

List of machinery – Super Critical Fluid Extraction Plant

S.N	Item Description	Qty
1	Extractors 165 lit. of CS body with SS inner liner without basket for holding of raw material, with quick opening lid on both ends, pneumatic lid lifting arrangement	2 nos
2	Set of heat exchanger with CO <sub>2</sub> side wetted parts made of SS 304 & CS on shell side.	1 set
3	CO <sub>2</sub> circulation pump with vary speed drive & 25 HP motor (suitable for 300 bar operating pressure at desired flow rate)	1 no
4	Separator CS body SS internals	1 no
5	CO <sub>2</sub> day tank 700 lit CO <sub>2</sub> day tank CS body SS internals	1 no
6	Recovered CO <sub>2</sub> holding tank – horizontal cylindrical about 6 m <sup>3</sup> to with stand minimum 10 bar pressure & made in CS	1 no
7	Micro strainers with 40 micron strainer elements in SS 304 for 350 bar operating pressure	4 nos
8	Chilled water plant with chilled water hold up & circulation pump.	1 set
9	CO <sub>2</sub> compressor with motor (reciprocating 3 stage) for recycle of the recovered CO <sub>2</sub> gas back to system with 60 bar operating discharge pressure –	1 no
10	Local instruments like pressure gauges, Level transmitter with indicator, various temperature transmitters, pressure transmitters, CO <sub>2</sub> flow transmitter etc	1 set
11	Instrument air header & distribution tubing in CS/ GI , FRL, Valves etc	1 set
12	High pressure ON –off ball valves with actuators for 300 bar operation in SS304	10 nos
13	Ball & needle valves all in SS304 for manual operation –	12 nos
14	High operating pressure back Pressure control valve	1 no
15	Safety relief valves 350 bar (3 nos), 80 bar (1 nos)	4 nos
16	Instrument air compressor with motor & receiver	1 no
17	liquid extractor 45 lit jacketed type all in SS 304 with coiled condenser at top & liquid receiver at the bottoms . suitable to max operating pressure of 350 bar	1 no
18	Process piping in SS 304 for respective operating pressure & CS piping for utility side from distribution header to respective equipment	1 set