

INNOVATIVE, PROVEN,

**COST-EFFECTIVE** 

**TECHNOLOGY** 







Fike is the leader in delivering patented, innovative technologies to the explosion protection market. With over 60 years of field experience, Fike understands the complexities of plant processes, relevant code compliance and the critical nature of continued plant operation. The culmination of this expertise is Fike's line of explosion protection products — technology designed to help you achieve your safety goals AND keep you in compliance with the quickly changing codes, standards and regulations associated with the explosion protection industry. Fike is a leader in the development of effective, cost efficient, ATEX certified explosion venting solutions.

Proven to be one of the most effective forms of passive explosion protection, explosion venting provides overpressure protection from potential deflagration hazards by providing a planned pathway for the expanding gases to escape. Economically priced and offering a long service life, Fike's wide range of explosion venting solutions are ideal for many applications.

					PERFORMANCE ATTRIBUTES						
		MODEL	DESIGN	BURST PRESSURE	Operating Ratio	Operating	Vacuum	Non-	Pulsating /	Sanitary	COMPLIANCE
		Vmax™	Single element	1.5 - 5.0 PSIG 103 - 345 MBARG	80%	0 - 300°F -17 - 149°C	Rating	Fragmenting	Cycle		NFPA 68
	[GED	Sani-VS	Single element Integrated frame	0.1 - 0.35 KG/CM <sup>2</sup> 0.7 - 6.5 PSIG 50 - 448 MBARG 0.05 - 0.5 KG/CM <sup>2</sup>	80%	-40 - 460°F -40 - 240°C	<del></del>	•	•••	•	NFPA 68 ATEX / CE
	BNTG	Sani-VSA	Single element Integrated frame	0.7 - 6.5 PSIG 50 - 448 MBARG 0.05 - 0.5 KG/CM <sup>2</sup>	80%	-40 - 460°F -40 - 240°C	<del></del>	•	•••	•	NFPA 68 ATEX / CE 3-A
3TE		CV-SI	Composite	0.5 -14.5 PSIG 35 - 1000 MBARG 0.04 - 1.0 KG/CM <sup>2</sup>	80%	-40 - 1100°F -40 - 600°C	<del></del>	•	••0		NFPA 68
RECTANGL		CV-CF	Composite	0.75 -10.0 PSIG 52 - 690 MBARG 0.05 - 0.7 KG/CM <sup>2</sup>	60 - 75%	-40 - 250°F -40 - 120°C	<del></del>	•	•••		NFPA 68 ATEX / CE
REC		CV-SF	Composite	0.5 -10.0 PSIG 35 - 690 MBARG 0.04 - 0.7 KG/CM <sup>2</sup>	60 - 75%	-40 - 500°F -40 - 260°C	ዕዕዕ	•	•00		NFPA 68
