



Kyntronics and Rockwell Automation Introduce a New Actuation Partnership

SMART
Electro-Hydraulic Actuators (SHA)
Support Sustainable Manufacturing



Environment Friendly:

- Leak-Free, Sealed System
- Minimal fluid, no replenishment required
- No need to dispose of fluid waste

Employee Safety & Ergonomics:

- No leaks improve safety
- Quiet operation
- Smaller footprint

Cost Reduction:

- Power-on-Demand saves significant energy
- Reduced maintenance
- No hoses or filters to replace
- Improves process control and quality
- Saves machine design and installation time

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Industrial Parkway
Solon, OH 44139
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855.596.8765

Eliminate Traditional Hydraulics..



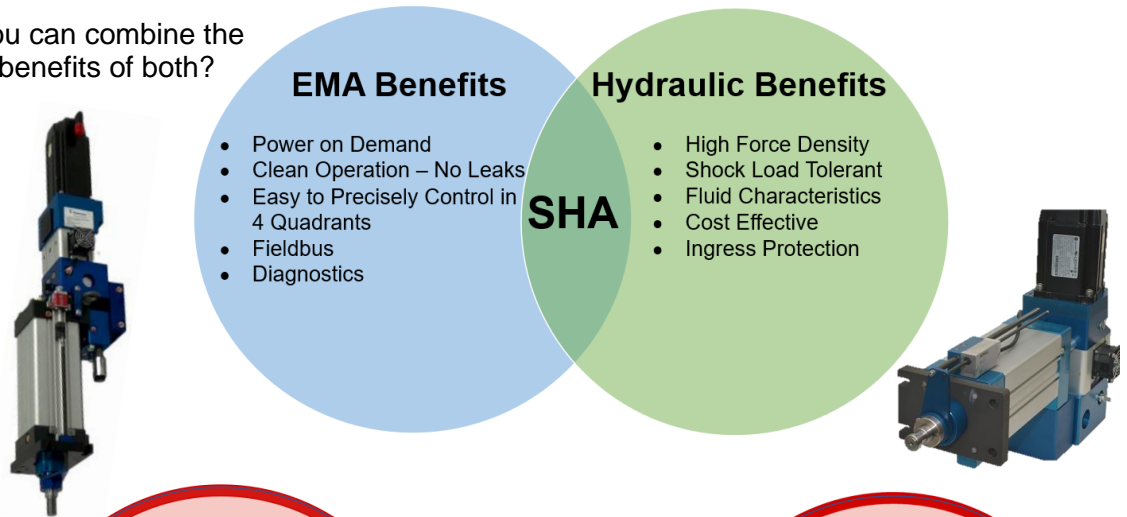
With The SMART Electro-Hydraulic Actuator



Electro-Mechanical Actuators (EMAs) vs. Hydraulics

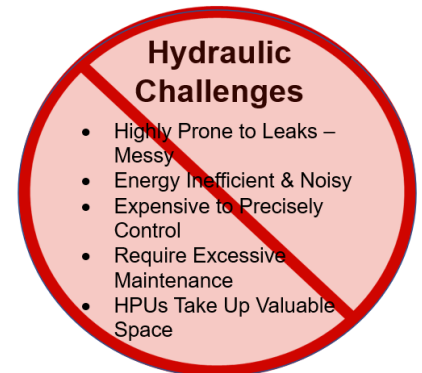
What If...

You can combine the benefits of both?



And...

eliminate the challenges of both?



Kyntronics SMART Electro-Hydraulic Actuator Accomplishes This and More



SMART Electro-Hydraulic Actuators (SHA)

The Modular SHA provides a Multitude of Flexible Configurations to Fit Your Application!

