Industrial & Diving Gases - Important Trends to Watch Out in South African Market

The South African market see the significant demand for industrial and diving gases due to the presence of oil rigs situated in the shores of a vast economic coastline. South Africa is a rich country encircled by a coastline that provides an advantage for several marine-based activities. Marine and oil-based industries are tapping into the South African market to not only leverage the strategical coastline for oil and gas but also to expand their range of exports to the world. In terms of specifically talking about the oil and gas industry, it is among one of the largest contributors in the South African market for fostering the demand for industrial and diving gases.

This blog features various aspects of the sphere and perspective of the gas industry market in the country.

South-Africa: The market for Industrial & Diving Gases

The wide presence of the oil and gas industry in South Africa might require numerous industrial gases. The wide range of marine operations might include diving equipment and gases for the professional divers, gases for the use of hyperbaric welding and construction under the sea. It also uses various equipment to control the gases simultaneously during the operations to offer adequate life support to divers.

As most of the demand for industrial gases seems to be drawn from the oil and gas industry, the wide scope of growth for this sector could see a significant bump in revenues for the existing players dealing in industrial and diving gases.

Emerging-Trends: Spheres of Demand for Industrial Gases

Industrial Gases for Food Industry

The industrial gases market in South Africa supplies a wide range of chemical gases to the food industry for the preservation needs. It is one of the premier market segment for industrial gases which see a huge demand in the south African ecosystem.

Marine Operations & Diving

South Africa as a country surrounded with the coastline on its peripheries, the marine activities are growing primarily due to the presence of oil rigs off the coast. The demand for diving gases such as oxygen, nitrogen and helium has become quite popular among the industrial players. These gases are used by professional divers to carry out essential marine operations not

limited to just repairing of docks, ships, etc. but it also includes complex industrial works on offshore oil rigs under the sea.

Industrial Gases for Medical Needs & Life Support

The demands for industrial gas is also rising high in the health care industry. Like oxygen is used in medical centers to help in the treatment of hypoxia and hypoxemia, carbon dioxide is required for insufflation. It is used in combination with oxygen or air to promote deep breathing. Other industrial gases include helium, xenon, hydrogen, for a variety of medical marine offshore equipment such as COVID-19 Pressure Ventilator System. It is also quite useful for support in the ventilators.

Subsea Construction & Maintenance

The subsea construction and maintenance activities are part of usual work done in the numerous oil fields and on-shore establishments situated in the ports. From laying out the foundation of offshore oil rigs to make it up and running, there are multiple tasks which need to be done. From welding to deploying complex metal structures subsea, the wide variety of gases like helium, oxygen, argon and nitrogen is needed. In hyperbaric welding under the sea, there are various equipment and gases required altogether to facilitate the industrial construction.

Driving Players for Industrial Gases Demand

One can recognize several market players, Here are various industries that drive the growth for demand of industrial gases for various purposes:

Oil and Gas Industry

Naval Organizations

Research & Development agencies

Port Authorities

Production of Industrial Gases

The market is primarily influenced by the use of pressure-swing absorption of industrial gas companies as an effective and cost-effective method to produce industrial gas. The PSA system's operation works based on the process of static separation for ambient air that comprises nitrogen, oxygen, and other gases using an adsorbent capable of extracting the target gas at low pressure. The nitrogen is the largest segment of both the South African market and the global industrial market, which is used in the diving industry.

Scuba Diving Market & Need for Industrial Gases

The coastline of South Africa features various economic units in and around its coastline. As the offshore oil and gas industry has now explored the untapped potential of petroleum and

gas production in the seabed, the increase of commercial demands is rising day by day. The scuba diving market supplies a wide range of equipment pertaining to diving and life support for the professionals who operate on the complex structures under the sea. It could be related to the extraction activities or maybe a part of undersea construction operations, the scuba diving market generates demand for the industrial gases to operate the activities in full swing while ensuring proper safety and life support (oxygen) for divers.