



Product Line Card

FLUID POWER & MOTION CONTROL EXPERTS



Fluid Power & Motion Control Experts

Dedicated to quality and success, JEM Technical has aligned with many of the world's foremost hydraulic and electronics manufacturers.

These product lines were strategically selected to ensure seamless system integration. With a comprehensive range of hydraulic valves, pumps, motors, filtration, accumulators, hoses, clamps electronic controls, operator interfaces, sensors, and connectivity, we are positioned to deliver innovative solutions tailored to your motion control needs.



Expert Design Capabilities

At JEM Technical, we offer a comprehensive range of engineering, testing, machining, and manufacturing services. Our skilled engineers work closely with OEM customers, transforming challenges into innovative, cost-effective solutions. From conception to production, our engineering teams, in collaboration with our advanced shop and assembly facilities, ensure high-quality, tailored results that meet the unique needs of our clients.



Engineering

Our team of experienced engineers provides comprehensive hydraulic and electronic control system design solutions. With a focus on innovation and customer satisfaction, we deliver tailored solutions to meet our customers' unique application needs.

- In-house hydraulic & electronic control system design
- Innovative design attitude to solve customer applications with unique solutions
- Expert team of manifold designers, application specialists, controls, manufacturing, & quality engineers



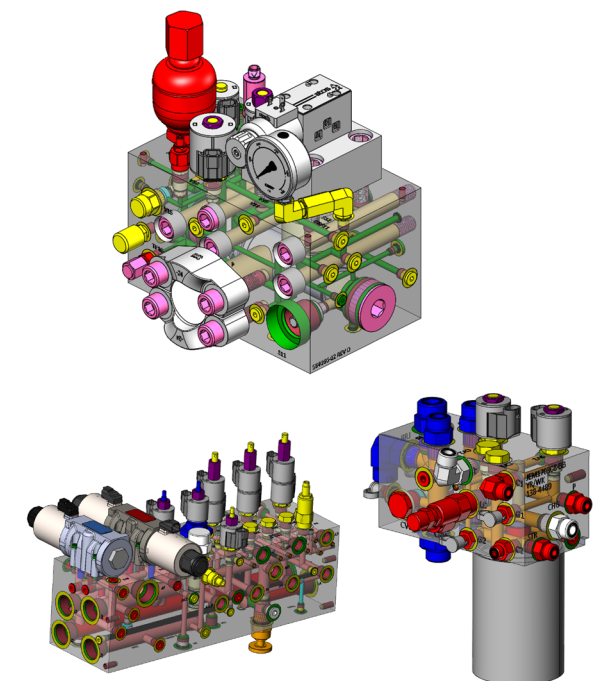
Hydraulic System & Manifold Design

We partner with our customers to understand their unique motion control and power management needs. Our experienced engineers leverage deep industry knowledge to design innovative solutions that drive core machine technologies.



3D Model Design & Automation Studio Simulation

Our engineering department utilizes SolidWorks 3D CAD software. With its solid modeling features, we provide design integrity while optimizing efficiency and manufacturability. Additionally, our ability to conduct hydraulic circuit simulation, along with thorough analysis of materials and component parts, ensures that customers' specifications are met with precision.





