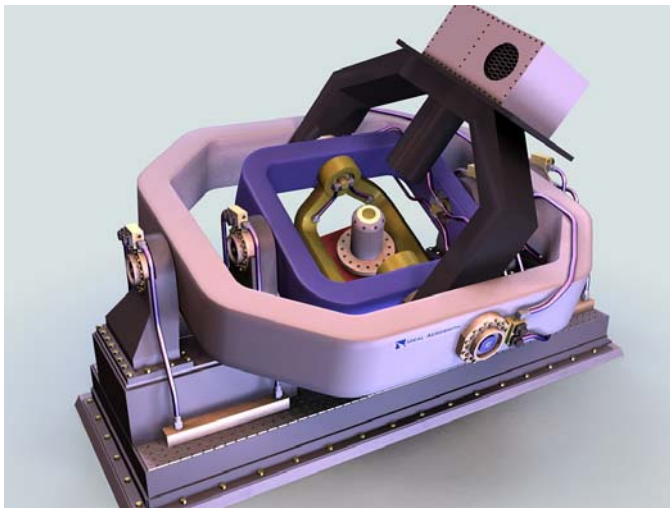


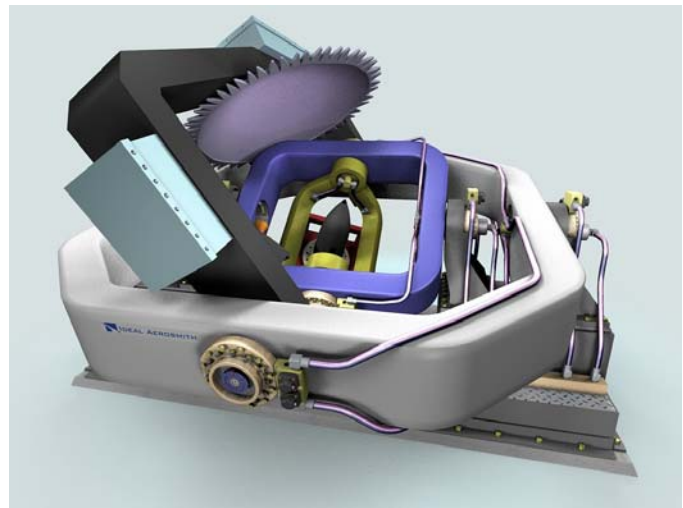


## Five-Axis, Electro-Hydraulic, Flight Motion Simulation (FMS) Systems

These equipments extend the capabilities of Ideal’s three-axis FMS systems for hardware-in-the-loop (HWIL) seeker/guidance testing, to include target motion simulation. The inner target axis can accommodate an infra-red scene projector, or we can configure the two target axes as an RF compact-range, with multiple feeds and a parabolic collimating reflector. Extremely efficient hydraulic actuators allow high system utilization — such as Monte Carlo-type test scenarios — on a time-continuous basis. As with our three-axis FMS systems, Ideal’s flexible AERO 4000 Controller affords real-time motion control via several industry-standard high-speed interfaces.



5-Axis FMS with Infrared Target Generator



5-Axis FMS in RF Compact-Range Configuration

Main configurable performance parameters, dependent on payload and application requirements:

	Roll	Yaw	Pitch	Azimuth	Elevation
Angular Displacement	±45 to Continuous	±45 to ±120	±45 to ±120	±45, typ	±45, typ
Peak Velocity, degrees/sec	600 to 7200	200 to 600	200 to 600	200, typ	200, typ
Peak Acceleration, degrees/sec <sup>2</sup>	20,000 to 60,000	5,000 to 35,000	5,000 to 35,000	1500 to 3,000, typ	1500 to 3,000, typ
Position Accuracy, degrees (feedback transducer-dependent)	±0.2 to ±0.002	±0.053 to ±0.002	±0.053 to ±0.002	±0.053 to ±0.002	±0.053 to ±0.002
Frequency Response, Hz, payload-dependent	50	33	33	10	10

**Standard features:**

- Inter-axes Orthogonality: 30 arc-seconds
- Axes intersection: ±0.02” (±0.5mm)

Submit your requirements and let our engineers work with you toward an effective solution.