GROTH CORPORATION®
a Continental Disc company

INDUSTRIAL
PRODUCT SELECTION GUIDE

PRESSURE/VACUUM RELIEF VALVES · PILOT OPERATED RELIEF VALVES · EMERGENCY RELIEF VALVES
DEFLAGRATION & DETONATION FLAME ARRESTERS · BLANKET GAS REGULATORS

SAFETY PRODUCTS THAT PROTECT EQUIPMENT, LIVES & THE ENVIRONMENT

COMPANY OVERVIEW //
GROTH CORPORATION

Groth Corporation

Groth Corporation, formerly Groth Equipment Corporation, was founded by Edward Groth on August 1, 1960 and incorporated on September 7th that same year. Groth began as a manufacturers' representative, distributor, and remanufacturer of pressure relief valves sold to the refining and petrochemical industries. In 1999, Groth Corporation joined Continental Disc Corporation and moved to its current Stafford, Texas manufacturing site in 2002. These two events strengthened Groth's position as a global leader in low pressure safety solutions.

Today, Groth is a global leader in low pressure safety equipment with representatives around the world, providing engineered solutions with uncompromising commitment to customer satisfaction.

Groth industrial products are comprised of independent product lines, classified as: pressure/vacuum relief valves, blanket gas regulators and flame arresters.

Statement of Quality and Conformance

Groth Corporation products are designed to the latest standards from around the world. Groth possesses in-house flow lab testing capabilities which have been certified by TUV and are capable of flow testing most products to API 2000 standards. Additionally, Groth has the capability of performing deflagration and detonation testing as per U.S. Coast Guard 33 CFR and ISO 16852 (ATEX) guidelines. Groth has worked with outside testing and approval agencies such as FM, Southwest Research, TUV, IBExU, GOST and CSA to ensure that products perform to relevant specifications. As an ISO 9001 approved company, including compliancy to the European Pressure Equipment Directive (PED) through testing and certifications, Groth is able to meet the customer's demanding requirements for performance, safety and consistent quality.

For specific performance characteristics of the products contained in this selection guide, please see the Groth Industrial Catalog.

Product Overview

The following information provides a brief summary of Groth industrial products. More details on applications, features, benefits and technical information for each model can be found in the tables on the following pages.

Complete product specifications are available in the Groth Industrial Product Catalog. We also invite you to call our offices at 281-295-6800 or visit our website at www.grothcorp.com.

Pressure/Vacuum Relief Valves are protection devices typically mounted on a nozzle opening on the top of a fixed roof atmospheric storage tank. Their primary purpose is to protect a tank against rupture or implosion by allowing the tank to breathe, or vent, when pressure changes in the tank due to normal operations.

Pilot Operated Relief Valves serve the same primary purpose as pressure/vacuum relief valves, but with better performance characteristics than weight or spring loaded valves. Lower leakage and better flow performance make a pilot operated valve the solution when the focus is product conservation, expanded tank working band, and reduced fugitive emissions. A pilot operated relief valve provides the maximum available leakage control technology as specified in the Clean Air Act of 1990.

Emergency Relief Valves protect tanks against excessive pressure caused by external fire exposure or flashes within the tank. Emergency relief valves provide higher flow capacity than standard pressure/vacuum relief valves.

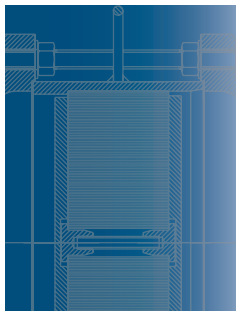
Deflagration Flame Arresters are fire safety devices used to protect stored or process media from deflagrations. A deflagration flame arrester can be used on the top of a tank or as an in-line safety device where combustible gases are transported through low pressure pipe lines.

Detonation Flame Arresters provide flame protection in cases where the ignition source pipe lengths are greater than what can be protected with a deflagration arrester.

Blanket Gas Regulators can provide both pressure and fire protection for storage tanks by supplying a blanketing gas which maintains a constant positive pressure in the vapor space of a storage tank. In addition to preventing outside air and moisture from entering the storage vessel, a blanket gas regulator reduces the evaporation of the stored product to a negligible amount, resulting in product conservation and greatly reduced emissions.

