VIGILEX®

SAFETY PROTECTION By STIF

EXPLOSION PROTECTION



STIF

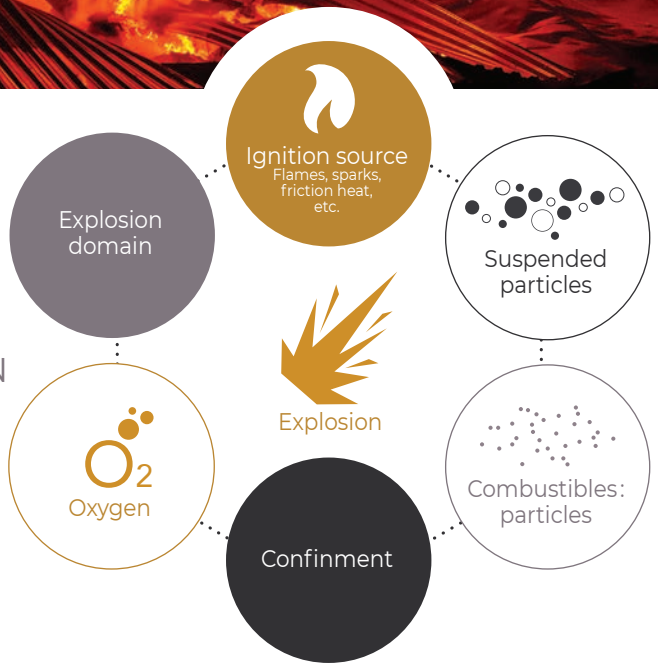
components for your success

English

INTRODUCTION



THE SIX **REQUIREMENTS** FOR A DUST EXPLOSION



Explosion venting is one of the most common and effective forms of explosion protection. Relieving the overpressure from a potential industrial explosion and providing a planned pathway for the expanding gases to escape.

WHAT IS A DUST EXPLOSION ?

- It begins with the ignition of a fuel which burns instantaneously
- An explosion produces and release a large cloud of gas or dust
- An explosion does not require a flame
- A vessel can bursts from increased internal pressure, and then it´s called an explosion

WHAT IS AN EXPLOSION VENTING ?

- A designed weak point in a pressure system
- Limit the explosion overpressure by releasing unburned mixture and products of combustion
- Panels do not prevent an explosion they prevent the vessel from over pressure by allowing us to control the maximum pressure
- A non-reclosing pressure relief device to discharge outside the explosion energy
- designed to fail at a pre-determined pressure

VIGILEX explosion protection devices are designed by the STIF company, who are specialists in the manufacture of components for the bulk handling industry.

Established in 1984 **S.T.I.F.** Company has earned a solid international reputation by exporting to more than 70 countries.

The 10 000 m² production facility and global headquarters is based in the west of France near ANGERS, 80 km from the port of NANTES-ST NAZAIRE.

Following the successful launch of the explosion vent panels several years ago the company introduced the **VIGILEX VQ Flameless Venting**. This new explosion protection device is designed to protect personnel and equipment from the effect of an explosion within a plant environment also to replace the costly generally used ductwork solution that conveys the explosion outside the building. The **VIGILEX VQ** is the first Flameless venting in the market to be approved following the new standard **EN16009** (Flameless explosion venting devices).

With technical expertise in dust explosion STIF provides a comprehensive service to offer help and advice on your particular project.

Our website **www.vigilex.eu** is an open source platform which allows you to download drawings of each panel, a questionnaire form is also available with all of the information required to define the vent area to protect your equipment (Filters, Dust Collectors, Silos, Elevators).

From our modern in house test facility we offer pressure test certificates along with certificates of conformity following the latest standards.

Our staff pride themselves on offering you, the customer a first class product and service.

CERTIFICATIONS

Ex II GD

EN 14491-2012/ EN 14994-2007/ EN 14797-2007/ EN 1127-1:2019

EN 16009-2011

EU Certificate: INERIS 15ATEX0001X

EU Certificate: INERIS 14 ATEX 0049X

Production quality assurance notification: INERIS 08ATEXQ406



*CERTIFICATIONS, CALCULATION & **TESTS***

The VIGILEX explosion vent panels and flameless venting are Atex approved products certified by the French notified body INERIS.



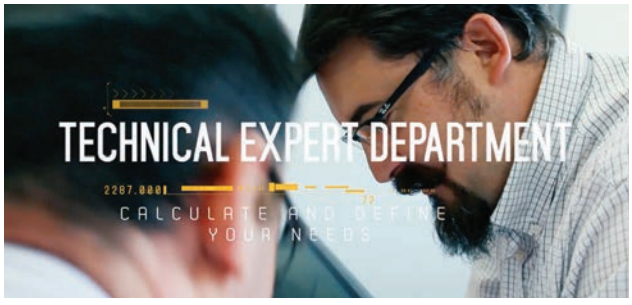




STIF is the only French company to have **EU certificate** for this kind of products. **STIF** is also certified **ISO 9001 AFAQ**.

In the event of an explosion the vent panels are designed to evacuate the pressure in order to protect both the workforce and surrounding facilities. The Vigilex explosion vent panels offer a simple and efficient protection system wich is designed to resist vacuum under cycling conditions and can be used in silos, cyclones, filters units and vessels.





CALCULATION

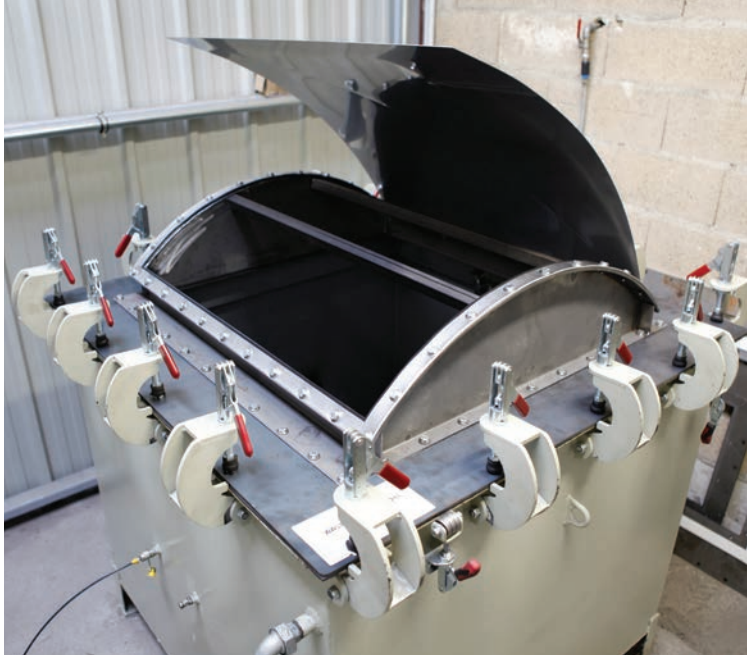
We determine for you the surface areas of the vents to be placed in your installations to be protected. Thanks to the main specific information related to the characteristics of your installations (KST, Predmax, Pmax, your installations size, etc.), which you will indicate to us. We can calculate the safety area adapted to your needs and conforming to the standards **EN 14491, EN 14994, VDI3673** and **NFPA 68**.

And, backed by our experienced technical department, we can offer a comprehensive service to guide you in your choices and optimize your investments.



VENT PANEL
EXPLOSION
TEST

STIF delivers conformity declarations by testing each explosion vent panel in its own test room.









DIRECTIVE : 2014/34/UE



QUALITY CONTROL

We test the vent panels in our factory according to **EN 14 797**.
These panels are manufactured under the EU examination certificate type Ineris **15ATEX0001X, 14ATEX0049X** and the quality managment system of the company is certified by the EU quality certification Ineris **08ATEXQ406**.

Our range of products are supplied with a certificate of conformity complete with burst test results along with installation guidelines.

CERTIFICATIONS

EXPLOSION VENT PANEL STANDARD

- Ex II GD
- EN 14 491 / EN 14 994 / EN 14 797 / EN 1127.1
- EU Type examination certificate : INERIS 15ATEX0001X
- Production quality assurance notification : INERIS 08ATEXQ406

CERTIFICATIONS

FLAMELESS DEVICES STANDARD

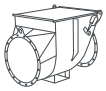
- Ex II GD / Ex II 2 D
- EN 16009
- EU type examination certificate : INERIS 14 ATEX 0049 X
- Production quality assurance notification : INERIS 08ATEXQ406

CERTIFIED FOR :

