NitroPurge™

Nitrogen Purging System

Part of ECI's Integrated Process Control System

Improper purging of coils can produce leaks. And leaks mean lost time and money in scrap and product rework. Nitro-Purge[™] helps lower the cost of producing a quality coil by guaranteeing proper Nitrogen purge—each time, every time. NitroPurge[™] guarantees each coil is correctly purged with Nitrogen prior to brazing. A computer-controlled sequence of operation eliminates human error—using wrong fixtures, forgetting to hook up Nitrogen, applying incorrect flow-rates, or short-cycling purge times.



Hardware Components:

- Computer with CRT monitor (flat screen or touchscreen also available) in industrial enclosure
- Barcode reader
- · Valve board assembly
- Nitrogen flow meter

Sequence of Operations:

- Operator scans model number
- Computer retrieves test procedure by model (fixture, flow rate, purge time)
- Computer executes test procedure
- Prompts operator to pick up fixture
- Verifies correct fixture
- Verifies fixture is connected to coil (using ground clip)
- Begins nitrogen purge
- Monitors nitrogen flow rate
- Records nitrogen purge data to database by serial number
- Records pass/fail status to PackOut[™] database—prohibits cycling at subsequent IPCS modules until passed (for example, Pressure-Check[™] or LeakProof[™])

Capabilities:

- Controls flow rate of nitrogen by model
- · Guarantees correct fixture is used for each coil
- Verifies each coil is purged with Nitrogen—at correct flow rate and specified time
- Confirms each fixture is attached to the coil prior to purge sequence using ground clip
- Prohibits autobrazer from cycling if unit has failed NitroPurge™ cycle (when used in conjunction with ECI autobrazer interface)
- Prohibits coils from cycling at individual brazer stations (when used in conjunction with ECI Trace-a-Leak[™] system)