

**CURTISS -  
WRIGHT**

**VALVES  
DIVISION**



Pressure Management Solutions

# CURTISS - WRIGHT



## OUR COMMITMENT

We provide customers with total pressure relief management solutions transforming and ensuring plant function and safety.



## OUR COMPANY

Since 1943 **Farris Engineering**, part of Curtiss-Wright Valves Division is at the forefront in design and manufacturing of spring-loaded and pilot-operated pressure relief valves.

With over 80 years of proven performance, we are committed to providing total pressure relief management solutions through expert engineering, innovative tools, and superior products, transforming and ensuring plant function and safety.

**Curtiss-Wright Corporation** (NYSE: CW) has a long history with its roots dating back to Orville and Wilbur Wright's first flight in 1903, and Mr. Glenn Curtiss, the father of naval aviation. In 1929, the companies founded by these three great aviation pioneers, the Curtiss Aeroplane and Motor Company and Wright Aeronautical Corporation, merged to form the largest aircraft company at the time, Curtiss-Wright Corporation.

We have continued on the path of innovation and advanced engineering, and have applied that expertise to a number of critical applications in high-performance markets. Our success has resulted in a world-renowned reputation for performance, long-standing customer relationships and significant growth.

Today, we are a global, integrated provider of highly engineered, technologically advanced products and services. Our revenues are generated by providing our critical solutions through three segments: Aerospace & Industrial, Defense Electronics and Naval & Power, which support several of the largest, most vital industries in the world.

**Farris Engineering** has a network of representatives, located worldwide with experienced engineers, innovative tools and superior products to help design and support your facility.

