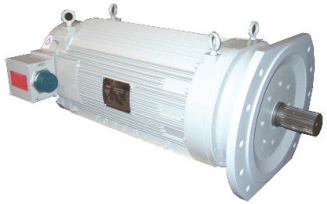
POWERTEC Powertec Delivers on Mission Critical Motion Control

Customer Profile



Location: Fridley, MN
Application: Motion Control for Mission Critical Weapon System
Long range ballistic weapon for Navy ships

Problem

The customer required a precise motion control solution for feeding and extraction of projectiles, rotation of cannon, control of azimuth and control of elevation for the weapon system. The mission critical solution must precisely deliver projectiles with a mass of 225lb (102Kg) for a rate of fire of 10 rounds per minute from a 300+ rounds magazine.

Solution

Powertec partnered with the customer to design and manufacture efficient and reliable PMAC motors to interact with the large weapon system. Powertec designed and manufactured lightweight, compact and highly efficient PMAC motors to meet NAVY Service A duty and hi shock impacts up to 200G (Grade A).

Why They Chose Powertec's PMAC Solution:

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

Motor Specifications:

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	107lb (48Kg)