

BENEFITS OF USING AN ALL-ELECTRIC LABELING SYSTEM

Diagraph's current generation of 7000 series label printer applicators reduce downtime and save up to 25% energy costs compared to pneumatic systems. Some of the key features offered by all-electric printer applicators compared to pneumatic labeling equipment:

PNEUMATIC LABELING EQUIPMENT

VS

DIAGRAPH'S ALL-ELECTRIC LABELING EQUIPMENT

Use of compressed air:

- ✓ Leads to performance challenges associated with inconsistent air supply
- ✓ Requires managing adjustment points
- ✓ Results in inconsistent label feed and placement
- ✓ Increases maintenance and operational costs



MAINTENANCE

Brushless DC servo motor:

- ✓ Doesn't require plant air
- ✓ Retains precise control of the actuator arm
- ✓ Offers consistent, repeatable label placement
- ✓ Requires minimal maintenance and reduces downtime

Eliminates the risk of inconsistent performance with precision servo driven controls.

Vacuum venturi and needle valves:

- ✓ Inconsistently hold labels
- ✓ Lose label hold due to contamination
- ✓ Require higher tamp pressure due to high label hold



AIR SYSTEM

High RPM fan:

- ✓ Holds all label sizes evenly across label surface
- ✓ Consistently and evenly holds label to prevent edge curl
- ✓ Offers consistent label apply pressure

The electric fan creates the vacuum while allowing contaminants to pass through with no effects to the label hold and apply process.

Clutch-operated take-up system:

- ✓ Requires adjustments based on print and accuation timing
- ✓ Creates label jams, print drifts and liner breaks
- ✓ Leads to brush motors and gearbox failures



LABEL FEED

Brushless DC servo motor and automatically tensioned Kevlar belt:

- ✓ Eliminates clutch and need for adjustments
- ✓ Offers consistency of label feed and long label take-up
- ✓ Offers longevity of equipment
- ✓ Provides sensor controlled close-loop speed control

Sensor controlled logical feed system offers reliability by preventing hardware wear and failure.

- ✓ Pneumatic system requires unique tamp pad for each label size
- ✓ Requires fine tuning to locate label correctly onto the label pad
- ✓ Is more expensive



LABEL SIZES

- ✓ Single tamp pad efficiently accommodates multiple label sizes
- ✓ Does not require fine tuning

One tamp pad easily accommodates various label sizes.

- ✓ Requires adjustments for changes in speed, timing and label application
- ✓ Aging air cylinders and contamination require further adjustments
- ✓ Worn pneumatic components seize



APPLICATION SPEED

- ✓ Smart sensing technology monitors and adjusts speed and pressure with each label application
- ✓ No adjustments needed as the system ages
- ✓ Reduces failure actuation sensors

Tamp sensors, label sensors and liner sensors ensure the consistent, reliable performance of the system throughout its lifecycle.