Autoclave Maintenance Schedule

2030 E. University Drive
Rancho Dominguez, CA
Phone: 310-328-6600 Fax: 310-603-9625

✓ *recommended service*

Recommended by Thermal Equipment Corporation

ASME No.	*Month*	January				February				March				April				May				June				July				August				September				October				November				December			
Year:	*Week*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Door System																																																	
Clean lower 1/3 of locking ring	1 week	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inspect door seal for fit in groove of the door	1 week	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inspect door seal for nicks, gouges or embedded debris	1 week	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inspect sliding surfaces & wedges for excessive wear & alignment	1 week	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inspect for operation, clean and lube lock ring & shell flange (SS30)	1 month	✓				✓				✓				✓				✓				✓				✓				✓				✓				✓				✓				✓			
Check hydraulic pump reservoir fluid level	2 month	✓								✓								✓								✓								✓								✓							
Lubricate door wedges surfaces with SS30	3 month	✓												✓												✓												✓											
Inspect heat seal & repair if required	6 month	✓																								✓																							
Clean and apply protectant to door seal	6 month	✓																																															
Strip wedges & flanges of lubricant and re-lube with SS30	1 year	✓																																														
Inspect hydraulic lines, fittings and cylinder packing for leaks	1 year	✓																																														
Check wear plates for gouging: *indicates door out of alignment*	1 year	✓																																														
Door Mechanism Operation																																																
Inspect camroll assembly	1 year	✓																																														
Inspect door interlock cylinder & micro-switch for proper operation	1 month	✓				✓				✓				✓				✓				✓				✓				✓				✓				✓				✓				✓			
Attain a magnetic partial exam of lugs, wedges & closure	1 year	✓												✓				✓				✓				✓																							
Pressure Vessel Safety																																																
Check and verify all pressure safety interlocks	6 month	✓																								✓																							
Back flush pressure sense line	6 month	✓																																														
Activate Man-In-Vessel Alarm & confirm operation	6 month	✓																								✓																							
Calibrate or replace relief valves	1 year	✓																																														
Replace rupture disks	1 year	✓																																														
Check and calibrate pressure in autoclave switch & interlocks	1 year	✓																																														
Vessel Inspection																																																
Inspect vessel and nozzles for cracking, surface pitting	6 month	✓																								✓																							
Inspect vessel for high surface operating temperature	6 month	✓																								✓																							
Attain a magnetic partial examination of vessel and nozzles	3 year	✓																																														
Inspect vessel for minimum thickness	5 year	✓																																														
Fan and Drive System																																																
Remove housing, check all bolts, piping & electrical connections	1 year	✓																																														
Inspect and grease fan shaft, seal & drive bearing	1 year	✓																																														
Inspect and drain bell housing	1 week	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Inspect connection of fan wheel & motor shaft, tighten as required	1 year	✓																																														
Inspect sheave guards, belt guards and motor seal linkage	1 year	✓																																														
Electrically Heated Vessels																																																
Check functionality and operation of contactors and SCR	1 year	✓																																														
Check functionality and operation over-temperature controller	1 year	✓																																														
Inspect all wires in MCC and clave leading to and from the heater	1 year	✓																																														
Check all contactors, starters, & circuit breakers proper operation	1 year	✓																																														
Check all connections for tightness, including power source line	1 year	✓																																														
Gas Fired Vessels																																																
Check combustion chamber over-temperature controller	1 year	✓																																														
Replace spark plug and adjust pilot	1 year	✓																																														
Adjust low & high fire	1 year	✓																																														
Check the high & low gas pressure switches	1 year	✓																																														
Check gas supply, double block, proof of closure switches, and bleed valve	1 year	✓																																														
Check the low combustion air pressure switch	1 year	✓																																														
Check the UV flame scanner, simulate alarms and flame indicators	1 year	✓																																														
Inspect operating condition and cleanliness of blowers	1 year	✓																																														
Inspect condition and cleanliness of gas train and internals	1 year	✓																																														
Inspect combustion heating coil for leakage	1 year	✓																																														

Autoclave Maintenance Schedule

2030 E. University Drive
Rancho Dominguez, CA
Phone: 310-328-6600 Fax: 310-603-9625

✓ *recommended service*

Recommended by Thermal Equipment Corporation

ASME No.	*Month*	January				February				March				April				May				June				July				August				September				October				November				December			
Year:	*Week*	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Oxygen Analyzer																																																
Calibrate analyzer & check operation	6 months	✓																								✓																							
Vacuum System																																																
Inspect pump packing	6 month	✓																								✓																							
Vent receiver tank and drain condensation	1 month	✓				✓				✓				✓				✓				✓				✓				✓				✓				✓				✓				✓			
Pneumatic Systems																																																
Test clean and range adjust all I/P transducers	6 month	✓																								✓																							
Inspect and range adjust all pneumatic control valves	6 month	✓																								✓																							
Drain & adjust all instruments and valve air regulators	2 month	✓								✓								✓								✓								✓								✓							
Autoclave Interior																																																
Clean debris from inside of vessel	1 week	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Check the sheet metal screws for tightness and clean sheet metal	3 month	✓												✓												✓												✓											
Check bolts for tightness	1 year	✓												✓																																			
Cooling System																																																
Inspect and replace worn fan belts	6 month	✓																								✓																							
Inspect cooling valve for leakage	6 month	✓																								✓																							
Drain tank and refill	1 year	✓																																														
Motor Control Center																																																
Check contactors, starters, & circuit brakers	1 year	✓																																														
Verify that all contactors are tight, including the incoming power	1 year	✓																																														
Part Monitoring Sensors																																																
Calibrate all vacuum transducers	1 year	✓																																														
Check vacuum system fittings for tightness and leaks	6 month	✓																								✓																							
Check system PID tuning and adjust if required	6 month	✓																								✓																							