification and resolution of potential issues.

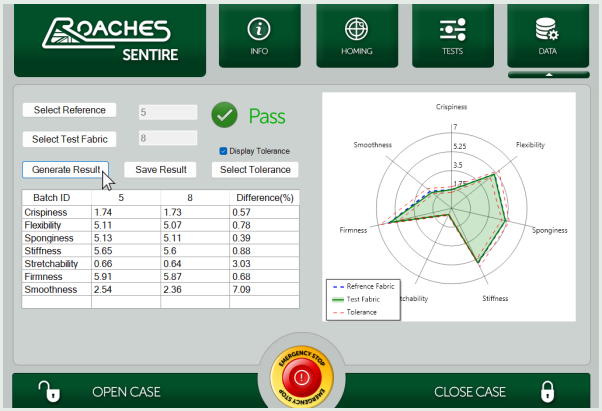
Unambiguous Results:
Achieve confident quality control with clear **PASS/FAIL** indicators based directly on your defined tolerance thresholds.



VERIFICATION

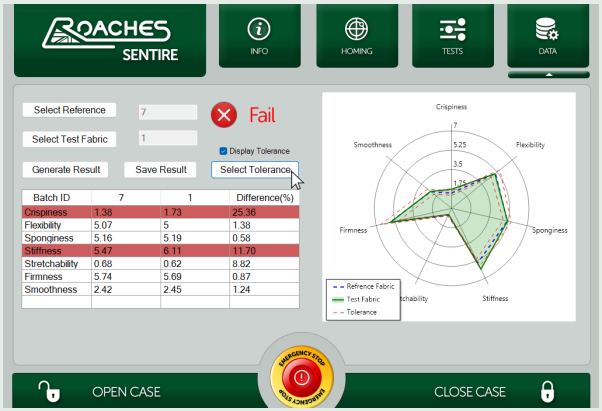
Sentire provides a clear and objective assessment of your fabric handle through intuitive "Pass" and "Fail" reporting. By comparing your test sample against a defined reference fabric across seven key indices, and factoring in your precise tolerance settings, Sentire delivers immediate and actionable quality insights.





Pass

This section showcases results where the tested fabric sample's handle characteristics align with the tolerances defined by the reference fabric or by user selected tolerances across all seven critical indices. Each "Pass" result provides a clear visual graph along with a numerical report that the materials tested meet your defined quality benchmarks when compared against your reference fabric.



