





 Gachsaran Polymer Industries Company	Gachsaran Polymer Industries Company HDPE Plant Hazop Close Out Report For Refrigeration Package Unit		
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Hazop Close Out Report For Refrigeration Package Unit

Code 1	No Comment/ Approved
	(Applicable Only for "For Review" and "For Approval" Documents) No comment and the document are released for Manufacturing.
Code 2	No Comment/ Approved with Note(s)
	Vendor/Sub- Contractor shall correct, revise and resubmit the document. The document is released for Manufacturing if changes incorporated.
Code 3	Commented
	Vendor/Sub-Contractor shall correct, revise and resubmit the document by the date specified. The document shall be revised under the Status of "R: Revised Issue". All corrected documents shall be resubmitted before starting the Manufacturing Process.
Code 4	Not Accepted (Rejected)
	Vendor/Sub-Contractor shall re-work / re-design / re-specify the contents of the document according to the comments / reasons for rejection. All corrected documents shall be resubmitted before starting the manufacturing. Vendor/Sub-Contractor shall not proceed with subsequent works of Material Supply or Manufacturing until receiving Code1/Code2 or No Code from PURCHASER. Vendor/Sub-Contractor shall resubmit the document with the same revision within 6 working days after receiving comments.
No Code	No Code
	(Applicable Only for "For Information" Documents and "As Built DWGs") Document has been submitted for PURCHASER's Information (FI). Consistency, completeness and correctness of document content is in Vendor/Sub-Contractor's responsibility.
	Date: Dec. 21, 2025
	Dept.: MA
	Signature: F.Hamooni
Above checking results by EIED shall in no way relieve Vendor of any liability, obligation and responsibility out of the purchase order and the mutual agreement in writing.	

00	6-Dec-25	IFA	A.M	F.T	A.M
Rev.	DATE (DD.MM.YY)	PURPOSE OF ISSUE	PREPARED	CHECKED	APPROVED

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Company: EIED

Consultant: Arya Imen Tadbir

Recommendations / H.S.E Reply	References	Responsibility	Diciplines							Item (Open/Close)	Deadlines	Signature	
			Process	Instrument	Piping	Machinery	Mechanic	General Engineering	HSE				
Check for considering pressure differential gauge for C-6101A, and C-6101B suction strainers.	REF#01	H.S.E.	<p>Pressure differential gauge is not required due to below provisions:</p> <ol style="list-style-type: none"> The system is a closed loop with propylene refrigerant that is normally a solvent. There is a pressure transmitter that detects low and low-low pressure With low suction pressure, discharge pressure drops as the compressors cannot maintain it. Chiller outlet temperature will increase, causing an alarm and trip. 										
Consider emergency depressurizing system with ESD system (I.e. blow down valve) for the refrigeration system. Check study/ for considering a shut down with depressurizing, and a shut down without depressurizing.	REF#02	H.S.E./EIED	<p>As per API-521, section 4.6.4, emergency depressuring is required for large process equipment operating at a gauge pressure of 1700 kPa (~250 psi) or higher.</p> <p>For this package, equalize pressure after compressor shutdown is about 1140 kPag which is less than the required pressure in API-521. So emergency depressuring is not applicable for this package.</p>								Noted, closed.		
Consider Thermal Relief Valve (TRV) for cooling water line of E-6104. Or, remove isolating block valves on cooling water lines of E-6104 (due to presence of PSV-61101-R in PID-611B).	REF#03	H.S.E.	<p>Isolating block valve on cooling water line will be removed.</p> <p>Additionally, RO will be consider instead of isolating block valve.</p>								Noted, closed.		

Please find PR reply as below:
 1: While the system is closed-loop, the suction strainer can still become clogged over time.
 2, 3, & 4: The low-pressure alarms at the compressor suction and the high-temperature alarm at the chiller outlet are not definitive indicators of a clogged strainer, as they can be triggered by other issues.
 In conclusion, vendor's clarification is not accepted and pressure differential gauge to be considered for suction strainers of compressors.

