

Reactor



Reactor is a closed vessel, which is used to perform a chemical reaction, distillation, crystallization, mixing, and isolation of materials etc. in API manufacturing facility.

This is specially designed equipment with agitator and gearbox with flameproof electrical motor. Agitator is used for proper mixing, eddy formation, Vortex formation as per requirement. Agitator types are decided based on process requirement.

Single full Jacket/limpet coil jacket is used for maintaining reaction conditions by providing utilities like steam, chilled water, cooling water, chilled brine

and hot water. Solids are charged into reactor through Manhole/ Nozzles manually and liquids are charged in to reactor by liquid transfer pipelines connected to reactor or manually through manhole .

Solution or slurry is discharged from the reactor by nitrogen pressure or by pump, through bottom discharge valve.

- Machine structure -

Reactor system including the following unit : reaction tank, condenser, sub-cooler, collection tank and pipeline

- Technology data specification -

Item	Technology specification
Working volume	20-30000L
Material	SS304, SS316L, F40 coated SS material and Glass lined etc.
Jacket structure	Single full jacket type, limpet coil jacket, dimple jacket, inside coil pipe etc.
Jacket medium	Heating by steam, hot water & hot oil or electrical heating etc. Cooling by cooling water or chiller etc.
Top mounted agitator	Propeller type agitator, anchor type agitator, scraper type agitator, high shear emulsifying agitator etc.
CIP/SIP	Tank with the pipeline can be online CIP/SIP.

*Above specification just for reference, we can do according to client's URS *