WHY PRESSURE/ VACUUM RELIEF VALVES ARE REQUIRED

- Saves money by saving product
- Protects tank from over or under pressure when sized properly
- Protection against fire hazard when conforming to API standards
- Minimizes evaporation emissions
- Reduces atmospheric corrosion of tank
- Generally required by OSHA, EPA, etc.



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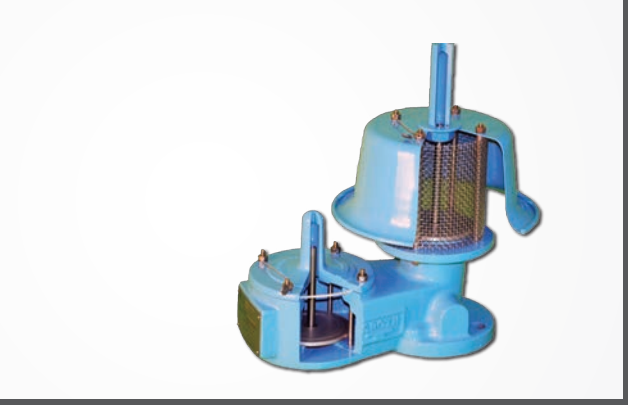
SMART RELIEF...SAFE SOLUTIONS℠

PRODUCT	Series 1200A VENT TO ATMOSPHERE PRESSURE/VACUUM RELIEF VALVE	Series 1220A PIPE-AWAY PRESSURE/VACUUM RELIEF VALVE
INDUSTRIES	Oil & Gas Chemical Liquid Storage Food & Beverage Wastewater	Oil & Gas Chemical Liquid Storage Food & Beverage Wastewater
FEATURES & BENEFITS	• Peripheral and central seat guides ensure reliable, repeatable performance • A wide seat and air-cushion seal keeps leakage low long after the valve is put in service • Self-draining housing body and drip rings protect seating surfaces from condensate and freezing, increasing operational reliability • TEFLON® seating diaphragms are standard to minimize sticking caused by resinous vapors and atmospheric moisture	• The outlet size is the same as the inlet size. • The flanged outlet connection allows escaping vapors to be piped away, instead of released directly to the atmosphere • Peripheral and central seat guides ensure reliable, repeatable performance • A wide seat and air-cushion seal keeps leakage low long after the valve is put in service • Self-draining housing body and drip rings protect seating surfaces from condensate and freezing, increasing operational reliability • TEFLON® seating diaphragms are standard to minimize sticking caused by resinous vapors and atmospheric moisture
TECHNICAL DETAILS	• Sizes 2” through 12” (50-300 mm) • 150# ANSI, PN10, PN16, JIS drilling classes available • Pressure settings 0.5 osig to 15 psig • Vacuum settings 0.5 osig to 12 psig • Available in aluminum, carbon steel, stainless steel, fiberglass and other materials • Optional materials of BUNA-N, VITON® & other seating diaphragms can be provided when required • ATEX and PED Approval	• Sizes 2” through 12” (50-300 mm) • 150# ANSI, PN10, PN16, JIS drilling classes available • Pressure settings 0.5 osig to 15 psig • Vacuum settings 0.5 osig to 12 psig • Available in aluminum, carbon steel, stainless steel, fiberglass and other materials • Optional materials of BUNA-N, VITON® & other seating diaphragms can be provided when required • ATEX and PED Approval



SMART RELIEF...SAFE SOLUTIONS℠

Series 1800A

10% OVERPRESSURE PRESSURE/ VACUUM RELIEF VALVE

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- Rated flow at only 10% overpressure provides the ability to operate closer to the tank MAWP, increasing the operating range of the process
- Reduced seat leakage prevents fugitive emissions and conserves stored product
- Near zero blow down lowers operating cost by reducing product evaporation
- Peripheral and central seat guides ensure reliable, repeatable performance
- Self-draining housing body and drip rings protect seating surfaces from condensate and freezing, increasing operational reliability

- Sizes 2” through 12” (50-300 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Pressure settings 0.5 osig to 15 psig
- Vacuum settings 0.5 osig to 12 psig
- Available in aluminum, carbon steel, stainless steel, fiberglass and other materials
- Optional materials of BUNA-N, VITON® & other seating diaphragms can be provided when required
- ATEX and PED Approval

