

viii. BIODIESEL PILOT PLANT



The bio-diesel pilot plant consists of a transesterification reactor with heater, a stirrer, chemical mixing tank, glycerol settling tank (2 Nos.) and washing tank. The capacity of pilot bio-diesel plant is 250 litres/day. The cost of the pilot plant is Rs.5 lakhs. oil is mixed with alcohol and catalyst mixture in transesterification reactor. The reactor is kept at reaction temperature for specific duration with vigorous agitation. After reaction, the bio-diesel and glycerol mixture is sent to the glycerol settling tank. The crude bio-diesel is collected and washed to get pure bio-diesel. Depending upon the need, the size of the unit can be scaled up to get higher production.