

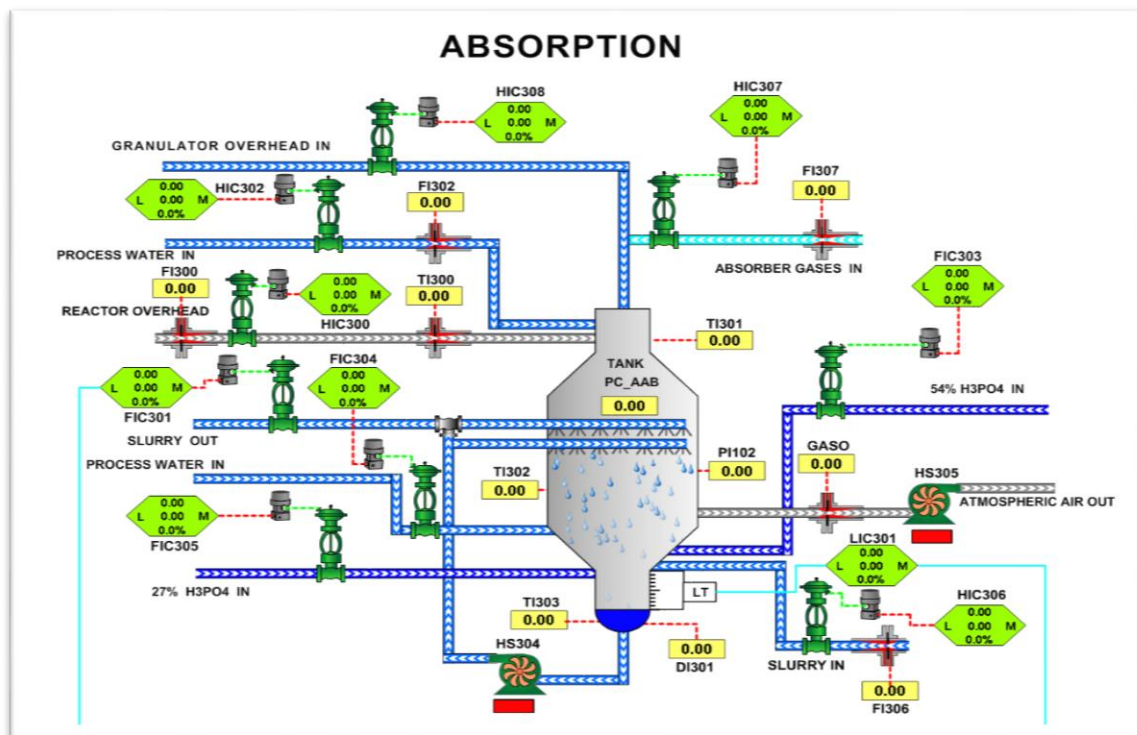
ABSORPTION

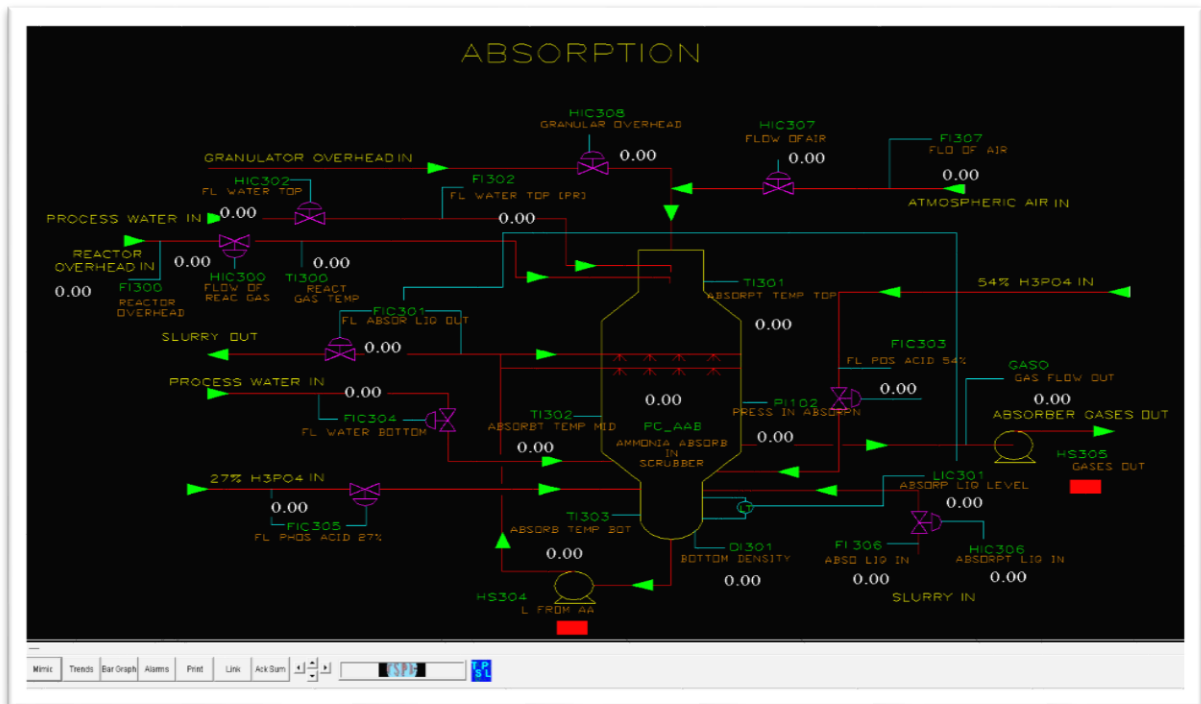
PROCESS DESCRIPTION:

Gas absorption is an operation in which a gas mixture is contacted with a liquid for the purposes of preferentially dissolving one or more components of the gas and to provide a solution of them in the liquid. When mass transfer occurs in the opposite direction, i.e. from the liquid to the gas, the operation is called desorption, or stripping. The principles of both absorption and desorption are basically the same.

Exhaust gases from the reactor and granulator containing ammonia are scrubbed with phosphoric acid. Co-current void tower is used to dissolve the gas in the liquid (phosphoric acid). The scrubber liquid is re-circulated via an integral sump and pump. A constant bleed of liquor is fed to the ammonia scrubber under level control.

The gases at the ammonia scrubber inlet are maintained below 90°C by a constant bleed of cold air or water injection into the hot gases. Specific gravity in ammonia scrubber is maintained below 1.6 by addition of water and the liquor bleed is fed to the reactor under level control.





Instructor Station for Process Training Simulator

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Group: A. ABSORPTION CONTROLLERS-1 Page: 0

	FIC304	FIC303	FIC305	FIC301	LIC301	HIC300	HIC306	HIC306
SP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARM	ON	ON	ON	ON	ON	ON	ON	ON

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Group: A. PRESSURE CONTROLLERS

Real Time Mode [Base: 1 seconds]

Tag	Description	Range	Value
FIC304	FL_WATER BOTTOM	0- 3	00.00
FIC303	FL_PHOS ACID_54%	0- 40	00.00
FIC305	FL_PHOS ACID_27%	0- 40	00.00
FIC301	FL_ABSOR LIQ_OUT	0- 40	00.00

Freeze 11:32:41 00:00:01 ST 0.00 Sim Speed