

12.1 Vessel Temp (TIC-VSL) Control Module Verification

Objective:

The objective of this test is to verify that the Vessel Temp Control Module functions as defined per TruBio™ FRS (801-FRS-001).

Test Equipment and Material Required:

- Operator Workstation with an operational system
- Color Printer

Procedure:

1. Follow the instructions of each section below to complete the functional verification of the Vessel Temp Control Module.
2. Set the following parameter values:

Parameter	Value
V1-TIC-VSL/FS_CTRL1/MOD_DESC.CV	Vessel Temp
V1-TIC-VSL/FS_CTRL1/IN_SCALE.DECPT	1
V1-TIC-VSL/FS_CTRL1/IN_SCALE.EU0	0
V1-TIC-VSL/FS_CTRL1/IN_SCALE.EU100	40
V1-TIC-VSL/FS_CTRL1/OUT_SCALE.DECPT	0
V1-TIC-VSL/FS_CTRL1/OUT_SCALE.EU0	0
V1-TIC-VSL/FS_CTRL1/OUT_SCALE.EU100	100
V1-TIC-VSL/PID1/ALARM_HYS.CV	0

3. Where indicated, print screen captures using the following instructions.
 - With the desired window/screen open, press Alt - Print Screen. If the PrintKey application opens, print the screen capture from this window, otherwise follow the remaining steps to print the screen capture from Paint.
 - Click on Start, Programs, Accessories, Paint.
 - In the Paint application, click on Edit, Paste from the main menu or press Ctrl-V to paste the window/screen.
 - Print the screen capture.
4. Attach the screen capture(s) to this IOQ Package.
5. Detail the attachment(s) information in Appendix A - Attachment List and record the necessary information on each attachment.
6. Detail any discrepancies in Appendix B - Discrepancy List and prepare a Discrepancy Report as applicable. If necessary, reference Discrepancies section for guidance in resolving and evaluating the impact of any discrepancies on the performance of the system.

Sample Document

Acceptance Criteria:

Acceptance Verification				
No	Acceptance Criteria	Actual Result	Pass / Fail	Initial/Date
1	The Graphic Configuration Verification was recorded in the data table	The _____ Configuration Verification was recorded in the data table	Pass Fail	
2	The Functional Verification was recorded in the data table	The _____ Verification was recorded in the data table	Pass Fail	
3	The Configuration Verification was recorded in the data table	The _____ Verification was recorded in the data table	Pass Fail	
4	The Online Parameter Update Verification was recorded in the data table	The _____ Verification was recorded in the data table	Pass Fail	
5	The Vessel Temp Control Module functioned as defined per TruBio™ FRS (801-FRS-001)	The Vessel Temp Control Module _____ as defined per TruBio™ FRS (801-FRS-001)	Pass Fail	
6	No discrepancies in this section impact the operation of the system or affect the Operational Qualification	No discrepancies in this section _____ the operation of the system or _____ the Operational Qualification	Pass Fail	

Comments:

Results:

1.0 Graphics Configuration Verification

Perform the actions in the table below to verify the graphic configuration of the V1-TIC-VSL Control Module.

Vessel Temperature Control Module Graphic Configuration Verification					
No.	Action	Expected Result	Actual Result	Pass / Fail	Initial / Date
Vessel Temperature V1-TIC-VSL Main Display Object Box					
1	Open the Main Display page for V1	Vessel Temp Object Box is located at the top of the screen	Vessel Temp Object Box is _____ at the top of the screen	Pass Fail	
		The PV, SP, and Cascaded Setpoint values are displayed	The PV, SP, and Cascaded Setpoint values are _____	Pass Fail	
Vessel Temperature V1-TIC-VSL Standard Faceplate					
2	Click on the Vessel Temp Object Box on the Main Display	The Vessel Temp Standard Faceplate Opens	The Vessel Temp Standard Faceplate _____	Pass Fail	
		The Control Module Device Tag appears as V1-TIC-VSL	The Control Module Device Tag appears as _____	Pass Fail	
		The Control Module Description appears as Vessel Temp	The Control Module Description appears as _____	Pass Fail	

