

Process: Gasket sealing / dispensing application

Equipment: Robotek HSx212 Polyurethane Dispensing System



System Description:

The system is adapted for a polyurethane gasket sealing operation on a flat surface. Polyurethane is a two-component material and is produced by mixing polyol (component A) and isocyanate (component B). In polyurethane dispensing system A and B components are metered, mixed and dispensed into a groove or onto a flat surface at room temperature in Formed-in-Place-Foam-Gasket (FIPFG) process for the production of polyurethane foam gasket.

The system control is based on powerful industrial CNC unit with linear, circular, and helical interpolation. The system has an operator friendly interface with 15" TFT industrial PC of all the operating parameters. Quick programing experience for simple geometrical gasket contours such as rectangular, circular or U-formed gaskets. Also, the system has environmentally friendly recirculating cleaning system, is used with biodegradable cleaning agent. The cleaning agent is filtered and waste particles are separated. Rejuvenated cleaning agent recycled and used over and over again. No methylene chloride, no contaminated water is discharged. It is a real and proven alternative to conventional cleaning systems in terms of performance, economy and greatly improved environmental health and safety. The raw materials as well as the PUR-System are in accordance with RoHS and WEEE legislation.

Technical Data

Process material: Two component polyurethane gasket; Shape of the gasket applied surface: Flat or groove;

Forms of the gasket: Simple (standard) or complicated (not straight) contours;

Gasket size/type: height Max. 15 mm, width 30 mm/ D type;

Material of work part: Mild painted steel; stainless steel and other types of metal; Dispensing space: X=2250mm, Y=1250mm, Z=300mm (here "Z" depth or high);

Positioning accuracy (X Y Z): +/- 50 μm according to ISO9283;

Repeatability (X Y Z): +/- 50 μm according to ISO9283;

Application temperature range (UL 50): -30 ÷ +70°C; (UL50 - suitable for electrical enclosure manufacturing)

Temperature resistance (permanent): $-40 \div +100$ °C; Temperature resistance (short time): $-60 \div +160$ °C;

Water absorption: < 10%;

Colour of reacted product: Grey (RAL~7005).