Industrial Process Solutions

Let’s make industry work better
ERIKS has a history of delivering customer confidence and peace of mind in North America for decades by providing far more than just products. We offer:

- Specialists in all of our core products and markets
- Local inventories to provide quick, reliable product supply to meet the ever-increasing need for speed to market
- A global footprint that allows for technical and logistical support, with 140 locations in North America
- In-house testing and development labs
- Access to some of the engineering resources of a major manufacturer plus the flexibility of a global solutions company
- A complementary product offering
- Own brand products which enables us to customize product solutions based on our customers’ needs

**We provide a partnership that:**

- Lowers customers TCO Total Cost of Ownership
- Increases Uptime
- Provides Innovative Solutions for Market Advantages

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**LOWERS TCO TOTAL COST OF OWNERSHIP**

**INCREASES UPTIME**

**INNOVATIVE SOLUTIONS FOR MARKET ADVANTAGE**
ERIKS is an international 80-year old company that was founded in Alkmaar, The Netherlands in 1940.

We provide a worldwide network of resources and know-how from 300 locations in 20 countries.

ERIKS North America has a long history of servicing industries at the local level as a network of North American specialists.

ERIKS is the consolidated name for all distribution companies in North America. Building on decades of success and growth in the European market, ERIKS began expanding into North America in 1988. We serve a wide range of industries that require high-performance solutions for use in demanding applications. See the timeline below on how the major companies that make-up ERIKS North America came together:

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1940</td>
<td>ERIKS is established</td>
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<tr>
<td>1988</td>
<td>ERIKS expands from the Netherlands to North America with the acquisition of ERIKS Seals and Plastics</td>
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<tr>
<td>2010</td>
<td>ERIKS acquires Rawson</td>
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<tr>
<td>2011</td>
<td>ERIKS acquires Lewis-Goetz</td>
</tr>
<tr>
<td>2011</td>
<td>ERIKS acquires Industrial Controls Distributors</td>
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<tr>
<td>2016</td>
<td>ERIKS North America is established for all North American owned companies and their subsidiaries</td>
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We partner with you to reduce your total cost of ownership and increase uptime. We also provide full system solutions.
ERIKS believes in strong, trust-based customer relationships that can only be formed locally. While our names are different, our heritage is the same.
ERIKS is an innovative supplier; we can fulfill twin roles of comprehensive maintenance supplier and manufacturer of high-quality products. We take the time to listen, consult and create a solution, especially when it means engineering or fabricating a custom component. We deliver plant uptime, efficiency, innovation and product sustainability.

WE’VE DOCUMENTED MORE THAN $88 MILLION IN SAVINGS FOR OUR CUSTOMERS OVER THE LAST 3 YEARS THROUGH OUR TOTAL COST OF OWNERSHIP APPROACH BY PROVIDING SOLUTIONS SUCH AS PRODUCT SUBSTITUTIONS, TESTING, INNOVATION AND VENDOR-MANAGED INVENTORY TO NAME A FEW.
We provide the finest, most comprehensive hose solutions available and fabricated to NAHAD, RMA, UL and CGA standards. We are one of the largest hose fabricators in North America and provide custom-cut, crimped and coupled hose assemblies. We also offer testing capabilities for every use at locations across North America.

Hose Product Offering

- **General Industrial Service Hose** – Air, water, steam, material handling, petroleum, chemical, ducting, oxygen service, composite and hot water wash down hose
- **Hydraulic Hose** – A complete range of hydraulic hose, couplings and accessories for a wide array of temperatures, pressures and applications
- **Industry-Specific Hose and Couplings** – We stock and fabricate a complete line of mining, agricultural, oilfield service, petrochemical service, food processing, wine and brewery and other industry-specific products
- **Stainless Steel Braided Hose** – All variations of PTFE hose and metal hose for every application including those requiring special alloys, high temperatures, and extreme pressures. Our custom weld capabilities assure quick and complete satisfaction. We carry all variations of PTFE hose including smooth bore PTFE.
- **Smooth Bore Metal Hose** – Material handling and dry bulk substances
- **Fittings and Accessories** – The right adapters, quick couplings and the fittings you need to make safe, secure connections, plus custom loaded hose reels, nozzles, swivel joints and more
Hose Service Offering