Vessel Temperature Control Module Graphic Configuration Verification					
No.	Action	Expected Result	Actual Result	Pass / Fail	Initial / Date
		PV on the Faceplate and the Object Box on the Main Display matches	PV on the Faceplate and the Object Box on the Main Display _____	Pass Fail	
		SP on the Faceplate and the Object Box on the Main Display matches	SP on the Faceplate and the Object Box on the Main Display _____	Pass Fail	
		The CAS PATH is displayed below the CO and PV bars	The CAS PATH is _____ below the CO and PV bars	Pass Fail	
Vessel Temperature V1-TIC-VSL Trend Data					
3	Click on the Trend Data link from the Standard Faceplate	The Module Trend Window for V1-TIC-VSL Opens	The Module Trend Window for _____ Opens	Pass Fail	
Vessel Temperature V1-TIC-VSL Control Studio					
4	Click on the Control Studio link from the Standard Faceplate	The Control Studio window for V1-TIC-VSL Opens	The Control Studio window for _____ Opens	Pass Fail	

Vessel Temperature Control Module Graphic Configuration Verification					
No.	Action	Expected Result	Actual Result	Pass / Fail	Initial / Date
Vessel Temperature V1-TIC-VSL Process History View					
5	Click on the Process History View link from the Standard Faceplate	The Process History View Chart for V1-TIC-VSL Opens	The Process History View Chart for _____ Opens	Pass Fail	
Vessel Temperature V1-TIC-VSL Detail Display					
6	Click on the Detail Display link from the Standard Faceplate	The Detail Display Opens	The Detail Display _____	Pass Fail	
		The Control Module Device Tag appears as V1-TIC-VSL	The Control Module Device Tag appears as _____	Pass Fail	
		The Control Module Description appears as Vessel Temp	The Control Module Description appears as _____	Pass Fail	
		Cal, Limits, Tuning, Alarms, Gain Sched, Diag, Simulate, and Select tabs are available	Cal, Limits, Tuning, Alarms, Gain Sched, Diag, Simulate, and Select tabs are _____	Pass Fail	
Vessel Temperature V1-TIC-VSL Config Button					
7	Click on the Config Button on the bottom of the Main Display	The Vessel Temp Config Button is displayed on the Config Page	The Vessel Temp Config Button is _____ on the Config Page	Pass Fail	

Vessel Temperature Control Module Graphic Configuration Verification					
No.	Action	Expected Result	Actual Result	Pass / Fail	Initial / Date
		The description "Vessel Temp", the Cascaded Setpoint, and the Gain SP are displayed on the Config Button	The description "Vessel Temp", the Cascaded Setpoint, and the Gain SP are _____ on the Config Button	Pass Fail	
Vessel Temperature V1-TIC-VSL Config Form					
8	Click on the Vessel Temp Config Button	The Vessel Temperature Config Form Opens	The Vessel Temperature Config Form _____	Pass Fail	
		The following parameters are available for configuration: Remote Setpoint, Gain Schedule Aux Input, Temperature Control Modes, Available Outputs, and Discrete Output Settings	The following parameters are _____ for configuration: Remote Setpoint, Gain Schedule Aux Input, Temperature Control Modes, Available Outputs, and Discrete Output Settings	Pass Fail	
9	Click on the Online Parameter Update Button on the Vessel Temperature Config Form	The Online Parameter Update Form Opens to tab V1-TIC-VSL	The Online Parameter Update Form Opens to tab _____	Pass Fail	

Comments:

Subsection 1.0 has been completed. Your signature below indicates that the results have been reviewed with all discrepancies recorded in Appendix B.

	Printed Name	Signature	Date
Reviewed By			

Sample Document