

GAS GENERATION · PROCESS INDUSTRIES

Industrial Oxygen Generator

Consistent, high-purity oxygen delivered at the point of use with licensed, proven technology — ending cylinder dependence for industry.

93–96%

TYPICAL DELIVERED PURITY

24x7

UNINTERRUPTED
AVAILABILITY

Auto

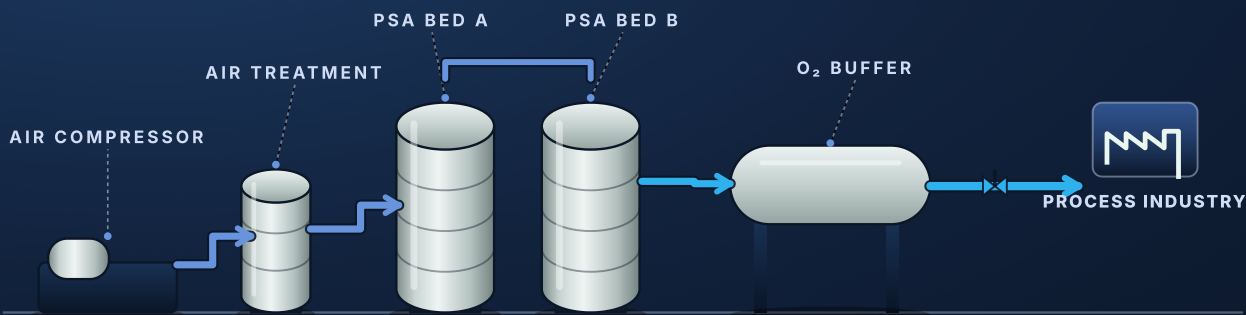
FULLY AUTOMATIC
OPERATION

Low

MAINTENANCE & POWER
DEMAND

PROCESS OVERVIEW

INDUSTRIAL OXYGEN GENERATOR



01 Overview

Brise Industrial Oxygen Generator Plants are advanced on-site generation systems designed to eliminate dependency on traditional oxygen cylinders and ensure uninterrupted oxygen availability. Using licensed and proven adsorption technology, the plant separates oxygen from atmospheric air — removing nitrogen and other impurities — and delivers consistent, high-purity oxygen directly at the point of use.

Systems operate at significantly lower pressures than cylinder storage, improving plant safety while removing the cost, handling and supply-chain exposure of purchased oxygen. Fully automatic operation, remote monitoring and robust industrial-grade components keep uptime high and the total cost of ownership low across years of continuous service.

