John Henry Foster Solutions

JHFOSTER

John Henry Foster**.com**

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OUR LOCATIONS

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ROBOT LAB Eagan, MN

980 Lone Oak Rd Eagan, MN 55121 651.452.8452

BEGIONAL West Fargo, ND

1016 5th Ave, Suite 3 West Fargo, ND 58078 Hiawatha, IA 52233 651.452.8452

Cedar Rapids, IA

935 Metzger Drive 319.200.1316

AUTOMATION PRODUCTS

Please note that some products may be not be available in your area. For complete details, check with your Account Manager.

Robotics

IAI America, Inc.: ROBO Cylinder™, Mini ROBO Cylinder, Linear, Rotary Actuators, Grippers, IX SCARA Robots, TT-Table Top Robot, Controllers

Kawasaki: 6-axis robots, pick and place robots, dual arm scara robots

Staubli: Industrial SCARA 4-axis robots and 6-axis robots

Techman Robot (TM): Collaborative robots with built-in vision, 5 kg, 12 kg and 14 kg payloads; 700 mm, 900 mm, 1100 mm, and 1300 mm reach

Robotic Accessories

80/20: Mobile bases, tables and guarding Bimba | Vaccon: Vacuum tool end effector

DESTACO: Pneumatics and electric grippers, end-of-arm tooling and tool changers

MurrPlastik: Cable management solutions

OnRobot: Pick & place, machine tending, packaging & palletizing, assembly, surface

finishing, quality testing & inspection

Pick-it: Software, 3D Camera, Industrial processor

Robo-Gear: Industrial Robot Covers, Disposable & Paint Robot Covers as well as

Custom cable/hose/conduit wrap

Robotiq: Adaptive grippers, wrist camera, force torque sensors, kinetiq teaching,

robotic welding

Techman Robot (TM): Robot stands and mobile work stations



Electric Automation

Auer Signal: Optical and audible signal devices, stack lights and explosion proof signal

BACO Controls, Inc.: 22MM and 30MM control and signaling devices (push buttons, mushroom buttons, emergency stops, selector and key switches, pilot lights and joysticks), IP69K Pilot Devices, disconnect switches 25AMP-100AMP, cam switches, custom control stations, rex timers

Canfield Connector: Electronic timers, connectors, sensors

Carlo Gavazzi: Proximity, Photoelectric and Level Sensors, Monitoring Relays, Energy Meters and Power Supplies, Push buttons, Switches, Timing Relays

IFM: Industrial sensors, networking and control systems

Integra Enclosures: Polycarbonate - Impact, Premium, Genesis enclosures and accessories and Integra Strong Box Enclosures: Custom stainless steel enclosures

Maple Systems: HMIs, Panel PCs, PLCs

Mencom Corporation: Industrial connectors, cordsets, panel interface connectors, ethernet switches

MurrPlastik: Cable management solutions

Optex FA: Photoelectric, Displacement and Vision Sensors

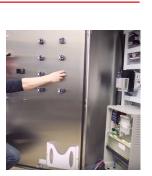
Saginaw Control and Engineering: Standard and custom enclosures

SolaHD: Power supplies, industrial control transfers, power protection, power conditioning, transformers

Sprecher & Schuh: Contactors, relays, starters, push buttons, switches, circuit protection, disconnects, terminals

Wieland Electric, Inc.: Power supplies, relays, sensors, terminal blocks, industrial connectors







AUTOMATION PRODUCTS

Electric Actuators/Motion Control/Motors/Drives

Bimba: Original Line Electric rod type

Bimba | Intek: Belt, Ballscrew, Rack and Pinion, Thrusters, Idlers,

Linear Servo, Gantry Systems

Carlo Gavazzi: Contactors, Overloads, Manual Motor Starters, Soft Starters, Solid State Contactors, Definite Purpose Contactors and Miniature Circuit Protectors/Breakers

Control Techniques/Leroy-Somer/Nidec: Servo Motors, Servo Drives, AC/DC Drives, Induction/Permanent, Magnet/DC Motors

Duff-Norton: Screw jacks, linear actuators, electric cylinders, acme and ball screws & nuts, rail maintenance equipment

IAI America, Inc.: ROBO Cylinder, Linear, Rotary Actuators, Grippers, Controllers, Mini ROBO Cylinder, IX SCARA Robots, TT-Tabletop Robots