- Organic dust
- Fiber dust
- Gas

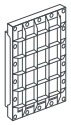
SUMMARY

SUMMARY



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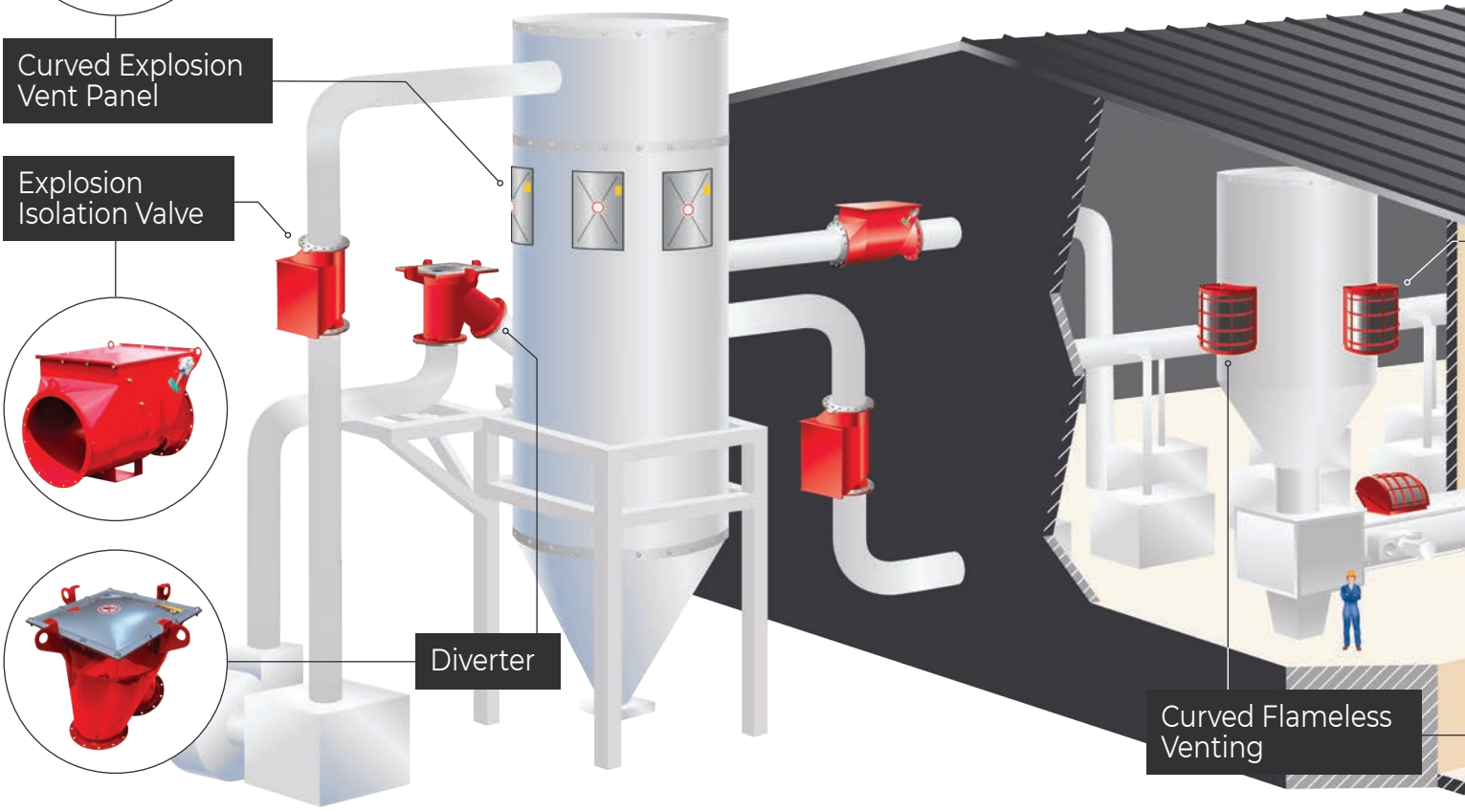


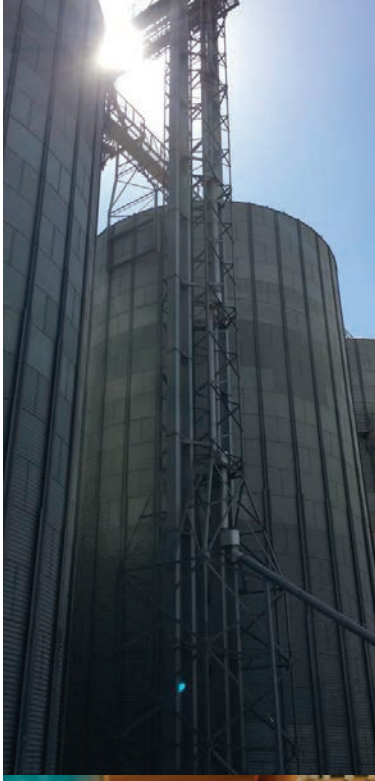
Explosion Vent Panel

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OUR DEVICES









Explosion Vent Panel

NEW VIGILEX VL-HV&VL-R-HV *For high vacuum or working pressure* 30

NEW VIGILEX ARC-VENT *Relieve arc explosions overpressure* 32

Pressure and Flame Guide

NEW VIGISPACE *Deflector* 33

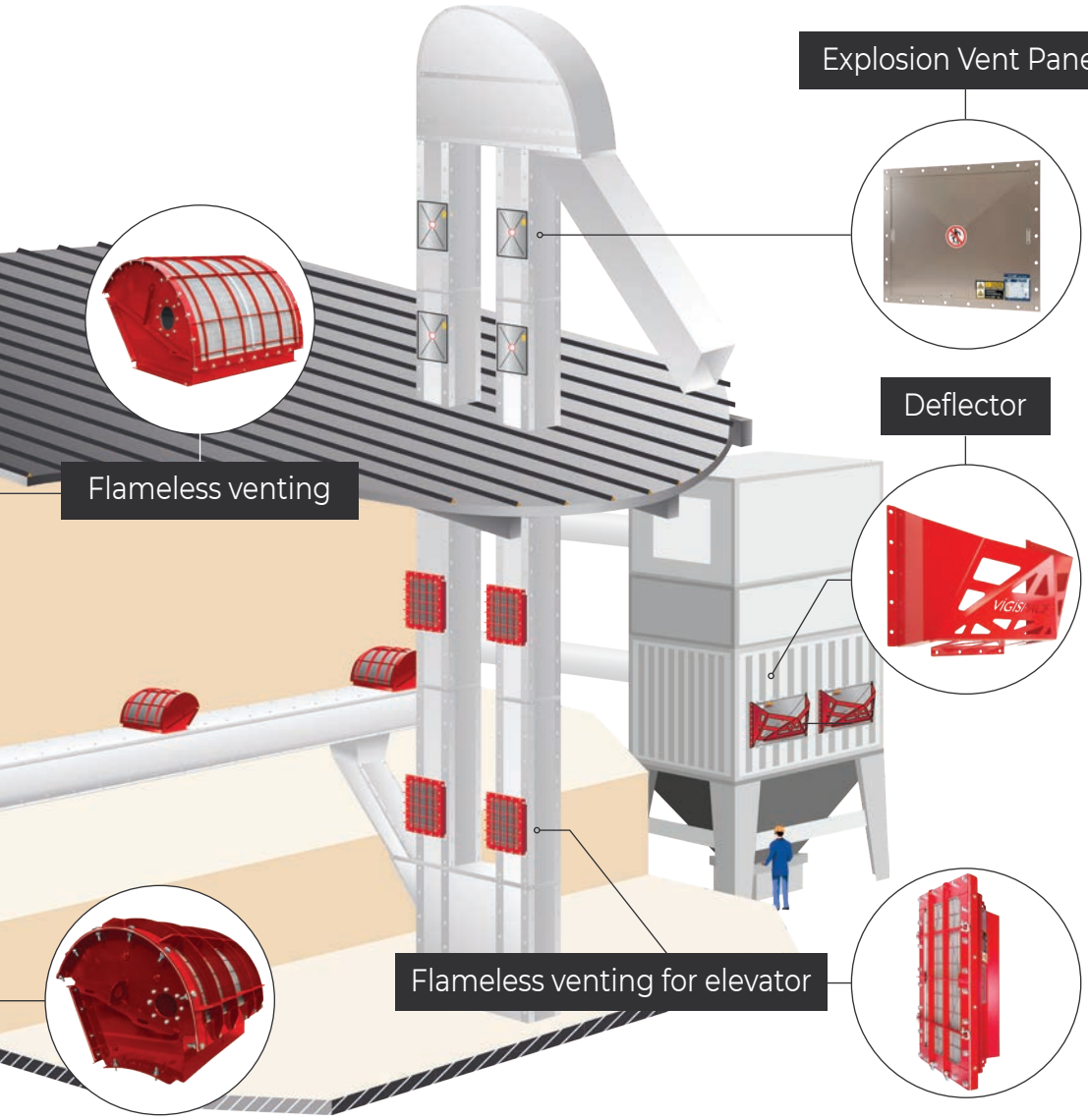
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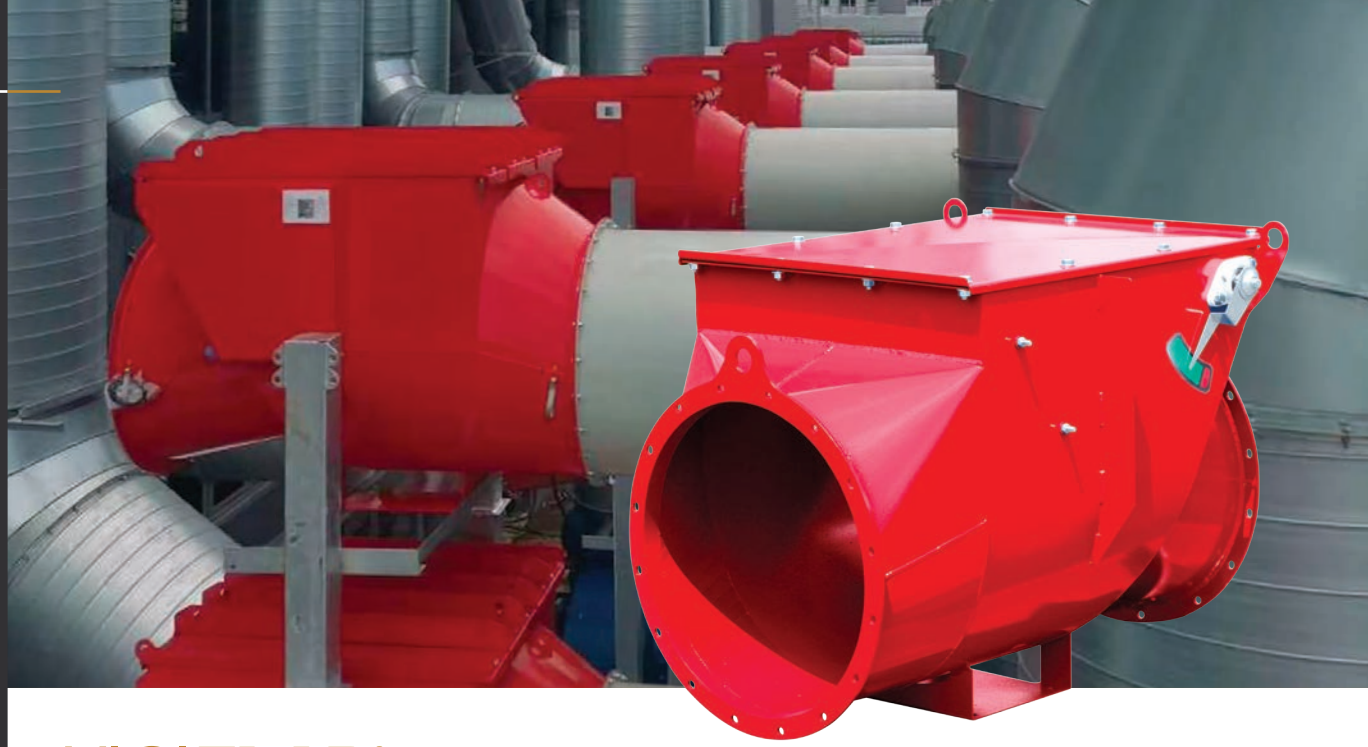
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VIGIFLAP® Explosion Isolation Valve

APPLICATIONS

The **VigiFLAP** is a non-return valve designed to prevent overpressure or flame caused by a downstream explosion (dust collectors, filters, cyclones...) to propagate in the piping system.

