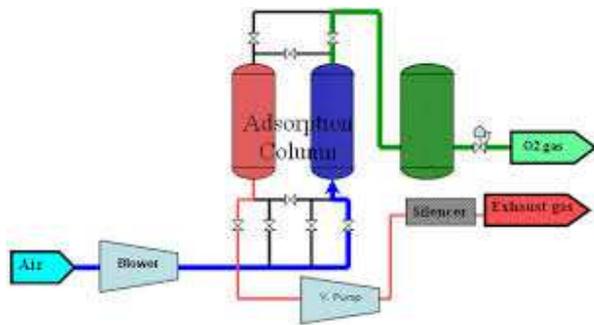


PSA OXYGEN



MARUTI CORPORATION having a modern facilities with over 50000 square feet of manufacturing space near Vadodara (Gujarat, India).

Vadodara is one of the biggest industrial and chemical complexes hub in India making us ideal for easy availability of specialized skilled engineers, man power, spares & instruments availability also.



Oxygen Gas Plant work with PSA (Pressure Swing Adsorption) technology. Using this technology, we produce oxygen gas plants that are highly economical and require low maintenance and produce the desired results in a hassle-free manner. These generators absorb nitrogen with the help of two absorption vessels that are filled with most efficient X type zeolite molecular sieves responsible for nitrogen absorption.

The Pressure Swing Adsorption (PSA) Oxygen Generating Process Air contains 21% oxygen, 78% nitrogen, 0.9% argon, and 0.1% other gases. Oxygen Generating Systems separate oxygen from compressed air through a Pressure Swing Adsorption (PSA) process. The PSA process uses molecular sieve, which adsorbs nitrogen from air at high pressure and desorbs it at low pressure. Oxygen Generators contain two vessels filled with molecular sieves as adsorbers. As compressed feed air flows through one of the vessels, the molecular sieves adsorb nitrogen. The remaining oxygen passes through the vessel and exits as the product gas. Before the adsorber becomes saturated with nitrogen, the feed air is diverted to the second vessel. At that point, the sieve in the first vessel regenerates by desorbing the nitrogen through depressurization and purging it with oxygen from the second vessel. This process is then repeated in the second vessel to complete a cycle that allows the oxygen generator to deliver a constant flow of product oxygen at 90% minimum purity. Under normal operating conditions, the molecular sieve is completely regenerative and will last indefinitely.

Flow Rate 1-150 Nm³ / hr

Purity 95%

Pressure 2-15 Barg

Industry applications of PSA Oxygen gas Generator :

Manufacturing Batteries.

Pulp and Paper Industry.

Fish Farming.

Glass Industry.

Copper Smelting.

Sewage Treatment.

Chemical Oxidation.

Welding.

Melting.

Brazing.

Salient Features :

- * Full Automation All systems are designed for un-attended operation and automatic Oxygen demand adjustment.
- * Lower Space Requirement The design and Instrumentation makes the plant size very compact, assembly on skids, prefabricated and supplied from factory.
- * Fast Start-up Start-up time is only 5 minutes to get desired Oxygen purity. So these units can be switched ON & OFF as per Oxygen demand changes.
- * High Reliability Very reliable for continuous and steady operation with constant Oxygen purity.
- * High Reliability Expected Molecular sieves life is around 15-years i.e. whole life time of Oxygen plant. So no replacement costs.

