

# TECHNICAL PACKAGES

## NITRIC ACID PURIFICATION SYSTEM



The process to purify industrial/technical grade nitric acid involves a single stage distillation to leave non-volatile impurities in the still bottoms. 69% – 70% concentrated nitric fluid is delivered by means of a metering pump from a storage tank into the glass still which is equipped with Electrically heated Oil Bath. The acid vapors flow through a mist removing packed section to the Glass condenser. Depending on the desired concentration high pure water can be added as a diluent to the condensed product before entering the bleach column. Clean air is introduced at the base of the bleacher. Air and oxides of nitrogen are vented through a condenser to a scrubber. Entrained nitric acid is not returned to the bleaching column but collected separately. Removing of all NO<sub>x</sub> out of electronic grade nitric acid.

Design Basis & Requirement of Utilities :

Capacity	40	kg/hr
Commercial grade Nitric Acid - 69-70%	44	kg/hr
Electric Heater	48	kw
Cooling Water @ 7 deg. C*	4-5	Cu.M/hr
Space Requirement	3 x 3 x 8 m	

Size Available 5 kg/hr to 500 kg/hr