- **Industrial & Hydraulic Hose Services** – In-house and on-site inspection, recoupling, hydrostatic testing and hose assembly recertification
- **Reliable Hose Assemblies** – Our Master Coupler technician training ensures assembly processes use the latest manufacturer and industry best practices
- **Hose tagging, tracking, laser marking, color coding**
- **Hose Management System** – Includes hose reclamation and testing
- **Special packaging and kitting**
- **Hose programs** including crimper placement, training and reclamation program

Our goal is to help assure safety and increase the lifespan of your hose.
Loading Arm Products

- **Loading Arms – we offer:**
  - SBLA or TBLA Counterweight Balance
  - High Capacity Hose Handlers
  - Open System /Closed Loop System
- **Swivel Joints – we supply:**
  - Low Pressure Series
  - Split Flange
  - OEM Swivels
- **Loading Racks – we provide:**
  - Gangways
  - Safe-Walk Bridges
  - Safe-Walk Ramps
- **Accessories – we have:**
  - Dry Break Couplings
  - API Couplers
  - Vapor Recovery Plate
  - Vapor Recovery Cone
  - Repair Kits (Swivel Joints & All Couplers)
- **Loading Arm Systems**
  - Jacketed/Heated
  - Vapor Recovery
  - Pneumatically Actuated
  - Lightweight Series
  - Heavy Duty Series
  - Self-Leveling Stairs
  - Hydraulic Powered
  - Pneumatic Powered
  - Breakaways
  - Pumping Station Skid Packages
  - Truck Scale Systems
  - Electric Thermal Probes

Loading Arm Services

- **Loading Arm Repair** – We offer a complete loading arm repair facility in Houston, Texas where we provide the following either in-house or at the customer’s site:
  - Swivel joint repair
  - Tank truck loading arm refurbishment
  - Rail car loading arm restoration
- **Preventative Maintenance Program** – We offer a comprehensive preventative maintenance program around your specific needs and requirements that includes:
  - Overhaul of truck and rail car loading arms in-house or on-site
  - Complete survey that includes an inspection and condition report
  - Necessary refurbishment and replacement of swivels
  - Balancing assembly repairs
  - Hydrostatic testing
- **Equipment Inspection Reporting & Recommendations** – Following initial equipment inspection, an Inspection and Condition Report is issued that will detail the condition and/or recommendations for your equipment. Once the scope of work is agreed upon, our team of experienced technicians will replace and/or refurbish all equipment either at your site or at our warehouse in a timely manner. Please note that any in-house or on-site repair work should be scheduled.

Our goal is to ensure safe and optimal operation of your swivel joints, loading and/or unloading arms by being proactive towards maintenance instead of reactive to emergencies.
We have the conveyor system products, know-how, services and application experience to deliver the lowest cost-per-ton conveyed.

**Conveyor System Products**
- **Heavyweight Products** – Premium grades I & II and specialty compounds that perform where abrasion, cut & gouge, heat, oil and flame-resistant conditions exist as well as steel cord and premier fabric combinations to handle impact, high tension, agricultural belt fabrication and everyday needs
- **Lightweight Belt Specification** – Monofilaments, Interwovens, PVC, rough-top, urethane, thermoplastics, cleats and guides and impression top belting
- **Specialty Belting Products** – Phantom Cleat, power turn belts, sidewall belts, air slides, plastic modular and wire mesh belting
- **Conveyor Belt Accessories** – Idlers, pulleys, belt cleaners, lagging, mechanical fasteners, skirtboard, chute liners, safety cages and doors, elevator buckets and fasteners, cold bond cements and repair kits
Conveyor System Services
Our service crew members undergo rigorous in-house and factory splice training resulting in an ideal splice for all belt constructions. We work safely – all crews are certified to MSHA parts 46 and 48B, OSHA 10 and 30 where appropriate.

