Electronic Controls



Analog and digital electronic control units designed to optimize device performance for each specific application

Testing



JASC has substantial and diversified testing capabilities including shock, vibration, thermal and high-pressure pneumatics to facilitate new design validation



JASC Products

Single And Two-Stage Servo Valves FlexJet[™] Servo Valves Pressure-Compensated Servo Valves Fuel Control Valves **Complete Fuel Control Systems Cryogenic Valves Expansion Valves** High-Temperature Valves and Controls **Servo Actuators Electromechanical Actuators**

Pneumatic Actuators Hydraulic Actuators Adaptive Combustion Control Systems Relief and Check Valves Pressure Regulators **Flow Dividers** Metering Pumps Solenoid Valves **Proportional Solenoids Electronic Control Units**







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Aerospace

Defense



Research

Space

JASC is a provider of innovative solutions for today's most advanced and challenging aerospace programs.

Beginning with the SR-71 Blackbird J-58 turbine engine and the RL-10 rocket engine, JASC has proven experience developing unique and cost effective solutions for a wide variety of applications including:

- Aerospace fluid controls and actuators
- Turbine APU valves and actuators
- Rocket engine fuel controls and actuators
- Hypersonic research engine controls

Servo Valves



Three-way servo valve used on the Airbus A320 family APU

Capabilities include:

- 3D solid modeling
- Dynamic simulation, finite element analysis (FEA) and computational fluid dynamics (CFD)
- Testing gaseous and liquid flow, high-pressure and temperature, cryogenic, vibration, shock
- Manufacturing of R&D quantities to high-volume production
- Cleanroom
- ISO 9001:2008 and AS9100 Certified
- FAA and EASA Repair Station

Actuators _



Servo hydraulic/fueldraulic actuators for spacecraft engine thrust vector control and flight control surface positioning



Direct-drive, 3-way servo valve used for military sonobouy deploy/retract system



Fueldraulic inlet guide vane actuator used on the Airbus A380 APU



Two-stage, 4-way, hydraulic servo valve for use in robotic arm control



Hydraulic linear actuator with FlexJet[™] servo used to accurately position injector pintle for a throttlable rocket engine



FlexJet™ pneumatic servo valves and actuators used in military situation simulators



High-temperature, compressor vane control actuator for supersonic gas turbine engine

Fluid Management



Integrated fuel metering system used on the Airbus A380 APU



Cavitating pintle valve for thrust control in a liquid-fuel rocket engine



High-efficiency refrigerant pump used in portable power and A/C system for US Army



Smart pressure regulator for precise control of fuel tank pressure on the AFRL X-51A Waverider



Self pilot-operated solenoid valve with position indication for oxidizer management aboard SpaceShipTwo



Multi-channel, high-temperature fuel control used on the AFRL X-51A Waverider



Adaptive combustion control valve and ECU for suppression of instabilities in gas turbine engine combustors and augmentors



Bi-propellant throttle valve used on SpaceX Merlin vacuum engine



Fast-acting, pilot-operated solenoid valve for crew capsule cold gas thruster decelerator system



Remote pilot-operated, high-flow solenoid valve with position indication for oxidizer management aboard SpaceShipTwo