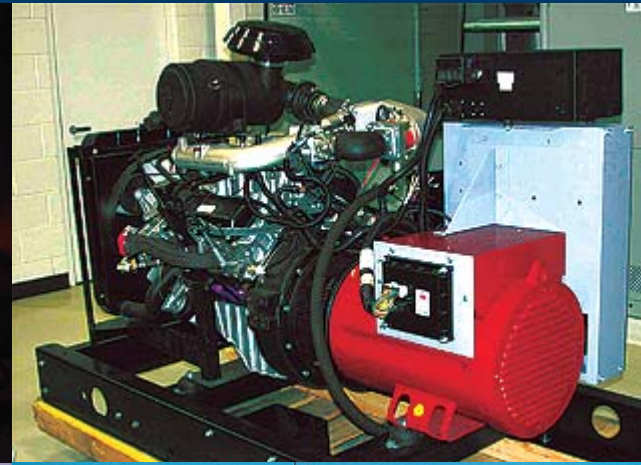


LISK

G.W. Lisk Company, Inc.



control

Solenoids and Solenoid Valves

**Components for Fuel, Emissions,
Power Generation and
Pneumatic/Hydraulic Systems**

DESIGN EXPERTISE.

The Experience To Meet Every Challenge.

Whether you're looking for a proven design or a new approach for a new application our design team delivers. We will work with your team to establish the design required, our experience will demonstrate that we can often suggest ways to improve component functionality, performance, or manufacturability.

A SINGLE RESOURCE.

From Concept to Production.

It's all here-under one roof. Design, tooling, manufacturing and testing. Insuring that you get your product on time, on spec and on budget.

SPECIALTY SOLUTIONS.

Solutions for Today's and Tomorrow's Systems.

Some example applications are:

- Cryogenic
- High Temperature (over 400deg. F)
- Magnetic Detent
- Voice Coil
- Closed Loop position (with LVTD)
- Extreme Pressure
- Bi-Directional
- Proportional
- Radiation Resistant
- EMP Hardened
- Micro Second response
- Extended Cycle life
- Precision Stroke
- Corrosive Atmosphere
- Vacuum



Emission Systems



Pneumatic/Hydraulic Systems



Fuel Systems

SOLENOIDS AND VALVES FROM LISK

State of the Art, Precision control for Today's Complex Systems

Lisk will work with you to design a Solenoid or Valve to fit your specific application. Lisk has over a half century of experience engineering and manufacturing specific designs for a wide variety of applications and customers.

Actuators

Relays, gun firing, conveyor-sorters, diesel shut off, park brakes.

Locks/Releases

Safe arm devices, door locks (home, offices, vehicles, space craft, shipping containers, aircraft), missile fins, gimbals, hydraulic spool locks, molding machine, cryogenic clamps, chair lift, wheel chair.

Valve and Valve Controls

Tubing pinch, diaphragm, proportional, butterfly, fuel-injector, high pressure, EGR, down hole oil drilling, pipe organ.

Positioners

Integrated circuit wiring, laboratory test equipment, optical testing, camera focusing, laser beam manipulation, power transmission, gear sensors, knitting machines, tape players.

Innovation. Precision. Performance. Quality.

For over 50 years, these characteristics have been the DNA for G. W. Lisk's evolving line of high tech, high quality precision solenoids, valves, flame arrestors and LVDTs. We've built a global reputation by listening very carefully to our customer's needs. Then meeting those needs with a level of commitment, dedication, ingenuity, experience and expertise found in only a handful of companies.

We understand the demands and pressures OEMs face as world markets demand even more efficient, cleaner, innovative systems to control each new generation of processes, vehicles and equipment.

Using our special expertise and experience, we are helping companies worldwide to increase power and fuel economy. Improve reliability and performance while reducing emissions. And achieve new levels of performance and control.

Our solenoid and valve technology can be found in systems on the

OVER 90 YEARS OF EXPERIENCE AND INNOVATION



In 1910, George Washington Lisk opened a small sheet metal shop on a portion of land that our current U.S. plant now occupies. The Main Campus is over 400,000 square feet (37,000 square meters) with supporting facilities in both the US and international locations.

