



**CHALLENGE**

A major US Navy defense contractor required a precise motion control solution for loading and unloading of projectiles, cannon rotation, azimuth and elevation control for the gun system. The mission critical solution precisely delivers projectiles with a mass of 225 lb (102 Kg) at a rate of fire of 10 rounds per minute.

**SOLUTION**

**POWERTEC Permanent Magnet AC Motors**

APPLICATION	PERFORMANCE	WEIGHT
Elevation control	93hp (69KW) @ 2000 RPM	553lb (251Kg)
Azimuth control	33hp (24KW) @ 1500 RPM	297lb (135Kg)
Projectile feeding	15hp (11KW) @ 3600 RPM	151lb (68Kg)
Projectile extraction	6.5hp (5KW) @ 3300 RPM	07lb (48Kg)

**Benefits:**

- Rugged construction to meet Navy Service A duty and high shock impacts up to 200G (Grade A)
- Modular designs, 4 motor sizes can accommodate 18 different performance configurations
- Designed to fit special mountings, electrical interfaces and MIL-Spec paints/coatings

**RESULTS**

POWERTEC partnered with the customer to design and manufactured lightweight, compact and highly effective PMAC motors to meet Navy Service A duty and high shock impacts up to 200G (Grade A).