CASE STUDY

intertronics
adhesives, coatings, sealants & equipment
for your manufacturing and technology applications

THINKY ARV-310 mixer
Industrial non-contact “planetary” vacuum mixer

Our customer

Compound semiconductor manufacturer

Customer benefits

- Consistently homogenised compound
- Process times reduced from hours to minutes
- Easy set up

Degassing times reduced by up to 90%

One of the final processes in the packaging of compound semiconductors is encapsulation with a multi-part resin, which requires metering, mixing and degassing before application and then heat curing. For one such manufacturer of these components, the process of preparing the compounds by hand was causing an inconsistent, labour intensive final product.

The original production process involved mixing materials with a spatula and then placing the resulting compound within a vacuum degassing machine to remove all air traces. This process, which required constant supervision, could take up to several hours to degas the high viscosity resin, adding time and reducing staff efficiency.

Seeking a more efficient method of mixing their compounds, the manufacturer in question contacted THINKY and arranged a demonstration of their **ARV-310** unit. The chosen mixer, which uses a non-contact “planetary” mixing method, processes all engineering compounds regardless of viscosity, making it suitable for the manufacturer’s requirements. With the integral vacuum capability of the ARV-310 mixing and degassing machine, the user is able to simultaneously mix and degas up to 310g of material in seconds to minutes, removing any micro-bubbles to a high level.

By running the mixer through a series of tests the team observed a significant improvement in mixing uniformity as worker-related variation was eliminated through a consistent, automated process. They also realised time efficiencies of up to 90% as mixing and degassing processes could take place simultaneously, reducing production time from hours to minutes and allowing staff to attend to other tasks within the factory.

THINKY ARV-310 Mixing and Vacuum Degassing Machine

- Fast mixing
- Degas and remove bubbles at the same time
- Mix in your product container
- Non-invasive
- From low viscosity to semi-solid materials
- Dry particle mixing
- Degasses filled syringes
- No cleaning between batches
- Consistent quality with all digital controls
- Multi-step mixing
- Hands-free processing
- CE marked

Applications include: Formulating and mixing a multitude of different products including LED phosphors, adhesives, sealants, moulding compounds, lubricants, slurries, coatings, inks, paints, abrasives, bio-chemicals, cements, medical compounds, cosmetics/personal care materials, detergents, conductive pastes, dental materials, foods, construction materials or any other materials which are hard-to-mix, hard-to-degas, or hard-to-wet.

Contact us for more information on our mixing and degassing machines
t 01865 842842
e info@intertronics.co.uk
www.intertronics.co.uk

intertronics
Station Field Industrial Estate
Banbury Road, Kidlington
Oxfordshire, England OX5 1JD