Koganei: Electric Linear and Rotary Actuators, Electric Grippers

Robohand/DESTACO: Electric Grippers and Power Clamps



Conveyors



New London Engineering: Standard, Modified and Custom Conveyors - Slider Bed, Hinged Steel Belt, Chain Driven Live Roller, Zero Pressure Accumulation, Wire Mesh, Magnetic, Cleated Incline, Table Top Chain, Modular Belt, Low Profile, Drag Chain, Turntable, Slat, Pallet Dispensing, Pallet Stacking and Pallet Handling Conveyors - in Steel, Aluminum and Stainless Steel



Lasers | Dot Peen | Scribing

Gravotech: Marking, engraving, laser cutting and dot-peen solutions

MurrPlastik: Laser printing



Pneumatic Actuators and Grippers

Advance Automation: Air cylinders
Air-Mite, Inc.: Air cylinders, presses

Bimba: Original Line® stainless steel air cylinders, Ultran® magnetic coupled rodless, Flat-I®, Flat-II® and Square Flat® stainless steel low profile, PneuTurn® rotary actuators, linear thrusters, position feedback, DoubleWall® NFPA, ISO 6431 & 6432 metric cylinders, feedback, Pneumatic Grippers (BPGS)

Bimba | Mead: Air actuators and presses

Bimba | MFD: Extruded thrusters, angular and parallel grippers

Bimba | TRD: NFPA actuators in aluminum, steel and stainless steel,

presses

Emerson | ASCO Numatics: NFPA Air Cylinders, rodless, air bellows, linear slides, ISO/VDMA, rotary actuators

Emerson | AVENTICS: NFPA air cylinders, rodless, short-stroke, compact, ISO 15552 (ISO/VDMA), mini, round, guided, bellows, slide units, diaphragm-type, mobile type, cylinder-valve units, rotary actuators, grippers

Nopak: Cylinders

Robohand/DESTACO: Pneumatic grippers, angular and parallel grippers,

rotary actuators







Pneumatic Valves

AAA Products: Mechanical, pilot, or solenoid operated **Air-Mite, Inc.:** Mechanical, pilot, or solenoid operated

Bimba | Acro Associates: Pneumatic and solenoid pinch valves
Bimba | Mead | MFD: Solenoid, control and specialty valves
Bimba | Pneumadyne: Mechanical, pilot or solenoid operated
Bi-Torq: Manual and automated ball and butterfly valves

Emerson | ASCO Numatics: Mechanical, pilot, or solenoid operated, in-line, manifold and sub-base mountings, fieldbus (Ethernet, DeviceNet, Profibus etc.), poppet valves, ISO 1 - 3

Emerson | AVENTICS: Manual/mechanical, pilot or solenoid operated, in-line, manifold and subbase mounted, fieldbus (EtherNet, DeviceNet, Profibus, etc.), poppet valves, ceramic sliding plates, ISO 1-4, safety, flow control, check, shuttle, quick exhaust, relay

Humphrey: Mechanical, pilot, or solenoid operated, pressure and vacuum, in-line, stackable, manifold and sub-base mountings

Koganei: Solenoid

Nopak: Mechanical or solenoid operated valves

Ross Controls: Safety valves, poppet valves, solenoid valves





Pneumatic Filters, Regulators, Lubricators



Arrow Pneumatics: Filters, regulators, lubricators, desiccant dryers

Beach: Sta-Dri in-line desiccant filters, Sta-Dri pouches, breathers **Bimba | MFD**: Particle removal filters, regulators and lubricators

Emerson | ASCO Numatics: In-line oil and particle removal filters,

regulators and lubricators, precision regulators

Emerson | AVENTICS In-line oil and particle removal filters, regulators and lubricators, precision regulators, stainless steel air prep

Parker (Domnick Hunter/Airtek): In-line oil and particle removal filters, carbon filters, vapor filters, vacuum filters



Fittings | Couplers | Hose | Tubing

Bimba | Pneumadyne: Barbed, threaded, electroless nickel, brass and stainless steel

Emerson | ASCO Numatics: Push-In tube fittings, nickel plated brass, and World Thread fittings

Emerson | AVENTICS: Push-in fittings (polymer and nickel plated brass), metric tubing, tubing accessories

Freelin-Wade: Polyurethane, polyethylene, nylon, PVC tubing, re-coil assemblies and fittings, blowguns

