Annexure-I

Equipment Name: Solution pump with accessories

MAIN COMPONENTS

The major equipment comprise of the following:

Si. No.	Main Component/Equipment	Unit	Quantity
1.	Solution pump with accessories	No.	1

TECHNICAL SPECIFICATIONS

Feature	Required features
Application	To raise the pressure of liquid solution (R134a+DMF) Where, R134a - 1,1,1,2-Tetrafluoroethane
	DMF – Dimethylformamide
Type of pump	Hermetic centrifugal
Flow rate	1 to 5 m ³ /hr (Rated: 2 m ³ /hr)
Operating temperature	45°C
Max. Pressure	50 bar
Differential head	87 m at Q _r
Density (at 35°C, 270 kPa and	1127.5 kg/m ³
0.5 mass fraction of R134a)	
Viscosity (at 35°C, 270 kPa and	$4.2 imes 10^{-4}$ Pa.s
0.5 mass fraction of R134a)	
Density of individual fluids (at	R134a – 1206.7 kg/m ³
25°C)	DMF – 944.89 kg/m ³
Ambient temperature	20 to 50°C
Ambient air humidity	0 to 100% RH
Material of the wetted parts	Compatible with R134a+DMF solution
Power supply	**AC 400 V (3 phase)
	50 to 60 Hz
Warranty	Minimum one year warranty period from the date of
	installation.
Eligibility Criteria	a.Should have Supplied to any IIT in India & details to be
	provided.
	b. Reputed Make

** - Bidder has to specify in their offer

Note: All the technical parameters are indicative value, Bidder will be designing and specifying in their offer.