

mcX – Quiet operation with functionality to shout about

- Enhanced system diagnostics and BITE
- Fully enclosed actuators provide quiet operation
- 100,000 seat cycles
- Enhanced mechanical robustness
- Geared for optimal motor performance
 - 5-10% increased efficiency over previous generations
 - 20% increased stall torque
 - 50% increased precision
- Direct potentiometer drive
- New compact override mechanism
- Drive train designed to reduce stress on motor planetary gearbox
- Hard-mount connections (no more pigtail harnesses)

Compliance

Airbus

- 2520M1F001200, Electrical Seat Actuation System
- 4421M1F000000, Basic Requirements for IFE Systems in A380 Aircraft
- ABD0100, Equipment Design – General Requirements for Suppliers
- ABD0031, Fire Worthiness Requirements – Pressurized Section of Fuselage

Boeing

- D6-36440, Standard Cabin System Requirements Document
- D6-44588, Electrical Requirements for Utilization Equipment Installed on Commercial Transport Airplanes
- D6-51377, Airplane Fire Worthiness Design Criteria – Pressurized Compartments

Others

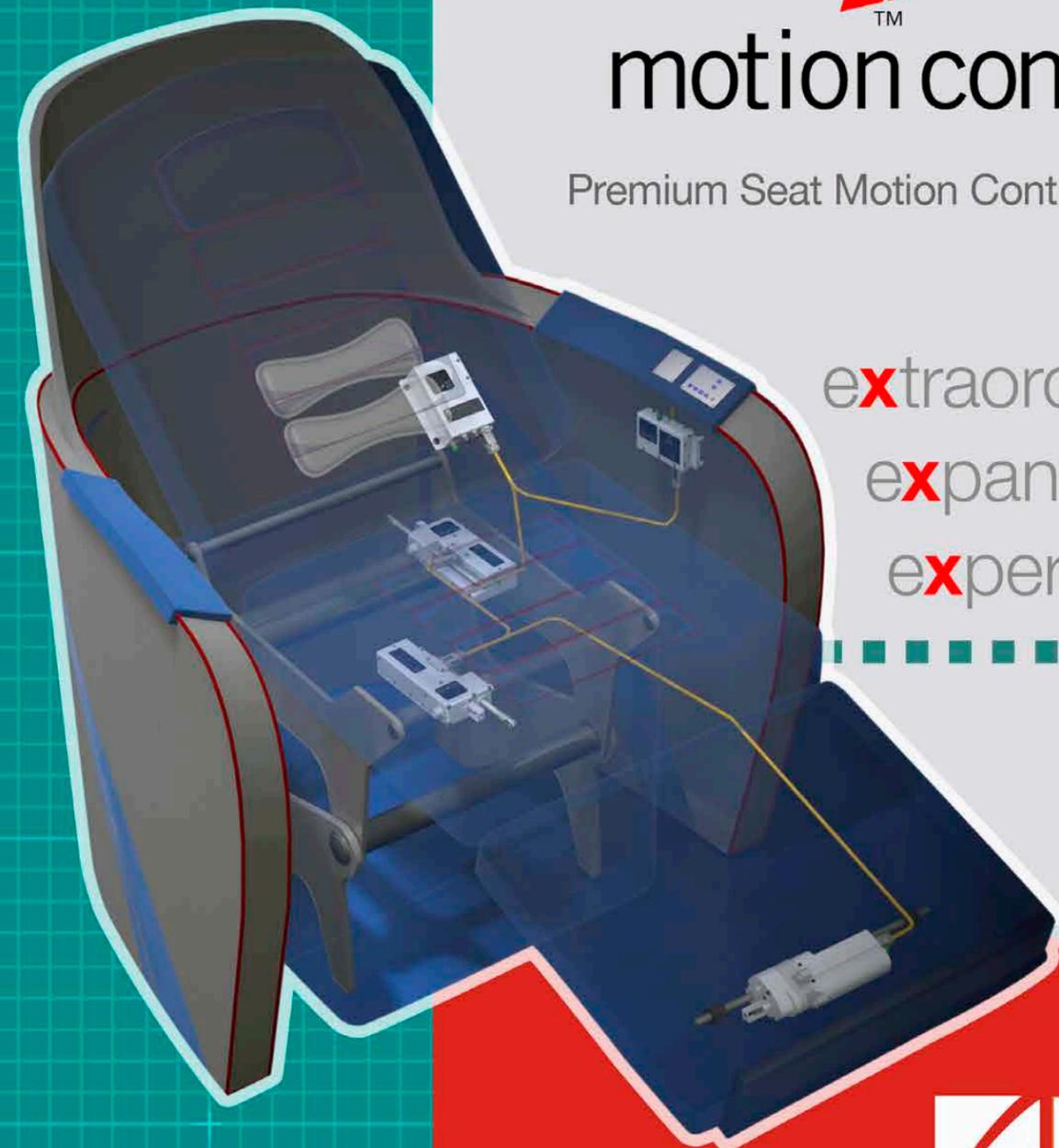
- RTCA/DO-160E/F, Environmental Conditions and Test Procedures for Airborne Equipment
- RTCA/DO-178B, Software Considerations in Airborne Systems and Equipment Certification
- JAR 25.853, Appendix F
- FAR 25.853, Appendix F
- SAE Aerospace Recommended Practice, Section 3.18, Electrically Actuated Features