Goodyear: Air hose

Midland Metal: Brass pipe fittings, compression fittings and needle

valves

New Age Industries: Plastic tubing and hose

Nycoil: Tubing, fittings, couplers

Pisco: Push-in tube fittings, rotary joints and ball valves

Polyconn: Push-to-connect tube fittings

ZSi-Foster, Inc.: Quick disconnect fittings, blow guns, recoil hoses

and fittings







AUTOMATION PRODUCTS

Pneumatic Automation Accessories

ACE Controls: Shock absorbers, velocity and feed controllers, gas

springs, and hydraulic dampers

AiRTX: Blow-off nozzles, transvectors, cold air guns, static elimination

Aladco: Grippers, clamps, check valves

Alumi-Tec: Aluminum manifolds

Bimba: Alignment couplers, flow control valves and 3 & 4-way disc

valves

Bimba | Mead: Flow controls, timers, relays, and sensors
Bimba | Pneumadyne: Air jets, fittings and manifolds
Control Line Equipment: Pneumatic counting devices

Cox Reels: Hose, cord and cable reels

Deltrol: Flow control valves, needle valves, and check valves

Desoutter Industrial Tools: Auto-feed drills, air motors, pneumatic

drills/grinders/sanders, screwfeeders **DESTACO:** Manual and pneumatic clamps

Duff-Norton: Rotary unions

Duro Reels: Hose, cord and cable reels

Dwyer: Pressure & vacuum gauges, flow meters, pressure,

temperature & level switches

Ellis/Kuhnke Controls: Pneumatic timers and counters

Emerson | ASCO Numatics: Sintered bronze and shell type mufflers,

flow controls, check valves, tubing

Emerson | AVENTICS: Valves (safety, flow control, check, shuttle, quick exhaust, relay), silencers, grippers, timing volumes, regulators, tubing &

iculige

Generant: Check valves, needle valves, regulators, relief valves

Guardair: Air and siphon guns, pneumatic vacuums

Hannay: Hose, cord and cable reels

Hedland: Flow meters

Kingston: Safety relief valves and check valves

Marsh: Pressure and vacuum gauges, precision regulators

Midwest Pressure Systems: Air driven air pressure booster systems

NGT: Pilot-operated check valves

Oetiker: Hose clamps, swing couplers

Parker (Domnick Hunter/Airtek): Air filtration and oil and water

condensate separators

Pore Technology: Plastic mufflers

Reelcraft: Hose, cord and cable reels

Rotary Systems: Rotary unions

Silvent: Blow guns and blow-off nozzles

Specialty Manufacturing Company (SMC): Brass and plastic ball

valves and check valves

Vibco Vibrators: Air and electric vibrators

Waldom Electronics (Aero-Motive): Hose reels, tool balancers, and

ergonomic devices

Wika: Pressure & vacuum gauges and chemical seals

ZSi-Foster, Inc.: Cushioned clamping and support systems











Hydraulics



Bimba | TRD: NFPA, MH medium duty and HH series heavy-duty

Emerson | AVENTICS: NFPA medium and high pressure heavy-duty

industrial hydraulic cylinders, compact hydraulic

industrial hydraulic cylinders

Marsh: Pressure and vacuum gauges Midland Metal: Hydraulic fittings

Nopak: NFPA Hydraulic cylinders, piston and bladder accumulators

Wika: Pressure gauges

ZSi-Foster, Inc.: Quick disconnect couplers



T-Slot Aluminum Framing Systems

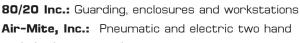


80/20 Inc.: T-Slotted aluminum extrusion and accessories Bucher Hydraulics I Dyna-Lift®: Hydraulic lift systems

Swivellink®: Mounting systems for cameras, sensors, monitors



Safety



anti-tie-down controls

Bimba | Mead: Pneumatic two hand anti-tie-down controls, lock-out

valves

Carlo Gavazzi: Interlocks, safety relays, sensors

Emerson | ASCO Numatics: Lock-out valves, power isolation bases Emerson | AVENTICS: Lockout valves, cylinder locking and holding units, power isolation bases

Euchner: Safety switches, e-stop devices, limit switches, light curtains, safety controllers, safety photocells

Renco, Inc.: Pneumatic and electric two hand anti-tie-down controls

Ross Controls: Energy isolation valves, control reliable double valves, po check valves

Tapeswitch: Sensing edges and bumpers, light curtains, safety and signal mats, safety interlocks

