

# ALFA LAVAL SERVICE SUPPORT VISIT REPORT



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Rakshapuram, Gachibowli Post,  
Hyderabad - 500032.

Customer: M/s. Indian Immunologicals Limited

Location: Rakshapuram, Gachibowli Post, Hyderabad - 500032.

Customer Rep: Mr. Ramanjaneyalu (+91 9666250099)  
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Date: 04/01/2017

No. of Pages: 2

Equipment Details: PHARMA - X Heat Exchanger Module

Type & Sr. No.	Model/ Sr. No. - 1102, Mfg: 2016 / 10.	Running Hours
Application	Cooling of WFI	
Purpose	Commissioning of PHARMA - X Module	

**Observations:**

1. Visited Site & found the Pipe lines were erected as Per Drawings. Also Customer confirmed that the pipe lines were thoroughly flushed before connecting the Module.

**Work Carried Out:**

1. Instrument Air Line Connected with the Air Pressure of 04 Bar to the Module.

2. Cooling Water (Cold Medium) Line's Inlet & Outlet Valves Opened, Cooling Mode Switched ON Thoroughly.

3. **Cold Medium: Chilled Water.**  
Temp. Inlet Provided at Site: 13 °C,  
Whereas 7 °C has to be provided as per the Module Requirement.  
Flow Rate at Site: Flow Meter Not Available at site for measuring flow. 2600 LPH has to be provided as per the Module Requirement.

**Hot Medium: WFI (Water For Injection).**  
Temp. Inlet Provided at Site: 87 °C,  
With the Customer's Requirement of Outlet Temperature of 25 °C, we achieved the Flow rate of 300 LPH in place of 600 LPH.

4. The WFI flow rate couldn't be achieved as per the Design of 600 LPH at 25 °C, due to Customer can't able to provide Cold Medium Inlet Temperature at 7 °C. Customer Provided the Temperature of 13 °C (ie. 6 °C is the difference in Cold Water Inlet Temperature).

5. Informed Customer to provide the Cold water Temperature of 7 °C and to take the trials and to revert back to ALFA LAVAL INDIA LTD & G.S. Process Engineers.

6. Operational Training given to customer on How to operate the Heat Exchanger Module and how to do SIP (Steam in Place) for the WFI side.

7. Also informed customer to do CIP (Cleaning in Place) for the Cooling Water Side with Chloride free water with high velocity in reverse direction.

9. Results:

1. PHARMA - X Module Handovered to customer for further operational purpose.

2. Customer Comments:

The Vendor has to Supply IA, O2, elements in proper formats.

Customer Signature: Alfa Laval & G.S. Process Engineer's Signature

Date: 04.01.17

Date: 04/01/2017

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