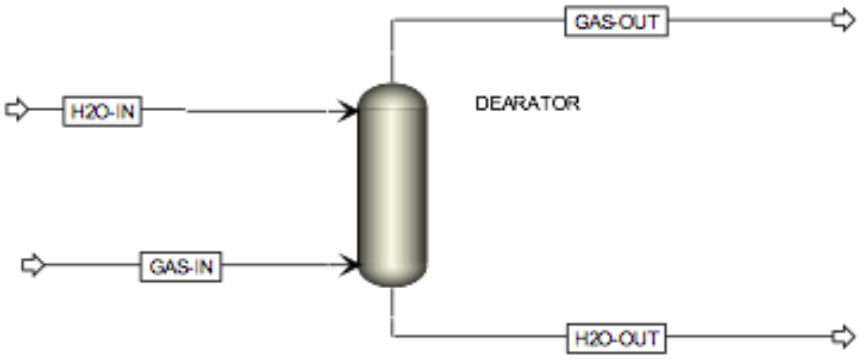
Description - Deaerator- Removal of Oxygen from Water using Stripping Gas

Process Flow Diagram



Process Description

Water containing 15-20 ppm of oxygen by weight needs to treated in such a way that oxygen in outlet water should be in the range of ppb. This is done using a deaerator column where stripping gas, containing 60-70 percent (wt) methane, is used to strip the oxygen. Typical composition of the stripping gas is

Component	Mass Fraction
H2S	0.0009
CO2	0.0200
Nitrogen	0.0035
Methane	0.6619
Ethane	0.0636
Propane	0.1072
I-Butane	0.0209
N-Butane	0.0630
1-Pentane	0.0218
N-Pentane	0.0214
N-Hexane	0.0158

Plant capacity: 600-700 cubic meter per hour of water to be treated in this deaerator.

Operating Conditions

The deaerator is operated under atmospheric condition and is packed with plastic column internals.

Experience

Finepac® Structures has designed and supplied deaerators capable of treating 650 cubic meter/hr of water.