



# KUMAR's ECOSTEAM DEODERIZER



## OPTIMISED REFINING PROCESSES FOR SUPERIOR OUTPUT QUALITY

Kumar's EcoSteam deodorizer is designed for chemically refined oil. This works under very low absolute pressure and reduces deodorization temperature and minimizes steam consumption.

Joint venture with



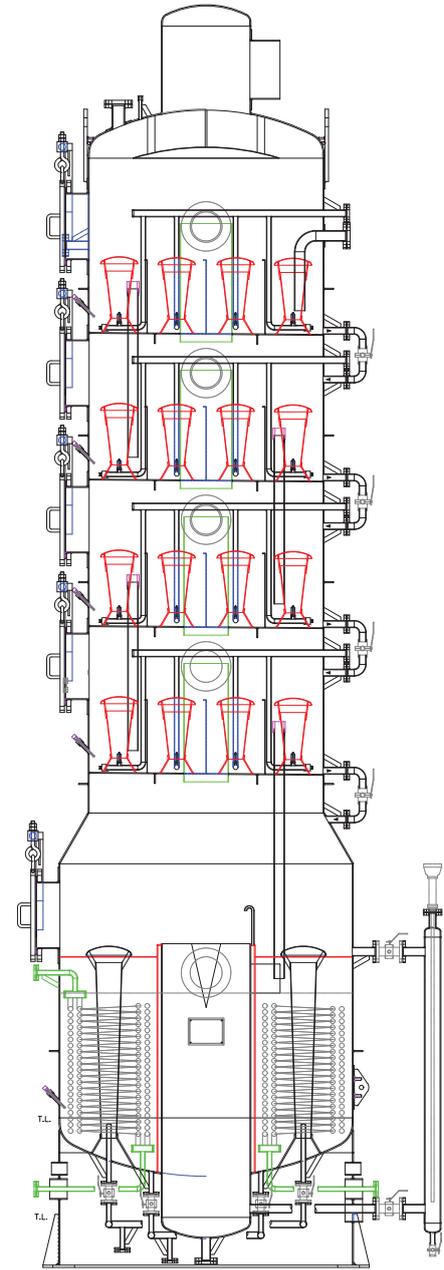
# WORKING PRINCIPLE

Oil is deodorized by stripping off FFA and odoriferous compounds under high vacuum. The vacuum reduces the boiling point of FFAs and odoriferous compounds. This reduces the working temperature of the deodorizer and also minimizes steam consumption.

Oil is held in each tray for 10 - 15 minutes before it flows down to the next tray. After passing through all trays, oil is passed through the economizer which heats the incoming deaerated oil. Once passed through the economizer, oil is filtered by the polished filter and sent to storage.

# FEATURES

- Robust construction that is easy to maintain.
- Specially designed easy to operate and risk-free automation system.
- Deodorizer trays designed for full drainage ensuring no stagnant zone.
- Mammoth pump efficiently sparges steam for intensive agitation.
- Heating and cooling under vacuum.
- Extremely high steam to oil interfacial surface.
- Efficient fatty acid scrubber for minimal carryover of fatty acid.
- Optimized retention time reduces low trans-fatty acid formation.
- Steam sealed manways.
- Optional dual scrubber for concentrating tocopherols.



# ABOUT KUMAR

Kumar Metal Industries is a process engineering company manufacturing advanced Oil Mill, Solvent Extraction and Edible Oil Refining plants for companies all over the world. What started as a small fabrication unit in 1939, has grown into an industry favourite that employs over 400, with 20,000 sqm of factory space spread over two locations.

Through our hard work, integrity and emphasis on superior engineering and service, we've gained the trust of more than 500 customers spread over 60 countries worldwide.



## KUMAR METAL INDUSTRIES PRIVATE LIMITED

Turnkey Solutions: Oil Mills | Edible Oil Refineries | Solvent Extraction Plants

### REGISTERED OFFICE

#101, Kakad Bhavan, 30th Road,  
Opposite Gaiety Galaxy Cinema,  
Bandra W, Mumbai 400 050  
T: +91 22 2644 1667 | 6699 0123

### CORPORATE HQ

#7, Mira Co-operative Industrial  
Area, Western Express Highway,  
Mira Road E, Thane 401104  
T: +91 22 2845 8300/9100



info@kumarmetal.com  
kumarmetal.com