- 20+ of our locations provide belt and field services, including:
  - Heavyweight and lightweight belt assemblies and conveyor and component installations
  - Maintenance and technical services
  - 24/7 emergency and complete downtime support

We provide the right products and certified service crews skilled in installation, troubleshooting and preventative maintenance to respond to your needs 24/7.
From flue duct to pipe to chemical PTFE joints, we have a solution for your expansion joints.

 Expansion Joint Products

- **Rubber Spool Type Expansion Joints**
  - Standard and non-standard configurations up to 144 inches in diameter
  - Used to accommodate for expansion, contraction, vibration and lateral movement in piping systems sustaining temperatures up to 400°F
  - Available in a variety of rubber compounds that meet criteria for most applications
  - Made with fluoropolymer lining for harsher chemical environments. They can also be made with homogenous fluoropolymer (no rubber) to withstand temperatures up to 500°F and severe chemical applications.

- **Flue Duct Joints Ducting Systems - Round/Rectangular**
  - Composite - Multilayer (can withstand extremely high temperatures)
  - Elastomeric - FEP (400°F) - EPDM (300°F)
  - Dog Bone - FEP/EPDM (condensers)
  - Metal (Round/Camera/Miter) composite over metal
  - High pressure and low pressure

- **Metal Expansion Joints**
  - We provide metal expansion joint supplies both in spool type and flue duct designs
  - Available in a full range of sizes using various metal constructions, a variety of designs and in both spool and rectangular shapes

 Expansion Joint Services

- Design, engineering, consulting and manufacturing
- Flue duct and metal expansion joint design and fabrication
- Analysis – Field measurements, inspections, failure analysis and in-plant surveys
- Complete turnkey installation and replacement
- Customer training and site supervision
- On-site technical support for splicing
- Repair and lifetime support
- Emergency Support – Offered 24 hours a day, 365 days a year

All of our expansion joint capabilities are focused on reducing a customer’s Total Cost of Ownership (TCO) by increasing product performance.
Gasket Product Offering

From standard ring gaskets to special close tolerance OEM gaskets, we can handle it. In today’s industry, a gasket is much more than a piece of material squeezed between two surfaces. It’s the common thread within all industries that can either keep you running or shut you down.

- **Compressed NA General Service Sheet** – We stock and supply a complete line of Aramid fiber general service sheet and cut gasket products
- **High Temperature/High Pressure Grade Compressed Sheet** – Inorganic, carbon, and graphite fiber sheet products to handle the more demanding services in the process and power industries
- **Fluoropolymer Sheet** – Filled PTFE, ePTFE products and commercial / virgin grade products
- **Flexible Graphite Sheet, Rubber Sheet & UHMW Sheet Products**
- **Metal Gaskets** – Spiral wounds, RTJ ring gaskets, double jacketed type gaskets, camprofile and corrugated metal type gaskets
- **Fasteners** – Studs, bolts, nuts, socket heads, washers, threaded bar and more in a variety of materials, coatings and sizes
Gasket Service Offering
Our trained professionals and modern equipment are there to meet those high industry standards that are no longer a luxury, but a must. Whether your gasket requirements are complex or straightforward, we can handle them.

