



## ANNEXURE

 USER REQUIREMENT SPECIFICATION OF RECEIVER FOR 2 KL REACTOR  
 (2110011735)

SL.NO	SPECIFICATION	
I	<b>RECEIVER TECHNICAL SPECIFICATION DATA SHEET</b>	
1	NAME OF THE EQUIPMENT: RECEIVER	
3	Type: Shell and Jacket type	
4	Capacity: 300 Ltrs	
5	Design Pressure Shell: 3 Kg/ CM <sup>2</sup>	
6	Design Pressure Jacket: 5 Kg/ CM <sup>2</sup>	
7	Design Temperature: 180°C Maximum	
8	Operating Pressure (Shell) : Atmosphere	
9	Operating Pressure (Jacket) : 3 Kg/ CM <sup>2</sup>	
10	Operating Temperature: 140°C Maximum	
11	Test Pressure Shell: 2.6 Kg/ CM <sup>2</sup>	
12	Test Pressure Jacket: 6.5 Kg/ CM <sup>2</sup>	
13	Shell inside diameter :700mm	
14	Shell Height : 800mm	
15	Jacket inside diameter : 800mm	
16	Shell Thickness: 6mm	
17	Shell dished end thickness : 8mm	
18	Jacket sheet thickness : 4mm	
19	Jacket dished end thickness: 5mm	
20	Light and Sight Glass; 100 mm	
21	Insulation of Jacket: 100 mm (50 mm + 50 mm) thick Rock Wool + PUF insulation with 120 kg / cm <sup>3</sup> density with SS304 Cladding ( 12 gauge with screwed construction)	
II	<b>RECEIVER INSTRUMENT DATA SHEET</b>	
1	Compound Gauge: Receiver Shell side – 1	
2	Temperature Gauge : Receiver Shell side – 1	
3	Pressure Gauge: Receiver Jacket side -1	
4	Light Glass : Receiver Shell side – 1	
5	Sight Glass : Receiver Shell side – 1	
6	Bottom outlet nozzle with ball valve: Receiver Shell side – 1	
7	Level Indicator	

## SCOPE OF SUPPLY AND USER REQUIREMENT SPECIFICATION – RECEIVER FOR 2 KL REACTOR

SL. NO.	SCOPE OF SUPPLY
1)	Dismantling of existing Condensor at HLL site.
2)	Receiver for 2KL reactor : Manufacture, Supply, loading & unloading at HLL, Erection, Installation, Commissioning as per detailed specification given in the document.
3)	Care has to be taken by manufacturer to ensure that all the used materials for manufacturing are compatible to our process.
4)	Piping for Utilities from Receiver to Utility Point will be in Supplier's Scope. Interconnecting piping & valves of SS316 MOC, between Reactor, Receiver & Condenser will be in supplier scope of supply
5)	Party has to include any kind of platform fabrication work in their scope.
6)	The Supplier has to arrange for Manpower, Tools and Consumables including fasteners (MOC SS 316).
7)	All Electrical Wiring, Internal to the Machine, as per current Electricity Rules are in the Supplier's Scope..
8)	Nozzles for Receiver will be NB based pipes with flanged end connection. Flanges will be as per ASME B 16.5 Standard. Nut bolts & Counter Flange (MOC SS316) along with gasket will be in Supplier's scope of supply.
9)	The Party has to submit the Design Qualification Drawing (GA) and Electrical Wiring diagram with appropriate Ferrule numbering for all nodes, without omission and duplication, and documents for approval before commencement of manufacturing. All the instruments / Digital indicators / Motor Control Panel etc. should Comply with the Flameproof (Gas Zone 2A,2B) Requirements & Certifications
10)	A Factory Acceptance Test should be arranged by the Supplier once the manufacturing is complete.
11)	All Qualification documents are to be approved by HLL prior to Installation and Operational Qualification at site.



**HLL LIFECARE LIMITED**  
(A GOVT. OF INDIA ENTERPRISE)



**PRICE BID**

ITEM: SUPPLY, INSTALLATION AND COMMISSIONING OF **RECEIVER FOR 2KL REACTOR**

Qty: 01 NO

SL.NO	Scope of supply/work	Basic price	Taxes	Total	Remarks if any
1	Receiver with complete attachments and accessories				
2	Piping including all the materials & consumables				
3	Civil work/ Platform or base fabrication as required with material				
4	Loading /Unloading				
5	Erection /Installation				

DELIVERY PERIOD (FROM THE DATE OF ORDER): \_\_\_\_\_

**TERMS AND CONDITIONS OF PRICE BID:**

1. The rate should be inclusive of all for Supply, Installation & Commissioning on TURN KEY BASIS.
2. Party should take care of all Safety Measures and should obtain Work Permit from our Safety Dept. before starting the work.
3. In case of any damages caused to our (HLL Lifecare Limited) property by you/ your workmen while executing the above job, the Company (HLL Lifecare Limited) shall recover the cost of such damages from you.

Place:

Signature of the Bidder

Date:

Name, Seal and Address of the Bidder