mcTM
motion control

Premium Seat Motion Control System

eXtraordinary
eXpandable
eXperience



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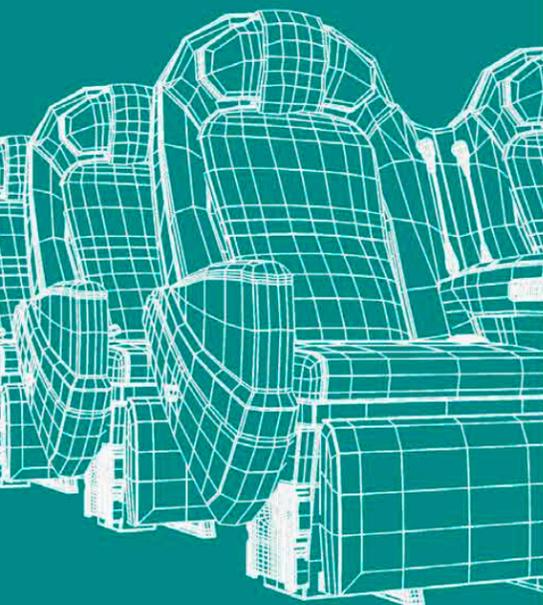
The
CRANE
Advantage





Premium Seat Motion Control System

extraordinary
expandable
experience



Passengers want a comfortable, smooth, and quiet premium seat. Airlines want reliable performance, low cost of ownership, and most importantly, happy customers.

Crane Aerospace & Electronics' mcX premium seat motion control system delivers for both, enhancing the passenger experience while providing lower cost of ownership to airlines. It also gives seat manufacturers maximum flexibility with its expandable, modular system architecture. mcX represents an evolution in premium seat motion control to a new era of smooth, customizable comfort.

extraordinary

Patented modular system architecture provides flexibility, performance and cost savings to deliver a premium seat experience for passengers and airlines alike.

- Individual "smart actuators" make rapid adjustments without routing through a central hub
- Lower cost of ownership over the product life cycle
- Customizable system enables regular, easy-to-install updates for improved competitive advantage
- One-touch calibration with an intuitive user interface
- Increased fault tolerance with a distributed architecture design
- Enhanced diagnostic capabilities for superior troubleshooting and fault isolation
- Works with mcX power supply module, aircraft power or alternate regulated power source for added design flexibility

expandable

mcX provides the scalability and flexibility that airlines and seat manufacturers need with a suite of standardized system components.

- Easy to upgrade and reconfigure individual modules
- Up to 8 seats or 32 modules per network
- Standardized system software across multiple aircraft and seat platforms
- Easily customizable seat motion
- Seamless integration with additional cabin systems via CANBUS
- Micro-USB ports enable system-wide software updates from any control module

experience

The best seat motion control system is the one you don't notice. The smooth, quiet mcX seating experience lets passengers just sit back, relax and enjoy the flight.

- No delays or pauses through full actuator range of motion with coordinated movement control
- Smooth and simultaneous seat motion
- Reduced system noise via quiet-operation actuators
- Industry-leading "safety zone" collision avoidance and jam detection
- Active power management works cohesively with integrated cabin electric systems
- Improved fault tolerance, motion control and system redundancy

excellence

Crane's P.L. Porter brand has been a leader in seat control systems since 1947. Designed with the benefit of nearly 70 years of expertise, mcX meets the needs of the passenger, the airline, and the seat supplier.

Contact your local Crane sales representative today to elevate the passenger experience with the mcX premium seat motion control.



mcX System Modules

- Linear Thru-shaft Actuator
- Linear Extension Shaft Actuator
- Full-Sized Rotary Actuator
- Compact Rotary Actuator
- Power Supply Module
- Passenger Control Module
- Auxiliary Interface Module
- Lumbar Module
- Legacy Actuator Module

The
cabin
Advantage

