

PSA "Fast Purity"

Thanks to **Pressure Swing Adsorption (PSA)** technology the generator produces nitrogen from the compressed air inlet by separating the nitrogen molecules from the other molecules present in ambient air by means of filtration performed by carbon molecular sieves.

Inside the CMS columns, oxygen, moisture, hydrocarbons, CO₂ and other "contaminants" are adsorbed, allowing the nitrogen to flow into an accumulation tank.

From the accumulation tank the nitrogen is brought to the required pressure and then transferred to the generator outlet.

Alternatively, the CMS columns are regenerated by expelling the previously absorbed compounds and then prepared for a new filtration stage by means of flushing with a reverse flow of nitrogen to ensure thorough cleaning.

The "Fast Purity" process, composed of several stages, makes it possible to maintain constant minimum pressure in the CMS columns in such a way as to avoid peak flows on the molecular sieves for complete utilisation of CMS performance and consequent delivery of the maximum purity of nitrogen in minimal times.