The valve is held open by a lever arm. It can be used both at the entrance and at the exit of the filter. This allows to isolate the filter from an explosion or an overpressure.

In case of explosion, the valve closes and remains locked preventing the progress of the flame. The unlocking of the flap is done manually.

Standard characteristics

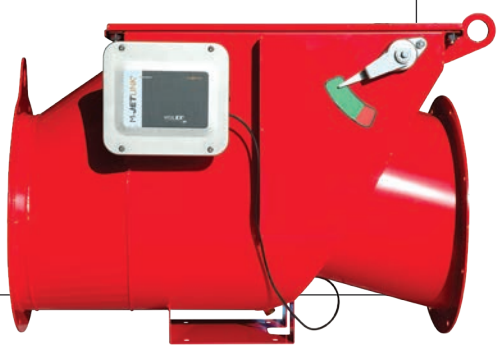
- Body: Painted steel
- Flap: Round domed flap: Stainless steel
- Diameter: ø100 mm to ø800 mm
- EPDM FDA Gasket:
  -30 °C to +70 °C / -22 °F to 158 °F
- Flanges: ISO and ANSI flanges design
- Inductive Sensor: Non ATEX closing indication sensors in case of explosion or overpressure

CERTIFICATIONS

INERIS 19ATEX0016 X
EN 16447
EN 15089
NFPA 69

OPTIONS for VIGIFLAP

- Body: Metallic steel (zinc protection)
- Body: Stainless steel
- Gasket silicone FDA and 1935/2004 CE: -10°C to +180°C / 14°F to 356°F
- Counter-flange
- ATEX 21 closing indication sensors
- Capacitive sensor to warn dust accumulation (max: 70°C / 158°F)
- Connection box installed on the body, opposite side of the locking mechanism



Explosion isolation valve **dimensions**: VIGIFLAP®

SIZES & DISTANCE INSTALLATION

	DN (mm)	DN (inch)	Minimum Vessel Volume	L Min A* Min Mounting Distance	L Min B** Min Mounting Distance	L Max Max Mounting Distance	Installation position
VIGIFLAP Ø	100	4"	0,70 m³	5,0 m	6,0 m	17 m	
VIGIFLAP Ø	130	5"	1,70 m³	5,0 m	6,0 m	17 m	
VIGIFLAP Ø VIGIFLAP Ø	160 160	6" 6"	0,70 m³ 1,35 m³	4,0 m 3,0 m	6,0 m 5,0 m	17 m 17 m	
VIGIFLAP Ø VIGIFLAP Ø	180 180	7" 7"	0,70 m³ 1,35 m³	4,0 m 3,0 m	6,0 m 5,0 m	17 m 17 m	
VIGIFLAP Ø	200	8"	1,35 m³	4,6 m	6,6 m	17 m	
VIGIFLAP Ø	250	10"	1,35 m³	4,0 m	6,0 m	17 m	
VIGIFLAP Ø	300	12"	2,90 m³	4,6 m	6,6 m	17 m	
VIGIFLAP Ø	350	14"	2,90 m³	4,2 m	6,2 m	17 m	
VIGIFLAP Ø	400	16"	4,50 m³	5,2 m	7,2 m	17 m	
VIGIFLAP Ø	450	18"	4,50 m³	4,7 m	6,7 m	17 m	
VIGIFLAP Ø	500	20"	6,05 m³	5,8 m	7,8 m	17 m	
VIGIFLAP Ø	550	22"	6,05 m³	5,5 m	7,5 m	17 m	
VIGIFLAP Ø	600	24"	7,65 m³	7,2 m	9,2 m	17 m	
VIGIFLAP Ø	650	26"	7,65 m³	6,7 m	8,7 m	17 m	
VIGIFLAP Ø	700	28"	7,65 m³	6,4 m	8,4 m	17 m	
VIGIFLAP Ø	750	30"	10,00 m³	7,3 m	9,3 m	17 m	
VIGIFLAP Ø	800	32"	10,00 m³	6,9 m	8,9 m	17 m	

*■ *Floating in horizontal position :*
Flap valve activated by the working air flow

**■ *With elbows*
■ *Flap valve kept open by its spring blade system*
■ *Vertical position for VIGIFLAP ≥ ø160*





Flap valve test with INERIS notified body

TECHNICAL INFORMATION

Kst max	≤250 bar.m/s	Pred max*	≤ 0.5 bar	Air flow speed	Clean air side : ≤ 30 m/s Dirty air side : ≤ 45 m/s
Kst min	No limit	VIGIFLAP Resistance	2.0 bar	Working	Air + dust circuit Clean air circuit
Pmax	10 bar 145 psi	Marque ATEX	Ex II D	Air flow range	Pull flow Push flow
MIE	≥ 10 mJ	Atex inside	Zone 20 (II 1D)	Working pressure	500 mbar max
MIT	≥ 400° C ≥ 752° F	Dust**	All dusts kinds	Working vacuum	-800 mbar max
MESG	1,7 mm 0.067 inch	Dust concentration	No limit	Elbow quantity	No limit

Vessel (potential explosion source)

**Organic dust, synthetic dust and metal dust*

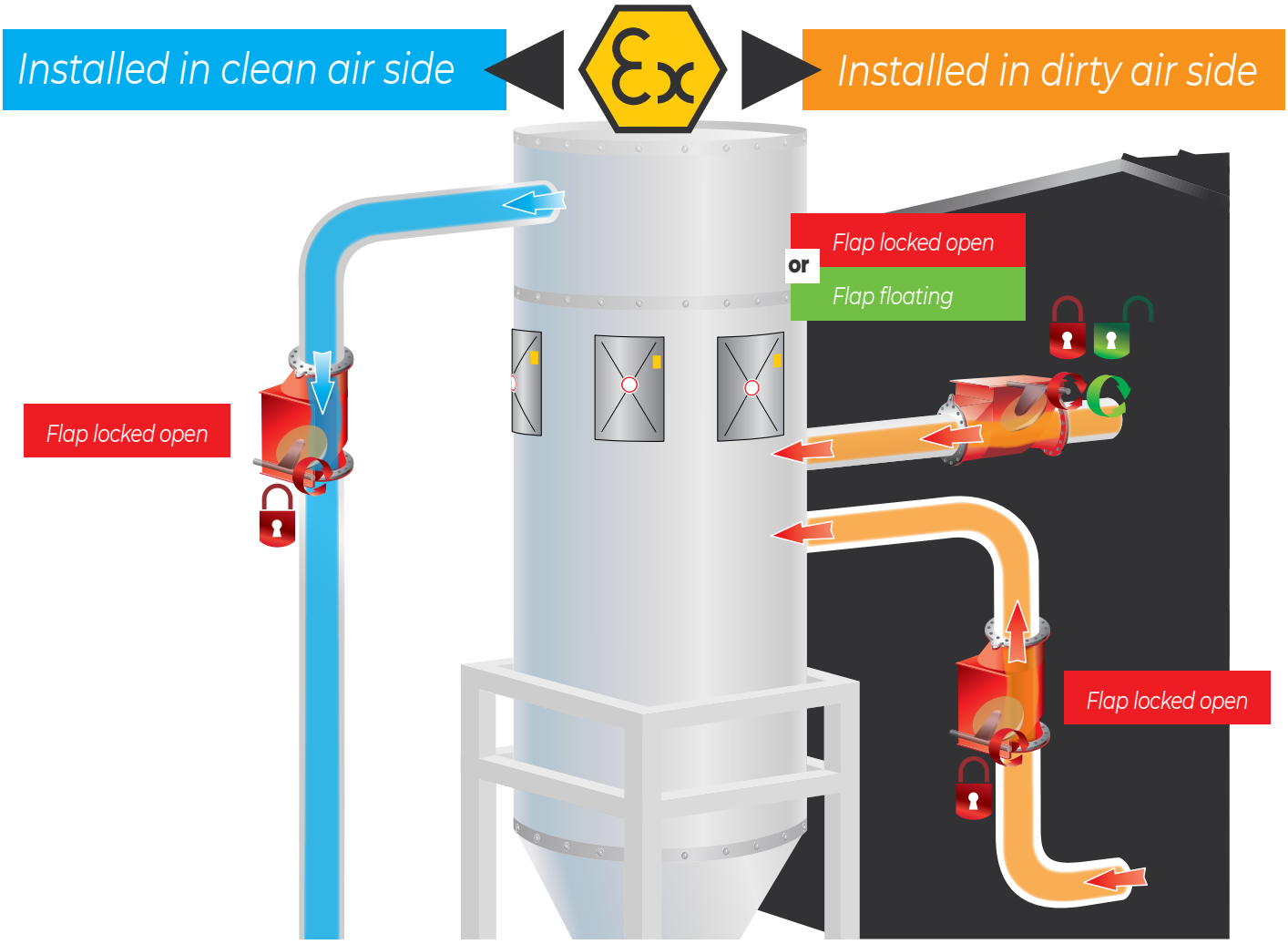
Features of the explosion isolation valve: VIGIFLAP®

