Life Testing

Application Challenge: When designing life testing equipment, it is important to take into consideration the hidden costs of using hydraulic cylinders. Hydraulic systems are inherently inefficient because the main power unit continuously consumes current, regardless of whether or not the cylinder is producing any force. Additionally, since most hydraulic systems operate under high pressure, there is a risk of personal injury if a leak develops in one of the many hoses in the system. High pressure hydraulic fluid leaks represent a health and safety risk to anyone in the vicinity of the testing equipment.

In fact, this risk is so serious that Europe imposes regulations requiring companies to periodically change out all of the hoses used in the system to reduce the potential of injuries related to leaking hoses. Replacing the hoses within the system is very costly and should be considered part of the overall system cost when designing life testing equipment.

Exlar Solution: With Exlar's all-electric actuator solutions, the need for hoses and hydraulic fluid, and the inherent risk associated with a fluid leak, is eliminated. Furthermore, for companies operating in Europe this can lead to a large cost savings by eliminating time and expense of mandatory hydraulic hose replacement.

Exlar's GSX product line further simplifies the system. Utilizing an integrated servo motor and feedback device, the GSX actuator requires only a servo amplifier to operate. This fully integrated component package eliminates the need to purchase and assemble these components individually, and minimizes overall package size.

Exlar's GSX series actuators not only simplify the linear motion system and offer significantly higher energy efficiency than hydraulics, they also offer the highest available force density among electric actuator alternatives.

Exlar Products: Exlar's GSX Series actuators offer ideal solutions for life testing applications. Available in five frame sizes, the GSX actuator can be used in a variety of applications with many different space and force requirements.

Exlar GSX Series Integrated Servo Motor/ Linear Actuator

GSX Series Characteristics

- Available frame sizes: 2" GSX20, 3" GSX30, 4" GSX40, 5" GSX50, 7"GSX60
- Continuous force rating up to 12,389 pounds (55.1 kN) and max velocity of 40.0 in/sec (1,016 mm/sec)
- Expected life exceeds that of a ball screw actuator by up to 15X
- Available for applications requiring Class 1 Division 2 Hazardous Location certification

Call us Today!

Contact us toll free at 855-620-6200 to discuss your application. You may also visit www.exlar.com to locate the sales rep nearest you.

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