02 At a Glance



Point-of-use supply

Oxygen generated where your process consumes it



Licensed technology

Proven adsorption process with industrial track record



Self-regulating

Autonomous separation and output stabilisation

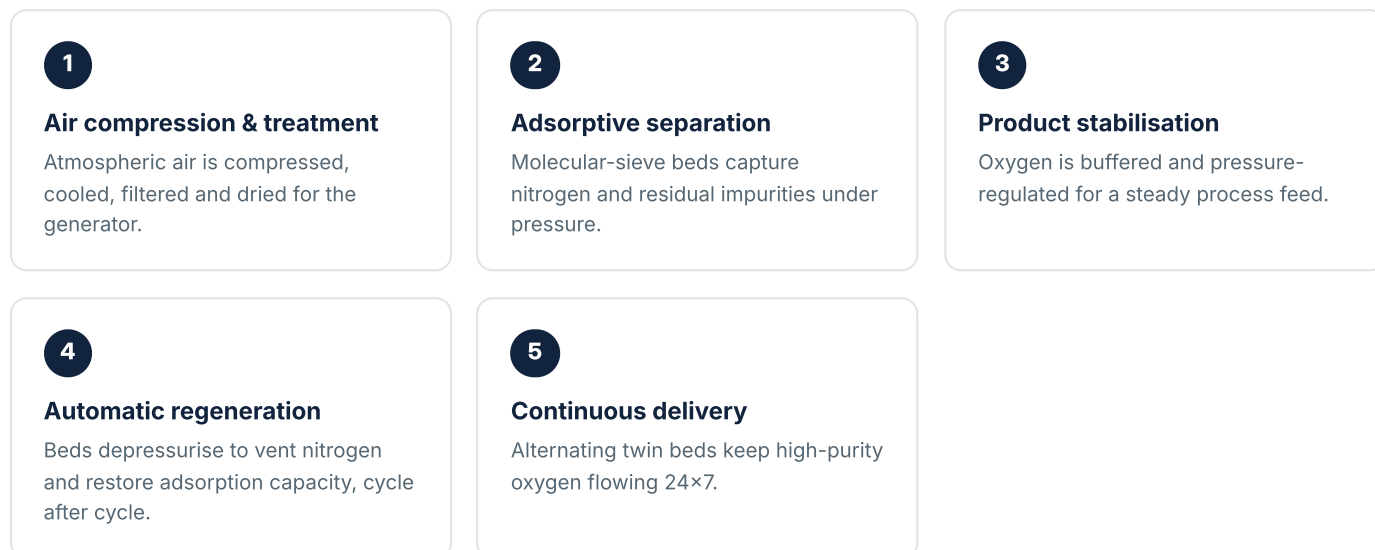


Long service life

Robust components, extended intervals, low downtime

03 Technology & Process

Compressed, treated air passes through adsorbent beds that capture nitrogen and impurities; high-purity oxygen flows on to a buffer for stable delivery. Twin beds swing between adsorption and regeneration so supply never pauses.



The on-site advantage for industry

Why process industries move from purchased oxygen to captive generation:

Uptime	Continuous point-of-use supply keeps furnaces, kilns and production lines running
Unit economics	Generating on-site removes purchase, rental and logistics premiums
Process stability	Consistent purity and pressure, supervised remotely in real time
HSE profile	Significantly lower operating pressure than cylinder storage and handling



End-to-end EPC delivery

Concept, FEED and engineering through construction, commissioning and PG testing.



Certified quality

ISO 9001 / 14001 / 45001 systems; designs per PESO, IEC, ATEX & IS standards.



Lifecycle partnership

Operator training plus AMC/CMC programmes for maximum plant uptime.

04 Technical Specifications

PARAMETER	SPECIFICATION
Technology	Licensed adsorption-based air separation (PSA family)
Feed	Atmospheric air
Product purity	High-purity industrial oxygen (typ. 93–96%)
Supply	Continuous, at point of use
Operation	Fully automatic, self-regulating
Monitoring	Centralised digital supervision; remote parameter adjustment
Power	Optimised consumption design
Maintenance	Minimal post-installation requirements
Capacity	Sized to process demand — modular skids

- ✓ Capacity, purity trim and delivery pressure are configured to the application during basic engineering. Figures shown are design values from Brise Chemicals product documentation; final specifications are confirmed during detailed engineering.

05 Key Features

 Fully automatic operation Continuous autonomous running with self-regulating output stabilisation.	 Remote monitoring & control Digital supervision of plant performance with parameter adjustment.	 Energy efficiency Optimised power consumption reduces electrical load and operating cost.
 Low maintenance Robust industrial-grade components and extended service life.	 Lower-pressure safety Significantly safer than high-pressure cylinder storage and handling.	 Supply independence No cylinder logistics — availability is under your control.