- **CAD Drawing & File Storage** – Services that will help you manage and safe keep your drawing library
- **Customer Product & Application Training** – Multiple levels of customized training available on best practices and emission / reliability
- **Exchanger, Bolted Joint Kitting & Standard ANSI Flange Kitting** – Our kitting capabilities allow us to provide the right gasket, bolts/fasteners, eliminate torque misapplication and create time efficiencies. Our kits are also supplied with lubricants and CAD drawings.
- **Gasket Application & the ERRIC System** – The ERRIC sealing system is a heat exchanger protocol that has reported leak-free results. ERRIC stands for Evaluation, Radial Shear, Relaxation, Installation, Certification. ERRIC protocols have been used in tens of thousands of heat exchangers around the world, with operators reporting leak-free results, even in the face of plant emergencies and power outages.
- **Metal Gasket Manufacturing** – Complete capability to produce spiral wounds, corrugated metal and camprofile designs
- **Plant Surveys** – Aim to reduce a customer’s Total Cost of Ownership (TCO) and increase product performance by ensuring that the most current gasket technology is used
- **Turnaround Services & On-Site Trailers** – We offer support for and during turnarounds, plant shutdowns, outages and production stops for industrial companies. Whether it is for emergency repairs or planned shutdowns, ERIKS has the management and staff in-house to work alongside plant personnel during these work stoppages.
- **Vendor Managed Inventory (VMI)** – A program that allows you to keep working capital at a minimum while having the inventory needed on-hand

Whether you need 24/7 die-cut gasket fabrication, high-speed computer operated gasket die-cutting, precision computer operated knife cutting, water jet cutting, on-site gasket fabrication or inventory stocking programs for shutdowns and outages, ERIKS is the name to know for the know-how you need.
Seals & Polymer Product Offering

Our application engineers possess an in-depth understanding of the products we supply and their unique applications. We represent the world’s most respected seal and polymer manufacturers which allows us to provide our customers with the most objective assessment of the features and benefits of available products that meet their specific needs. If we cannot find the right product for your application, we will work with you to make it.

- **Braided Packing** – Synthetic fiber, carbon filament/yarn fiber, PTFE filament and graphite filament/yarn fiber
- **Custom Molded Elastomers** – Extrusions, moldings, cellular and sponge rubber, anti-vibration technique, high purity seals, high purity gaskets, rubber-to-metal bonded
- **Fluid Power** – Backup rings, piston seals, Q-rings, rod seals, square rings, wear rings, wipers & scrapers, U cups
- **High Temperature Textile** – Silica products, ceramic fiber products, fiberglass products, cloth rolls and blankets, tapes, rope and yarns
- **Hydraulic Seals** – U-seals, chevron vee seals, rod wipers, t-seals, back-up rings and o-rings
- **Oil Seals** – All types including bearing isolators
Seals, Bearings & Polymer Product Offering

- **O-Rings** – FKM & FFKM, Nitrile / NBR, HNBR / X-NBR, EPDM, encapsulated, silicone & fluorosilicone, Neoprene / CR, custom compounds, high purity compounds

- **Mechanical Seals** – Cartridge type, component type, single spring, multiple spring and bellows designs. We also offer a variety of tungsten carbide balls, shafts and bushings.

- **Rotary Seals** – Shaft seals, lip seals, v-rings, oil seals

- **Spring Energized Seals** – Cantilever spring, helical spring, spiral pitch spring, special configurations

- **Sealing Components** – We provide a number of various metal high vacuum components, typically with seals

- **Engineered Plastics** – Sealing components & rings, bearings & bushings, structural components, wear pads & wear rings, specialty components

- **Surface Modification** – Coatings, dip & spin, thermal spray, Ultralube™, DepoPar, internal lubrication, halogenation, chemical & surface structure changes

- **Bearings & Wear** – Thrust ball & roller bearings, radial & angular contact, tapered roller, cylindrical roller, spherical roller, spherical plain, precision hardened balls and lubricated/self-lubricating bushings
Seals & Polymer Service Offering

With a dedicated staff of engineers and the most experienced technical specialists in the industry, ERIKS offers reliable and knowledgeable recommendations that go far beyond the basic product level. ERIKS combines technical product expertise with application knowledge, in-house engineering and materials testing with production and state-of-the-art logistic services. This enables ERIKS to play an active role in R&D, product innovation and application support, therefore increasing our customers’ productivity. It is this dedication and technical know-how that allows us to be your sealing partner, not just a supplier.