		CV-H	Composite	0.5 -10.0 PSIG 35 - 690 MBARG 0.04 - 0.7 KG/CM <sup>2</sup>	60 - 75%	-40 - 500°F -40 - 260°C		•	●00	•	NFPA 68
SQUARE	7	CV	Composite	0.5 -10.0 PSIG 35 - 690 MBARG 0.04 - 0.7 KG/CM <sup>2</sup>	60 - 75%	-40 - 500°F -40 - 260°C	<del></del>	•	•00		NFPA 68 ATEX / CE
8	FLA	CV-I	Composite	0.5 -10.0 PSIG 35 - 690 MBARG 0.04 - 0.7 KG/CM <sup>2</sup>	60 - 75%	-40 - 800°F -40 - 425°C	<del></del>	•	•00		NFPA 68
		Sani-V®	Single element Integrated frame	0.5 - 6.5 PSIG 35 - 448 MBARG 0.04 - 0.5 KG/CM <sup>2</sup>	50%	-40 - 460°F -40 - 240°C	<del></del>	•	●00	•	NFPA 68 ATEX / CE
		Sani-VA	Single element Integrated frame	0.5 - 6.5 PSIG 35 - 448 MBARG 0.04 - 0.5 KG/CM <sup>2</sup>	50%	-40 - 460°F -40 - 240°C	<del></del>	•	●00	•	NFPA 68 ATEX / CE 3-A
		EleGuard™	Single element Integrated frame	0.7 - 2.9 PSIG 50 - 200 MBARG 0.05 - 0.2 KG/CM <sup>2</sup>	25%	-4 - 140°F -20 - 60°C		•	•00		NFPA 68 ATEX / CE
		Flex-V®	Composite Reclosing	1.23 - 1.81 PSIG 85 - 125 MBARG 0.087 - 0.127 KG/CM <sup>2</sup>	50%	-4 - 140°F -20 - 60°C	ዕዕዕ	•	●00		NFPA 68 ATEX / CE
	FLAT BULGED	CV-S	Composite	1.0 - 15.0 PSIG 69 - 1030 MBARG 0.07 - 1.0 KG/CM <sup>2</sup>	80 - 90%	-40 - 500°F -40 - 260°C	<del></del>	•*	•••		NFPA 68 ATEX / CE
		CV-SI	Composite	0.5 - 10.0 PSIG 35 - 690 MBARG 0.04 - 0.7 KG/CM <sup>2</sup>	80%	-40 - 1100°F -40 - 600°C	ዕዕዕ	•	••0		NFPA 68 ATEX / CE
ROUND		CV-CF	Composite	.75 - 15.0 PSIG 52 - 1030 MBARG 0.05 - 1.0 KG/CM <sup>2</sup>	60 - 75%	-40 - 250°F -40 - 120°C	<del></del>	•*	•••		NFPA 68
RO		CV-SF	Composite	0.75 -10.0 PSIG 52 - 690 MBARG 0.05 - 0.7 KG/CM <sup>2</sup>	60 - 75%	-40 - 500°F -40 - 260°C	<del></del>	•	•00		NFPA 68
		CV-H	Composite	0.5 - 15.0 PSIG 35 - 1030 MBARG 0.04 - 1.0 KG/CM <sup>2</sup>	60 - 75%	-40 - 500°F -40 - 260°C		•	•00	•	NFPA 68
		CV	Composite	0.5 - 15.0 PSIG 35 - 1030 MBARG 0.04 - 1.0 KG/CM <sup>2</sup>	60 - 75%	-40 - 500°F -40 - 260°C	<b></b>	•*	•00		NFPA 68 ATEX / CE
		CV-I	Composite	0.5 - 15.0 PSIG 35 - 1030 MBARG 0.04 - 1.0 KG/CM <sup>2</sup>	60 - 75%	-40 - 800°F -40 - 425°C	<del></del>	•	•00		NFPA 68

