

Integration: Robotic Dispensing with Vision System and LED UV Light Curing



Description



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This is an example of our **archytas series** robot integration capability. The robotic dispensing system and UV light curing offers a combined material application and curing process in one compact machine. Comprising a volumetric [preeflow eco-PEN](#) mounted on a [Fisnar F4000 ADVANCE robot](#) with [CCD vision system](#), and a [Phoseon LED UV curing flood lamp](#) on a linear drive, this automated system applies UV-curable adhesive, sealant, coating or other material with a high level of accuracy and precision. The UV curing flood lamp is then automatically actuated. and it passes over the parts, effecting a complete and fast cure of the material.

Integrated controls allow operation from the safety of outside the enclosure, while the enclosure itself offers smoked glass for UV light safety, and a dead switch which activates if the doors are opened during operation.

In this instance, our customer's material is packaged in 310ml cartridges, so the preeflow eco-PEN is fed from a 310ml cartridge retainer, but this system could easily be customised to support material in syringes, cartridges, or bulk packaging.

Features & Benefits



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High level of dispensing accuracy and precision: +/- 1%, >99% of the time,

resulting in less material waste and fewer rejects

- CCD vision-based programming and fiducial auto-adjustment system
- Curing material on the machine immediately after application reduces work in progress
- Complete application and curing process without additional part handling
- Working area available up to 7m x 7m

Applications

Dispensing and LED UV light curing of:

- Coatings

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- Encapsulants
- Potting compounds
- Adhesives
- Gaskets
- Sealants

Ordering Information

This combined robotic dispensing and UV curing system is an example of our [**archytas series**](#) [**of robot integrations**](#). If you are interested in a similar system, [**get in touch with our Technical Team**](#) to discuss your requirements.

Supplied by:

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