NON DUST ACCUMULATION DESIGN

THE ALIGNMENT OF THE LOWER PART OF THE VIGIFLAP WITH THE PIPING, ALLOWS THE AIR FLOW TO CREATE A CONTINUOUS SELF-CLEANING, WITH LOW PRESSURE DROP



LOW PRESSURE LOSS



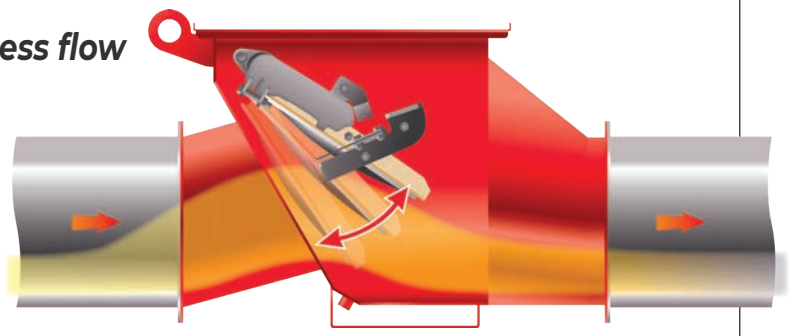
Process flow positions:

VIGIFLAP® Ex CE

PRODUCT PROCESS FLOW

1 ***Flap is held open by process flow***

INSTALLATION WITH FLOATING FLAP



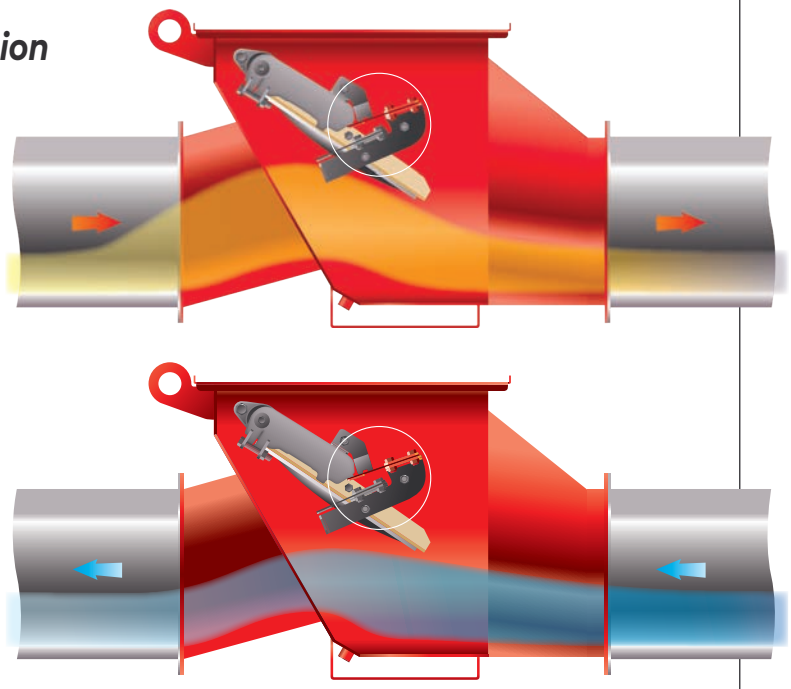
2 ***Flap locked in open position***

INSTALLATION WITH FLAP LOCKED OPEN

Locked open flap for dirty airside

OR

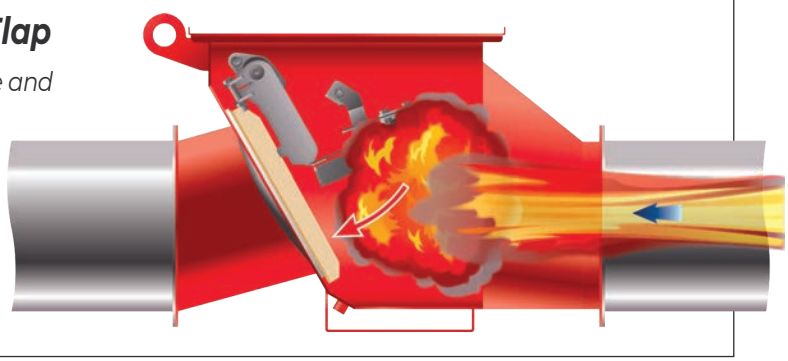
Locked open flap for clean airside



DURING AN EXPLOSION EVENT

Floating Flap or Locked Open Flap

Flap is closed by the explosion pressure wave and locked in place. Manual locking mechanism reset is required.

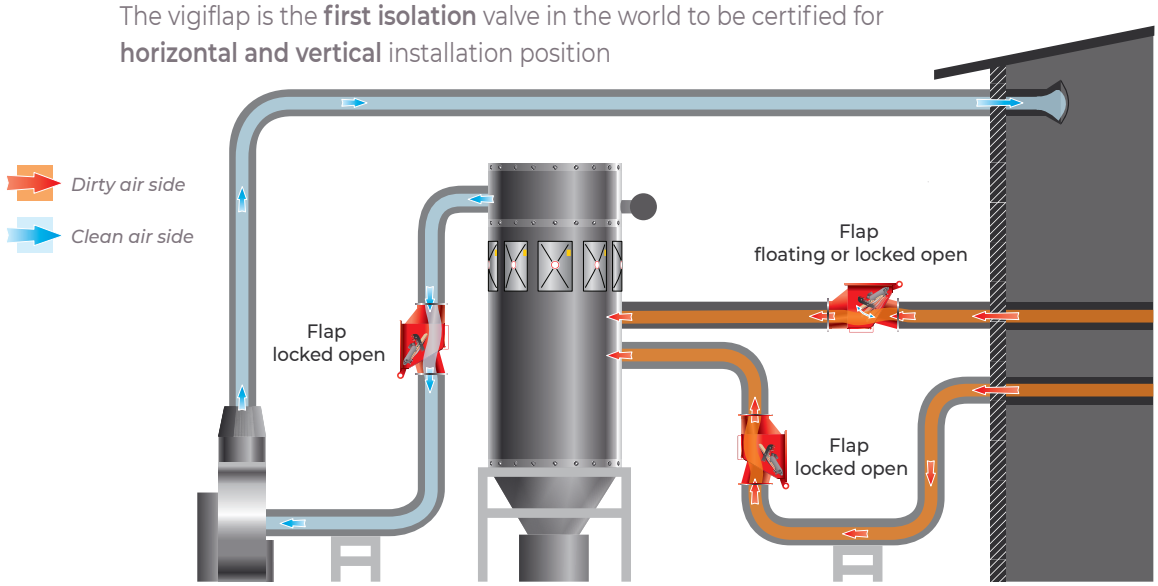


Positions and pressure drop curves:

VIGIFLAP®

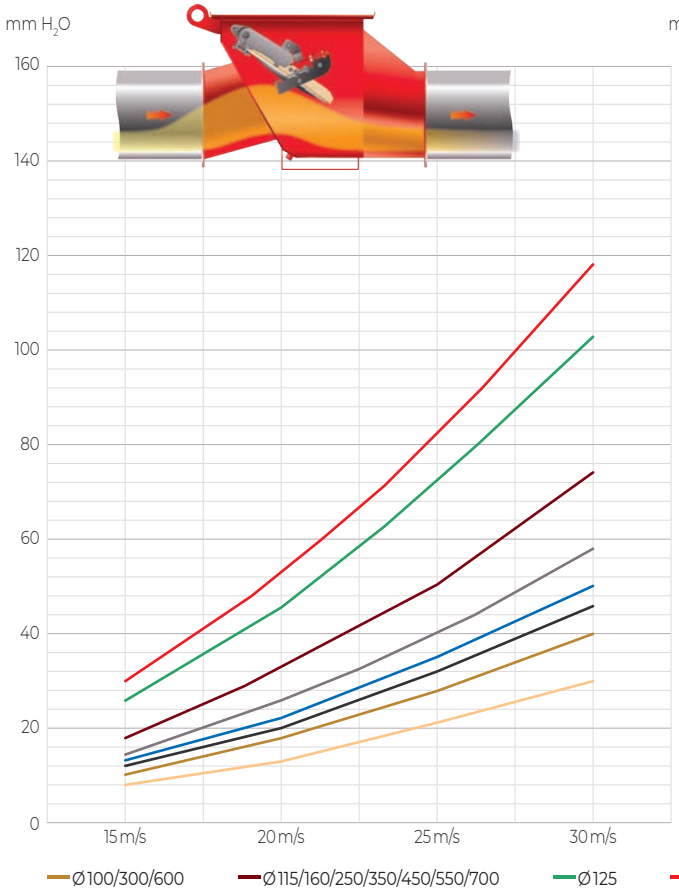
VIGIFLAP POSITIONS

The vigiflap is the **first isolation** valve in the world to be certified for **horizontal and vertical** installation position

