

RC1mx Service Products

Get the Best from Your Equipment

Develop your equipment maintenance and support strategy through METTLER TOLEDO services.

Service Products	Qualification at Installation			Post-Warranty Maintenance Plan			
	StarterPac	IPac	EQPac	BasicCare	StdCare	CompCare	ExtCare
RC1mx™	–	Available	–	Available			
Accessories							
RTCal Reactor	Included			Available			
Heat Flow Calorimetry	Included			Available			
Easy Control Box (ECB)	Included			Available			
Universal Control Box (UCB)	Included			Available			
Dosing Unit SP-50	Included			Available			

The availability of Service Products can vary by region.

Installation

Service Activity		IPac
Unpacking and Shipment Verification	Inspect shipped package for potential damages	•
	Verify that delivered items match the order confirmation and shipment papers	•
	Unpack the equipment	•
	Check the completeness and the condition all supplied items and documentation	•
Installation (IQ) and Operational (OQ) Qualification	Connect the synthesis workstation to the power supply	•
	Connect cooling and purge gas and set correct flow rate	•
	Check if the thermostat can perform heating, cooling, and stirring tasks	•
	Check if all temperature and stirrer readings show plausible values	•
	Check functionalities like data export to USB stick, control valve, safety valve, safety relay, and emergency button, etc.	•
	Perform temperature sensor calibration as well as accuracy and precision tests	•
Qualification Documentation	Basic confirmation, IQ	•
	Standard qualification, OQ	•
Basic User Familiarization	Instrument components, handling, and operation	•
	Introduction to instrument indicators and functions	•
	Software overview and tutorial videos	•
	Documentation portfolio overview	•
	Instrument maintenance and support	•

Preventive Maintenance (Annual Service)

Maintenance Plans	PM Service	Travel & Labor (Repairs)	Repair Parts
B39910003 BasicCare	(1) Month 13	Billable	Billable
B39910002 StandardCare (StdCare)	(1) Month 13	Included	Billable
B39910001 ComprehensiveCare (CompCare)	(1) Month 13	Included	Included
B39910001 ExtendedCare (ExtCare)	(2) Month 12 & 24	Included	Included

The METTLER TOLEDO annual Preventive Maintenance (PM) service is designed to minimize unplanned downtime, maximize performance, and ensure the highest level of confidence and repeatability in data. This is done through the replacement of wear parts, optimization of the complete system and documented validation of diagnostic and performance specifications. The result is a system operating at peak performance, data you can trust, and the documentation to back it up.

Service Activity

Maintenance Qualification	Visual inspection and cleaning
	Mechanical inspection (seals, O-rings)
	Inspect accessories, probes, and sensors
	Inspect the reactors and glassware: no cracks or scratches
	Inspect the touchscreen and if the latest firmware is installed
Installation Verification	Check connections of the instrument and start-up
	Inspect cooling and purge gas lines for correct function
	Open the instrument and check for corrosion or leakage
	Installation verification deviation log
Operational Qualification	Verify oil low level alarm
	Verify temperature sensors and stirring limitations
	Verify heating and cooling
	Verify safety components and functions
	Check if latest firmware is installed
	Validation/adjustment of control valve and stepper motor
	Validation/adjustment of Tr and RTCal signals
	Validation/adjustment of Tr and Tj sensors
	Tj control and performance test
	Stirrer control accuracy and precision test
Tr control accuracy and precision test	
Scheduled Maintenance	Replace parts with limited life based on instrument age and maintenance schedule (must be prepaid)

Lifecycle Maintenance Plan

Developed in conjunction with the instrument, the lifecycle maintenance plan outlines the recommended intervals for performance validation and parts replacement. Pro-active replacement of key components with a known lifespan is essential for minimizing unplanned downtime and the risk of a system failure. This holistic approach to maintenance ensures that your instrument continues to operate at the same level of performance throughout its entire lifetime.

RC1mx Maintenance Schedule	Every Year	Every 2 Years	Every 5 Years
Validate/Adjust Tr Signal, Tr and Tj Sensors, Control Valve, Stepper Motor, and Stirrer – to ensure repeatable, reliable, and accurate calorimetry data	•	–	–
Perform Tj Control and Performance Test, Tj and Stirrer Control Accuracy and Precision Tests – to validate precision of jacket temperature control	•	–	–
Replace Antistatic-Additive – to maintain precise jacket temperature control	•	–	–
Replace Sleeve for Stepper Motor – to maintain precise jacket temperature control	•	–	–
Replace Battery – to maintain the system information (date and time)	–	○	–
Replace Oil and Jacket O-Rings – to maintain calorimetric performance	–	–	○
Replace Cooling Fan – to prevent catastrophic hardware failure	–	–	○

- Pro-active replacement not included in cost of annual Maintenance Plans; must be prepaid at time of contract

METTLER TOLEDO Group

Automated Reactors and In Situ Analysis
Local contact: www.mt.com/contacts

Subject to technical changes
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