# SPECIFICATIONS FOR 8 TONNE CAPACITY TALLOW RECOVERY PLANT

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| **Sl.** | **Description** |
|  **1.** | Specification for Mild Steel Tallow processing vessel 1. The total capacity of the vessel shall be 10 KL with double jacket for circulation of steam. MS sheet thickness shall be not less than 10 mm. Top and bottom dish ends shall be not less than 80 mm thickness.
2. Insulation shall be with Mineral wool. LRB pads and aluminium cladding of 26 swg sheet, 02 Nos safety valve, tallow recovery valves, drain valve, manholes, pressure and temperature gauges to be provided.
3. 80% (8KL) of the volume of vessel to be installed with steam jacket, remaining 20% (2KL) will be free board.
4. The total volume of the reactor is 10kl out of which 8KI is the reaction zone filled with fleshing.
5. Two manholes of 600 mm diameter will be provided at bottom and top with gasket to prevent leakage of steam.

Material of construction of pipes shall MS Class (Pref: Jindal).valves shall be of Cast Iron.Diameter of drain valve is 100 mm. |
|  **2.** | SS agitator for 8 KL shall be with following specification1. With gear box and motor to be fixed on vessels.
2. Worm gear shall be be provided for agitator with appropriate motor to overcome torque.
3. Diameter of the shaft shall be not less than 65 mm
4. Preferred motor make is Kriloskar.
5. Preferred make of worm gear is Elecon/Greaves
6. SS 304 Paddle type stirrer cross section shall be not lessthan 50 %. Thickness of MS angle shall be not lessthan 6 mm
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| **3.** | Steam distribution header with following specification shall be provided.1. Pipe: Seamless ASTM 106 Gr B(2019)

2. PRV: Forbes marshal/spirex sarco3. Valves: KSB/WJ/Leader4.Flanges: ASA 150 |
| **4.** | Structure & working platform shall be provided with ISMB angles, channels and chequered plates of 5 mm thick. All MS structures shall be painted with epoxy.Size and the thickness of the angels, channels  |
| **5.** | Lifting conveyor for fleshing to process tank.1. Lifting conveyor to handle 8 tonnes of fleshings in less than 2 hours.
2. Lift conveyor with hopper size of 900mmx750mmxht 600mm may be provided. Vertical lifting hopper conveyor with hopper.
3. Motor capacity shall be not less than 5hp/ Kirloskar with rope drum and gear box make Elecon / Greaves preferred.
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| **6.** | Hydraulic filter press with following specification may be provided1. Filter press shall be size 36 “x36 “. Number of plates shall be 26Nos with structure, plate form, screw pump and Piping.
2. MoC shall be Non pigment white PP plates, body MS, thickness of set plates is 70 mm, temp for operation 80c.
3. Material of the construction of the filter cloth shall be PP
4. Hydraulic Pressure preferably 6 kg/ sq.cm.
5. Screw pump and motor, with SS316L Stator and motor shall be provided. Preferred make Rotopump and Kirloskar motor.
6. VFD to be included.
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| **7.** | Electrical cabling, control panel to be provided.Make of cables Havells, MCBs Siemens to be provided. |
| **8.** | Fabrication , transportation, Erection and commissioning to be included in the scope. The work shall be completed with in 30 days from the placing of order. |
| **9.** | Boiler (Optional)1. Supply and Installation of steam boiler of cap.1000 kgs/hr, pressure-10.54 kgs/cm2 with

ducting, stack. Steam piping.1. Make of boiler will be Rajdeep / Ross/ Balkrishna and Fuel will be Briquettes /set wood/ coal.
2. Stack height 30 mts.
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| **10.** |  Loading, Unloading, Transportation , electrical supply with MCB to control panel & insurance cost to be included in the quotation. GST to be indicated separately. |
| **11.** |  Civil drawings to be provided. The same will be executed by beneficiary. Approx. Land requirement to be be intimated |
| **12.** |  Line drawing with the size of reactor, lay out plan are to be provided. |
| **13.** |  Time frame for the work completion to be mentioned. |