## **Flexible Packaging**



## Graco equipment supports quality production in flexible packaging

Flexible packaging is a significant global industry. Flexible packaging is used on numerous products: bottle labels for apple juice, lidding structures for yogurt and pudding, pet food, cereal, lawn and garden products, snack foods, meats and cheeses, liquid juice packs, stand up pouches, and boil-in-a-bag products.

Advantages of flexible packaging include product appeal, good shelf exposure and packaging creativity. Stand-up pouch structures are cost-effective because they reduce the amount of packaging material required. Their light weight reduces freight costs and since they don't require much adhesive, material costs are lower as well. Typical structures that can be laminated together include plasticto-plastic film, and plastic film to foil. Plural-component adhesives are used in this lamination process.

## **Application**

Whether it's solvent-free or solvent-based material, the application for flexible packaging is the same. Mixed adhesive is supplied to a nip puddle between rollers or an adhesive pan/sump on the laminator unit. The puddle or sump holding tank is filled with adhesive. When it gets to a low level point, a sensor sends a signal to the dispense unit calling for more mixed material. When the puddle or sump holding tank is full, the sensor shuts down the dispense unit.

With flexible packaging, manufacturers achieve higher speed packaging times. Along with these faster production rates, it is critical that convertors have assurance that adhesives are mixed properly and on ratio prior to bonding the films. Adhesive failure can lead to massive scrapped product and quality control issues. Excessive down time may lead to loss of revenue.



## Graco equipment solution for flexible packaging

The Graco HFR<sup>™</sup> Metering System for flexible packaging laminating applications is designed for accurate, on-ratio dispensing. With the Graco HFR, you can reduce scrap and rework, thanks to the system's accuracy, repeatability and ratio monitoring. Ideal for low-to high-viscosity compounds, this hydraulic, fixed ratio metering system is advanced and reliable, yet affordable.

- · Provides intermittent dosing actuated from nip sensor
- Provides on-ratio mixing with accuracies +/- 1%
- · Handles higher viscosity products without heat
- Provides fixed ratio range 1:1 to 32:1
- Fixed ratio equipment can reduce operator tampering while in production
- Handles polyurethane materials