SCOTTS
INTERNATIONAL

Air Separation Unit - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 150 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License $4750.00
- Team License (1-7 Users) $5250.00
- Site License $6500.00
- Corporate License $8750.00

Report description:

The Air Separation Unit Market is expected to register a CAGR of 4.82% during the forecast period.

Key Highlights
- Over the medium term, factors such as increasing demand for industrial gases, spurred by the growth in steel and process industries, are likely to drive the market growth during the forecast period.
- On the other hand, since the cost to supply high-purity industrial gases is huge, several operating companies are shifting toward alternate air separation techniques, such as pressure swing adsorption (PSA), as a cost-effective solution that may restrain the market for air separation units.
- Nevertheless, countries such as Saudi Arabia, the United Arab Emirates, and South Africa have been witnessing a high growth rate of urbanization and industrialization activities. They are expected to offer growth opportunities for air separation unit players. Therefore, the increase in industrial development activities in the Middle East and African region presents a good market opportunity for air separation unit market players in the coming years.
- Asia-Pacific is expected to dominate the market during the forecast period, with most of the demand coming from countries like India, China, etc.

Air Separation Unit Market Trends

Iron and Steel End-user Segment to Witness Significant Demand

- The iron and steel industry is one of the major consumers of ASUs, as steel production requires massive amounts of oxygen, most of which is sourced from the air using ASU technology.
- It is estimated that more than half of the global steel production uses the basic oxygen process (BOP), which uses pure oxygen to convert a charge of liquid blast-furnace iron and scrap into steel. Hence, most steel plants install large ASUs to cater to the oxygen demand, which forms a critical part of plant operations.
- The iron and steel industry is one of the drivers of modern industrial growth, and steel production has been growing steadily over the past decade. According to the World Steel Association, as of December 2022, China upholds the world leader in crude steel production, with 77.9 million metric tonnes produced, a 10% decrease from the previous year. India, Japan, the United States, and Russia trail far behind.
- As all steel plants require large-scale ASUs, and these units are highly energy-intensive, optimising energy consumption is a major challenge. Maintaining oxygen purity is also a major challenge, as different purities are required for steel production.
- The steel demand is expected to be highest among developing economies, such as China, India, Africa and the ASEAN countries, which are industrialising fast and investing heavily in large-scale infrastructure projects.
- In March 2022, INOX Air Products Ltd announced that it had won a contract to construct India's largest Greenfield Oxygen Plant in India at the Steel Authority of India's (SAIL) Bokaro plant in Jharkhand. Being built at a total investment of INR 750 crore, the plant will generate 2150 tonnes per day (TPD) of Industrial Gases, including 2000 TPD of Gaseous Oxygen, 150 TPD of Liquid Oxygen, 1200 TPD of Gaseous Nitrogen & 100 TPD of argon.
- Such large investments and projects for the construction of new ASUs in steel plants are expected to drive the iron and steel segment of the Global ASU market during the forecast period.
- Therefore, based on the abovementioned factors, the iron and steel end-user segment is expected to witness significant demand for the global air separation unit market during the forecast period.

Asia-Pacific Expected to Dominate the Market

- Asia-Pacific accounted for the largest air separation unit market share and is expected to continue its dominance during the forecast period.
- China is the world's second-largest oil consumer but the sixth-largest oil producer. It imports nearly 50% of its hydrocarbon demand, and to reduce dependence on energy imports and improve energy security, China has been trying to maximise its shale potential by exploiting its domestic reserves across various inland shale basins, such as the Sichuan basin.
- The shale revolution in China has resulted in unprecedented petrochemical capacity creation and expansion. As a result, China has made significant investments in its refining and petrochemical infrastructure to appease domestic demand and reduce the petrochemical process for domestic industries. Due to an ever-rising demand for plastics and other petrochemicals from sectors such as food packaging, clothing, cosmetics and fertilisers, refining capacity has to be increased to handle the growing demand.
- China has been constructing new refineries and upgrading and adding capacity to older refineries. In March 2023, Saudi Aramco aims to start operation at the refinery and its new petrochemical project in northeast China after three years. The USD 10 billion project at Panjin, Liaoning Province, will be Aramco's second large refining-petrochemical venture in China.
- China is expected to lead the market in Asia-Pacific due to its significant growth in electronics manufacturing (like solar PV etc.) domestically, increasing refining and petrochemical capacity, and increasing healthcare expenditure, which has significantly increased the demand for industrial gases.
- Moreover, India aims to achieve 300 million metric tons of steel annually by over next two to seven years. The increasing steel production in India is expected to increase the demand for industrial gasses, particularly oxygen, which will likely drive the demand for air separation units in the country during the forecast period.
- In February 2022, Linde India Limited entered into a 15-year agreement with ESL Steel Limited to supply about 800 mt per day of oxygen and 900 mt per day of nitrogen to the steel mill. Linde India will set up an on-site air separation unit at ESL Limited's steel mill at Bokaro.

- In January 2022, Air Liquide announced an investment of about INR 350 crore in a new air separation unit dedicated to industrial merchant activities in Kosi, Uttar Pradesh, India. This unit will have a production capacity of 350 tons per day with a maximum of 300 tons of oxygen. The plant is likely to be operational by the end of this year.
- As a result, the increasing uptake of ASUs from the iron and steel, oil and gas, and chemical end user segments, majorly from China and India, is expected to increase the demand for air separation units in the region.

Air Separation Unit Industry Overview

The ASU market is moderately fragmented. Some of the major players in the market (in no particular order) include Linde AG, Messer Group GmbH, SIAD Macchine Impianti SpA, Air Products and Chemicals Inc., and Air Liquide SA.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

Air Separation Unit - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2025 - 2030)

Market Report | 2025-04-28 | 150 pages | Mordor Intelligence

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$4750.00
	Team License (1-7 Users)	$5250.00
	Site License	$6500.00
	Corporate License	$8750.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-03-02
		Signature	