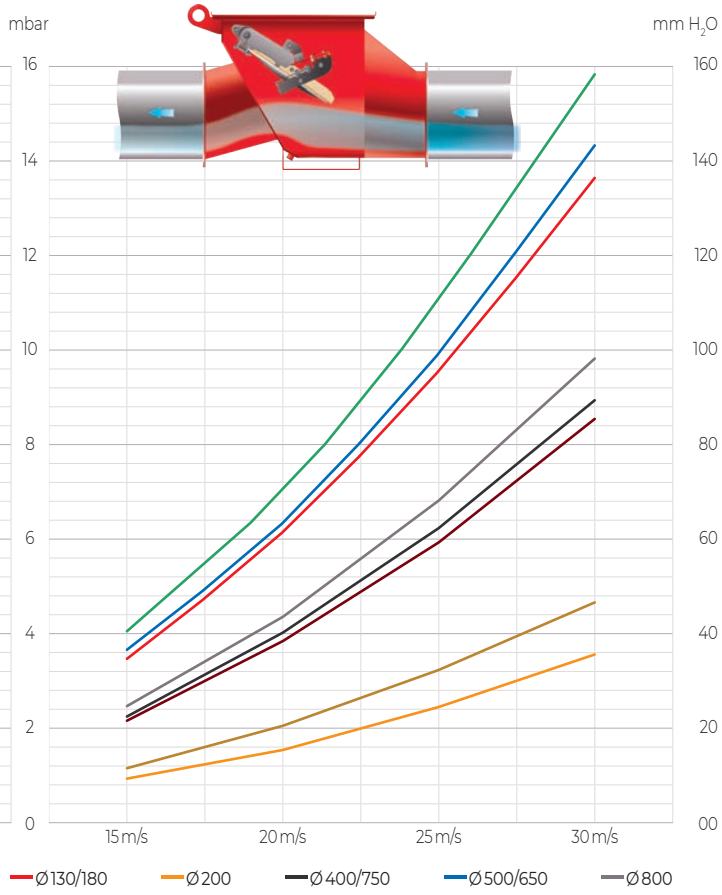


PRESSURE DROP CURVES

PRESSURE DROP/IN FLOW PROCESS (DIRTY AIR)



PRESSURE DROP/REVERSE PROCESS (CLEAN AIR)



Certification:

VIGIFLAP®

INERIS 19ATEX0016X



INERIS

2 Appareil ou système de protection destiné à être utilisé en atmosphères explosibles
Equipment and protective systems intended for use in potentially explosive atmospheres

Directive 2014/34/UE
Directive 2014/34/EU

1 **ATTESTATION D'EXAMEN UE DE TYPE**
EU-TYPE EXAMINATION CERTIFICATE

3 Numéro de l'attestation d'examen UE de type / *Number of the EU-Type Examination Certificate*
INERIS 19ATEX0016X INDICE / *ISSUE* : 00

4 Appareil ou système de protection / *Equipment or protective system*
Vanne à clapet d'isolation d'explosion TYPE VIGIFLAP
Explosion isolation flap valve TYPE VIGIFLAP

5 Fabricant / *Manufacturer* : STIF
6 Adresse / *Address* : ZA de la Lande F-49170 Saint-Georges-sur-Loire

7 Cet appareil ou système de protection et toute autre variante acceptable de celui-ci sont décrits dans l'annexe de la présente attestation et dans les documents descriptifs cités dans cette annexe.
This equipment or protective system and any acceptable variation thereto is specified in the Annex of this certificate and the descriptive documents therein referred to.

8 L'Ineris, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 and 21 de la directive 2014/34/UE du parlement européen et du conseil, datée du 26 février 2014, et accrédité par le Cofrac sous le n° 5-0045 dans le cadre de l'activité de certification de produits et services (portée disponible sur www.cofrac.fr) certifie que cet appareil ou système de protection répond aux exigences essentielles de sécurité et de santé en ce qui concerne la conception et la construction des appareils et des systèmes de protection destinés à être utilisés en atmosphères explosibles, décrites en annexe II de la directive.
Ineris, notified body and identified under number 0080, in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, and accredited by COFRAC under number 5-0045 for certification of products and services (scope of accreditation available on the website www.cofrac.fr), certifies that this equipment or protective system fulfils the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

Les procédures de certification sont disponibles sur www.ineris.fr
The rules of certification are available on Ineris website on www.ineris.fr

Les examens et les essais sont consignés dans le rapport :
The examinations and the tests are recorded in report
N° 033660

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Folio 1 / 5

Institut national de l'environnement industriel et des risques
Parc technologique Alata - BP 2 - F-60550 Verneuil-en-Halatte
www.ineris.fr

CERTIFICATIONS

Explosion Isolation Valve

- 2014/34/UE
- EN 16447 : 2014
- EN15089 : 2009
- EN 1127-1 : 2019
- EN 14460 : 2018
- NFPA 69 : 2019
- INERIS 08ATEXQ406
- ISO9001 : 2015

HIGH CERTIFICATION TEST

To get our Atex certificate (N° INERIS 19ATEX0016X) according to the standard EN16447 : 2014, **we carried out our explosion tests in the most extreme conditions and as close as possible to the reality of the use of the product**, with for example :

- **Protected Zone Pipeline :**
  All test carried out with a pipeline after the flap (picture1).
- Flap locked open :
  Automatic release of the valve by the pressure of the explosion
- **Floating flap :**
  During the test the flap valve is held fully open until the appropriate time of release.
- **Vent panel on test vessel :**
  No open ports were used during test but vent panels were always used.

SOON :

In few months our **VIGIFLAP** certificate will be improved with the following additionnal features Atex certified :

- **Size up to diameter 1370 mm**

10 m³ vessel
(All dust Kst 250 bar.m/s)

VigiFLAP Ø800

The test and approval must reflect the intended use, in combination with a pipe.



(Picture1)



VIGIFLAM Vi® Flameless for Elevators

APPLICATIONS

The **flameless explosion venting device** VIGIFLAM Vi is designed in a rectangular shape and consists of three main components: the body, a metal filter composed of several layers to cool flames, and a new innovative explosion panel. This stainless steel membrane is weakened in the middle allowing to rupture when excessive overpressure occurs inside the enclosure intended to be protected.

The purpose of VIGIFLAM Vi is to neutralize the flame effects produced during an explosion, which would typically vent through a standard explosion panel. By containing the flames, it helps protect both people and property within a building or room.

VIGIFLAM Vi is specifically optimized for conveyors - bucket, belt, chain, and screw conveyors - due to its compact and efficient design, making it suitable for protecting such equipment in industrial settings.

CERTIFICATIONS

Ex II D

EN 16009

EC Certificate:
DNV 25 ATEX 55887X

Production quality assurance notification:
INERIS 08ATEXQ406

CERTIFIED FOR:

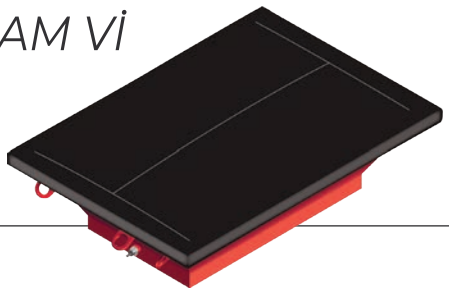
- Organic dust
- Fiber dust

STANDARD CHARACTERISTICS

- Vent panel
- Mild steel body + coating
- Stainless steel 304 mesh
- Integrated Silicone gasket
- Integrated burst sensor

OPTIONS for VIGIFLAM Vi

- Waterproof sanitary cover



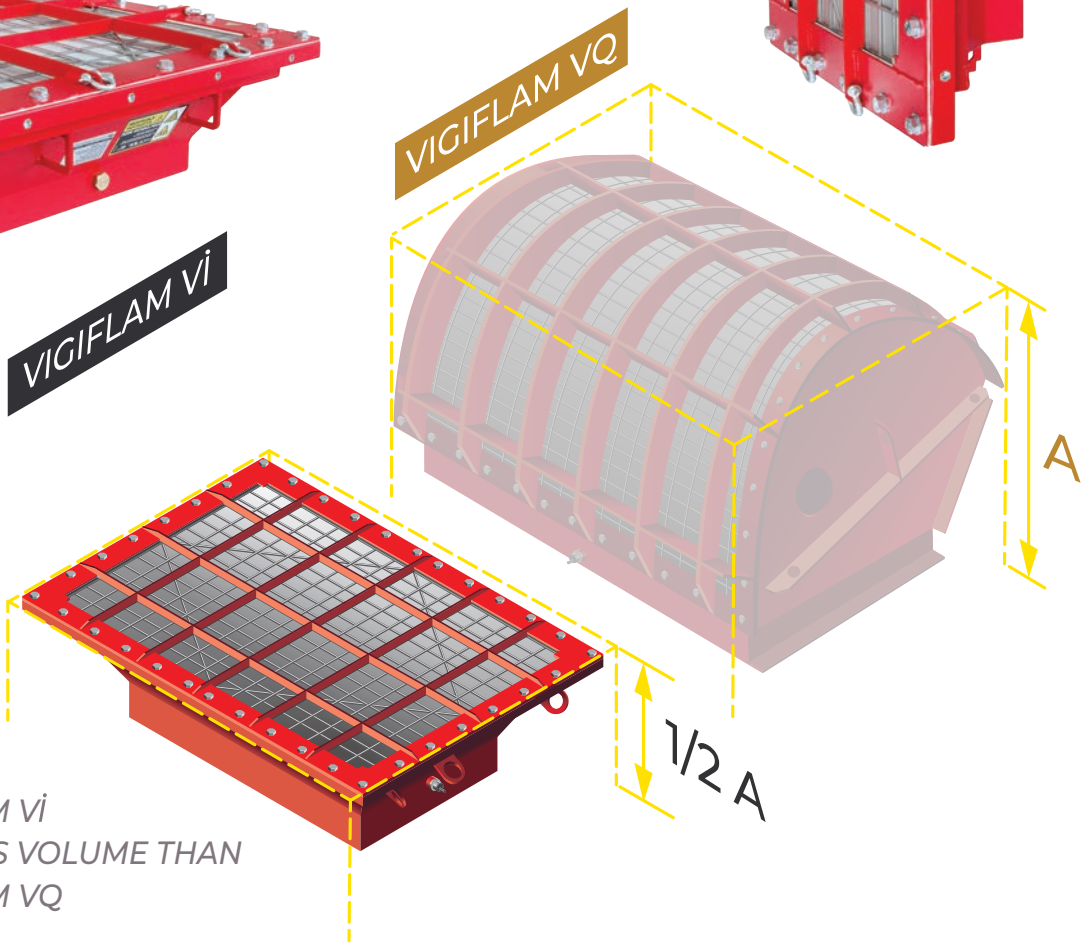
Flameless **dimensions:** VIGIFLAM Vİ®

GENERAL DIMENSIONS

VIGIFLAM Vİ	NOMINAL PANEL SIZE		NOMINAL PANEL AREA		WEIGHT		FIXING BOLT
	(mm)	Pouces	m²	sq ft	kg	lb	Nbr
170 x 470	170 x 470	7 x 19	0.0799	0.845	29	64,0	16 M10
180 x 420	180 x 420	7 x 17	0.0756	0.795	28	61,7	16 M10
205 x 610	205 x 610	8 x 24	0.1251	1.320	38	83,8	20 M10
270 x 458	270 x 458	11 x 18	0.1237	1.315	40	88,2	18 M10
305 x 610	305 x 610	12 x 24	0.1861	1.980	55	121,3	22 M10
350 x 650	350 x 650	14 x 26	0.2275	2.420	67	147,7	22 M10
490 x 590	490 x 590	19 x 23	0.2891	3.085	80	176,4	26 M10







THE VIGIFLAM Vİ HAS 50% LESS VOLUME THAN THE VIGIFLAM VQ

TECHNICAL INFORMATION

VIGIFLAM Vİ	Kst max ≤ 200	Pmax: 9,4 bar	Pred: 1 bar	Pstat ≤ 0,1 bar (±20%)



VIGIFLAM VQ® Flameless Venting

APPLICATIONS

The **VIGIFLAM VQ** is a rectangular flameless device connected with an internal standard panel **VIGIFLAM** bursting panel.

