<u>Technical Description: Repair and Return of Helium Liquefier (Linde Model 1410)</u>

Repair and return a Helium liquefier (model 1410) manufactured by Linde Cryogenics is required. The work would be undertaken at the OEM factory. The following repair work/upgradation (as appropriate) are to be done:

Sr. No	Item Description and Detailed Technical Specification	Technical Compliance (Yes / No)	Additional Information (if any)
1	Replacement of silicon diode TA, TB, TC & its spares (DIODE, HEAT SINK SUB-ASSEMBLY) and reinstall inside the cold box associated measuring electronics if required (TJ Cards Part No. 3999959)		
2	Heater E72 (probably shorted to body inside the cold box) for impure gas line to be checked and repaired.		
3	Older version Gas intake control PY370 and V370 mechanism can be upgraded to more recent design if possible and associated modification in the PLC code if required.		
4	Alignment of the flywheel assembly to be checked and corrected if required.		
5	Any other faults if found during factory inspection may be notified and possible repair discussed.		
6	After installation a through factory check liquefication run should be performed and test result shared with us.		
7	The original 50+50 ohm brake resistor (as supplied in 2009) may be replaced with a newer 150 Ohm unit if required.		
8	Repackaging, Shipping/Freight /Insurance cost as required (CIF Mumbai)		