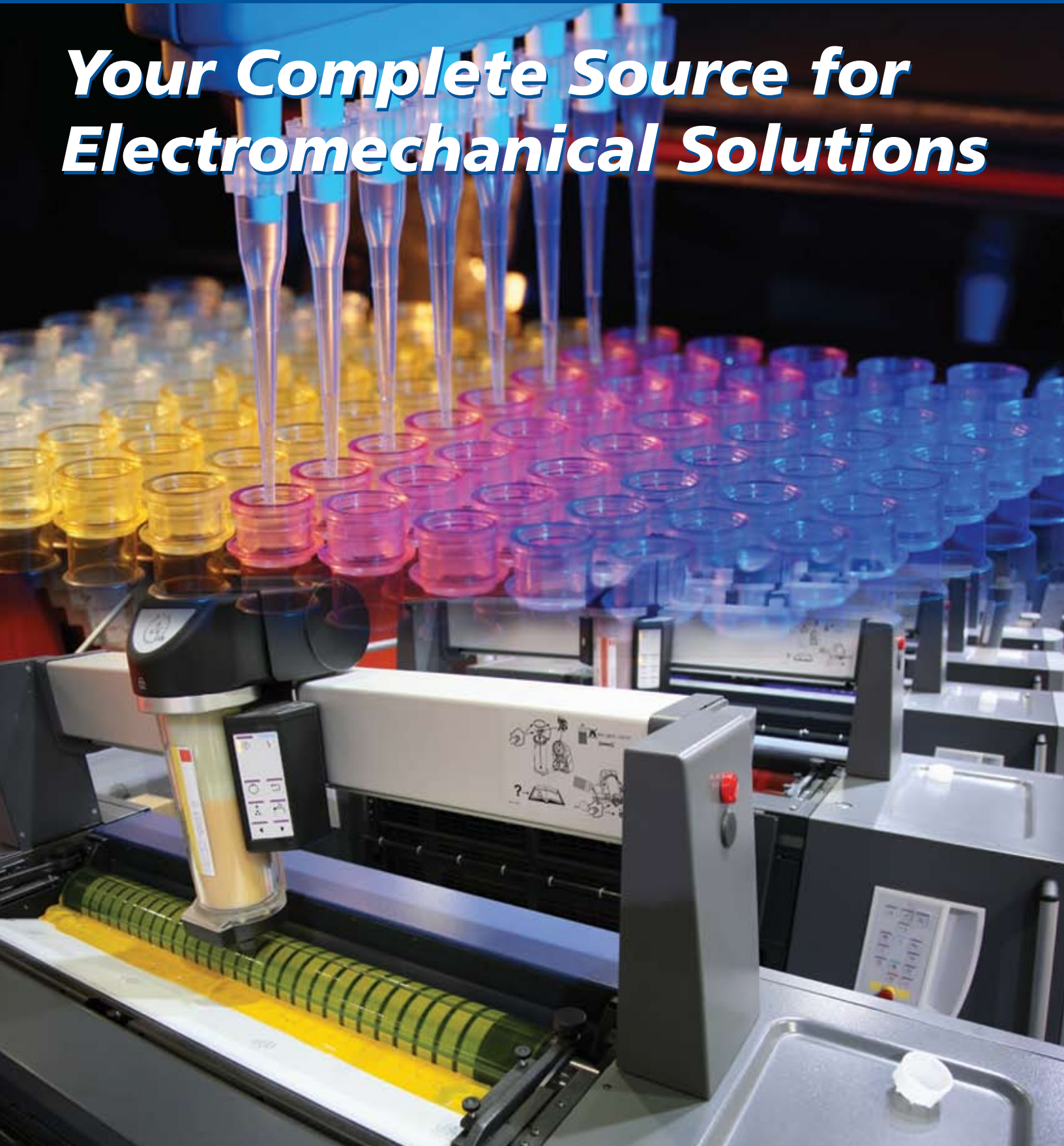


Your Complete Source for Electromechanical Solutions



Discover the Electromechanical Advantage



In today's competitive environment, many companies need to revamp their equipment or manufacturing process in order to increase system throughput, reduce overall material costs, and ease energy demands. SunSource has the electromechanical products and experienced people in place to help you make that transition from pneumatic or hydraulic to completely electromechanical. Take Advantage of our expertise in electromechanical applications, and stay ahead of your competition.

SunSource stocks over \$30 million worth of product inventory from over 300 of the most recognized manufacturers in the world today. Refer to our Core Supplier List and Application Grid below to see that SunSource can provide the **best products that best fit your application, on-time and error-free.**



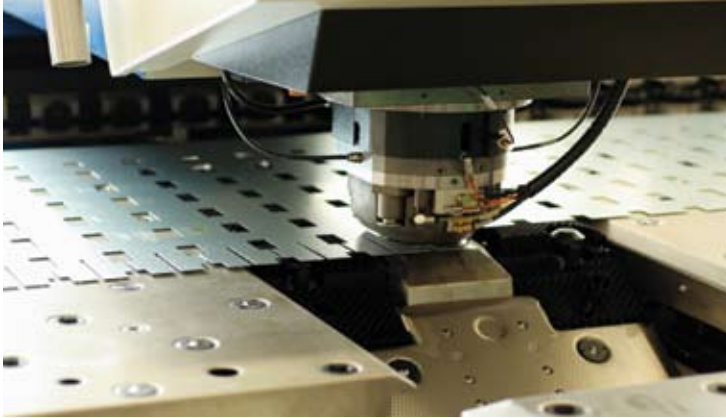
NOTE: Not all products are available in all areas.