Models 1720A & 1760A

PIPE-AWAY PRESSURE/VACUUM RELIEF VALVE SAME SIZE I/O

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- Peripheral and central seat guides ensure reliable, repeatable performance
- A wide seat and air-cushion seal keeps leakage low long after the valve is put in service
- Self-draining housing body and drip rings protect seating surfaces from condensate and freezing, increasing operational reliability
- TEFLON® seating diaphragms are standard to minimize sticking caused by resinous vapors and atmospheric moisture

- 2”, 3” and 4” sizes available (50, 75 and 100 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Pressure settings 0.5 osig to 33 osig
- Vacuum settings 0.5 osig to 16 osig
- Available in carbon steel, stainless steel, fiberglass and other materials
- Optional materials of BUNA-N, VITON® & other seating diaphragms can be provided when required
- ATEX and PED Approval

Series 1260A

PIPE-AWAY PRESSURE RELIEF VALVE

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- An ideal solution when only pressure relief is required
- The flanged outlet connection allows escaping vapors to be piped away, instead of released directly to the atmosphere
- Peripheral and central seat guides ensure reliable, repeatable performance
- A wide seat and air-cushion seal keeps leakage low long after the valve is put in service
- Self-draining housing body and drip rings protect seating surfaces from condensate and freezing, increasing operational reliability
- TEFLON® seating diaphragms are standard to minimize sticking caused by resinous vapors and atmospheric moisture

- Sizes 2” through 12” (50-300 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Pressure settings 0.5 osig to 15 psig
- Available in aluminum, carbon steel, stainless steel, fiberglass and other materials
- Optional materials of BUNA-N, VITON® & other seating diaphragms can be provided when required
- Back pressure in the system must be considered
- ATEX and PED Approval

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SMART RELIEF...SAFE SOLUTIONS℠

	Series 2300A PRESSURE RELIEF VALVE	Series 1300A VACUUM RELIEF VALVE
PRODUCT		
INDUSTRIES	Oil & Gas Chemical Liquid Storage Food & Beverage Wastewater	Oil & Gas Chemical Liquid Storage Food & Beverage Wastewater
FEATURES & BENEFITS	• Can be used for emergency relief on smaller tanks • Peripheral and central seat guides ensure reliable, repeatable performance • A wide seat and air-cushion seal keeps leakage low long after the valve is put in service • Self-draining housing body and drip rings protect seating surfaces from condensate and freezing, increasing operational reliability • TEFLON® seating diaphragms are standard to minimize sticking caused by resinous vapors and atmospheric moisture	• Peripheral and central seat guides ensure reliable, repeatable performance • A wide seat and air-cushion seal keeps leakage low long after the valve is put in service • Self-draining housing body and drip rings protect seating surfaces from condensate and freezing, increasing operational reliability • TEFLON® seating diaphragms are standard to minimize sticking caused by resinous vapors and atmospheric moisture
TECHNICAL DETAILS	• Sizes 2” through 12” (50-300 mm) • 150# ANSI, PN10, PN16, JIS drilling classes available • Pressure settings 0.5 osig to 15 psig • Available in aluminum, carbon steel, stainless steel and other materials • Optional materials of BUNA-N, VITON® & other seating diaphragms can be provided when required • ATEX and PED Approval	• Sizes 2” through 12” (50-300 mm) • 150# ANSI, PN10, PN16, JIS drilling classes available • Vacuum settings 0.5 osig to 12 psig • Available in aluminum, carbon steel, stainless steel and other materials • Optional materials of BUNA-N, VITON® & other seating diaphragms can be provided when required • ATEX and PED Approval

SMART RELIEF...SAFE SOLUTIONS℠

Series 1360A

VACUUM RELIEF VALVE (Side Mount)

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- Optional flanged inlet connection allows relief capacity to be piped in, instead of pulled directly from the atmosphere
- Peripheral and central seat guides ensure reliable, repeatable performance
- A wide seat and air-cushion seal keeps leakage low long after the valve is put in service
- TEFLON® seating diaphragms are standard to minimize sticking caused by resinous vapors and atmospheric moisture

