Nordson Systems Drive Better Process Control for Automotive Manufacturer

After extensive equipment run off between competitive dispensing systems, Nordson systems were chosen for reliability and control.

The automotive manufacturing industry is one of the most demanding environments around. With stringent quality and cost control standards to meet, automotive manufacturers are constantly seeking ways to improve their operations.

One big-three automotive manufacturer was seeking better repeatability, cost-efficiency and process control on their power train line. This particular power train division is responsible for producing engines, transmissions and other components that propel the car forward.

The manufacturer wanted to replace adhesive and sealant systems that were not performing – instead offering poor repeatability and inconsistent application. After considering several options, and conducting an equipment “run off” among competitive adhesive and sealant dispensing vendors, this manufacturer decided that the Nordson Pro-Meter® S system with Process Sentry™ control and two dual Rhino® pumps performed best for their specific power train application needs.

Applications include form-in-place gasket technology for front covers, rear oil seals, oil pans, axle cover plates and rear drive units. The goal of the application is to apply a sealant to these components in order to create a permanent, leak-free gasket.

The Pro-Meter S combines shot meter technology with proportional control to provide precise, repeatable deposition and efficient material usage. The material cylinder of the Pro-Meter S is filled by positive pressure from a Nordson Rhino bulk unloader to ensure positive material refill and eliminate “empty dispenses.” The first-in, first-out material flow eliminates dead spaces for material to pack out. In turn, the on/off gun dispenses the material with consistent bead profiles regardless of changing robot speeds.

In combination with the Pro-Meter S System, dual Rhino pumps provide superior flow properties and ease-of-operation in dispensing high-viscosity adhesive and sealant materials. The Rhino pump’s modular design allows for flexibility to accommodate changes in application requirements. Air motors, pumps and follower plates are interchangeable to allow easy system configuration.

The repeatability offered by the Pro-Meter S system played a key role in Nordson winning this large account. In addition, Nordson’s global presence in more than 30 countries was also a factor, as it aligned with the footprint of this major automotive player.

To date, Nordson has installed more than 50 systems in 12 manufacturing plants globally – including Michigan, Ohio, Mexico, Romania, Germany, the United Kingdom, Brazil and India.