



MERCURY In GLA	SS (MIG) REFERENCE	THERMOMETER
MIG	Certified	Check temperature against certified laboratory thermometer and adjust to be within 0.5 °F, PMO Test 1. Ensure the indicating (MIG or DRT) is reading 0.5-1.0 °F higher than the recording thermometer after adjustm
Certification Date		Provide date of laboratory thermometer certification
Seconds	Thermometric Res	ponse – Time temperature rise from 12°F below cut-in to cut-in, with water bath 7°F above cut-in, PMO Test 7
DIGITAL REFEREN	ICE THERMOMETER	(DRT)
DRT	Certified	Check temperature against certified laboratory thermometer and adjust to be within 0.5 °F, PMO Test 1. Ensure the indicating (MIG or DRT) is reading 0.5-1.0°F higher than the recording thermometer after adjustm
Certification Date		Provide date of laboratory thermometer certification
Seconds	Thermometric Res	ponse – Time temperature rise from 12°F below cut-in to cut-in, with water bath 7°F above cut-in, PMO Test 7
DRT RTD		
DRT	Certified	Check temperature against certified laboratory thermometer, PMO Test 1 (adjust as necessary -typically 0.5-1.0°F higher than the recording thermometer)
Certification Date		Provide date of laboratory thermometer certification
Seconds	Thermometric Response - Time temperature rise from 12°F below cut-in to cut-in, with water bath 7°F above cut-in, PMO Test 7	
SAFETY THERMA	L LIMIT RECORDER (S	STLR)
YES	Verify programming of electronic recorder per the FDA's M-b approval for the device, maintain documentation for review	
VES	Verify time accuracy of electronic recorder over a 30 minute time span, PMO Test 3, document on chart as appropriate	
Indicator	Recorder	Compare temperature with indicating thermometer and adjust as necessary, PMO Test 4
GUT-IN	CUT-OUT	Verify cut-in and cut-out temperatures are above legal pasteurization temperatures PMO Test 10



_	manutacturer test pr	oceaure, PMU Test 0.4	
PROGRAMMABLE LC	GIC CONTROLLER	5 (PLC) OR MECHANICAL TIMER CABINET – All Systems	
TES YES	Verify timing pump does not run when valves are improperly assembled. Refer to per the FDA's M-b approval for the FDD and manufacturer test procedure, PMO Test 5.4		
Valves divert	Booster Stops	Verify valve and booster pump controls during MANUAL DIVERT, PMO Test 5.5	
Seconds	Verify FDD Response time, PMO Test 5.6		
Time for pumps to stop	Time valves move to Forward.	Verify INSPECT mode function that all flow promoters stop during INSPECT prior to the valves returning to the FORWARD FLOW position, PMO Test 5.7	
CIP Time Delay	Flow promoters disabled	Verify CIP mode function that valves divert and no flow promoters other than timing pump run during the first 10 minutes of CIP, PMO Test 5.8	
Seconds	Verify flush delay between valves, PMO Test 5.9		
YES	🔲 N/A	Verify booster pump stops as required on loss of pressure differential, PMO Test 9.2.2	
YES	🔲 N/A	Verify booster pump stops when system diverts, PMO Test 9.3.1	
YES	🔲 N/A	Verify booster pump stops when timing pump is disabled, PMO Test 9.3.2	
Seconds	🔲 N/A	Marily Research (MDTD and y) following Research and the DMD Text 11.05	
TES YES	🔲 N/A	Verify that the DATCP reviewed logic program is installed and the PLC wiring (inputs & outputs) match the wirin schematic as reviewed by DATCP	



Industry Concerns

- Ability of plant employees to comprehend (PMO) testing requirements
- Currently no guidance from DATCP Access to PLC logic programming 24/7
 - Staffing concerns
 - Comprehension of logic and wiring schematics
- DATCP personnel reviewing logic and wiring at time of reseal
 - Will changes be required for systems that have been in place for many years based upon review?

Recommendations

PLC Logic and Wiring Diagram

- Many facilities do not have access to review logic program or even access the logic program
- Wiring diagrams are often archaic and few are reviewed by DATCP.
- Alternative to this requirement Written acknowledgment
- Many tests prove logic is still accurate

Industry Temporary Seal Program

- PMO 16p(D): On an emergency basis, pasteurization equipment may be tested and temporarily sealed by a milk plant employee provided:
 - (b) The individual has satisfactorily completed training, acceptable to the Regulatory Agency, on tests and controls for pasteurization equipment. .