



July 26, 2019 Nippon Avionics Co., Ltd. http://www.avio.co.jp/english/

Nippon Avionics releases high performance general purpose type "Auto seam sealer Model NAW-6000" which contributes to improvement of production yield by top level lid mounting accuracy!

Nippon Avionics Co., Ltd. (Headquarters: Shinagawa-ku, Tokyo. President: Masato Takeuchi) who is the leading company for full automatic seam sealer for small metal packages, released a seam sealer model NAW-6000 with high precision lid mounting function suitable for wide range of applications from ultra small metal package represented by crystal devices to large metal package such as mirror device or imaging device, based on its seam sealing expertise.



Seam sealing in process



[NAW-6000]

■ Features

In recent years, various types of devices are increasing due to rapid development of information equipment or progress of IoT, and high accuracy and uniform quality are required in the manufacturing processes of those devices. This machine is the first model for Avio adding auto lid mounting function to the conventional general purpose seam sealing machine. It enables sealing of various packages from small to large in high accuracy. Furthermore, it is applicable not only to the conventional flat type lid for crystal devices but also cap type lid or lid with window for mirror devices or imaging devices. Furthermore, by realization of high speed sealing, it contributes not only to quality improvement but also to productivity improvement and cost reduction by reduced working manhours.



1. Lid mounting accuracy, top level in the industry, realizing considerable reduction of reject rate.

Dedicated recognition cameras are arranged for lid and package, respectively, and misalignment of lid can be reduced by realization of world top level lid mounting accuracy. Example) Work size of less than $\Box 25$ mm, with mounting accuracy of ± 0.035 mm.

2. Productivity improvement is realized by high speed sealing

Two sides, in parallel, of a package are sealed at 10mm/sec. speed for improvement of productivity.

Example) Sealing of □5mm package in approximately 5.5 sec.

3. It can handle various package sizes and lid shapes.

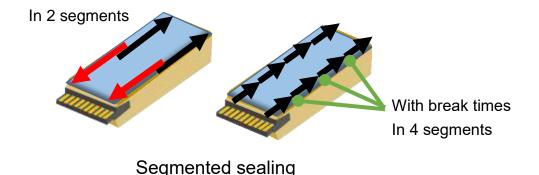
One machine can handle sealing of packages from $\square 2$ mm to $\square 150$ mm.

Furthermore, flat lids, cap lids and lids with window can be accommodated.

4. Free programming reduces work damage and improves welding quality.

Avio unique power supply dedicated for seam sealing, which is beyond the concept of generally accepted fixed frequency approach, enables discretional setting of wave height value and time. As a result, stress of the package can be minimized and cracks or warpage can be reduced. Furthermore, because sealing is achieved with minimally required heat, generation of outgas is suppressed reducing the impact to the internal devices.

On top of that, weld start position and end position can be designated by coordinates. In the case of large packages where large heat is accumulated, segmented sealing helps to minimize stress and suppress cracks.



5. Rich customization option

- ·Process capacity and arrangement of annealing* chamber can be selected based on the production volume. As a result, seam welding wait time can be reduced resulting in higher production efficiency.
- *Annealing effect: By heating the package or the lid in vacuum, adsorbed moisture, gas inside the adhesive or other organic substance can be eliminated, which helps to maintain the device characteristic after the sealing.



·Particle suppression

By addition of a HEPA filter, impact of dust is suppressed to a minimum level.

It is effective to acceleration sensor, mirror device and imaging device.

·Lid supply method

In addition to tray supply (standard), lid cassette or parts feeder method can be selected.

For Further Information, Please Contact;

Nippon Avionics Co., Ltd.

Overseas Sales Department

Industrial Electronic Products Sales Division

4475, Ikonobe-cho, Tsuzuki-ku, Yokohama-shi, Kanagawa-ken 224-0053, Japan

Phone: +81-45-930-3596

E-mail: Product-mj@ml.avio.co.jp

Consultation regarding seam sealing

Please contact us for sample sealing, or consult with us if you have any problem regarding product quality or tact time in seam sealing.