- Sizes 3" through 14" (80-350 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Vacuum settings 0.5 osig to 12 psig
- Available in aluminum, carbon steel, stainless steel, fiberglass and other materials
- Optional materials of BUNA-N, VITON® & other seating diaphragms can be provided when required
- ATEX and PED Approval

Series 3000

BLANKET GAS REGULATOR

Refineries
Chemical & Petrochemical Plants
Liquid Bulk Storage Terminals
Pulp & Paper Plants
Food & Beverage Storage

- Modulating action ensures the valve only opens as much as necessary, which lowers operational cost by conserving product
- Direct acting, patented force-multiplying linkage allows for a compact size and low weight solution
- Field adjustable orifice selector allows flow selection from: 25%-100% for 1/2" and 5%-100% for 1"
- Setting is unaffected by fluctuations in blanket gas supply pressure, providing reliable, repeatable performance

- Available in 1/2" and 1" (15 mm and 25 mm)
- Settings from 0.5 InWC to 15 psig
- Molded TEFLON® (PFA) Actuator Diaphragm
- Wide selection of elastomeric seal materials
- Available in stainless steel or other materials by request
- Field adjustable flow capacity (25%-100% for ½", 5%-100% for 1")
- ATEX Approval (3011L & 3011H)

Models 6000/6100

GAUGE HATCH

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- Provides access for gauging or obtaining product samples from storage tanks
- Design ensures uniform seating while providing convenient access for gauge product sampling
- Designed with serrated foot lever surface to avoid foot slippage when opening
- Model 6000 provides pressure relief as emergency venting
- Model 6100 incorporates positive cover hold down which assures premium tight seal on tanks with internal pressures up to 3 psig
- TEFLON® seating diaphragms are standard to minimize sticking caused by resinous vapors and atmospheric moisture

- Sizes 4" through 10" (100-250 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Available in aluminum, carbon steel, stainless steel & additional materials
- Available in free lift or lockdown cover
- Gasketed covers are recommended on tanks with high pressure settings
- Optional materials of BUNA-N, VITON® & other seating diaphragms can be provided when required
- ATEX Approval

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SMART RELIEF...SAFE SOLUTIONS℠

	Series 1660A	Series 1400
PRODUCT	**PRESSURE RELIEF PILOT OPERATED VALVE**	**PILOT OPERATED PRESSURE/VACUUM RELIEF VALVE**
INDUSTRIES	Low Pressure Storage Tanks Natural Gas Production Facilities Air Separation Plants Air Blowers for Conveyor Systems & Wastewater Treatment Plants Storage of Volatile Organic Compounds Cryogenic Service	Low Pressure Storage Tanks Natural Gas Production Facilities Air Separation Plants Air Blowers for Conveyor Systems & Wastewater Treatment Plants Storage of Volatile Organic Compounds
FEATURES & BENEFITS	• Rated flow at less than 10% overpressure provides the ability to operate closer to the tank MAWP, increasing the operating range of the process • Bubble-tight to set pressure design prevents fugitive emissions and conserves stored product • EPA Method 21 testing available from the factory • Flexibility in terms of film or o-ring seat and snap or modulating action allows product customization to specific application requirements	• Rated flow at less than 10% overpressure provides the ability to operate closer to the tank MAWP, increasing the operating range of the process • Flexibility in snap or modulating action allows product customization to specific application requirements
TECHNICAL DETAILS	• Sizes 2” through 12” (50-300 mm) • 150# ANSI, PN10, PN16, JIS drilling classes available • Pressure settings from 2 InWC to 15 psig • Vacuum settings from 3 InWC to 12 psig • Carbon steel, stainless steel & aluminum materials available • Options include pilot exhaust piped to discharge header, field test connection, manual blow down, conical film seat pallet, and remote sense pickup • Cryogenic service proven reliable below minus 300°F with no freeze-up • ATEX and PED Approval	• Sizes 2” through 12” (50-300 mm) • 150# ANSI, PN10, PN16, JIS drilling classes available • Pressure settings from 2 INWC to 15 psig • Vacuum settings from 1/2 osig to 12 psig • Carbon steel, stainless steel, aluminum and other materials available • ATEX and PED Approval

