



## HIGHLIGHTS

### Ameriflex Couplings

Unique diaphragm design permits high-torque density and low weight. Designed for years of dependable, low-maintenance performance.

### Amerigear Couplings

Fully-crowned gear teeth provide operational benefits including maximum load-carrying capacity with minimum size, maximum reliability and long life.

## Application Success Story



## Custom Ameriflex and Amerigear Couplings Naval Propulsion and Auxiliary Drives

### PROBLEM

A variety of custom coupling solutions were needed for use aboard the U.S. Navy's fleet of Arleigh Burke-class guided missile destroyers.

The ship's propulsion drive consists of four General Electric LM2500 gas turbines which produce 100,000 total shaft horsepower (75 MW) via a dual propeller shaft design. The drive configuration allows the ships to achieve 30+ knot speeds on open seas.

### SOLUTION

Engineers at Ameridrives worked closely with the ship's propulsion drive OEM to develop custom Ameriflex and Amerigear couplings to meet the challenging drive application requirements. Both Ameriflex diaphragm and Amerigear gear couplings are incorporated within both drivetrains on the twin propeller shafts of each ship.

With a speed range up to 20,000 RPM and a peak torque capacity over 34,000,000 in.lbs. (3,840 kNm), Ameriflex high performance couplings are designed specifically to meet the rigorous demands of turbomachinery applications. Units are maintenance-free, meet API-671 requirements and feature a high torque-to-weight ratio and shot-peened 15-5 PH stainless steel diaphragms.

Amerigear couplings, with fully crowned gear teeth, are designed for higher torque, higher speed, and higher misalignment to accommodate the increased performance demands of modern, rotating equipment.

US (Customer Service)

**1-814-480-5000** (Universal Joints, Driveshafts)

**1-888-449-9439** (Small Industrial Driveshafts)

**1-219-874-5248** (Irrigation Universal Driveshafts)

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