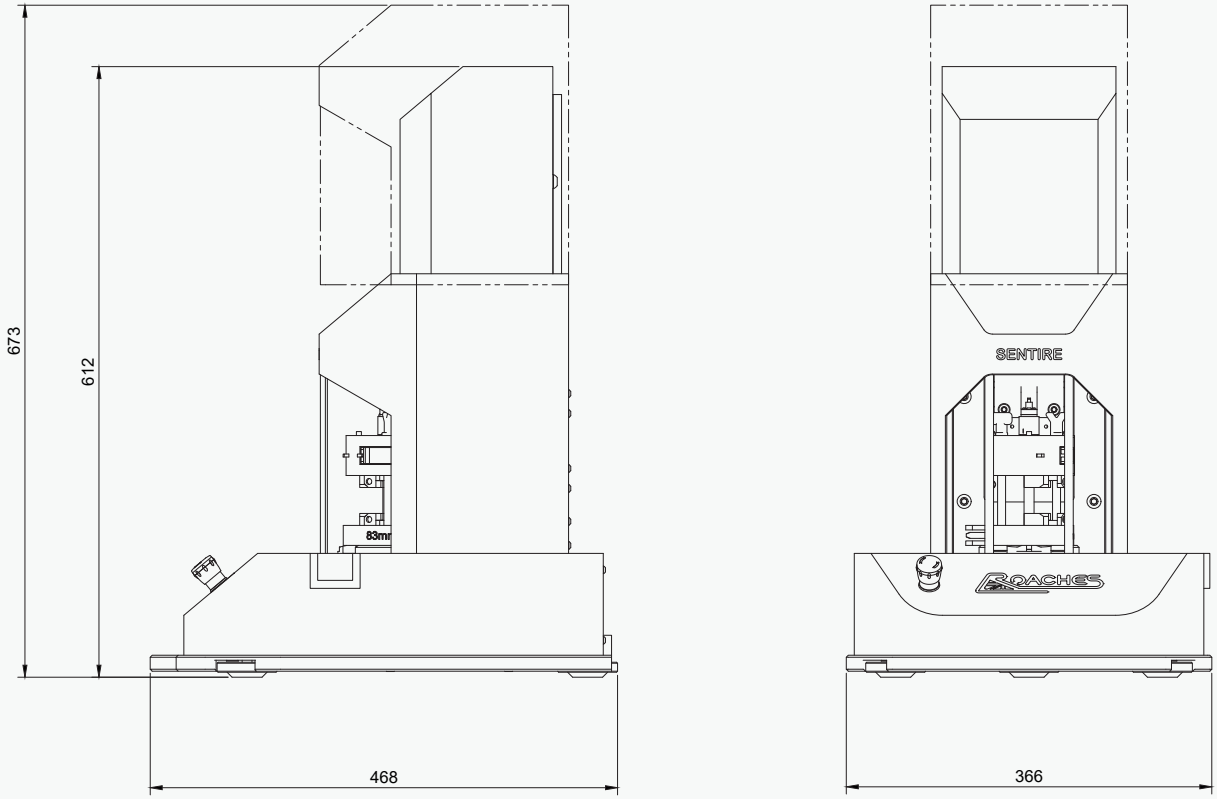
Fail

The "Fail" result highlights instances where one or more of the seven key fabric handle indices fall outside your pre-defined tolerance levels when compared to the reference fabric. These results clearly pinpoint the specific indices where the deviation occurs, allowing for immediate identification of potential issues in material consistency or production processes.

DIMENSIONS & WEIGHTS

Machine	Height (H) *	Width (W)	Depth (D)	Weight
Sentire	673 mm	366 mm	468 mm	45 kg

* Height is with the cover in the upwards position



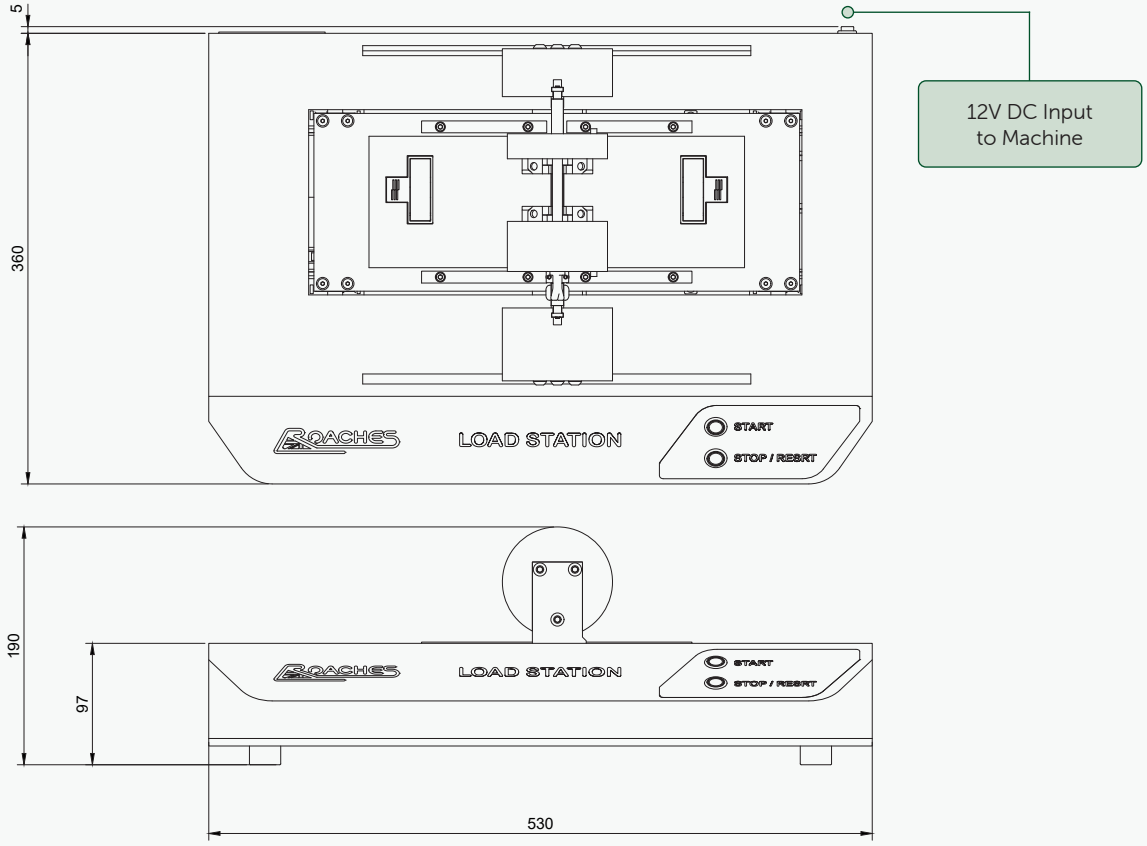
SPECIFICATIONS

Voltage	Frequency	Phases	Amp	Wattage	Air Supply	Water Supply
90V to 250V	50/60Hz	One (1)	0.5A	115W	Not Required	Not Required

DIMENSIONS & WEIGHTS

Machine	Height (H) *	Width (W)	Depth (D)	Weight
Load Station	190 mm	530 mm	365 mm	21 kg

* Height includes the loaded sample



SPECIFICATIONS

Voltage	Frequency	Phases	Amp	Wattage	Air Supply	Water Supply
100V to 240V	50/60Hz	One (1)	0.2A	3W	Not Required	Not Required