- **Application Support** – Our engineers and technical specialists offer reliable, knowledgeable and unbiased product and material recommendations. By focusing on end-user applications, ERIKS brings together design, materials knowledge and supplier quality systems to provide exceptional solutions.

- **Design & Develop**
  - Reverse engineering
  - New product development
  - 3D part generation
  - Linear and non-linear finite element modeling
  - Elastomer and thermoplastic compound development
  - Manufacturing of engineered plastic prototype parts

- **Test & Analysis** – Comprehensive in-house test facilities allow us to perform a wide range of testing and analysis.
  - Tensile strength
  - Chemical and heat aging
  - Dimensional measurements
  - Custom-designed testing and validation
  - Hardness
  - Compression-set
  - Material analysis
  - Failure analysis
  - Vendor Managed Inventory (VMI) programs
  - Kanban
  - EDI
  - Consignment programs

- **Logistic Services**
  - Local stocking
  - Customer specific labeling & packaging
  - Express delivery
  - Strategic partnerships
  - Dock-to-dock stock programs

Whatever market you are in, ERIKS has the knowledge and experience to understand and focus on your specific needs and deliver tailored solutions that can lower your operating costs and save you valuable time.
Valves, Instrumentation, Controls & Filtration Product Offering

Our valves, instrumentation and controls are currently sold through our Rawson and Industrial Controls companies which are recognized as the leading source for HVAC controls, process controls and industrial valves. We offer only the finest materials in the industry today. Whether you are a local solution provider or a Fortune 500 Company, we have the products you need, when you need them.

**Industrial Valves** – We are one of the leading industrial valve providers in the country. Our factory-trained technicians assemble a wide variety of valve and actuator combinations.

- Control Valves
- Ball; Manual & Automated
- Butterfly; Manual & Automated
- Gate, Globe & Check
- FM/CSA Approved Burner Management Valves
- Electrically or Pneumatically Actuated for Standard & Severe Service
- Desuperheaters & Steam Conditioning
Valves, Instrumentation, Controls & Filtration Product Offering

- **Process Instrumentation** – We have the top lines to measure and control pressure, temperature, flow, level, humidity, pH, gas detection and more. Our team of engineers can help you design and implement the solution that best meets your needs.
  - Temperature, Pressure, Level, & Flow
  - pH, Conductivity & Humidity Sensors/Transmitters
  - Single & Multi-Loop Controllers
  - Paper & Paperless Recorders
  - Digital Indicators

- **Industrial Components** – Whether it is instrumentation, controls, sensors or valves, we have the products you need to keep your plant running.
  - Analog Gauges
  - Digital Gauges
  - Solenoid Valves
  - Pressure & Temperature Switches
  - Rotameters
  - Steam Traps & Accessories
  - Recorder Supplies

- **Factory Automation** – Our engineers utilize state-of-the-art tools to provide you with the best solution for your application.
  - Programmable Controllers
  - Industrial Network Communications
  - Industrial Computers
  - Motion Control
  - Integrated Systems
  - Data Recording & Reporting
  - Distributed Controls/Intelligent SCADA
  - Wireless Data Acquisition
Valves, Instrumentation, Controls & Filtration Product Offering

- **Combustion Controls** – We have a fully-stocked inventory of combustion control products to fulfill all of your boiler application needs.
  - Flame Safeguard Sensors & Controllers
  - Pumps & Low Water Cutoffs
  - Control Valves
  - Blow Down Valves
  - Gauges
  - Thermometers

