

# TEMPERATURE-CONTROLLED LABORATORY EQUIPMENT

All Scientific Technology Group (AST) provides specialized repair, maintenance, and calibration for CO<sub>2</sub> incubators, centrifuges, and temperature-controlled research equipment. These instruments are the backbone of cellular research, diagnostics, and pharmaceutical testing, and their accuracy directly impacts experimental validity, compliance, and safety

## CHALLENGE

Laboratory equipment rarely “fails suddenly” it **drifts, contaminates, or degrades quietly over time**, compromising results long before a full breakdown occurs.



**CO<sub>2</sub> incubators accumulate bacteria, fungi, and condensation buildup**, putting cell cultures at risk of contamination.



**Centrifuges lose speed accuracy or develop rotor imbalance**, generating inconsistent separations or dangerous mechanical stress.



**Uncalibrated or poorly maintained devices lead to irreproducible data, compliance violations, or emergency shutdowns.**

Labs cannot afford downtime or, worse, **unnoticed deviation**.

## SOLUTION OVERVIEW

AST implements **structured, ISO-aligned maintenance and calibration programs** designed to ensure **environmental stability, mechanical safety, and performance accuracy** across core laboratory equipment.

We service:

- **CO<sub>2</sub> Incubators, Cleaning, disinfection, CO<sub>2</sub> sensor calibration, airflow & humidity verification**
- **Centrifuges, Rotor inspection, balance testing, bearing & seal checks, RPM/G-force calibration**
- **Refrigerated Chambers & Temperature-Controlled Units: Thermal accuracy mapping and alarm verification**



## KEY BENEFITS

- ✔ Protect Experimental Integrity: Guaranteed Temperature, Humidity & CO<sub>2</sub> Accuracy
- ✔ Stay Audit-Ready: Digital Calibration Records & SOP Compliance
- ✔ Prevent Contamination & Mechanical Failure Before They Happen
- ✔ One Service Partner for Multiple Lab Assets: No Need for Multiple Vendors
- ✔ Extend Equipment Lifespan & Avoid Emergency Replacements
- ✔ AST performs ON-LINE troubleshooting utilizing a structured call avoidance algorithm before dispatching a technician. Historically avoiding 8% of unnecessary dispatches.

## HOW IT WORKS

01

Asset Tagging, Evaluation & Compliance Requirement Review

02

Scheduled Cleaning, Calibration & Component Inspection

03

Sensor, Rotor & Speed Verification Against Manufacturer Spec

04

Report of Findings with Pass/Fail Indicators & Corrective Actions

05

Maintenance Records Stored in Equip ID™ for Traceability & Audits