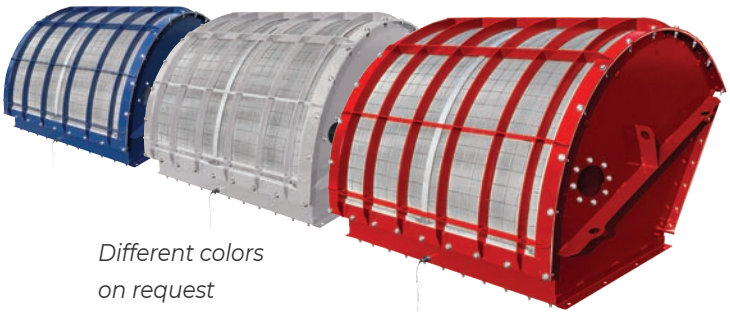
It can be used with great effect indoors and outdoors and is a fast and easy solution instead of cumbersome and expensive solutions with pipe installations to the open air.

VIGIFLAM VQ can eliminate the spread of flame and glowing particles. During the early stage of an explosion the explosion vent opens. The flame, burned and unburned dust enter the flame arrestor element. Flame propagation beyond the **VQ** is prevented by energy dissipation in the filter element, reducing the burning fuel below its ignition temperature.

The dust is retained within the **VQ** and gases from the explosion are vented through the device into the external atmosphere around the device.

Standard characteristics

- VL flat vent panel or VD domed vent panel included
- Mild steel body + coating
- Stainless steel mesh
- Burst sensor VIGILEX INR included



Different colors on request

CERTIFICATIONS

Ex II GD
Ex II 2 D
EN 16009
EC Certificate: *INERIS 14ATEX0049X*
Production quality assurance notification: *INERIS 08ATEXQ406*

CERTIFIED FOR:

- Organic dust
- Fiber dust
- Gas

ACCESSORIES for VIGIFLAM VQ

- Waterproof Sanitary cover



- Body made of stainless steel *(See page 19)*

Flameless **dimensions**: VIGIFLAM VQ LW® Light weight - Pred: 0,5 bar
VIGIFLAM VQ HW® Heavy weight - Pred: 2,3 bar

FLAMELESS

VIGIFLAM VQ SPECIFICATIONS

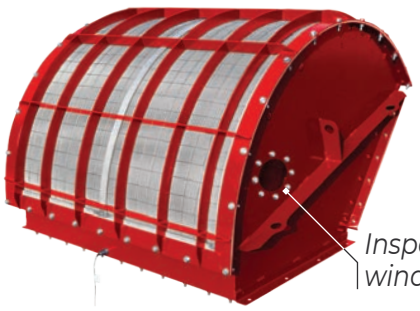
VIGIFLAM VQ	IN COMBINATION WITH VENT PANEL				WEIGHT VQ LW		WEIGHT VQ HW		BOLT SPECS	
MODEL	Nominal Size (mm/inch)		Nominal Square (m^2/ft^2)		kg/lb		kg/lb		Qty	Size
VIGIFLAM VQ 170x470	**170 x 470 mm**	7 x 19 in	**0,0785 m^2**	0,845 sq ft	**48 kg**	105,8 lb	**59 kg**	130,1 lb	20	M10x30
VIGIFLAM VQ 270x458	**270 x 458 mm**	11 x 18 in	**0,1220 m^2**	1,315 sq ft	**60 kg**	132,3 lb	**74 kg**	163,1 lb	22	M10x30
VIGIFLAM VQ 300x500	**300 x 500 mm**	12 x 20 in	**0,1480 m^2**	1,595 sq ft	**67 kg**	147,7 lb	**82 kg**	180,8 lb	24	M10x30
VIGIFLAM VQ 305x610	**305 x 610 mm**	12 x 24 in	**0,1840 m^2**	1,980 sq ft	**79 kg**	174,2 lb	**96 kg**	211,6 lb	26	M10x30
VIGIFLAM VQ 350x650	**350 x 650 mm**	14 x 26 in	**0,2250 m^2**	2,425 sq ft	**84 kg**	185,2 lb	**101 kg**	222,7 lb	26	M10x30
VIGIFLAM VQ 490x590	**490 x 590 mm**	19 x 23 in	**0,2870 m^2**	3,085 sq ft	**94 kg**	207,2 lb	**123 kg**	271,2 lb	32	M10x30
VIGIFLAM VQ 610x610	**610 x 610 mm**	24 x 24 in	**0,3695 m^2**	3,975 sq ft	**112 kg**	246,9 lb	**147 kg**	324,1 lb	32	M10x30
VIGIFLAM VQ 457x890	**457 x 890 mm**	18 x 35 in	**0,4040 m^2**	4,349 sq ft	**117 kg**	257,9 lb	**152 kg**	335,1 lb	34	M10x30
VIGIFLAM VQ 586x920	**586 x 920 mm**	23 x 36 in	**0,5360 m^2**	5,770 sq ft	**136 kg**	299,3 lb	**178 kg**	392,4 lb	42	M10x30
VIGIFLAM VQ 645x1130	**645x1130 mm**	25 x 44 in	**0,7250 m^2**	7,804 sq ft	**222 kg**	489,4 lb	**240 kg**	229,1 lb	34	M10x30
VIGIFLAM VQ 920x920	**920 x 920 mm**	36 x 36 in	**0,8425 m^2**	9,068 sq ft	**317 kg**	698,9 lb	**641 kg**	1413,2 lb	50	M10x30
VIGIFLAM VQ 1130x1130	**1130 x 1130 mm**	44 x 44 in	**1,2720 m^2**	13,694 sq ft	**442 kg**	974,4 lb	**802 kg**	1768,1 lb	62	M10x30

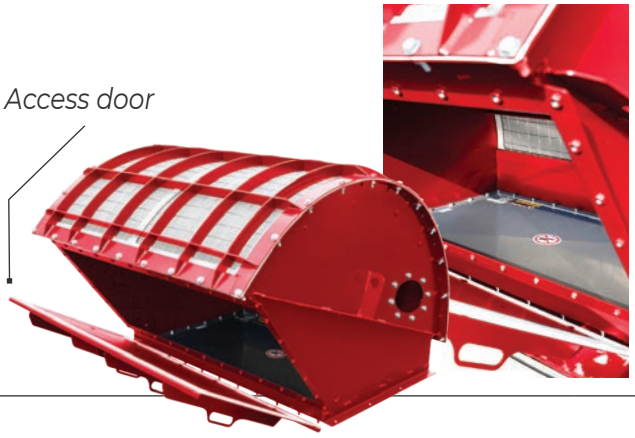
TECHNICAL INFORMATION

VIGIFLAM VQ LW	Kst max 500	Pmax ≤ 10 bar	Pred ≤ 0,5 bar	Pstat = 0,1 to 0,3 bar
VIGIFLAM VQ HW	Kst max 500	Pmax ≤ 10 bar	Pred ≤ 2,3 bar*	Pstat = 0,1 to 0,5 bar

**Pred < 1,85 for VQ HW ≥ 645x1130*

ADVANTAGES





** Only available on VQ LW*

Flameless **curved**:

VIGI**FLAM** VQ-R®



APPLICATIONS

The **VIGIFLAM VQ** curved is a rectangular flameless device connected with a standard bursting panel **VIGIFLAM VL-R**.

This curved flameless device can be installed directly on cylindrical vessels.

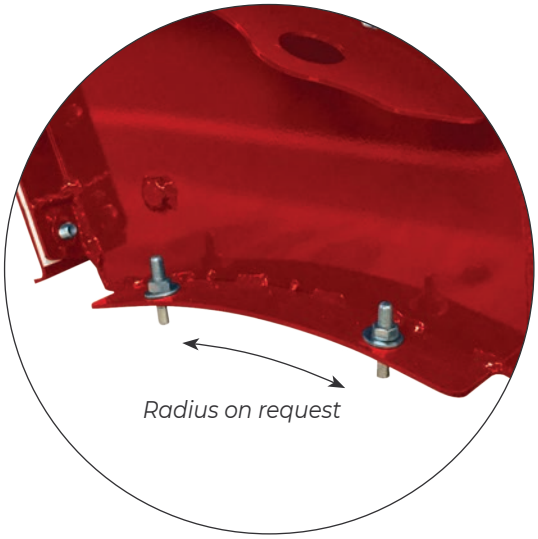
Thereby avoiding the possibility of a material accumulation in front of the explosion panel.

