

# The Importance of Preventative Maintenance for Incubator Shakers

## Why is routine temperature verification and calibration needed?

- Incubator Shakers are used for cell culturing, cell aeration, and solubility studies. Eliminating the need of placing a separate shaker inside an incubator, the instruments incorporate oxygen and evenly distribute nutrients throughout the culture media
- In addition to offering stable temperature conditions, the shaking incubators use an orbital agitation at variable speeds to affect the growth of cell cultures
- The unique environment of the incubator share supports simultaneous cultivation of adherent and suspension cultures
- The tiniest deviations in the culturing environment can result in undesirable outcomes due to the importance of consistency and reproducibility in cell culture applications
- Temperature verification is critical in incubator shakers as the unit needs to maintain optimal conditions while processing for accurate yields. These conditions include temperature, humidity, Carbon Dioxide, and oxygen

## Why is routine preventative maintenance (PM) service important?

- Routine preventive maintenance service is targeted at the prevention of unexpected downtimes through thorough inspection and cleaning of the equipment
- Preventive maintenance ensures that your culturing environment is reliably maintained and controlled, maximizing culturing consistency and repeatability, optimizing culturing performance
- Designed to check, validate and to promote continuous and stable incubator performance, optimizing instrument conformity with programmed culturing parameters
- Annual PM service includes temperature and RPM calibration and is recommended by Marathon and the manufacturers