Case Study: Manufacturer Adapts High Precision Adhesive Dispensing System for Automated Production with Quality Results

Head lamp and rear lamp adhesive bonding applications continue to evolve and Nordson SEALANT EQUIPMENT continues to work with material suppliers and lighting manufacturers to provide high precision dispensing systems for these applications. Today’s manufacturing challenges are increasingly large assemblies and a wide variety of designs in polycarbonate and glass lamp bonding. This is where precision dispensing and automation is required for high production and quality bonding.

Lamp dispensing applications include:
- Plastic Lens to Housing Reflector bonding
- Glass Lens to Metal Reflector bonding
- Sealing Exhaust Holes
- Halogen Burner bonding
- Halogen Insertion Lamp Potting

Materials used in lamp bonding include:
- Two-part polyurethanes
- Two-part silicones
- Hot melt adhesives
- UV cure epoxies

Material supplier partners:
- Dow Corning
- Henkel Loctite
Dispensing Systems for 2-Part Adhesives

Many two-part adhesives have an accelerator to improve the speed of the overall process. This requires mixing the two components at a specific ratio. Nordson SEALANT EQUIPMENT provides meter mix dispensing systems capable of laying on-ratio and repeatable precision beads of adhesive.

The two-part adhesive dispensing process is the most popular choice for lamp bonding and has been adopted by many companies globally for many years. The future possibilities are endless; any application where precision bead dispensing exists is an opportunity for Nordson SEALANT EQUIPMENT to help a manufacturer improve production time and quality.

Nordson SEALANT EQUIPMENT offers a variety of metering systems to fit the manufacturer’s dispensing application. Here is one example for lamp bonding:

- Servo-Flo 801 meter system
- Two-part mix-dispense valve, mixers
- Electronic control panel with HMI
- Material supply pumps or tanks
- Hose sets for supply and dispense

Nordson SEALANT EQUIPMENT: Manufacturers of precision meter-mix dispense systems and fluid dispense valves for processing 1- and 2-part adhesives, sealants and lubricating materials such as epoxy, polyurethane, silicone, acrylic, and more in manual, automated and robotic metering, mixing and dispensing applications such as bonding, encapsulating, gasketing, molding, potting and sealing for small to Fortune 500 companies since 1967 and is ISO 9001:2008 certified.

Nordson Corporation (Nasdaq: NDSN) is one of the world’s leading producers of precision dispensing equipment that applies adhesives, sealants, coatings and other materials to a broad range of consumer and industrial products during manufacturing operations. The company also manufactures equipment used in the testing and inspection of electronic components as well as technology-based systems for curing and surface treatment processes. Headquartered in Westlake, Ohio, Nordson has direct operations and sales support offices in more than 30 countries.