06 Applications & Industries



Steel & metal processing

Oxygen enrichment, lancing and furnace duty



Chemical & petrochemical

Oxidation reactions and process intensification



Glass & cement

Oxy-fuel combustion and kiln enrichment



Energy & power generation

Gasification and combustion support



Wastewater treatment

Aeration and advanced oxidation processes



Industrial cutting & welding

Steady oxygen for fabrication shops

07 Scope of Supply



Air compression & treatment package



Adsorption generator skid with twin vessels



Product buffer & analysis instrumentation



PLC control with remote supervision



Installation, commissioning & training



AMC/CMC lifecycle support

**CERTIFIED &
COMPLIANT**

ISO 9001:2015

ISO 14001:2015

ISO 45001:2018

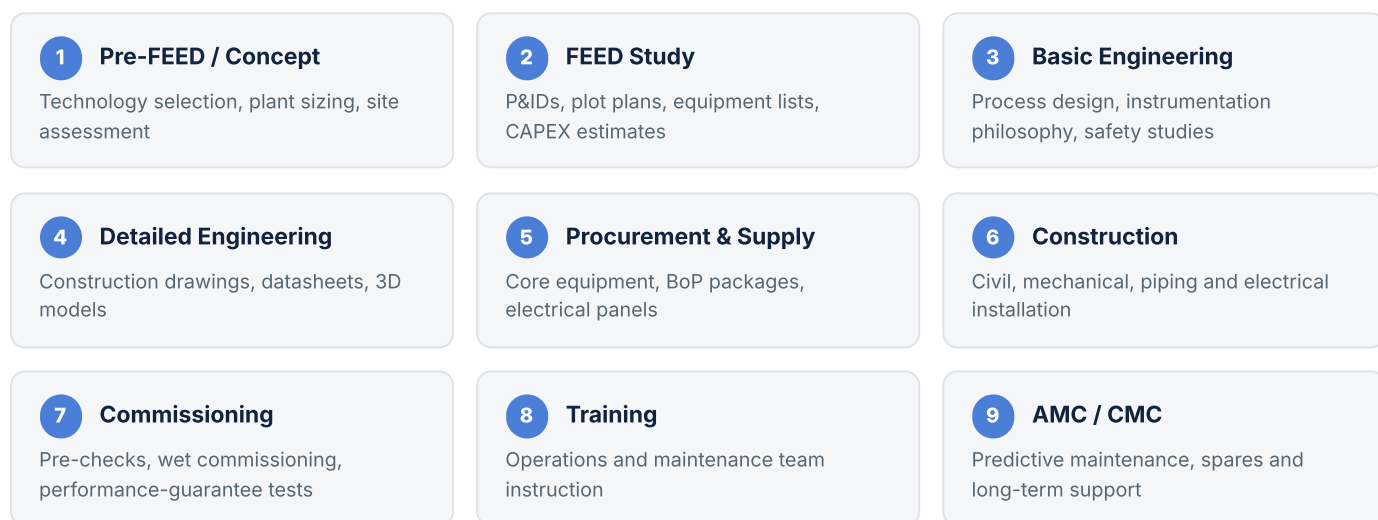
Designs compliant with PESO, IEC, ATEX & IS safety standards

08 About Brise Chemicals

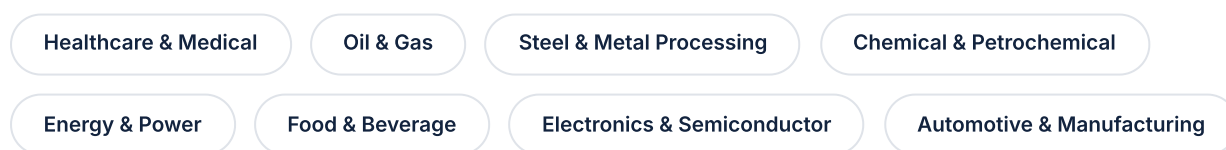
Brise Chemicals Pvt. Ltd. is a technology-driven OEM and industrial gas plant technology owner, founded by professionals with deep experience across turbo-machinery, oil & gas, refineries and the industrial gas sector. From our engineering and fabrication base in Pune, India, we design, engineer, manufacture, install and commission cryogenic and non-cryogenic gas plants — spanning alkaline electrolysis, gas generation, gas purification, ammonia and methanol synthesis, air separation and hydrogen liquefaction.

Our name derives from the ballet step “Brisé” — a reminder that precision, integrity and discipline underpin everything we build. With in-house fabrication, certified welding, an HVOF catalyst-coating facility and rigorous QA/QC, we deliver complete EPC projects and stand behind them through long-term AMC/CMC support.

09 The Brise EPC Lifecycle



10 Industries We Serve



Let's engineer your plant.

Request a detailed proposal, FEED study or site consultation for the Industrial Oxygen Generator.


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