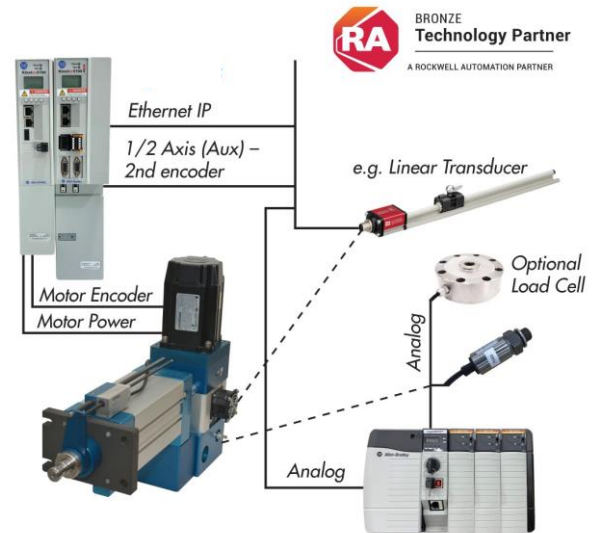


Kyntronics / Rockwell Automation Co-Developed Add-On-Instruction

AOI Features:

- 0-10vdc feedback inputs
- Hyperface linear encoder input
- Position Control
- Force Control
- Position & Force Control
- Position Control with Force & Speed Limiting
- Compound Moves
- Multi-Axis Synchronization

Connectivity Options



Kyntronics SHAs with Rockwell Automation Motors and Drives... Hundreds of Actuators Successfully Installed in a Variety of Industries

1. Appliance: Metalform Presses, 170,000 lbf (755 kN) Multi-axis Synchronized

2. Appliance: Coining and Piercing, 58,000 lbf (258 kN)

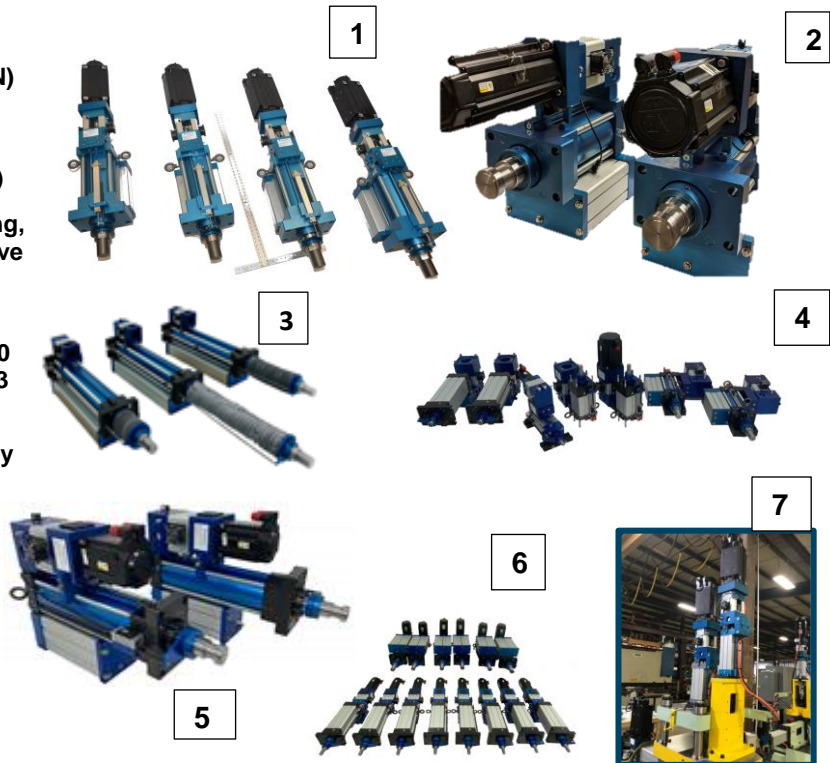
3. Automotive: Press – Welding, 84,000 lbf (374 kN), protective bellows for weld flash

4. Energy Infrastructure: Die-Set, Pressing, Testing. 1,500 lbf (6.7 kN) to 30,000 lbf (133 kN)

5. Heavy Truck Axle: Assembly Press, 45,000 lbf (200 kN)

6. HVAC: Metal Forming – 14 axis Positioning, Bending, 12,000 lbf (53 kN) to 46,000 lbf (203 kN)

7. Automotive Chassis: Bending, Clamping, Positioning. 15,000 lbf (67 kN) to 23,000 lbf (103 kN)



The Kyntronics SHA... Fusing the Power of Hydraulics with the Precision of Servo Control