SMART RELIEF...SAFE SOLUTIONS℠

Series 2500

EMERGENCY RELIEF
PILOT OPERATED VALVE

Low Pressure Storage Tanks
Natural Gas Production Facilities
Air Separation Plants
Air Blowers for Conveyor Systems & Wastewater Treatment Plants
Storage of Volatile Organic Compounds
Severe Service Environments

- Rated flow at 20% overpressure provides the ability to operate closer to the tank MAWP, increasing the operating range of the process
- Bubble-tight to set pressure design prevents fugitive emissions and conserves stored product
- EPA Method 21 testing available from the factory

- Sizes 16", 20" and 24" (400, 500 and 600 mm)
- Trim available in 316 SS or Hastelloy
- Standard (PFA) diaphragm
- ANSI 150# and API 650 drilling
- Pressure settings 5 InWC to 6 psig
- Derakane, Furan, carbon steel, 316 SS, and other body materials
- ATEX Approval

Series 1500

AIR OPERATED
PRESSURE/VACUUM RELIEF VALVE

Severe Applications
Where Polymerization and Crystallization May Take Place

- Snap acting design and soft-seat seals conserve product and minimize valve wear, lowering operational and maintenance costs
- Instrument air-operated allows for non-corrosive, non-plugging operation when storage media would otherwise damage or inhibit pilot operation
- Valve can be completely serviced while installed, reducing maintenance costs
- Lower profile and weight than spring operated models for high settings
- Remote pilot sensing from pressure switch
- Remote or manual blowdown available

- Sizes 2" through 12" (50-300 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Pressure settings from 5 InWC to 15 psig
- Vacuum settings from 0.5 osig to 12 psig (Models 1500 and 1520)
- Aluminum, carbon steel, fiberglass (FRP) or special body materials available

Models 2000A & 2050A

EMERGENCY RELIEF VALVES

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- Peripheral seat guides ensure reliable, repeatable performance
- A wide stainless steel seat and air-cushion seal keeps leakage low long after the valve is put in service

- Sizes 16", 20" and 24" (400, 500 and 600 mm)
- ANSI 150# and API 650 drilling classes available
- Pressure settings 1.5 - 16 osig
- Vacuum settings 0.5 - 4 osig
- Available in carbon steel, stainless steel, fiberglass and other materials
- Removable stops can be provided which restrict the lift of the cover
- Model 2050A incorporates a vacuum breaker for added vacuum relief capability
- ATEX Approval

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SMART RELIEF...SAFE SOLUTIONS℠

PRODUCT	Models 2400A & 2450A HINGED EMERGENCY PRESSURE RELIEF VALVE	Model 2100 EMERGENCY RELIEF VALVE
INDUSTRIES	Oil & Gas Chemical Liquid Storage Food & Beverage Wastewater	Oil & Gas Chemical Liquid Storage Food & Beverage Wastewater
FEATURES & BENEFITS	• Hinged design includes lift stop ensuring positive reseating for reliable performance • A stainless steel wide seat and air-cushion seal keeps leakage low long after the valve is put in service	• Independently adjustable springs keep the valve tightly sealed until set pressure is reached. • VITON® seating ensures a tight seal
TECHNICAL DETAILS	• Sizes 16”, 20” and 24” (400, 500 and 600 mm) • ANSI 150# and API 650 drilling classes available • Pressure settings 1.5 - 8 osig • Vacuum settings 0.5 - 4 osig • Available in carbon steel, stainless steel and other materials • Counter weights are available for lower settings • ATEX Approval	• Sizes 16”, 20” and 24” (400, 500 and 600 mm) • Pressure settings 1 - 15 psig • ANSI 150# and API 650 drilling classes available • Available in carbon steel, stainless steel and other materials • PED Approval • ATEX Approval (2100A)

SMART RELIEF...SAFE SOLUTIONS℠

Model 7618

VERTICAL DEFLAGRATION ARRESTER

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- Proven spiral-wound, crimped ribbon, flame element provides reliable flame protection
- Modular design allows easy and cost-effective flame bank maintenance
- Compact design keeps weight and installation cost down
- Flame arrester element geometry maximizes flame quenching capability while minimizing pressure drop