Farris engineering <https://www.cw-valvegroup.com/Products>

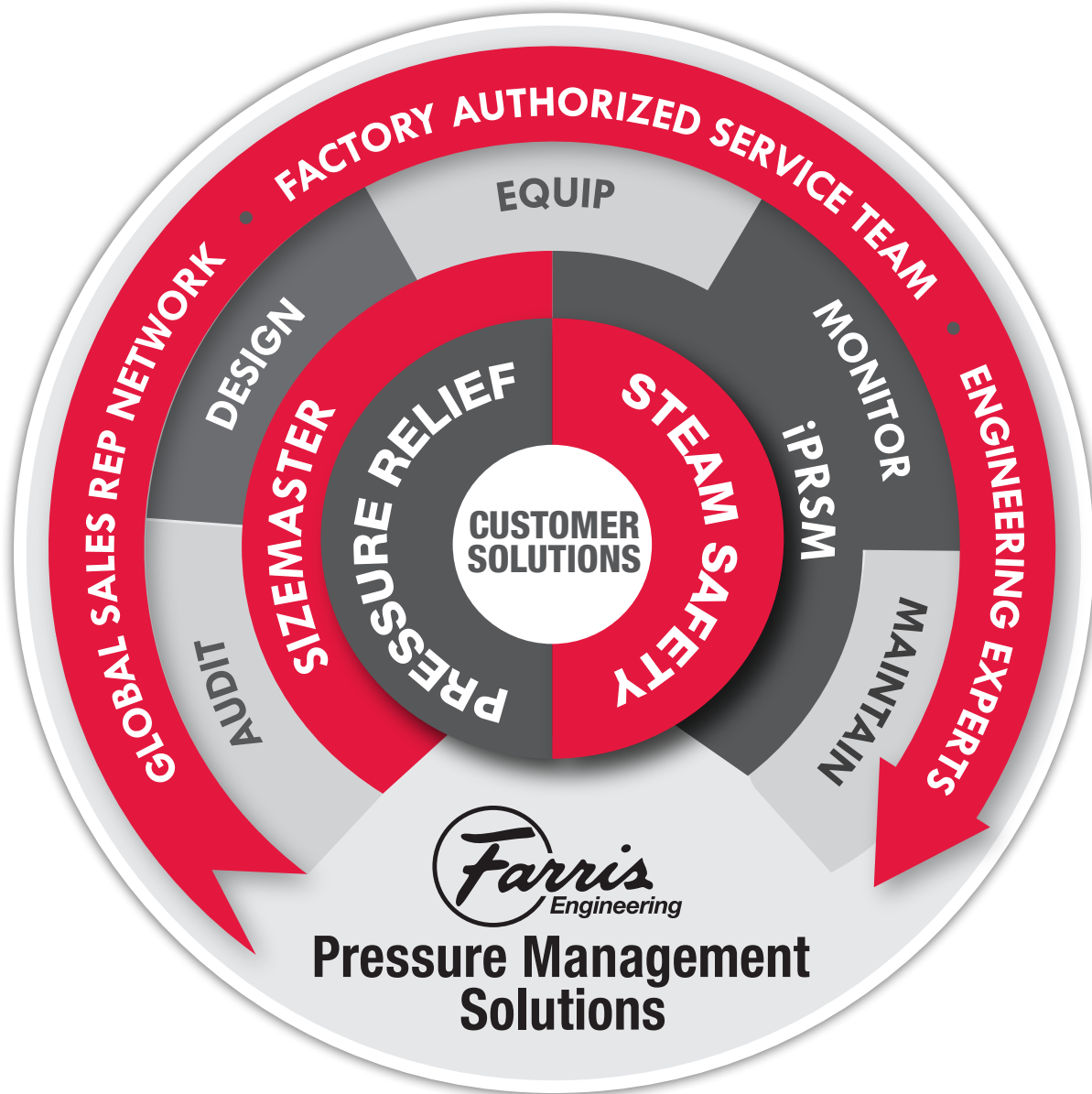




# WE HELP YOU ENGINEER IT

We bring total pressure relief management solutions supporting a facility's entire life cycle, transforming and ensuring plant safety.

Experienced Engineers • Solution Management • Superior Products



## THE POWER OF FARRIS

Our Pressure Safety Management Team Will Help Engineer, Equip, Audit, Monitor And Maintain Your System.

**Farris Engineering Services** is a global network with a local presence. Our team provides design and auditing services, inventory, factory trained Sales Representatives and a network of Field Engineers, to support your facilities safety. **SCAN** and learn how we can help.



Farris Engineering Services (tel) +1.281.724.2222 (e-mail) fes@curtisswright.com

# RESPONSIVE EXPERIENCED DEDICATED

Farris Engineering will assist in the design of your complete relief system. We can help with sizing, selection and specification of the appropriate relief device.

## TRAINING

We offer technical training courses ranging from novice to advanced levels, learning about Pressure Relief Valve Management and industry scenarios.

Training is at our Corporate Training Facility or on-site at customer location.

## SOME AVAILABLE CLASSES

- Pressure relief valve functionality
- Sizing requirements
- Material selection
- Sizing software training
- Maintenance and repair
- Mitigating overpressure scenarios

## CONTACT:

**techtrainer@curtisswright.com**

for a full schedule of technical training sessions.



## Pressure Relief System Software Management

### Software Capabilities

- Integrated thermal physical properties engine
- Relief load calculations to determine orifice area requirements for over pressure situations
- Inlet and outlet piping hydraulic calculations
- Header blowdown and knockout drum calculations
- Acoustic induced vibration analysis
- Screening for flow induced vibration



## Valve Sizing and Selection Software

- Provides sizing for vapor, liquid, steam and two-phase flow (Omega or HEM)
- Capable of multi scenario sizing. Multi-valve algorithm to easily size from multiple valves
- Built-in catalog selector ensures the proper product appropriate based on pressure and temperature
- Compliant with ASME and API



## Factory Authorized Service Team and Sales Representative Network

- Factory trained technicians in OEM specifications
- Local service and in-line testing reducing maintenance cost.
- Capability to track and manage relief valve maintenance and repair history
- Pressure relief solution management
- Access to Sales network, and keeping global inventory local





### 2600/2600L Series

Versatile and Customizable Spring Loaded Pressure Relief Valve

Product Description	
<b>Pressure Range:</b>	15 PSIG to 10,000 PSIG (1.03 to 689) BARG
<b>Temperature Range:</b>	-450°F to +1500°F
<b>Size Range:</b>	1" x 2" to 20" x 24"
<b>Materials:</b>	Carbon Steel, Stainless Steel, Monel, and Hastelloy C
<b>ASME Certification:</b>	UV and V
<b>Service:</b>	Steam/Water/Air



### 2700 Series

Customizable Spring Loaded Pressure Relief Valve with a Compact Design

Product Description	
<b>Pressure Range:</b>	15 PSIG to 16,000 PSIG (1.03 to 1103) BARG
<b>Temperature Range:</b>	-450°F to +750°F
<b>Size Range:</b>	1/2" x 1" to 1-1/2" x 2-1/2"
<b>Materials:</b>	Carbon Steel, Stainless Steel, Monel, and Hastelloy C
<b>ASME Certification:</b>	UV
<b>Service:</b>	Steam/Water/Air



