



# With you at every step



Keep up with COVID-19 by taking the right measures for your Steam Engineering products

Bringing you knowledgeable insights and information that will keep your Steam Engineering products up and running during and post lockdown period. Kindly refer to the Start-up Protocols for the product that is applicable to you.

## CUSTOMER SERVICE BULLETIN

DOCUMENT No : SE/Startup Protocol/TCS Rev: 00

PRODUCT : TCS - TEMPERATURE CONTROL SYSTEM

DIVISION : HEATING - STEAM ENGINEERING

Pre Check-up	Checklist	Yes	No
	1. Remove the condensate in steam line from available drain points and steam trap bypass.		
	2. Clean the suction strainer.		
	3. Pneumatic air line should be flushed for 5 to 10 minutes at full pressure before opening the air to instruments.		
	4. Adjust the air pressure in AFR as mentioned on actuator.		
	5. Check the input voltage before starting the electrical panel.		
	6. Check the control valve operation in manual mode.		

Start-up	<ul style="list-style-type: none"> <li>Open isolation valves of all instruments.</li> <li>Open the main steam valve and steam trap bypass valve to drain the condensate.</li> <li>Close the steam trap bypass valve until live steam is observed and open the trap upstream valve.</li> <li>Close all the drain valves.</li> <li>Close the TCS by-pass and isolation valves.</li> <li>Keep SV to "zero" in PID controller and open TCS isolation valves gradually upto its maximum position.</li> <li>Set the required temperature in PID controller as per process requirement and observe working of TCS.</li> </ul>
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Trouble Shooting	Symptoms	Possible Causes
	Control valve not operating	No air pressure.
		No 4 -20mA output from PID controller.
		Calibration disturbed.
	Valve jerking during stroke	Packing nut over tight.
	Gland leakage	Packing nut loose.
	Control valve passing in close position	Calibration disturbed.
		Seat & Plug worn out
		Foreign particle accumulated

Do's & Don'ts
Do's
Close the bypass valve when system is in operation
Drain the water present if any, inside the AFR daily once.
Always keep open the instrument isolation valve.
Don'ts
Never close the pneumatic air line valve during operation.
Don't change PID values or any parameters in controller except the set value.





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Thermax Limited Steam Engineering Services recommends customer to get in touch with the local service engineer as per details given below :

## 1<sup>st</sup> Level

Region	Name of Service Engineer	Email id	Contact No
North (JK, PB, HR)	Puneet Panchal	Puneet.Panchal@Thermaxglobal.com	9717200940
North (UP, NCR, RJ)	Pradeep Kumar	Pradeep.Kumar@Thermaxglobal.com	9717032325
East	Pranay Mridha	Pranay.Mridha@Thermaxglobal.com	9830240010
West (MH, CG, GOA)	Saddam Gadiwan	Saddam.Gadiwan@Thermaxglobal.com	7709973966
West (GJ, MP)	Vipul Gohil	Vipul.Gohil@Thermaxglobal.com	9662064627
South (AP, KAR, TS)	Sandeep Jampala	Sandeep.J@Thermaxglobal.com	8008145681
South (TN, KL)	Noor Mohammed	Noor.Mohammed@Thermaxglobal.com	8098734264
MENA, SEA, SAARC	Tushar Nalawade	Tushar.Nalawade@Thermaxglobal.com	8422044464

## 2<sup>nd</sup> Level

Contact Person	Designation	Email Id	Contact No.
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