- **HVAC Controls** – No one handles more of the major manufacturers than Industrial Controls. Whether it’s electric, pneumatic or DDC, we can accommodate almost any project on any scale.
  - Thermostats
  - Temperature, Pressure, Flow & Humidity Sensors
  - Controllers
  - Valves, Dampers, Actuators & Motors
  - Building Automation Systems
  - Gas Detection & Air Quality
  - Variable Speed Drives

- **Filtration** – Our vast breadth of filtration products allows our specialists to provide you with the solution that’s right for you. We are a brand-neutral filtration supplier which allows us to select the right solution for every filtration need or problem. Our specialists have access to the latest technologies to solve a variety of common filtration problems.
  - Bag & Cartridge Filters
  - Basket Strainers & Separators
  - Cartridge & Filter Housing
  - Media filtration
  - Self-cleaning automated systems
  - Self-cleaning screen & disc
  - Package filtration systems
  - Reverse Osmosis/Ultra-pure filtration

**Rawson and Industrial Controls** aim to continuously improve your efficiencies through superior products, services and solutions in order to increase your productivity and ultimately, your bottom line. Visit www.rawsonlp.com or www.industrialcontrolsonline.com for more information.
Valves, Instrumentation, Controls & Filtration Services

- **Advice on Product Selection** – Our customers rely on us to help them size and select products for their applications. Our experienced sales organization has wide product and application know-how.

- **Design & Co-Engineered Solutions** – Our tailor-made solutions help customers solve their difficult process control problems. We have in-house engineering and design capabilities at multiple locations based in Texas, New Jersey, and Wisconsin.

- **Valve Automation** – We offer the complete package - control valve, actuator and instruments – that is assembled, tested and ready for installation.
  - Standard and custom valve configurations
  - Complete documentation of engineering drawings for assemblies

- **Steam Trap Surveys** – Rawson and Energy Management & Technology (EM&T) provide the most accurate data and the highest quality products needed to improve the steam quality, equipment reliability and steam system safety at your site.
  - Steam Trap System Analysis
  - Maintenance Management & Consulting
  - Compressed Gas Leak Surveys
  - Tag Leaks Physically & Digitally
  - Informative & Decisive Reporting

- **Instrument Service** – Improved delivery times, more efficient inventory management and less inventory shrinkage through:
  - Product modifications such as calibration and liquid filling of gauges
  - Bag and tag
  - Rental tool program
  - Minor sub-assemblies

- **Program & Automation** – Our customer gets a complete solution that is designed, assembled, tested, ready for installation and customizable from a remote location
  - Standard and custom configurations
  - Specify solutions with right computer hardware, software, controllers and all interfaces

**Contact one of our Rawson or Industrial Controls Service Centers to learn more about our offering at www.eriksna.com.**
ERIKS (www.ERIKS.com) has been a leading international industrial service provider since 1940. ERIKS North America offers a wide range of innovative, high-quality mechanical engineering components and associated technical and logistical services from 140 locations across the United States, Canada and Mexico. We provide the highest quality product standards in the industry, along with the peace of mind knowing that our products and fabrication are consistent, location-to-location, across our extensive footprint. From agriculture to power generation and from oil and gas to petrochemicals, ERIKS North America provides a local presence and infinite possibilities, backed by ERIKS’ worldwide network of resources and know-how with over 300 locations in 20 countries. For more information, please visit www.ERIKSNA.com.

Dark blue countries represent ERIKS presence.
And Peace of Mind…
Knowing It’s All Right Here

ERIKS puts know-how where you need it. Fast.

From one of 140 locations, coast-to-coast.

ERIKS Industries Served
- Aggregate
- Agriculture
- Chemical
- Construction
- Consumer Products
- Food & Beverage
- Government
- Manufacturing
- Mining
- Oil and Gas
- Package Handling
- Petrochemical
- Petroleum Dispensing
- Petroleum Refining
- Pharmaceutical
- Power Generation
- Primary Metals
- Pulp and Paper / Wood
- Rental
- Semiconductor
- Tire
- Transport / Bulk Hauling
- Water and Wastewater