STANDARD CHARACTERISTICS

- VL-R Vent panel with EPDM gasket included
- Mild steel body + coating
- Stainless steel mesh
- Burst sensor VIGILEX INR included
- Sizes page 17
- Radius on request

OPTION

- Silicon gasket



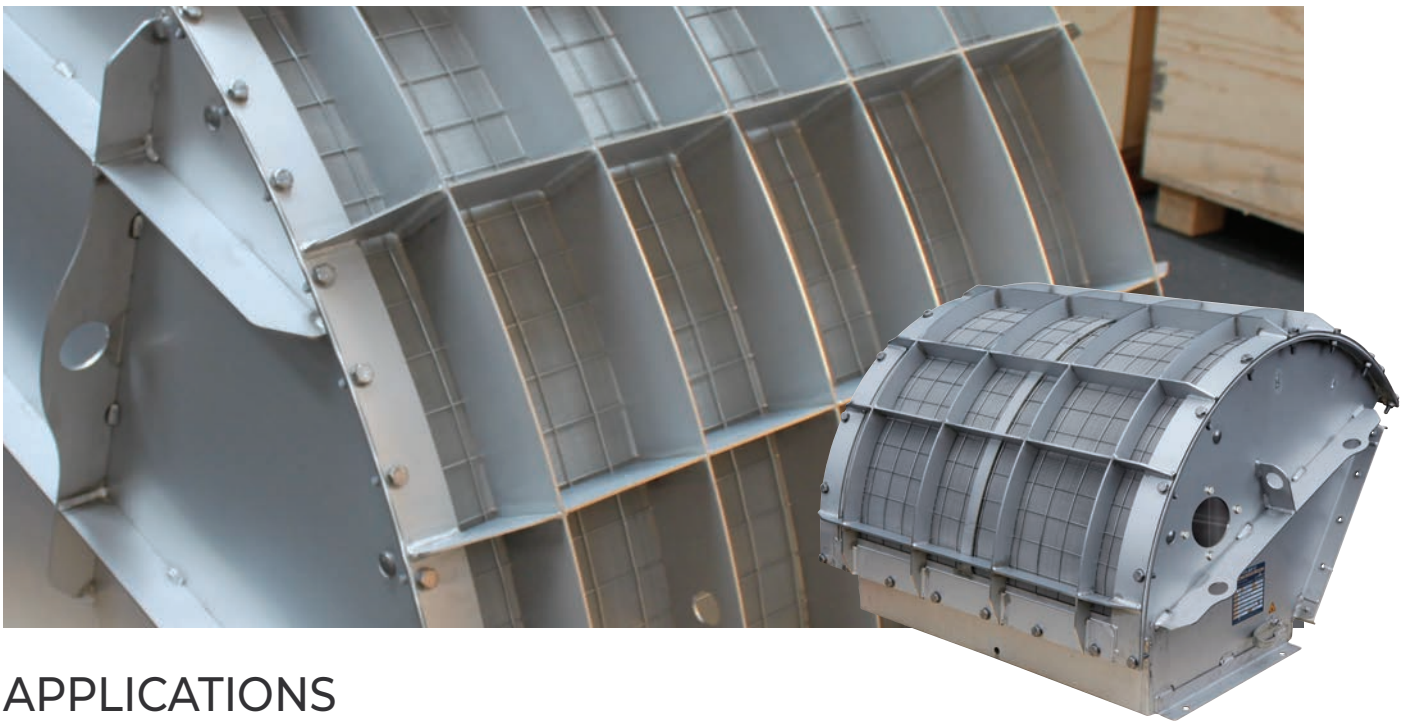
ACCESSORIES for VIGIFLAM VQ curved

- Waterproof Sanitary cover



Flameless **stainless steel**:

VIGIFLAM VQ-SST®



APPLICATIONS

The **VIGIFLAM VQ** stainless steel is a rectangular flameless device connected with a standard **VIGILEX** bursting panel. It is a perfect option for food or pharmaceutical facilities or installed in a moist atmosphere.

VIGIFLAM VQ stainless steel provides effective pressure resistance, eliminating the spread of flame and glowing particles.

STANDARD CHARACTERISTICS

- VL or VD Vent panel with silicone gasket included
- Stainless steel body
- Stainless steel mesh
- Burst sensor VIGILEX INR included

ACCESSORIES for VIGIFLAM VQ stainless steel

- Waterproof Sanitary cover





VIGILEX VL® VACUUM RESISTANCE: 50 MBAR

APPLICATIONS

The **VIGILEX VL** is suitable for all applications with low vacuum or working pressure (up to 50 % of static burst pressure) such as elevators, conveyors, silos, cyclones.

With an integral flange ready to install, covering the breaking point, the **VIGILEX VL** ensures a strong mechanical durability. The attached wide gasket provides the **VIGILEX VL** a perfect dust-proof seal.

The standard burst pressure is **0,1 bar (max. 0,5 bar) at 22° C (72° F)**.

STANDARD CHARACTERISTICS

- Design: Single flat sst 304 L
- Fully frame black EPDM gasket (-40°+80°C)
- Integrated stainless steel flange



Fully frame black EPDM gasket (-40°+80°C)

OPTIONS

- Panel material stainless steel 316L
- Fully frame white silicone FDA gasket and 1935/2004 CE (-60°+200°C)
- High temperature graphite gasket (-200°+500°C)
- Integrated stainless steel 316L flange

CERTIFICATIONS

Ex II GD

EN 14 491
EN 14 994
EN 14 797
EN 1127.1

EU Certificate: *INERIS 15ATEX0001X*

Production quality assurance notification: *INERIS 08ATEXQ406*

ACCESSORIES for VIGILEX VL *(See pages 36-37)*

- Burst Sensor
- Duct discharge
- Weather protection vigilex WI
- Vacuum safety grid

Explosion vent panel **dimensions**:

VIGILEX VL®

RECTANGULAR & SQUARE

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
110 x 290	4 x 11	174 x 354	310
150 x 600	6 x 24	230 x 680	885
170 x 470	7 x 19	250 x 550	785
220 x 420	9 x 17	300 x 500	910
229 x 229	9 x 9	310 x 310	515
229 x 305	9 x 12	310 x 386	690
247 x 610	10 x 24	327 x 690	1485
270 x 458	11 x 18	350 x 538	1220
300 x 500	12 x 20	380 x 580	1480
300 x 600	12 x 24	350 x 650	1780
305 x 457	12 x 18	386 x 538	1385
305 x 610	12 x 24	386 x 690	1845
319 x 765	12 x 30	405 x 850	2425
340 x 385	13 x 15	404 x 449	1290
340 x 440	13 x 17	404 x 504	1430
350 x 650	14 x 26	430 x 730	2255
375 x 655	15 x 25	460 x 740	2445
390 x 620	15 x 24	470 x 700	2395
410 x 410	16 x 16	480 x 480	1660
420 x 520	16 x 20	500 x 600	2165
420 x 920	16 x 36	500 x 1000	3835
457 x 890	20 x 28	537 x 970	4040
470 x 610	18 x 24	550 x 690	2845
480 x 680	19 x 27	570 x 770	3260
490 x 490	19 x 19	570 x 570	2380
490 x 590	19 x 23	570 x 670	2865

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
520 x 520	20 x 20	600 x 600	2680
520 x 620	20 x 24	600 x 700	3200
520 x 1020	20 x 40	600 x 1100	5270
580 x 780	23 x 30	670 x 870	4495
580 x 1180	23 x 46	670 x 1270	6805
586 x 920	23 x 36	666 x 1000	5360
610 x 610	24 x 24	690 x 690	3695
610 x 1118	24 x 44	690 x 1198	6785
645 x 645	25 x 25	735 x 735	4130
645 x 1130	25 x 44	735 x1220	7250
653 x 653	26 x 26	735 x 735	4260
680 x 680	27 x 27	770 x 770	4595
720 x 1020	28 x 40	800 x 1100	7305
780 x 780	30 x 30	870 x 870	6050
780 x 1180	30 x 46	870 x 1270	9160
800 x 1000	31 x 40	890 x 1090	7960
880 x 880	35 x 35	970 x 970	7705
915 x 1118	36 x 44	996 x 1198	10 200
920 x 920	36 x 36	1000 x 1000	8425
980 x 980	39 x 39	1070 x 1070	9560
1000 x 1000	40 x 40	1080 x 1080	9960
1020 x 1020	40 x 40	1100 x 1100	10 360
1080 x 1080	42 x 42	1170 x 1170	11 620
1130 x 1130	44 x 44	1220 x 1220	12 720
1180 x 1180	46 x 46	1270 x 1270	11 620
1000 x 2000	40 x 79	1080 x 2080	19940

Other sizes available

ROUND

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
Ø 200	8	Ø 268	310
Ø 250	10	Ø 330	480
Ø 300	12	Ø 390	700
Ø 350	14	Ø 424	955
Ø 400	16	Ø 473	1240
Ø 450	18	Ø 545	1570
Ø 500	20	Ø 574	1950

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
Ø 600	24	Ø 646	2805
Ø 700	28	Ø 790	3815
Ø 750	30	Ø 842	4335
Ø 800	31	Ø 880	5010
Ø 900	36	Ø 980	6325
Ø 980	39	Ø 1070	7445

Other sizes available

TRAPEZOIDAL *(On request)*

TECHNICAL INFORMATION

STIF MODEL	DESIGN	Pstat @ 22 °C	EFFICIENCY RATIO	MAX VACUUM	KST MAX
VL	Single flat Integrated frame	100 ≤ Pstat ≤ 500 (±15%) Pstat < 100 (±20%)	80 % - 100 %	50 mbar	500 bar.m/s



VIGILEX VL-R®

APPLICATIONS

VACUUM RESISTANCE:
-5 MBAR TO 50 MBAR DEPENDING ON DIMENSIONS

The **VIGILEX VL-R** is a curved explosion vent panel shaped according to a customer specification need.

VIGILEX VL-R is suitable for all applications with low vacuum or working pressure (up to 50 % of static burst pressure) such as elevators, conveyors, silos, cyclones.

