



AW-LAKE
PROCESS FLOW MEASUREMENT



APPLICATION SPOTLIGHT

Accurate Dispensing of High Viscosity PVC Sealants in Automotive Production Line



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APPLICATION:

An automobile production line needed to ensure precise measurement and dosing of sealants during paint finishing operations. After auto production, sealant is applied to welding spots, tank wax to the chassis and PVC to the frame hub for better corrosion resistance.

PRODUCT SUPPLIED:

- SRZ-40 Helical Gear PD Flow Meters

CHALLENGE:

Due to high viscosity of PVC sealant and frequent changes of manipulator actions during spraying, operators used inching actions most of the time. Flow meters must have excellent repeatability and corrosion resistance to provide the necessary feedback to ensure accurate operations.

SOLUTION:

The SRZ-40 Helical Gear Positive Displacement Flow Meter met customer operation conditions, providing the following technical advantages:

- High-resolution, 26,500 pulses/gallon, and a 0.1% repeatability ensured compliance with customer metering requirements even under inching and micro flow conditions.
- Tungsten carbide alloy bearing and rotor surface hardening treatment improved flow meter corrosion resistance, extending its product service life.
- As the measurement range ratio reached as high as 1:100, the system worked in a low range segment in high viscosity conditions to greatly reduce flow meter pressure loss.
- As operation pressure could reach up to 400bar, the system adapted to a higher back pressure during start/stop. Viscosity range could reach 1,000,000cst, making it suitable for applications such as silica gel.