

TAMURA HC SERIES

Lead-Free Wave Soldering Systems

Product Overview

The TAMURA HC Series is a family of high-performance wave soldering systems designed for lead-free electronics manufacturing. The series incorporates Tamura's proprietary technologies to improve soldering quality, reduce dross generation, minimize maintenance requirements, and support high-reliability production environments.

The HC Series is available in both nitrogen and atmospheric configurations to address different production requirements and cost targets.

HC Series N2 Wave Soldering



Special Features



HC Series N2 Wave Soldering Description:

Flat Linear Induction Pump (FLIP) solder bath : True Lead-free enabler : Less maintenance

Tamura Wave Advantages:

- No moving parts inside solder bath minimizes oxides in solder bath
- 40% less solder dross generated than conventional motor driven solder bath
- Smaller solder bath: requires 30% less initial solder to operate
- Enhanced pre-heating capability with hot air blower
- Solder bath drain heater easily drains solder completely for fast conversion to Lead-free operation
- Solder bath up/down, in/out operation motorized.

Key Features

Lead-Free Optimized Design

- Fully compatible with lead-free soldering processes.
- High-precision PCB preheating system.
- Stable solder wave generation for improved joint quality.
- Reduced solder oxidation and dross formation.

FLIP Technology (Flat Linear Induction Pump)

Tamura's proprietary FLIP solder bath technology offers:

- No moving mechanical parts inside the solder pot.
- Reduced solder oxidation.
- Lower maintenance requirements.
- Extended solder bath lifetime.
- Improved wave stability and solder joint consistency.

Intelligent Process Control

- Centralized touch-panel operation.
 - Automatic preheating temperature adjustment.
 - Optional remote secondary nozzle adjustment via laptop PC.
 - Optional monitoring systems and fully enclosed hood configurations.
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Product Configurations

HC Series (Nitrogen Models)

Examples:

- HC33-32LF2
- HC60-39NF
- HC25-33HNF
- HC40-44HNF

Applications:

- Automotive electronics
- Power electronics
- High-reliability assemblies
- Semiconductor packaging

Benefits:

- Minimum oxidation
- Lower dross generation
- Superior solder wetting
- High process repeatability