

Nitrogen generator for electronics manufacturing

On-site nitrogen production with N₂ purity of up to 99.9999 % (1 – 3 ppm residual oxygen) air factor 3.3

AIRCO® Systems offers both a **space-saving, effective and convenient solution** for on-site oxygen production. The so-called “**PSAE systems**” combine a modern **platform construction** with many years of experience in the field of **ultra-pure nitrogen production for electronics applications**.

The system, including all components, is assembled on the prefabricated modular skids at our production site in the Rhine / Main region. **The compressed air treatment, nitrogen generator, product container, nitrogen drying, N-Kat®, filter and the high-pressure compressor** are all located on the basic structure, which is always identical.

Once assembly is complete, the entire system undergoes an approval procedure by our technical department and our notified **CE body**, and the system is then run in. At this time, the subsystems are extensively checked for their function and leak-tightness. The settings can be adapted to the specifications of our customers at this early stage.

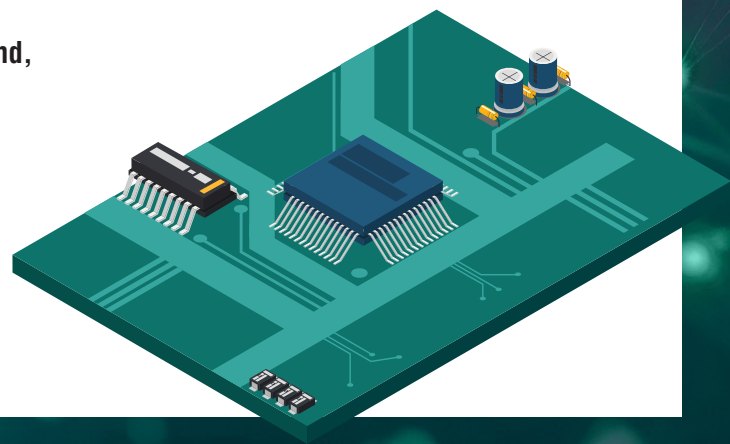
As a result, we can put the equipment into operation at the customer's location in record time and can implement the fundamental **plug and play application**. Loading and positioning, for which only a forklift is required, is also very simple thanks to the **compact construction**.

Our nitrogen generation system is professionally connected to the gas supplies for your soldering application. The final step sees our customers receive training from our technicians directly at their own facility so that they can plan and monitor their future **nitrogen production**.

With our **N-Kat® - system**, we guarantee purity of up to 6.0 with an air factor of 3,3 - this is **unique worldwide**.

In the N-Kat®, the hydrogen reacts with the residual oxygen in the nitrogen. The chemical reaction produces water vapour and heat, which is removed by means of filtration and drying.

This process allows us to operate much smaller air compressors thereby **saving 50% of the energy required and, as a result, a large quantity of CO₂** in connection with the production of high-purity nitrogen.



PSAE - NITROGEN GENERATOR

NITROGEN GENERATION DIRECTLY ON SITE.

SKIT PLATFORMS - OVERVIEW

Skit platform	Volumetric flow of up to 99.9999 % Nm³/h
PSAE 40	40
PSAE 70	70
PSAE 100	100
PSAE 150	150
PSAE 200	200
PSAE 300	300
PSAE 400	400
PSAE 500	500

Further intermediate sizes available - feel free to ask us.

SPECIFICATIONS / DATA

- Output pressure: 3 to max. 300 bar
- Ambient air: +10 °C to +45 °C
- Nitrogen purity: 5.0 = 10 ppm
- Maximum purity: 6.0 = 1 ppm
- Nitrogen temperature: +10 °C above ambient temperature



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POSSIBLE APPLICATIONS

- Selective soldering
- Wave soldering
- Reflow soldering

ADVANTAGES

- Ready for operation thanks to Plug & Play
- Low maintenance requirements
- High quality and worldwide service
- N-KAT® technology, air demand factor 3,3

HIGHLIGHTS

- Small surface area requirement and simple operation
- Extremely low power consumption
- Extremely low air consumption
- Industry 4.0: querying and control of the system from any location in the world

OPTION: SIGNIFICANTLY REDUCES ENERGY & COSTS

- Reduce your energy costs by integrating your photovoltaic system
- Utilise the potential of thermal heat and with **potential savings of up to 80%**



- Intelligent control for optimum energy saving and cost reduction
- Utilization of surplus solar power with >1 high-pressure compressor