Component & Control System Design

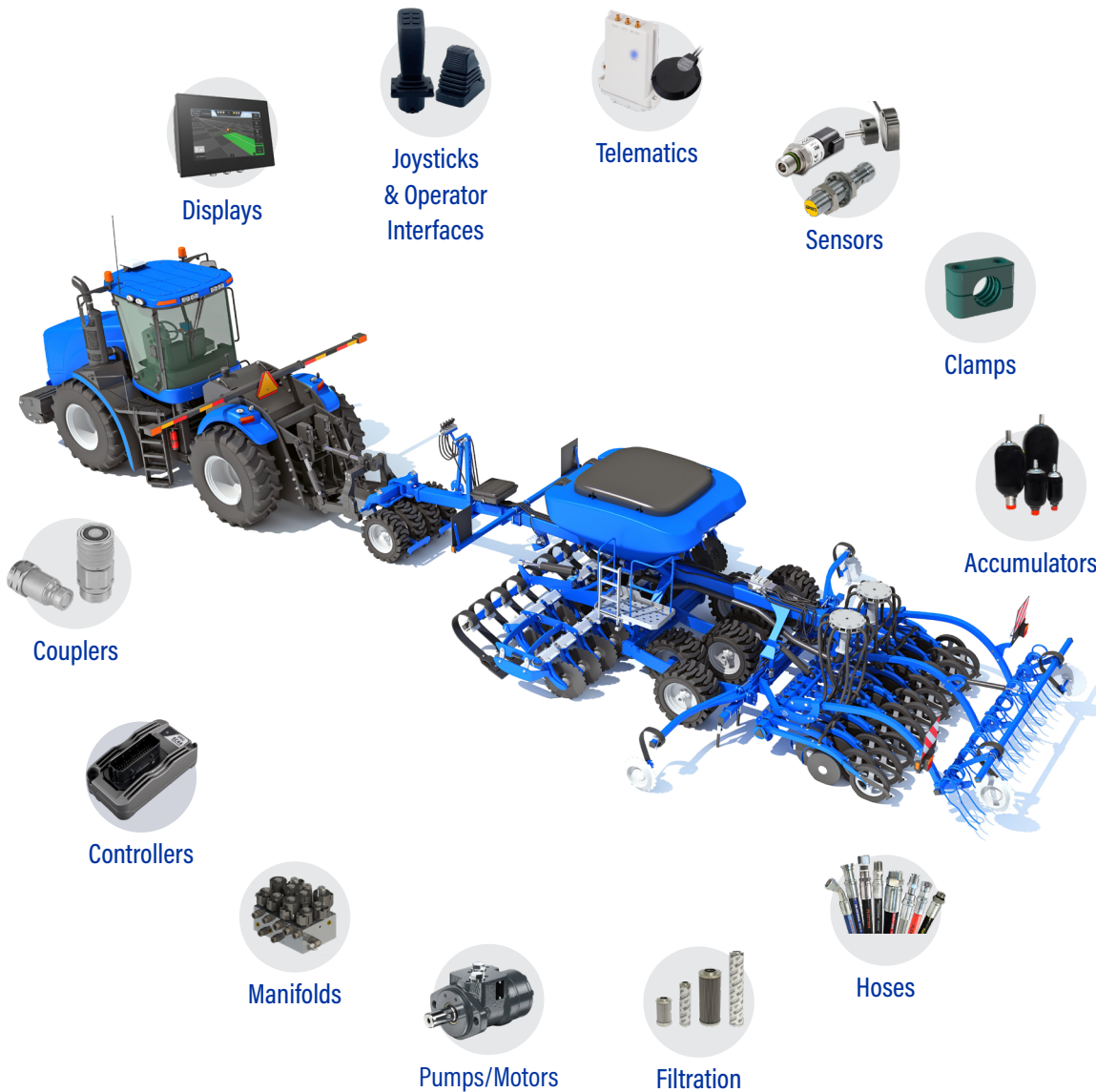
Our controls engineering department provides innovative electronic component selection, software development and custom wiring harness design.

Component & Electrical System Design

- Control system architecture development
- Automotive wire harness design
- Custom control panel design
- Discrete wire assemblies
- Heavy wire/battery cable assemblies
- Over molded cable assemblies
- J1939 & CANopen CAN BUS networking
- ISObus implementation

Advanced Programming Capabilities

- Intuitive operator interfaces with custom graphics
- Visual diagnostics with advanced troubleshooting capabilities
- Proportional valve and hydrostatic pump control
- Closed loop control - position, speed, and pressure control
- Electric drive and battery management
- CODESYS and C++ programming
- IoT off-highway solutions



Custom Hydraulic Manifolds

JEM Technical offers custom valve assemblies and manifolds tailored to your specific needs. Our in-house expertise and state-of-the-art equipment allow us to deliver innovative solutions that enhance your hydraulic systems.

Custom Manifolds

- Diverse block material options
- World-class valve components
- Endless configuration possibilities

Valve Solutions

- Versatile and flexible solutions
- Industry-leading brands
- In-stock availability

In-House Capabilities

- Full machining operations
- On-site assembly and testing
- ISO certified quality control

Operational Excellence

Our manufacturing department specializes in high-quality hydraulic products, leveraging advanced technology and flexible systems to meet evolving customer needs. With a focus on fluid power manifolds, we utilize robotic automation, precision work holding, and electronic monitoring for fast, accurate, and cost-effective production.



Manufacturing

- ISO 9001 Certified since 2003
- Controlled electronic documentation for consistent machining, deburring, assembly, test and final inspection processes
- ISIR, Measurement System Analysis, FMEAs, Capability Studies, PPAP, Corrective Actions, 8D methodology



We use our ISO 9001 Quality Systems to drive continuous improvement throughout the organization.





Machining

Our flexible manufacturing systems are engineered for speed and precision. Featuring robotic automation, advanced work holding, large tool capacity, and electronic monitoring systems, they enable 24-hour production and “lights out” manufacturing. Automated thermal deburring ensures consistent, burr-free, and contamination-free components. Manifolds are thoroughly inspected using calibrated precision tools and an advanced automated CMM inspection system to guarantee precise quality control.



