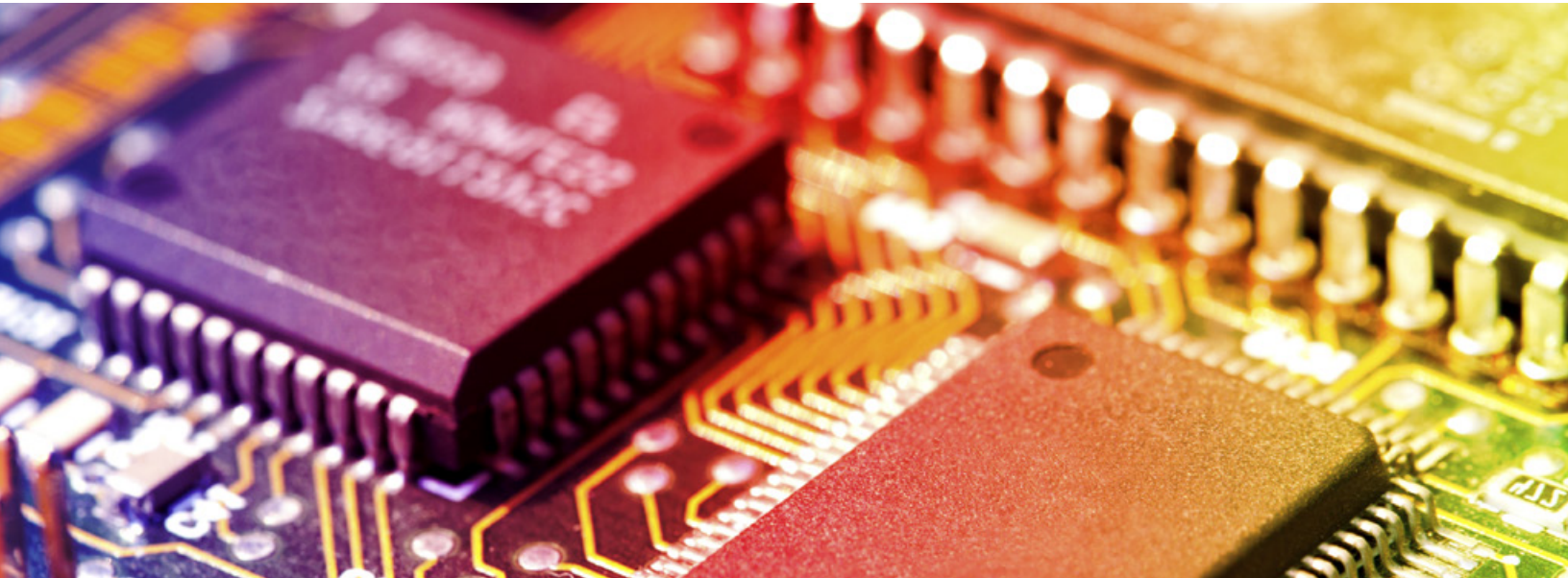


## Reflow Soldering

Nitrogen, equipment and expertise



- Control atmosphere quality
- Minimize reflow oven adjustments
- Decrease nitrogen use

### For electronic components manufacturing

Oxidation reaction, poor wettability and high peak temperature in reflow soldering of printed circuit boards (PCBs) weakens electronic solder joints. To offset these side effects during reflow soldering, using nitrogen to inert the atmosphere during assembly has become a globally-accepted practice.

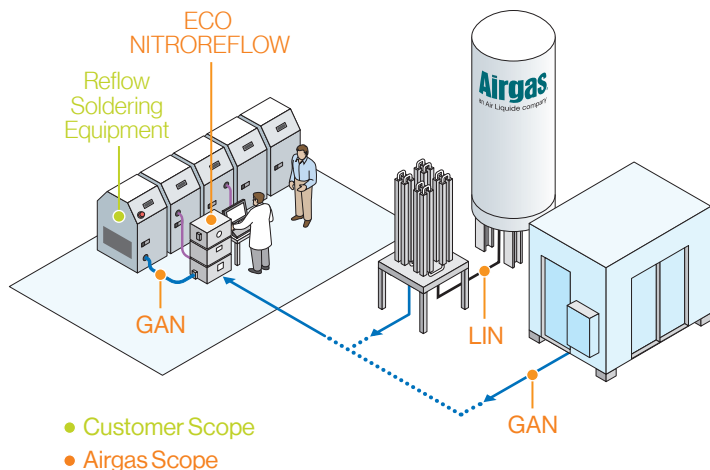
Airgas, an Air Liquide company, offers a comprehensive retrofit solution designed to help you create and carefully maintain an inert atmosphere into your reflow oven. This includes quality nitrogen and delivery equipment—all backed by a network of expertise in electronic components manufacturing—to help you improve solder wettability and reduce oxidation. For you, this means increased efficiency, savings and optimal solder joints.

# Reflow Soldering

Nitrogen, equipment and expertise

## Our solution

Customized solution to optimize your gas consumption, limit defects, and safely maintain your process



### It's easy to see the advantage

#### 100% monitoring of Residual Oxygen Levels (ROL)

The internal atmosphere quality of the reflow oven is adjusted throughout the day with ECO NITROREFLOW from Airgas. The system acts as a virtual operator by checking and adjusting the ROL in the reflow zone to maintain specifications and optimize performance.

#### 100% automatic adjustments to the reflow oven

The ECO NITROREFLOW system is easy to operate. Installation requires no modification or maintenance of your reflow oven. Just set the system to the required ROL and it starts monitoring your nitrogen level and automatically adjusts as needed.

#### 5%–15% decrease in nitrogen use

With constant detection, monitoring and regulation of the nitrogen flow to maintain the required ROL inside the reflow oven, your consumption decreases and you use only what you need.



From liquid storage to an on-site gas production system, your nitrogen requirements are carefully calculated by our team to ensure optimized performance of your reflow process. With a variety of supply modes and reliable supply you get the quality nitrogen you need, when and where you need it.



ECO NITROREFLOW is a patented, automatic-control system designed to carefully monitor the inert atmosphere quality of your reflow oven. The system is suitable for oxygen-level ranking from 0 to 3,000 ppm.



Tap into the full support of Airgas application engineers, backed by a global network of experts, who are dedicated to work with you—from system audit to efficient design and build to implementation and maintenance.



With a team of more than 70 QSSP- and OSHA 30-certified safety specialists, get the right safety products and services to help keep your team safe and compliant.



Airgas offers a complete supply chain solution designed to help you improve management of your supply chain, increase efficiencies and save time. As a single-source supplier, our smart supply chain solution options give you complete visibility into your inventory and usage.

Ask us how we can help you decrease your carbon footprint:

- Reduce process emissions
- Save energy
- Reduce gas waste



**ECO CHILLER:** Our new heat exchanger system that allows you to recycle the cold of liquid cryogen vaporization back into your cooling system.