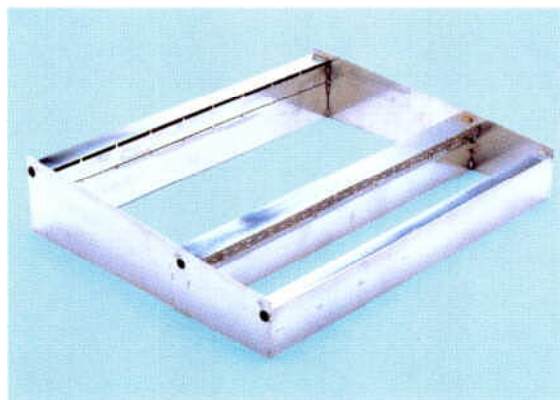


ALIX™ IN₂ERTWAVE

*Inert Boundary Wave Soldering
Retrofit System*



- *Over 80% dross reduction*
- *Reduced equipment maintenance*
- *Reduced flux consumption*
- *Defect reduction, shiny joints, wider process window*
- *Open system - hood-free, no curtains*
- *300 scfh or 8 Nm³/h N₂ per wave*
- *10 PPM O₂ at board*
- *Universal system fits all brands*
- *No capital required - a leased system*
- *Test in your plant before acquiring*



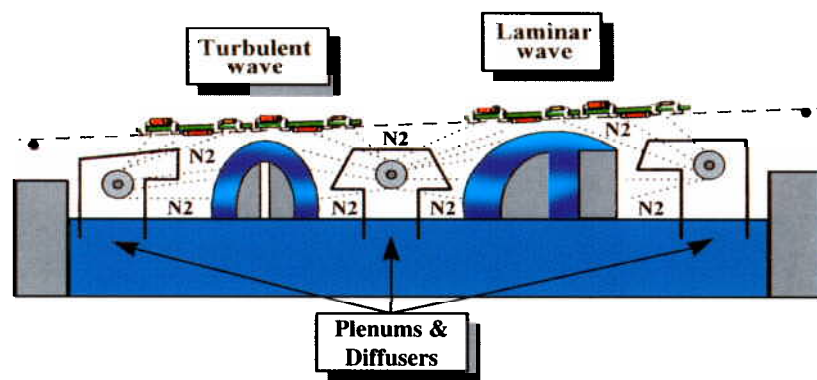
The Alternative to Expensive or Inefficient Nitrogen Systems

Nitrogen usage in PCB assembly continues to increase as assemblers realize the value of inert soldering. In wave soldering, nitrogen eliminates oxidation and increases the surface tension on the solder material. Introducing a non-oxidizing atmosphere leads naturally to benefits that make this an extremely cost-effective process.

Despite the savings, many potential users have not adopted a nitrogen process in wave soldering. One reason is the substantial capital investment required for a 'nitrogen-capable' upgrade. Another is the failure of existing nitrogen equipment designs to meet the needs of many soldering operations. In addition, potential users naturally wanted the opportunity to test a retrofit kit utilizing new technology before committing to a major capital purchase. No manufacturer, however, has offered this opportunity until now.

ALIX™ IN₂ERTWAVE Retrofit System

With the needs of wave soldering operations in mind, Air Liquide, the world's largest industrial gas company, has drawn on many years of nitrogen inerting experience to develop the IN₂ERTWAVE system. For the first time, optimized inerting technology for wave soldering inerting is available in a retrofit system for all brands of machines. The versatile IN₂ERTWAVE system can be installed on any brand of wave soldering machine without any machine modifications or nozzle changes. The installation is simple and is performed typically in 2 hours. This system makes it affordable and practical to convert a first machine or additional wave soldering machines to a nitrogen process.



A Simple Design

The IN₂ERTWAVE system inertes only where it is actually required—at the printed circuit board / solder wave interface. The system operates in an open environment and requires no troublesome hood or curtains. This patented design virtually eliminates mechanical limitations and maintenance issues. The nitrogen, which is regulated from a gas panel, is injected and directed at the wave through diffusers and special slits in the titanium plenums. This method gives the gas velocity and optimizes injection. In addition, it prevents flux vapors from clogging the nitrogen diffusers, an important benefit that virtually eliminates maintenance requirements. A nitrogen flow of less than 300 scfh (8 Nm³/h) per wave results in less than 10 PPM oxygen (O₂) content at the board. It allows you to take advantage of all the benefits of inert wave soldering with the lowest cost of ownership.

A Convenient, Affordable Leasing Package

Simple technology packaged in a high-efficiency design makes the IN₂ERTWAVE system extremely affordable. And by leasing it as part of a monthly service fee, you eliminate capital investment, altogether. The service includes system customization to your specific application, installation, start-up, maintenance, technical support and training by experienced Air Liquide personnel.

Test It in Your Plant

Another important feature of the leasing package is that Air Liquide fully supports the IN₂ERTWAVE system and ensures its performance. The IN₂ERTWAVE trial program allows you to test and evaluate the benefits of nitrogen inerting in your facility. Try the system risk-free on your equipment for up to 30 days. And to facilitate your evaluation, Air Liquide offers free customized cost-of-ownership modeling and counseling on inert soldering and the IN₂ERTWAVE system. It has never been so easy to make the transition to advanced nitrogen inerting technology.

For more information on the ALIX™ IN₂ERTWAVE trial program and how this patented, affordable system can improve your process and reduce costs, please contact your local Air Liquide representative. You may also call us at (800) 820-2522 or email us at EPA.mail@airliquide.com for more information.



Air Liquide America Corporation - 2700 Post Oak Boulevard, Suite 1800 - Houston, Texas 77056-8229
Air Liquide Canada Inc. - 1250 Blvd. Rene-Levesque West, Suite 1700 - Montréal, Quebec, H3B 5E6
On-Line: www.airliquide.com

Note: This brochure is intended for general information purposes only and is not intended as a representation or warranty of any kind, or as a statement of any terms or conditions of sales. The information herein is believed to be correct, but is not warranted for correctness or completeness, or for applicability to any particular customer or situation.

ALIX™ is a registered trademark of L'Air Liquide S.A.; ALIX™ IN₂ERTWAVE is a patented technology of L'Air Liquide S.A.; © 1998, Air Liquide America Corporation.

EPA0030998.5K