- Sizes 2” through 12” (50-300 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Available in carbon steel, stainless steel, aluminum and other materials

Model 8800A

VENT TO ATMOSPHERE PRESSURE/VACUUM RELIEF VALVE/ FLAME ARRESTER COMBINATION

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- Combines the benefits of the 1200A Series and the Model 7618 in a complete package that meets the increased flame protection requirements of API 2000

- Sizes 2” through 12” (50-300 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Pressure settings 0.5 osig to 15 psig
- Vacuum settings 0.5 osig to 12 psig
- Available in aluminum, carbon steel, stainless steel and other materials

Model 8820A

PIPE-AWAY PRESSURE/VACUUM RELIEF VALVE / FLAME ARRESTER COMBINATION

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- Combines the benefits of the 1220A Series and the Model 7618 in a complete package that meets the increased flame protection requirements of API 2000

- Sizes 2” through 12” (50-300 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Pressure settings 0.5 osig to 15 psig
- Vacuum settings 0.5 osig to 12 psig
- Available in aluminum, carbon steel, stainless steel and other materials

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SMART RELIEF...SAFE SOLUTIONS℠

	Model 7622 FLAME CHECK	Model 7628 HORIZONTAL DEFLAGRATION ARRESTER
PRODUCT		
INDUSTRIES	Oil & Gas Chemical Liquid Storage Food & Beverage Wastewater	Oil & Gas Chemical Liquid Storage Food & Beverage Wastewater
FEATURES & BENEFITS	• Perforated plate construction reduces pressure drop • Design permits easy access for inspection and maintenance	• Proven spiral-wound, crimped ribbon, flame element provides reliable flame protection • Modular design allows easy and cost-effective flame bank maintenance • Compact design keeps weight and installation cost down • Flame arrester element geometry maximizes flame quenching capability while minimizing pressure drop • Eccentric design allows for horizontal installation by preventing liquid accumulation
TECHNICAL DETAILS	• Sizes 1/2” through 2” (15-50 mm) • Available with carbon steel and stainless steel housing and stainless steel element	• Sizes 2” through 12” (50-300 mm) • 150# ANSI, PN10, PN16, JIS drilling classes available • Available in carbon steel, stainless steel, aluminum and other materials • Tapped drain and instrumentation ports available

SMART RELIEF...SAFE SOLUTIONS℠

Model 7758

DETONATION FLAME ARRESTER

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- Sintered wire mesh flame element efficiently and robustly protects product
- Compact design with high flow capacity and low pressure drop reduces installation and acquisition costs
- Elements are easily removed in-line for cleaning and maintenance and are economical to replace if necessary

- Sizes 2” through 12” (50-300 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Housings are available in carbon steel, 316 SS, and Hastelloy C
- Elements are available in 316 SS, Hastelloy C, and other corrosion resistant alloys
- In-line or end-of-line deflagrations in any piping configuration
- Bi-directional