# **Explosion Vents - Sanitary**

# Sani-VS



- · Integrated frame designed for bolt-on installation
- FDA compliant materials
- Stock program\*









# Sani-VSA



- · Integrated frame designed for bolt-on installation
- FDA compliant materials
- Sanitary gasket
- 3-A approval (CIP/SIP)











### Sani-V



- · Single membrane, integrated frame for bolt-on installation
- FDA compliant materials
- Stock program\*











# Sani-VA



- · Single membrane, integrated frame for bolt-on installation
- FDA compliant materials
- Sanitary gasket
- · 3-A approval (CIP/SIP) and **EHEDG** certified









# CV-H



- Teflon® liner on process side supports applications in static environments
- Available in round and square / rectangular configurations







# **Explosion Vents**

# CV



- · Long lasting service for static to light pressure cycling conditions
- Available in round and square / rectangular configurations
- Stock program\*









# **CV-CF**

- Extended service life under heavy pulsating and cycling process conditions
- Available in round and square / rectangular configurations









# CV-I

- Insulation extends service life in high temperature applications
- Available in round and square / rectangular configurations











# **EleGuard**

- · Integrated frame designed for bolt-on installation
- · Designed and priced to protect bucket elevators







# Vmax

- · Single membrane, multi-dome design offers extended service life
- · Provides stable burst pressure ratings independent of temperature
- Stock program\*









### CV-S



- · Optimal for full vacuum process conditions with some pulsating / cycling
- Stock program\*









### **CV-SF**



- Supports full vacuum conditions with use of backup bars in the frame assembly
- Available in round and square / rectangular configurations
- Stock program\*









### CV-SI



- · Optimal for high temperature vacuum process conditions with some pulsating / cycling
- Available in round and square / rectangular configurations









# Flex-V



- Recloses, recovering 90% of vent relief area, allowing more efficient use of fire fighting agents
- · Reduces risk of secondary explosions
- · Protection against vessel collapse due to vacuum pressure









### HIGH INTEGRITY



- Special design prevents fragmentation even during the most violent explosions
- Flange alignment independent
- Available in CV, CV-S, and CV-CF round vents

# Vent Accessories

- High quality installation FRAMES are available in a variety of materials and designs.
- · Easy plant-wide monitoring with **BURST INDICATORS**
- An optional **ATMOSPHERIC INSULATION** pack is available to help avoid energy loss or condensation effects, and to reduce acoustic emission levels of protected systems.



 PROTECTION WEATHER **COVERS** are lightweight, corrosion resistant

environmental protection. Weather covers minimize the effect of dirt, wind, snow, etc., while safeguarding the operation of the explosion vent.

# Vent Stocking Program

Explosion venting is one of the most common and effective forms of passive explosion protection for industrial equipment. Fike continues to lead the way by producing an unsurpassed range of reliable and tested explosion venting solutions. With Fike's Stock Vent program, you have the added advantages of quick turnaround and reduced costs. Vents will be shipped within 48 hours, at a price less than a custom vent!

TIME IS MONEY, AND YOU SAVE BOTH WITH FIKE'S GLOBAL STOCK EXPLOSION **VENT PROGRAM** 

\*Stock program varies by market

# Flameless Explosion Venting

During normal venting, an explosion is freely discharged, allowing flames and dust to exit the process vessel being protected. When the process vessel is located indoors, ducts are generally used to safely convey the explosion outside the building. However, ductwork has disadvantages and may result in decreased venting efficiency. Flameless venting, in combination with Fike explosion vents, can extinguish the flame from the vented explosion without the use of expensive ducting, limitations to equipment location, or more costly explosion protection.





- Eliminates need for expensive ducts
- Enhanced venting efficiency over venting with ductwork
- · Virtually maintenance free

Highly suited for indoor applications, flameless venting is designed to protect people and equipment from flames and dust, releasing post-combustion gases only.



FlamQuench II™

- · For use with round vents
- Field refurbish kits available
- FM/CE Approved



FlamQuench SQ

- For use with rectangular vents
- Field refurbish kits available
- CE Approved



EleQuench<sup>®</sup>

- For use with EleGuard explosion vents
- CE Approved

# **Testing Services**

Every application, process and facility is unique and requires a complete assessment to determine what needs to be protected and the most effective means for accomplishing the safety goals. Fike offers a wide range of both standard and non-standard explosibility tests designed to assist companies in identifying and mitigating costly explosion hazards — all completed at Fike's own state-of-the-art testing laboratories.

Contact Fike for a hazard evaluation.

Fike offers full-scale explosion testing

- Define the characteristics of an explosion in your plant
- Identify vulnerable process areas
- Design prevention and protection safety measures



### CONTACT FIKE

Fike is a global team of experienced professionals dedicated to life and business safety. We work closely with our clients to solve highly complex problems with easy-to-use

products and services.



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U.S. Patents including 4,662,126; 4,821,909; 6,070,365; 6,959,828; 7,017,767; 7,234,278; 5,105,370; 5,105,371; 5,107,446; 5,138,562; 5,199,500; 5,647,438; 5,718,294; 5,816,330; 6,031,462; 6,131,594; 6,540,029 Additional foreign patents and U.S. patents pending.

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