

# ME121: Checklist for salinity and temperature control

Date:

Group members:

Sub-project Leader

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Your score	Max score	
<hr/>	10	Plot(s) showing measurement of constant K for the thermal response of the system.
<hr/>	5	Value of K is reasonable
<hr/>	5	Plot(s) showing measurement of variation used to estimate the deadband.
<hr/>	5	Value of deadband is given, and is reasonable
<hr/>	5	Relay circuits for heater appear to be correct
<hr/>	5	LCD panel displays heating status and water temperature, in addition to the salinity control status
<hr/>	15	System responds to disturbance caused by addition of DI water: Salinity value on LCD changes, salty valve opens, system returns to equilibrium
<hr/>	15	System responds to disturbance caused by addition of salty water: Salinity value on LCD changes, DI valve opens, system returns to equilibrium
<hr/>	15	System responds to disturbance caused by addition of warm or cold water: Heater turns on as needed; system returns to equilibrium
<hr/>	15	System controls salinity between LCL and UCL, and temperature within the deadband
	95	Total

Sub-project Leader

<hr/>	5	Clear and responsive communication with instructor
<hr/>	5	System is organized and ready for in-class verification
<hr/>	5	All team members are knowledgeable about system operation
	15	