

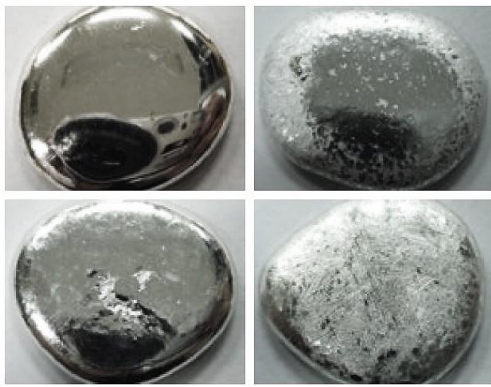
SN100CL: NIHON SUPERIOR LEAD-FREE SOLDER

The **SN100CL** nominal composition is 99.3% Tin, 0.6% Copper and a balance of Nickel & other proprietary elements. The patented addition of nickel to the tin-copper eutectic offers the following advantages:

- Superior fluidity: Liquidus @ 227°C (441°F) SMT pads are very uniform and flat.
- Excellent shelf life.
- Minimal attack on copper pads, holes.
- Compatible with ALL electronic assembly solders and fluxes.
- Eutectic solder/Superior cosmetics.
- Performs well as a final finish for circuit features not assembly-soldered.
- Complies with IPC J-STD-006
- **100% RoHS-compliant**

SN100C / SAC305 Appearance

Top Row: Fast Cool



SN100C

SAC305

Bottom Row: Slow cool

CIRCUIT CONNECT, INC.
4 State Street, Nashua NH 03063

Circuit Connect
I N C O R P O R A T E D

= S U P E R I O R =
LEAD-FREE

**HOT AIR
SOLDER
LEVELING**

A SERVICE FOR PCB FABRICATORS

Melanie Hunt

TEL: (603) 318-3078

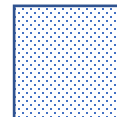
FAX: (603) 880-7975



eMail: Melanieh@circuit-connect.com

Web: www.Circuit-Connect.com

CIRCUIT CONNECT, INC.
4 State Street, Nashua NH 03063



HORIZONTAL SOLDER LEVELING*



Above: The UNICOTE HSL 175

Our Advantage in Lead Free

Processing: Our UNICOTE HSL 175

addresses concerns in the PWB industry of multiple thermal excursions and uncontrolled temperatures by providing a system that controls the temperature profile of the entire leveling process.

Process Capabilities by Panel

FEATURE	STANDARD	SPECIAL
• RIGID COMPOSITE LAMINATES		
WIDTH X LENGTH	18" x 24"	24" x 60"
THICKNESS	≥ 0.031"	< 0.031" – 0.004"
• RIGID-FLEX		
WIDTH X LENGTH	18" x 24"	24" x 60"
THICKNESS	≥ 0.031"	< 0.031" – 0.004"
• FLEX		
WIDTH X LENGTH	24" x 60"	24" x > 60"
THICKNESS	0.004"	n/a

* <http://www.magazines007.com/pdf/HSL-175.pdf>

The Quality Advantage:

The higher process temperatures and reduced surface tension of lead-free solder contribute to improved SMD pad quality. Molten solder flows readily over the pad surface improving the distribution of lead-free solder on the pad surface over that of leaded solder.

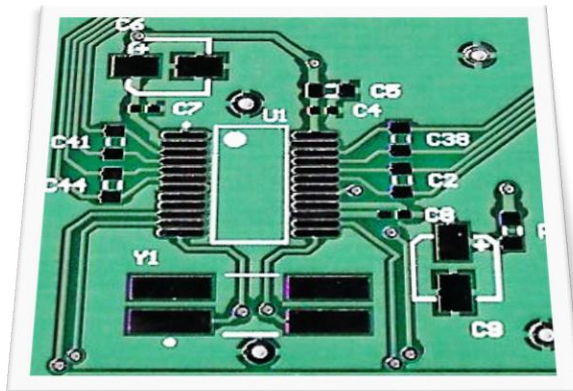
▶ The typical solder thickness on the most critical feature of a SMT board is controlled within 200 to 400 micro inches with 3 sigma standard deviation ◀

...because it solders so well

"HASL (hot air solder level) coating has been one of the most robust finishes for many years... because it solders so well."

– Jim Hall A Lean Six-Sigma Master Blackbelt, Jim is a pioneer in the science of reflow.

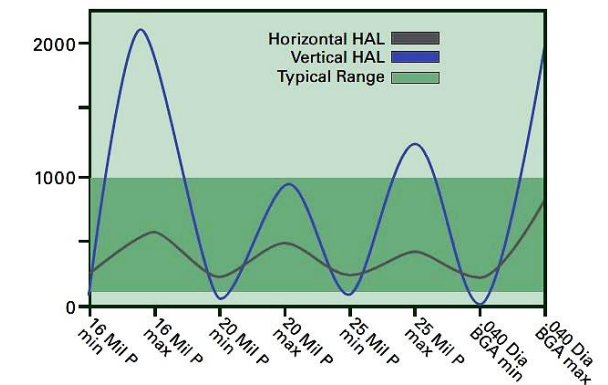
<http://www.circuitinsight.com/programs/52168.html>



Compare: Horizontal vs Vertical

When dealing with identical SMD pad configurations with a mean solder thickness of 200-300 millionths of an inch, the Unicote® system yields results with a typical standard deviation of only 50-60 millionths. Compare this to vertical processes that have standard deviations well over 200 millionths in the same thickness range:

Horizontal Vs Vertical HAL Capability*



When your customer demands Lead-Free, Hot Air-Leveled Solder, call us:

- Same-Day and 1-Day turns
- Starting at \$10/panel + freight
- IPC-certified inspection staff
- ISO-9001/ISO-14001 facility
- Terms and Conditions apply

Remember:

**Nothing Solders...
...Like Solder!**