The initial move into what is now our primary manufacturing facility came in 1949 with the introduction of SOLENOIDS. The design, development, and manufacturing of these coil-based products has been our focus ever since.

Building on the expertise and experience gained in both solenoids and valves, the company progressed into the design and manufacture of solenoid operated valves for specialized markets. Lisk's solenoid valve design and manufacturing expertise has continued to grow as applications have emerged and developed. The continued progression of product lines led to a hazardous-duty range of solenoid valves.

As our company has expanded, so have our engineering and manufacturing capabilities, which include a complete machine shop, welding, assembly and plating, complemented by a wide range of environmental, mechanical, and non-destructive testing facilities. These assets enable us to produce all parts from prototype to production.

No application is too small or too large for our consideration. We produce low volume, highly specialized designs as well as high volume, mass-produced products.

TOTAL IN-HOUSE CAPABILITY FOR DESIGN DEVELOPMENT AND MANUFACTURE

Our philosophy of maintaining complete control of the design, manufacture, and quality of Lisk products has led to a substantial investment in equipment, facilities, and training. This enables delivery of every order to specification, on time and on budget.

DESIGN & ANALYSIS Computer aided design in 3D capability. Finite element analysis in vibration, element analysis in vibration, shock, temperature, magnetic, flow, heat transfer, and stress

R & D LABORATORY Electrical characteristics, operational performance including pneumatic and hydraulic pressure/flow stands, response time, life cycling, evaluation of new processes, features, and new product development are just a few of the many "in-house capabilities".

NDT TESTING & MATERIAL ANALYSIS Non-Destructive Testing services that includes x-ray, visual, and Dye Penetrant inspection.

ENVIRONMENTAL TESTING

Including, but not limited to shock, vibration, salt spray, humidity, high (1000F) and low (-150F) temperatures, altitude to 100,000 feet, and other testing as required.

HYDRAULIC TESTING Up to 75HP, 60,000 PSI, with a multitude of fluids.

INTERNATIONAL STANDARDS Lisk meets and/or exceeds many international certification standards. Please inquire for our latest certifications.

PACKAGING Commercial, military, environmental storage, custom, VPCI, and returnable packaging and cleaning.



MANUFACTURING ENGINEERING In house Tool/Machine design and build capabilities. Fully trained technical staff for troubleshooting/repair of machinery and automated equipment to minimize downtime.

CNC WINDING MACHINES, COMPUTER AUTOMATED TEST STANDS

Reduces the time and costs associated with manual testing as well as eliminating any possibility of operator error.

CNC MACHINES Multi-axis, vertical and horizontal turning and milling as well as automatic manufacturing cells.

GENERAL SCREW MACHINES Six spindle, eight spindle chucking, and bar machines.

WELDING/BRAZING Electron beam, gas tungsten arc welding, laser, induction, heliarc, spot welding, and brazing.

PLATING Cadmium, zinc, electroless nickel, zinc phosphate, chemical film on aluminum, anodize, passivate, Zinc Nickel and others.

PRESSURE MOLDING Transfer and injection coil overmolding.

A WORKFORCE DEDICATED TO CONTINUOUS IMPROVEMENT, PROBLEM PREVENTION AND TOTAL CUSTOMER SATISFACTION.

Our investment in equipment and facilities is just part of our commitment to customer satisfaction. We demonstrate this commitment through the utilization of statistical process controls, Lean Manufacturing programs, training of suppliers and in-house personnel.

It is this level of commitment and investment that makes Lisk respected in the design and manufacture of Valves, Solenoids, LVDT's and Flame Arrestors. Whatever your application -- Sub-Sea petroleum extraction, transportation and refining, power generation, fuel dispensing and emission control -- our teams are eager to satisfy your requirements every step of the way.

“The result: dedication of every Lisk employee to defect-free products.”



Linear



Rotary

Proportional



Wet-pin



Solenoid Valves



Flame Arrestors



LVDT

Hazardous Location Valves



**A World Leader
in Commercial,
Aerospace,
and Military
Products**

**International Sales Office
and Manufacturing Facility**
G.W. Lisk Company, Inc.
2 South Street
Clifton Springs, New York 14432
Phone: (315) 462-2611

LISK
G.W. Lisk Company, Inc.
www.gwlisk.com