

HAL5224 and Retrofit Kits for HAL5124 and HAL5224

With the increasing use by the PCB Industry of lead free solders in mass production, **ARGUS** is pleased to inform our customers that our lead free compatible hot air leveler unit, Model HAL5224, is available. Also available for our existing hot air leveler customers are new retrofit kits for Model HAL5124 as well as for HAL5224. These retrofit kits are based on tests done on the existing **ARGUS** HAL5124 models at Instrumatic Inc, Cleveland, OH; Monitrol Center Inc., Elk Grove Village, IL and Malmo Monsterkort AB, Sweden.

The two widely used lead free solder alloys tested on the ARGUS retrofitted machines are:

1. Sn/Cu with nominal composition of 99.3% Sn, 0.6% Cu and 0.1% of other inhibitors and proprietary components.
2. SAC alloy with nominal composition of 96.5% Sn, 3.1% Ag and 0.5% Cu.

All **ARGUS** HAL equipment is built from Type 316 stainless steel. This material is stable for erosion of the above alloys.

Operating temperature range was from 255°C up to 280°C with the dwell time from 4 seconds up to 6.5 seconds. This test shows acceptable results with full solder thickness control and solderability test, as well as consistent uniformity and flatness on the pads as was previously designed and confirmed on our units. The test was done by using standard chemistry on currently used precleaners and fluxing applicators.

In order to decide which retrofit kit you need, it is necessary for you to contact the **ARGUS** service department to determine what equipment must be added to your existing unit; it can be as simple as new temperature control cards, extra heat capacity option, or even a new solder tank.

We are continually in contact with major solder alloy suppliers to assist you in obtaining the proper materials for lead free HAL application and to help you with the lead free HAL process.

For more information on Lead Free HAL process, contact the **ARGUS service department.**

You can also check out matrixusa.us for more information on materials and chemistry.