



**APPLICATION:**

The selective soldering process is well suited to soldering the vast majority of through hole components to PCBs, however there are certain applications that are difficult to solder without creating a bridge.

A few examples of these conditions are when soldering multi-pin fine pitch connectors with lead spacing less than .025” (.4mm) the tendency is to bridge between the pins. This happens primarily over the ground plane or when exiting the last few rows of pins. ACE has found that with a controlled directional force of Nitrogen impinging directly at the trailing edge of the solder wave the excess solder is forced back into the wave leaving the pins soldered but without bridging.

Recessed solder joints where the solder wave is restricted in movement prohibiting natural solder peel off also benefits with a blast of Nitrogen forcing excess solder back into the wave.

The **KNPOJ** Nitrogen peel-off jet was developed by ACE Engineering as the tool to provide just the right amount of Nitrogen at just the right time to mitigate solder bridging.

**Preliminary Specifications:**

**DESCRIPTION:**

The **KNPOJ** is a Nitrogen jet that provides a blast or continuous stream of Nitrogen aimed at the trailing edge of the traveling solder wave to remove bridges. This option is available on all KISS selective soldering machines. The jet can be rotated in any position around the solder wave to achieve the best de-bridging results.

Operation of the jet is through the KISSware programming where the jet may be activated or deactivated to millisecond accuracy.

Jet tips are interchangeable to match the nozzle size with a full set of jet tips to match the array of “Bullet Nozzles” are included with this option.

**SPECIFICATIONS:**

**Machine used on:**

- All KISS-102, KISS-103 and 104 models

**Jet tip sizes:**

- 3mm
- 6mm
- 9mm
- 12mm
- 18mm
- 25mm

**Nitrogen consumption:**

Minimal usage when jetting small nozzles up to 50 CFH for continuous stream 25mm nozzles

