Upflow versus Downflow Drying

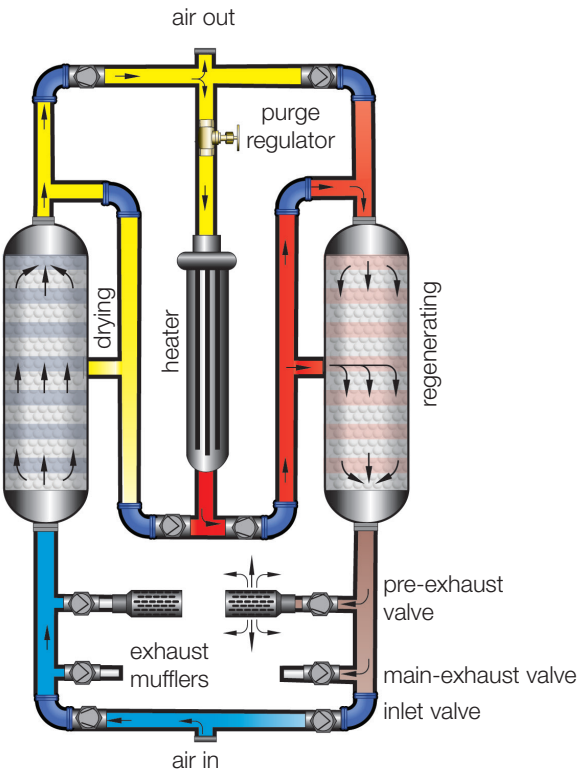
Heated Twin Tower Desiccant Dryers

By “down flow” drying, the air exits the dryer at the bottom of the bed. Any condensation or liquids put into the dryer by ineffective pre-filtration or drain failure will collect at the bottom of the vessel. As a result of this liquid presence, with “up flow” regeneration the purge air cannot lift the liquid slugs through the entire desiccant bed resulting in liquid being sent down stream at tower switch over.

With “up flow” drying, any liquid presence would fall to the bottom of the vessel during regeneration and would be extracted out by “down flow” regeneration.

The only real advantage to “down flow” drying goes to the dryer manufacture as the tanks have a smaller diameter and thus lower cost.

Also, Multi-Port regeneration injects heat into the top and middle of the desiccant bed during regeneration to make sure the desiccant is completely dry prior to switch over. The exhaust temperature sensors will shut off the heater when the vessel is fully regenerated. The result is energy savings and extended heater life.



Features and Benefits:

- Multi-Port Regeneration System ensures superior desiccant bed regeneration
- Smaller diameter tanks for “downflow” drying reduce costs
- Automatic heater shutoff
- Extended heater life
- Energy savings

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