SunSource Electromechanical Product Lines:

- ✓ **Parker Automation;** Screw, Belt and Linear Motor Actuators – both rod and rodless types
- ✓ **Nook Industries;** Screw, Belt and Electric Jack Type Actuators, – both rod and rodless types
- ✓ **Exlar;** Roller Screw Actuators, rod type
- ✓ **Yamaha Robotics;** SCARA Robots and Screw, Belt, and Linear Motor Actuators – both rod and rodless types
- ✓ **Duff Norton;** Screw and Electric Jack Actuators – rod type
- ✓ **Animatics;** OEM Dynamics Belt Actuators – rodless type
- ✓ **INA Actuators;** Screw and Belt Actuators – rodless type
- ✓ **Dyadic;** Mechatronics Electric Cylinders and Belt Actuators – both rod and rodless types

Comparison of Electromechanical Technologies

	Roller Screws	Acme Screws	Ball Screws	Belt Drives
Load Ratings	Very High	High	High	Moderate
Lifetime	Very Long	Low due to high friction	Moderate	Long with proper maintenance
Speed	Very High	Low	Moderate	Very High
Acceleration	Very High	Low	Moderate	Very High
Electronic Positioning	Easy	Moderate	Easy	Easy
Stiffness	Very High	Very High	Moderate	Moderate
Shock Loads	Very High	Very High	Moderate	Moderate
Relative Space Requirements	Minimum	Moderate	Moderate	Minimum
Friction	Low	High	Low	Low
Efficiency	>90%	approx 40%	>90%	>90%
Installation	Compatible with standard servo electronic controls	May need a motion / actuator interface	Compatible with standard servo electronic controls	Compatible with standard servo electronic controls
Maintenance	Very low	High due to poor wear characteristics	Moderate	Minimal



Linear actuators are now becoming the standard technology in many industries. Common applications include the following:

- > Positioning or adjustment for assembly, welding, etc.
- > Tensioning of roll stock, rubber, plastics, etc.
- > Opening and closing lids, doors
- > Extracting a product or mold
- > Lifting and tilting tubs, pans, etc.
- > Throttling, steering, diverting of product
- > Locking or securing
- > Compressing or crushing smaller products
- > Gantry; bi-directional transport

Many industries are migrating from hydraulic or pneumatic packages to electromechanical. Here are a few industries where electromechanical solutions can improve your process or end product.



Example:
Opening and closing oven doors
Application Type:
Low force, speed not an issue
Type of E-M actuator:
Acme screw, rod type actuator



Example:
Simple gripper or end-effector
Application Type:
Part clamping, pneumatic cylinder replacement
Type of E-M actuator:
Acme/lead screw, rod type actuator



Example:
Controlling flow in a filling or capping line
Application Type:
Product dispensing
Type of E-M actuator:
Belt drive rodless actuator with ball screw type for the vertical axis



Example:
Assembly jigs and welding cell positioning
Application Type:
High speed, precision pick and place
Type of E-M actuator:
SCARA robots or belt drive rodless type actuators



Example:
Vertical press or pressure stamping
Application Type:
Medium force, hydraulic cylinder replacement
Type of E-M actuator:
Roller screw, rod type actuator



Example:
Controlling a bottling line feed or case packing operation
Application Type:
Low force, stand alone programmable portion
Type of E-M actuator:
Mechatronics, Animatics, rod or rodless actuators

These are only a few of the many industries where electromechanical systems can offer a distinct advantage. There are many other industries where SunSource has had success providing complete electromechanical solutions:

- Woodworking
- Semiconductor
- Paper and Pulp
- Secondary Metal Processing
- Automotive Assembly
- Ag/Construction Equipment
- Truck Bodies, Buses, Motorcoach
- Defense Equipment
- Plastics Working

Contact SunSource today, and let us review your application to determine where Electromechanical Solutions can help you build a better product.

The company behind the SunSource Advantage

As a national distributor with local presence, SunSource has a unique and dominant position as a full-service resource for the industrial and mobile fluid power industry. We distribute a broad range of components, but SunSource is much more than a distributor just supplying fluid power products. We realize that our customers need more. Along with high quality products, we provide a commitment to high quality customer service and technically sound, cost-effective solutions.

The decisions you make every day affect your company's bottom line, so finding the right partners is a top priority. When your success depends on the success of others, it becomes critical to develop strong, lasting partnerships with suppliers you can trust to provide the support your company needs for a competitive advantage. Dependable, knowledgeable, efficient service helps you focus your energy on activities that help sell your product – and help your company succeed.

For more information, please contact your local SunSource representative.

SUNSOURCE BRANCH LOCATIONS

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