Machine Lineup

- 3 Mazak HCN5000s with 32 pallet rail system
- 2 Mazak PFH-4800 with 16 pallet rail system
- 2 Mazak FH-4800 with 16 pallet rail system
- 2 Makino A61 & 1 Makino NX with 32 pallet rail system
- 2 Mazak HCN5000's with Fanuc Robot
- 1 Haas VF4-SS vertical mill & 1 Haas tool room mill
- Extrude Hone T450 automated thermal deburring



Assembly

Our products are assembled to the highest level of quality and flexibility, keeping costs competitive. Limited quantity builds and highly visual assembly processes ensure that all products, from one order to the next, maintain consistent levels of quality and performance.

- Assembly and testing processes documented per ISO 9001 standards
- Automated test stands deployed on each assembly line for final test and validation
- Final inspection and custom packaging
- Certified precision tools
- Kitting & Sub-Assembly Management
 - Sheet metal, wire harness & hose install
- On-site contamination lab & services
- Hydraulic life cycle testing available upon request
- Value-add Services
 - Gauge, sensor, filter, and accumulator installation
 - Fitting installation +/- 3 degrees
 - Laser engraving
 - Electronic device programming & calibration



Hydraulic Partners

We design, assemble, and supply a variety of custom valve manifolds, valves, pumps & motors, cylinders, filtration systems, and accessories. Each vendor is selected for their ability to provide reliable components that help JEM design, configure, and deliver a system that helps our customers' equipment operate at maximum efficiency.



Accumulators

Fox Accumulators
GPM Controls
SFP Hydraulics



Clamps

Stauff



Couplings

DNP
Parker
SafeWay
Stauff



Custom Spools & Accessories

JEM Technical



Diagnostics

Argo-Hytos
Stauff



Directional Control Valves

Anfield
BLB
Bucher
Rexroth
Technord



Filtration

Argo-Hytos
Stauff



Gauges

Lenz
Stauff
Wika



Gear Pumps

Anfield
Bucher
Concentric
Marzocchi



Hose, Fittings & Accessories

Brennen
Flextral
Parker
Suburban



Heat Exchangers

Thermal Transfer Products



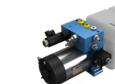
Manifolds

Fastline
HydraForce
JEM Technical



Motors

Anfield
Bucher Hydraulics
Concentric
Impro Fluidtek



Power Units

Argo-Hytos
Bucher Hydraulics
Concentric
Hydro-tek
Rexroth
MTE Hydraulics



Pumps

Anfield
Atos
Bucher Hydraulics
Marzocchi



Reservoirs & Tank Accessories

Argo Hytos
Lenz
Stauff



Rotary Flow Dividers

Concentric
Delta Power Company
MTE Hydraulics



Sensors

Anfield
Argo-Hytos
Gefran
STW Technic
Turck



Switches

Anfield
Argo Hytos
STW



Test Equipment

Argo Hytos
Stauff
Wika



Test Points

Parker
Stauff



Thermometers

Wika



Valves

Argo-Hytos
Atos
Bucher Hydraulics
Delta Power Company
Deltrol
Doering
Hydac
HydraForce
JEM Technical
Northman
Parker Skinner
Sun Hydraulics
Technord
Valvole America
Vis
Vonberg

Electronic Partners

JEM Controls designs, programs and distributes custom electronic control systems for the fluid power and motion control industry. We provide customer support with innovative electronic component selection, software development and custom wiring harness design.



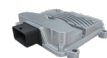
Batteries

Vanguard



Cable Accessories

JEM Technical
Suburban
Turck



CAN Bus Controllers

HydraForce
EPEC
STW Technic



Can Bus Keypads

Blink Marine
Grayhill



Coil & Valve Drivers

Atos
Axiomatic
HydraForce



Communication Devices

Axiomatic
CrossControl



Connectivity Devices

Axiomatic
JEM Technical
STW Technic
Turck



Displays

CrossControl
Grayhill
Maximatecc
STW Technic
Topcon Electronics



Fieldbus Solutions

STW Technic
Turck



Electronic Analog Gauges

Cross Control
Maximatecc



Instrument Clusters

Cross Control
Maximatecc



I/O Modules

Axiomatic
STW Technic



Joysticks

Caldaro
Elobau
Grayhill
OEM Controls, Inc.



Level Measurement

Cross Control
Maximatecc



Mounting Hardware

Ram Mounts



Sensors

Anfield
Elobau
Gefran
HydraForce
Novotechnik
Pressure Pro
STW Technic
Turck



Telematics

Elevat
EPEC
STW Technic



Transmitters & Receivers

Axiomatic
Cervis
Scanreco



Wire Harnesses

JEM Technical
Park Manufacturing Corp
Turck

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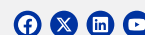
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