### 3800/3800L Series

Pilot Operated Relief Valve with Snap Acting or Modulating Control

Product Description	
<b>Pressure Range:</b>	15 PSIG to 10,000 PSIG (1.03 to 689) BARG
<b>Temperature Range:</b>	-450°F to +500°F
<b>Size Range:</b>	1" x 2" to 12" x 16"
<b>Materials:</b>	Carbon Steel, Stainless Steel, Monel, and Hastelloy C
<b>ASME Certification:</b>	UV
<b>Service:</b>	Steam/Water/Air

## 2400 Series

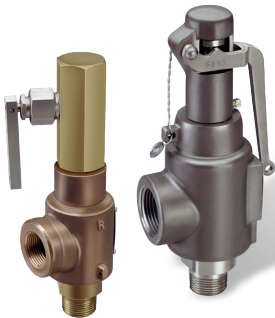
### High Performance Direct Spring Loaded Pressure Relief Valve



Product Description	
<b>Pressure Range:</b>	20 PSIG to 2,000 PSIG (1.37 to 137.8) BARG
<b>Temperature Range:</b>	-450°F to +550°F
<b>Size Range:</b>	1/2" x 3/4" to 1" x 1"
<b>Materials:</b>	Carbon Steel, Stainless Steel, and Brass/Bronze
<b>ASME Certification:</b>	UV
<b>Service:</b>	Air

## 1890/1896 Series

### Low Pressure Spring Loaded Pressure Relief Valves



Product Description	
<b>Pressure Range:</b>	15 PSIG to 800/300 PSIG (1.03 to 55.1/20.6) BARG
<b>Temperature Range:</b>	-20°F to +750°F
<b>Size Range:</b>	1/2" x 3/4" to 3/4" x 1"
<b>Materials:</b>	Carbon Steel, Stainless Steel, and Brass/Bronze
<b>ASME Certification:</b>	UV
<b>Service:</b>	Steam/Water/Air

## 4200 Series

### Spring Loaded Pressure Relief Valve for Section I team Applications



Product Description	
<b>Pressure Range:</b>	15 PSIG to 1,480 PSIG (1.03 to 102) BARG
<b>Temperature Range:</b>	-20°F to +1000°F
<b>Size Range:</b>	1-1/4" x 1-1/2" to 6" x 8"
<b>Materials:</b>	Carbon Steel, Stainless Steel, and Chrome-Moly
<b>ASME Certification:</b>	UV and V
<b>Service:</b>	Steam/Air

## 6400 Series

### Spring Loaded Pressure Relief Valve For Section I Steam Applications



Product Description	
<b>Pressure Range:</b>	15 PSIG to 2,900 PSIG (1.03 to 200) BARG
<b>Temperature Range:</b>	-20°F to +1000°F
<b>Size Range:</b>	1" x 2" to 4" x 6"
<b>Materials:</b>	Carbon Steel, Stainless Steel, and Chrome-Moly
<b>ASME Certification:</b>	UV and V
<b>Service:</b>	Steam/Air



## Warranty

All Farris Engineering Products have a Warranty Period of twelve months from first installation or eighteen months from delivery, whichever is sooner. All other warranty terms are as per Curtiss-Wright Industrial Standard Terms and Conditions, a copy which is available at [www.cw-industrialgroup.com/About/Group-Policies/Terms-Conditions.aspx](http://www.cw-industrialgroup.com/About/Group-Policies/Terms-Conditions.aspx) or contact your local representative.

## Certifications, Compliances and Approvals

- ASME V, UV, NV and NPT
- National Board Approval, NB
- ISO 9001:2015
- PED 2014/68/EU (European Pressure Equipment Directive)
- ATEX 2014/34/EU (European Potentially Explosive Atmospheres)
- CRN B51, N285.0 (Canadian Registration)
- CSQL (China Safety Quality License)
- Customs Union Certificates TR CU 010/2001 and TR CU 023/2013
- US Coast Guard
- API 526
- Nuclear Quality - 10 CFR 50 Appendix B, NCA-4000, NQA-1, N285.0 CSA N299.2/.3/.4"
- First Point Assessment Limited
- KGS (Korea Gas Safety)
- UKCA (United Kingdom) Conformity Assessed) *Pending*

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**Curtiss-Wright, Valves Division | Farris Engineering**

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**Offices Worldwide:** For a listing of our global sales network, visit our website at [www.cw-valvegroup.com/farrisdistributors](http://www.cw-valvegroup.com/farrisdistributors).

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