



# BENEFITS OF USING AN ALL-ELECTRIC LABELING SYSTEM

Diagraph's current generation of 7000 series label printer applicators reduce downtime and limit the amount of skilled labor needed to operate. Some of the key features offered by all-electric printer applicators compared to other pneumatic labeling equipment include:

PNEUMATIC LABELING EQUIPMENT	VS	DIAGRAPH'S ALL-ELECTRIC LABELING EQUIPMENT
<p><b>Use of compressed air:</b></p> <ul style="list-style-type: none"> <li>Leads to performance challenges associated with inconsistent air supply</li> <li>Requires managing adjustment points</li> <li>Results in inconsistent label feed and placement</li> <li>Increases maintenance and operational costs</li> </ul>	 <p>Maintenance</p>	<p><b>Brushless DC servo motor:</b></p> <ul style="list-style-type: none"> <li>Doesn't require plant air</li> <li>Retains precise control of the actuator arm</li> <li>Offers consistent, repeatable label placement</li> <li>Requires minimal maintenance and reduces downtime</li> </ul> <p>Eliminates the risk of inconsistent performance with precision servo driven controls.</p>
<p><b>Vacuum venturi and needle valves:</b></p> <ul style="list-style-type: none"> <li>Inconsistently hold labels</li> <li>Lose label hold due to contamination</li> <li>Require higher tamp pressure due to high label hold</li> </ul>	 <p>Air System</p>	<p><b>High RPM fan:</b></p> <ul style="list-style-type: none"> <li>Holds all label sizes evenly across label surface</li> <li>Consistently and evenly holds label to prevent edge curl</li> <li>Offers consistent label apply pressure</li> </ul> <p>The electric fan creates the vacuum while allowing contaminants to pass through with no effects to the label hold and apply process.</p>
<p><b>Clutch-operated take-up system:</b></p> <ul style="list-style-type: none"> <li>Requires adjustments based on print and accuation timing</li> <li>Creates label jams, print drifts and liner breaks</li> <li>Leads to brush motors and gearbox failures</li> </ul>	 <p>Label Feed</p>	<p><b>Brushless DC servo motor and automatically tensioned Kevlar belt:</b></p> <ul style="list-style-type: none"> <li>Eliminates clutch and need for adjustments</li> <li>Offers consistent label feed and long label take-up</li> <li>Offers longevity of equipment</li> <li>Provides sensor controlled close-loop speed control</li> </ul> <p>Sensor controlled logical feed system offers reliability by preventing hardware wear and failure.</p>
<ul style="list-style-type: none"> <li>Pneumatic system requires unique tamp pad for each label size</li> <li>Requires fine tuning to locate label correctly onto the label pad</li> <li>Is more expensive</li> </ul>	 <p>Label Sizes</p>	<ul style="list-style-type: none"> <li>Single tamp pad efficiently accommodates multiple label sizes</li> <li>Does not require fine tuning</li> </ul> <p>One tamp pad easily accommodates various label sizes.</p>
<ul style="list-style-type: none"> <li>Requires adjustments for changes in speed, timing and label application</li> <li>Aging air cylinders and contamination require further adjustments</li> <li>Worn pneumatic components seize</li> </ul>	 <p>Application Speed</p>	<ul style="list-style-type: none"> <li>Smart sensing technology monitors and adjusts speed and pressure with each label application</li> <li>No adjustments needed as the system ages</li> <li>Reduces failure actuation sensors</li> </ul> <p>Tamp sensors, label sensors and liner sensors ensure the consistent, reliable performance of the system throughout its lifecycle.</p>