## Nitrogen application in electronic manufacturing [nitrogen generator]



In the welding process, engineers in the electronic manufacturing industry use nitrogen. In many cases, nitrogen is ordered from external suppliers and transported to the construction site; However, electronic manufacturing enterprises should consider using on-site nitrogen generator (nitrogen generator). These innovative nitrogen generators are more economical than traditional purchase and delivery methods; In addition, they often increase productivity while improving overall safety in the workplace.

The on-site nitrogen generator has become a manufacturer of electronic products, greatly reducing costs and improving convenience

Through on-site nitrogen production and elimination, the demand for gas transportation is saved, and considerable cost savings are brought to electronic product manufacturers. Since nitrogen can be produced on site through nitrogen generator, it is no longer necessary to transport gas in the form of bulk liquid or steel cylinder. In addition, staff no longer need to worry about running out of gas, checking gas cylinders or cross checking delivery lists, which saves a lot of manpower and energy.

Benefits of on-site production of nitrogen in electronic manufacturing industry

Electronic manufacturing companies using nitrogen wave soldering or selective welding technology can benefit greatly from on-site nitrogen generators. The on-site generator is both economical and convenient.

Recommended systems for limiting hazardous substances (RoHS) and surface mount technology (SMT)

The following three systems are ideal for use with RoHS and SMT:

Nitrogen pressure swing adsorption generator

On site pressure swing adsorption (PSA) nitrogen generator physically separates molecules. PSA generator uses ordinary air to separate nitrogen molecules and oxygen molecules.

Nitrogen membrane system

This adaptable system provides convenience and reliability. When the nitrogen membrane system reaches the destination, our technicians will put it online. The nitrogen membrane system has a wide range of uses, enabling us to match the nitrogen membrane generator to meet the compression equipment specifications of each customer.

On site nitrogen filling station is more economical than purchasing bottled gas

No matter what kind of nitrogen generator system you have, we can easily equip the cylinder with a nitrogen filling station; Therefore, there is no need to buy bottled natural gas and wait for its delivery. The nitrogen filling system ensures that you are always ready for the gas you need.

Nitrogen semiconductor

For many years, semiconductor manufacturers and component level manufacturers have been using nitrogen inerting. The nitrogen film generator allows a larger process window while providing minimum oxygen safety.

Nitrogen inert gas generation for selective welding

Many solder applications use high purity nitrogen to reduce surface tension and dross on solder cans: This allows clean disconnection from solder locations. The purity obtained from on-site nitrogen production is usually between 99.99% and 99.9995%. This high purity nitrogen is also ideal for lead-free welding applications. The nitrogen filling station conveniently provides the engineers with the nitrogen they need, excluding transportation costs and shortages.

When controllable nitrogen atmosphere is used for wave soldering, reflow soldering, rework and selective applications, engineers will benefit from a larger process field. In addition, nitrogen helps to increase the bond strength when the solder completes surface wetting.

The electronic manufacturing industry can benefit a lot from on-site nitrogen production

Compared with the purchase of gas cylinders or liquefied gases, nitrogen production has many advantages, including:

- 1. Ease of use no special skills required
- 2. Added safety measures no need to move heavy-duty high-pressure cylinders
- 3. Low cost don't worry about rising gas prices no delivery fees or rental fees minimize the cost per cubic meter
- 4. High reliability and stability
- 5. Low maintenance cost
- 6. The installation is convenient and the commissioning is completed in one day

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