Wieland Electric, Inc.: Safety Relays, safe sensors, light curtains, two

hand relays, safety switches

ZSi-Foster, Inc.: Safety quick couplers/blow guns





Vacuum Cups & Generators



Bimba | Vaccon: Vacuum generators, cups and air amplifiers

Edco USA: Vacuum generators, cups and sensors

Emerson | ASCO Numatics: Vacuum generators, cups and sensors Emerson | AVENTICS: Vacuum generators, cups and sensors, non-

contact transfer units

Pisco: Vacuum generators, cups and sensors

Vi-Cas: Vacuum cups and accessories





COMPRESSED AIR SYSTEMS PRODUCTS

Air Compressors



Climate Control Air Compressors

Gardner Denver: Reciprocating: ½ HP - 25 HP

Powerex: Reciprocating: 1 HP - 15 HP Quincy: Reciprocating: 1 HP - 25 HP



Oil-Lubricated Air Compressors



Gardner Denver (CompAir): Rotary screw: 5-500 HP,

Reciprocating: ½ - 30 HP

Hydrovane: Rotary vane: 2-60 HP

Quincy: Rotary screw/reciprocating: ½ - 350 HP

Sauer Compressors USA: Reciprocating 2-4 stage high pressure compressors and boosters 100-6000 PSIG



Oil-Free and Oil-Less Air Compressors



Gardner Denver (CompAir): Water-sealed: 20 HP - 150 HP, Rotary screw: 100 HP - 400 HP, Reciprocating: 3/4 HP - 15 HP,

Scroll: 2 HP - 40 HP

Kobelco: Rotary screw: 20 HP - 500 HP

Powerex: Super quiet scroll and reciprocating: 3 HP - 40 HP

Quincy: Scroll: 2 HP - 30 HP

Thomas: Diaphragm, rotary vane, linear, articulating piston,

WOB-L piston



Medical & Vacuum Packages (NFPA 99 Compliant)



Dekker: Liquid ring, rotary vane

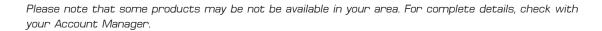
Gardner Denver: Scroll

Kobelco: Rotary screw, oil-free

Powerex: Scroll, piston, rotary vane and claw

Rietschle: Rotary vane and claw







COMPRESSED AIR SYSTEMS PRODUCTS

Air Dryers

Beko: Membrane

Gardner Denver: Refrigerated cycling, non-cycling, regenerative, digital

scroll

Nano: Refrigerated, regenerative dryers and breathing air systems

Parker (Domnick Hunter/Airtek): Refrigerated, regenerative dryers

and breathing air systems

Quincy: Refrigerated cycling, non-cycling, and regenerative

Trident: Desiccant 10-60 cfm versions

Zeks: Refrigerated cycling, non-cycling, and regenerative



Air Filters

Gardner Denver: Particulate, coalescing, vapor, mist eliminator

Nano: Particulate, coalescing, vapor, mist eliminator

Parker (Domnick Hunter/Airtek): Particulate, coalescing, vapor, mist

eliminator

Solberg: Compressor and vacuum pump inlet filters and silencers

Zeks: Particulate, coalescing, vapor, mist eliminator



Blowers

Aerzen USA: Positive displacement, hybrid to 51 PSI

Elmo Rietschle: Regenerative: 1/2 HP - 40 HP



Fluid Cooling Systems

Close

Nano: Process chillers

Parker (Domnick Hunter/Airtek): Process chillers

Thermal Precision: Dry coolers and towers



COMPRESSED AIR SYSTEMS PRODUCTS

Air System Accessories

American Industrial Heat Transfer: Air and water cooled heat

exchangers

CDI Meters, Inc.: Flowmeters

Control Devices: Drain-All, WaterHog fail-safe automatic condensate

drains

Manchester Tank: Air tanks Motortronics: Soft starters Nano: Oil/water separators

Parker (Domnick Hunter/Airtek): Oil/water separators

Quincy: Pressure flow controller

Samuel Pressure Vessel Group (Silvan Industries): Air tanks

Stoddard: Filters and silencers

Thermal Transfer: Air and water cooled heat exchangers

Zeks: Pressure flow controller, oil/water separators





Nitrogen Generation



Generon: Membrane generators, PSA nitrogen generators **Nano:** Membrane generators, PSA nitrogen generators **Parker (Domnick Hunter/Airtek):** PSA nitrogen generators



Plant Air Piping Systems



Gardner Denver: Quick-Lock and Big-Lock aluminum piping system **Parker:** Transair aluminum and stainless steel piping system

Quincy: AlRnet aluminum and stainless steel piping system



Vacuum Pumps



Dekker: Water & oil-sealed liquid ring, lubricated & dry rotary vane: 1/4 HP - 200 HP

Elmo Rietschle: Rotary vane and claw, regenerative blowers: 1/4 HP -

50 HP

Quincy: Industrial rotary screw: 7 1/2 HP - 200 HP, claw, vane **Thomas:** Diaphragm, rotary vane, linear, articulating piston, WOB-L

piston

