

# **SMART PUMPING STATIONS**

#### Precision dosing for grammage and pattern consistency

Smart Series Pumping Stations increase the adhesive delivery points of your existing melting equipment, and allow to separately control gear pumps to achieve a precise volumetric dosing. This improves adhesive grammage precision, pattern consistency and overall quality.



- Increase the number of adhesive outputs.
- Immediate Hydraulic Response. Reduce product and adhesive waste during machine ramp up and ramp down.
- Close-Loop Control. When working with Akura PF applicators and Weight Inspekt grammage control, the average grammage of each hydraulic zone in the applicator maybe controlled in close-loop with the gear pumps. As deviations in the coat-weight are detected, the system will automatically adjust the adhesive flow for the specific hydraulic zone.

Independent temperature control on each manifold. Pressure transducer port available at the input and at the outputs.

These enable a precise and constant monitoring of the adhesive working temperature and pressure.

Motor options available: AC motor (open loop), AC motor with encoder (closed loop) or servo motor for each pump

Output ports with independent filter



Featuring our SmartControl system for an intuitive and precise control of the motor, working temperature and pressure.

Main machine network communication protocols Profinet and Ethernet IP.

#### Benefits of replacing buffer tanks with pumping stations:

### REDUCE DEFECTIVE PRODUCTS

- Pumping stations increase your existing adhesive delivery points. They feature separately controlled gear pumps to achieve a precise volumetric dosing. This improves adhesive grammage precision, pattern consistency and overall application quality.
- Pumping stations guarantee an immediate hydraulic response during machine ramp up and down, ensuring that the amount of adhesive applied is correct fromt he start of the production run.

### **REDUCE ADHESIVE WASTE**

- Buffer tanks must be emptied, cleaned, and purged with every adhesive reference change, whilst pumping stations just need to be purged, there is no buffer reserve of adhesive.
- The purge process of a pumping station is pressurized, which makes it faster and more efficient than on buffer tanks, where the purge relays on gravity only.

# REDUCE ADHESIVE DEGRADATION

- Adhesive level on the buffer tank varies between the high and low level sensors. A thin layer of adhesive remains on the tank walls during this process, resulting in adhesive char.
- When cleaning the buffer tank we need to pay attention to the melting grid and the space below it, to remove all the char.

## **Technical Specifications**

Smart Pumping Station	
Pump Type	Single or dual stream
Motor Type	AC, AC with encoder or servo
Max. Pump Speed	100 rpm
Pump Size	1, 2.5, 4, 8, 15, 30, 70, 100 cc
Working Temperature	40-230°C
Supply Voltage	240 VAC
Number of Heated Zones	1
Temperature Sensors	NI 120, PT100
Working Viscosity	200,000 cps
Working Hydraulic Pressure	0-100 bar
Electrical Consumption (Pump and Manifold)	1, 2.5, 4, 8cc pump: 1000 W   15, 30cc pump: 2900W   70, 100cc pump: 4360W

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