• Application Note •

Tension Link Dynamometers

Force Measurement When Mounting and De-Mounting Aircraft Engines

Mounting and de-mounting engines from aircraft requires exact positioning and lifting of the engine throughout the procedure. Using Intercomp tension link dynamometers at the lift pick points, force is monitored at the engine mounts to increase safety and simplify the maintenance process.

> "The force from multiple pick points can be monitored using the wireless handheld during the operation. This allows for applying a specific lifting force, and more easily de-mounting the engine from the airframe."

Monitoring loads while lifting - jet engine with four pick points

Engine slings and spreaders vary in capacity and the number of pick points, so selecting tension links depends on the weight to be lifted and the number of points. Aircraft engines can vary greatly in weight within general and commercial aviation, with some single commercial jet engines weighing up to 17,000lbs (8,500kg).

Many Pratt & Whitney or Rolls-Royce jet engines weigh just under 10,000lbs (5,000kg). With four pick points, Intercomp recommends either 4x5,000lb tension links, or a combination of 2x5000lb tension links for the forward lift, and 2x2,000lb tension links for the aft lift. With two thirds on the engine weight typically loaded on the forward lift points, measuring force is critically important for these applications.

Typical capacities used for engine lift applications range from 500lb (250kg) up to 25,000lb (12,500kg). With a wide range of tension link capacities, Intercomp can provide any combination of links and shackles that accommodate the engine sling pick points for all aircraft engine types.

Tension links with simple wireless operation and easy to read display.

TL8500™ & TL8000™ Tension Links

- Capacities Ranging from 500lbs (250kgs) to 500,000lbs (250,000kgs)
- Sized to Accommodate Industry Shackles
- Standard Wireless Radio with no External Antennas for Convenient Remote Weight Monitoring
- IP65 Protection
- Commercially Available 9-Volt Batteries Last up to 400 Hours of Continued Use

Monitor multiple tension links with hand-held wireless indicators.