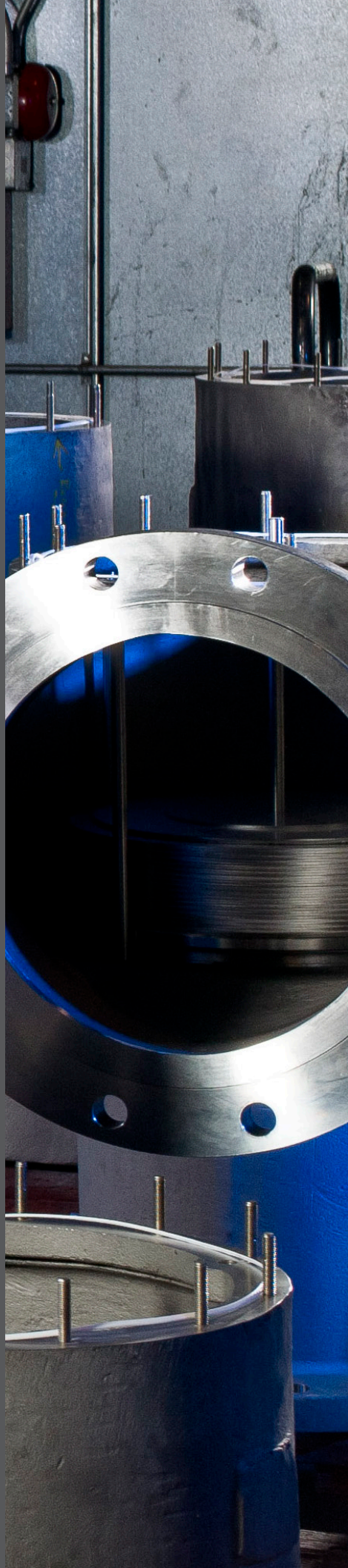
Model 7658A

DETONATION ARRESTER

Oil & Gas
Chemical
Liquid Storage
Food & Beverage
Wastewater

- Options for in-line cleaning & swing bolts for fast element removal keep maintenance costs low
- Availability of multiple flame element diameters for each pipe size allows arrester to be sized to provide required flow capacity at minimum cost
- Proven spiral-wound, crimped ribbon, flame element provides reliable flame protection
- Modular design allows easy & cost effective flame bank maintenance
- Compact design keeps weight & installation cost down
- Flame arrester element geometry maximizes flame quenching capability while minimizing pressure drop

- Sizes 2” through 12” (50-300 mm)
- 150# ANSI, PN10, PN16, JIS drilling classes available
- Multiple element sizes available for each flange size
- Bi-directional
- Vertical or horizontal installation
- Standard materials of construction are carbon steel or stainless steel
- 316 SS element is standard
- In-line maintenance available



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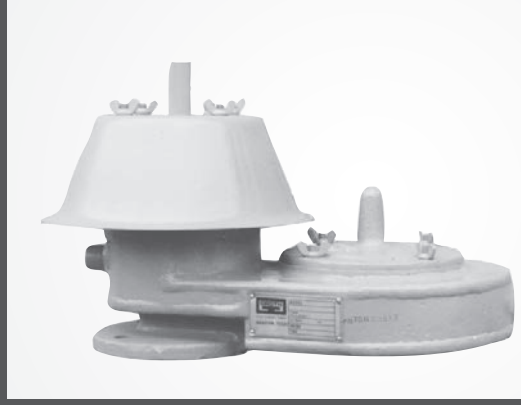

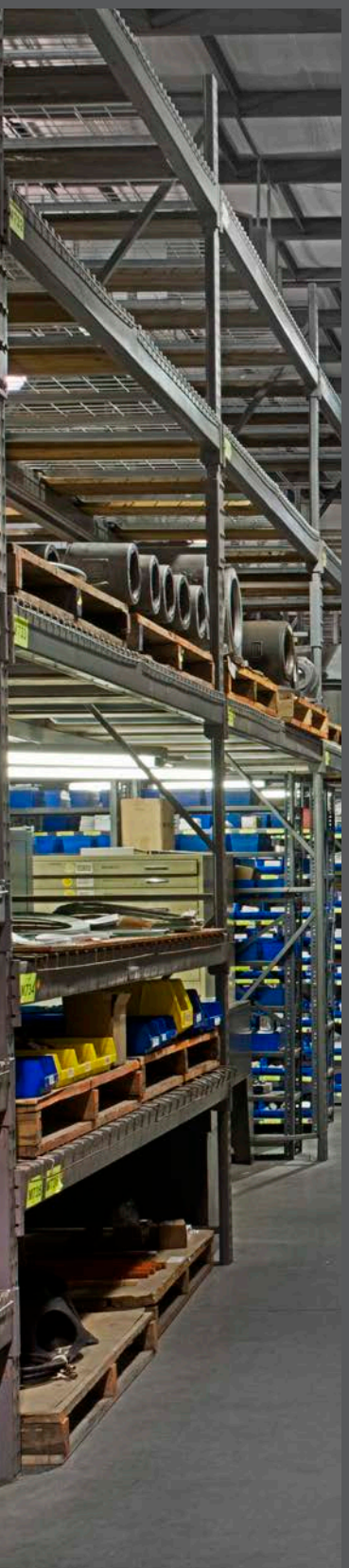

Fiberglass/Plastic Relief Valves

Fiberglass valves are used the same as their counterparts manufactured in metal, primarily on above ground storage tanks installations.

Fiberglass construction can be used where highly corrosive and toxic liquids are being stored.

STANDARD

- The non-metallic construction increases life in highly corrosive applications
- Peripheral and central seat guides ensure reliable, repeatable performance
- “Cushioned Air” seating
- TEFLON® seating diaphragms are standard
- Self draining housing body and drop rings protect seating surfaces from condensate and freezing

AVAILABILITY

- Fiberglass construction is available on Series 1200A, 1300A, 2000A and other products

Steam Jacketed Relief Valves

Steam jacketed valves are designed for use on tanks containing liquids whose vapors may crystallize at normal temperatures. They afford protection against valve clogging.

Uniform heating of the housing and valves assures the valve will remain in operating condition.

SPECIAL FEATURES

- Steam jacketed valves are built of corrosion resistant materials throughout
- Valve covers can be easily removed for convenient inspection and maintenance
- Steam heated valves are suitable for steam circulation up to 100 psig saturated

AVAILABILITY

- Steam jacketed valves are available on Models 1200A, 1220A, 1260A, 1300A, 1360A, 2000A, 2300A and 2400A

Model 210 Test Stand

The Model 210 Test Stand contains all valves and gauges necessary to accurately verify settings for both pressure and vacuum conditions. Seat leakage is monitored using flow meters ranging from 0.1 - 100 SCFH.

The Model 210 Test Stand is designed to assist in meeting the requirements of the 1990 Clean Air Act Amendments.

STANDARD

- Pressure/Vacuum testing
- Digital gauges
- Flowmeters
- Manometers
- Pressure vessel directly under test flange for smooth regulated pressure or vacuum
- Heavy steel construction
- SS tubing
- Mounting adapters & gaskets included

OPTIONS

- Pilot valve kit
- Blanket gas regulator kit

Markets & Applications Served by Groth Corporation

CHEMICAL INDUSTRY

Petrochemical Industry
Vapor Recovery System
Extreme Thermal Effect Protection
HCL Storage Tanks
Chlorine / VCM Storage
EDC Storage
Solvent Tanks
Polymers Tanks
Storage Tank Terminals - BGR/POV
Resin Tanks
Pigment Storage Tanks
PVC Silo (fiberglass fibers)
Heater Fans
Methanol Storage
Solvent PH Restoration
Caustic Soda Protection

OIL & GAS INDUSTRY

Offshore Platforms
Oilfield Production Tanks
Ethanol Process Tanks
Gasoline Storage
Crude Oil
Rich Oil Storage
Vapor Recovery System
Extreme Thermal Effect Protection
Raw Product Tanks (Oils)
Hydrocarbons & Organic Corrosives
Lube Oil Storage Tanks
Storage Tank Terminals - BGR/POV
Heater Fans
LNG Terminals – Cryogenic Service

BIOGAS INDUSTRY

Wastewater Municipal
Agricultural (Dairy, Swine, Poultry)
Food Processing Plants
Extreme Thermal Effect Protection

FOOD & BEVERAGE INDUSTRY

Granola Oil Storage
Orange Juice
Soybean Storage Tanks
Palm Oil
Crisco Oil Tanks
Bourbon Tanks
Ethanol Storage Tanks – Vodka Distillation
Beer Wells
Fermenting Tanks
Batch Distillation
Raw Product Material (oils)
Vacuum Relief Deaerator Accumulator
WFI & DI Tanks (Deionized)

PHARMACEUTICAL & COSMETICS INDUSTRY

Vitamin E
Process Tanks
Extreme Thermal Effect Protection
Peroxide Tanks
Mineral Spirits Tanks
Distillation and Storage
HDL Paste
Heater Fan
Caustic Soda Protection
Neutralization Sump

NICHE MARKETS

Utilities
Sticky Label Manufacturers
Coal Dust
Check Valve in piping system
Paint Mixing Tanks
Low Pressure Air Duct Protection
Hydraulic Fluid Storage
Crystallizer Vapor Columns
Semiconductor Facilities Industry
Feed Storage Tanks
Bulk Storage Tanks

GROTH®
CORPORATION
a Continental Disc company

All Groth manufacturing facilities are ISO 9001 approved.

TÜV SÜD ISO 9001

The products in this catalog may qualify for some, none or all of these certifications:

FM CE Ex

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