With an integral flange ready to install, covering the breaking point, the **VIGILEX VL-R** ensures a strong mechanical durability. The attached wide gasket provides the **VIGILEX VL-R** a perfect dust-proof seal. The standard burst pressure is **0.1 bar (max. 0.5 bar) at 22 °C (72 °F)**.

The **VIGILEX VL-R** is tested after it has been formed, to ensure that the correct burst pressure is observed.

STANDARD CHARACTERISTICS

- Design: Single flat sst 304 L
- Fully frame black EPDM gasket (-40°+80°C)
- Integrated stainless steel flange
- Curved: radius on request



Fully frame
black EPDM gasket (-40°+80°C)

OPTIONS

- Panel material stainless steel 316L
- Fully frame white silicone FDA gasket and 1935/2004 CE (-60°+200°C)
- High temperature graphite gasket (-200°+500°C)
- Integrated stainless steel 316L flange

CERTIFICATIONS

Ex II GD

EN 14 491
EN 14 994
EN 14 797
EN 1127.1

EU Certificate: *INERIS 15ATEX0001X*

Production quality assurance notification:
INERIS 08ATEXQ406

ACCESSORIES for VIGILEX VL-R *(See pages 36-37)*

- Burst Sensor
- Duct discharge
- Weather protection vigilex WI
- Vacuum safety grid

Explosion vent panel **dimensions**: VIGILEX VL-R®

RECTANGULAR & SQUARE

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
110 x 290	4 x 11	174 x 354	310
150 x 600	6 x 24	230 x 680	885
170 x 470	7 x 19	250 x 550	785
220 x 420	9 x 17	300 x 500	910
229 x 229	9 x 9	310 x 310	515
229 x 305	9 x 12	310 x 386	690
247 x 610	10 x 24	327 x 690	1485
270 x 458	11 x 18	350 x 538	1220
300 x 500	12 x 20	380 x 580	1480
300 x 600	12 x 24	350 x 650	1780
305 x 457	12 x 18	386 x 538	1385
305 x 610	12 x 24	386 x 690	1845
319 x 765	12 x 30	405 x 850	2425
340 x 385	13 x 15	404 x 449	1290
340 x 440	13 x 17	404 x 504	1430
350 x 650	14 x 26	430 x 730	2255
375 x 655	15 x 25	460 x 740	2445
390 x 620	15 x 24	470 x 700	2395
410 x 410	16 x 16	480 x 480	1660
420 x 520	16 x 20	500 x 600	2165
420 x 920	16 x 36	500 x 1000	3835
457 x 890	20 x 28	537 x 970	4040
470 x 610	18 x 24	550 x 690	2845
480 x 680	19 x 27	570 x 770	3260
490 x 490	19 x 19	570 x 570	2380
490 x 590	19 x 23	570 x 670	2865

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
520 x 520	20 x 20	600 x 600	2680
520 x 620	20 x 24	600 x 700	3200
520 x 1020	20 x 40	600 x 1100	5270
580 x 780	23 x 30	670 x 870	4495
580 x 1180	23 x 46	670 x 1270	6805
586 x 920	23 x 36	666 x 1000	5360
610 x 610	24 x 24	690 x 690	3695
610 x 1118	24 x 44	690 x 1198	6785
645 x 645	25 x 25	735 x 735	4130
645 x 1130	25 x 44	735 x1220	7250
653 x 653	26 x 26	735 x 735	4260
680 x 680	27 x 27	770 x 770	4595
720 x 1020	28 x 40	800 x 1100	7305
780 x 780	30 x 30	870 x 870	6050
780 x 1180	30 x 46	870 x 1270	9160
800 x 1000	31 x 40	890 x 1090	7960
880 x 880	35 x 35	970 x 970	7705
915 x 1118	36 x 44	996 x 1198	10 200
920 x 920	36 x 36	1000 x 1000	8425
980 x 980	39 x 39	1070 x 1070	9560
1000 x 1000	40 x 40	1080 x 1080	9960
1020 x 1020	40 x 40	1100 x 1100	10 360
1080 x 1080	42 x 42	1170 x 1170	11 620
1130 x 1130	44 x 44	1220 x 1220	12 720
1180 x 1180	46 x 46	1270 x 1270	13 875
1000 x 2000	40 x 79	1080 x 2080	19940

Other sizes available

TECHNICAL INFORMATION

STIF MODEL	DESIGN	Pstat @ 22 °C	EFFICIENCY RATIO	MAX VACUUM	KST MAX
VL-R	Single flat Integrated frame	200 < Pstat ≤ 500 (±20%) Pstat ≤ 200 (±25%)	80 % - 100 %	50 mbar	500 bar.m/s



VIGILEX VL-SANITARY® VACUUM RESISTANCE: 50 MBAR

APPLICATIONS

The new **VIGILEX VL-SANITARY** is designed especially for hygienic applications in food or pharmaceutical industry. Dedicated to protect systems with low vacuum or working pressure (up to 50 % of static burst pressure) such as spray dryers.

The high technology designed of this panel avoids contaminations.

The standard burst pressure is **0.1 bar (max. 0.5 bar) at 22 °C (72 °F)**.

STANDARD CHARACTERISTICS

- Design: Single flat stainless steel 316 L
- Food approved Blue FKM gasket (-10°+250°C):
  - FDA
  - 1935/2004CE
- Integrated stainless steel 316L flange
- Clean design
- Bacteriological barrier

TYPE EL CLASS I

CERTIFICATIONS

Ex II GD

EN 14 491
EN 14 994
EN 14 797
EN 1127.1

EU Certificate: *INERIS 15ATEX0001X*

EHEDG certicate: *C2600022*

Production quality assurance notification: *INERIS 08ATEXQ406*

ACCESSORIES for VIGILEX VL-SANITARY *(See pages 36-37)*

- Burst Sensor
- Weather protection vigilex WI
- Duct discharge

Explosion vent panel
dimensions:

VIGILEX VL-SANITARY®

RECTANGULAR & SQUARE

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
610 x 610	24 x 24	690 x 690	3695
586 x 920	23 x 36	666 x 1000	5360
782 x 882	31 x 35	990 x 890	6790
920 x 920	36 x 36	1000 x 1000	8425
1020 x 1020	40 x 40	1100 x 1100	10360

TECHNICAL INFORMATION

STIF MODEL	DESIGN	Pstat @ 22 °C	EFFICIENCY RATIO	MAX VACUUM	KST MAX
VL-SANITARY	Single flat Integrated frame	200 < Pstat ≤ 500 (±20%) Pstat ≤ 200 (±25%)	80 % - 100 %	50 mbar	500 bar.m/s

MAKE YOUR
HYGIENIC PROCESS SAFE





VIGILEX VD® VACUUM RESISTANCE: 200 MBAR

APPLICATIONS

The **VIGILEX VD** is a domed panel, designed to protect plants with a vacuum and pulsating processes. The domed design is optimal for pneumatic operated vessels like filters and cyclones with strong vibration.

With an integral flange ready to install and gasket included, the **VIGILEX VD** meet all your safety issues with the most demand in your application. The attached wide gasket provides the VIGILEX VD a perfect dustproof. The standard burst pressure is **0.1 bar (max. 0.5 bar) at 22 °C (72 °F)**.

STANDARD CHARACTERISTICS

- Design: Single flat sst 304 L
- Fully frame black EPDM gasket (-40°+80°C)
- Integrated stainless steel flange



Fully frame black EPDM gasket (-40°+80°C)

OPTIONS

- Panel material stainless steel 316L
- Fully frame white silicone FDA gasket and 1935/2004 CE (-60°+200°C)
- High temperature graphite gasket (-200°+500°C)
- Integrated stainless steel 316L flange

CERTIFICATIONS

Ex II GD

EN 14 491
EN 14 994
EN 14 797
EN 1127.1

EU Certificate: *INERIS 15ATEX0001X*

Production quality assurance notification: *INERIS 08ATEXQ406*

ACCESSORIES for VIGILEX VD *(See pages 36-37)*

- Burst Sensor
- Duct discharge
- Weather protection vigilex WI
- Vacuum safety grid

Explosion vent panel **dimensions**:

VIGILEX VD®

RECTANGULAR & SQUARE

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
150 x 600	6 x 24	230 x 680	885
170 x 470	6 x 19	250 x 550	785
205 x 290	8 x 11	285 x 370	580
220 x 420	9 x 17	300 x 500	910
229 x 229	9 x 9	310 x 310	515
229 x 305	9 x 12	310 x 386	690
247 x 610	10 x 24	327 x 690	1485
270 x 458	11 x 18	350 x 538	1220
300 x 500	12 x 20	380 x 580	1480
305 x 457	12 x 18	386 x 538	1385
305 x 610	12 x 24	386 x 690	1845
340 x 385	13 x 15	404 x 449	1290
340 x 440	13 x 17	404 x 504	1480
350 x 650	14 x 26	430 x 730	2255
375 x 655	15 x 26	460 x 740	2445
410 x 410	16 x 16	480 x 480	1660

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
457 x 890	20 x 28	537 x 970	4040
470 x 610	18 x 24	550 x 690	2845
490 x 490	19 x 19	570 x 570	2380
490 x 590	19 x 23	570 x 670	2865
525 x 668	21 x 26	630 x 765	3480
586 x 920	23 x 36	666 x 1000	5360
610 x 610	24 x 24	690 x 690	3695
610 x 1118	24 x 44	690 x 1198	6785
645 x 645	25 x 25	735 x 735	4130
645 x 1130	25 x 44	735 x 1220	7250
653 x 653	26 x 26	735 x 735	4260
915 x 1118	36 x 44	996 x 1198	10 200
920 x 920	36 x 36	1000 x 1000	8 425
920 x 1380	36 x 54	1000 x 1460	12 650
980 x 980	39 x 39	1070 x 1070	9560
1020 x 1020	40 x 40	1100 x 1100	10 360

Other sizes available

ROUND

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
Ø 200	8	Ø 268	310
Ø 250	10	Ø 330	480
Ø 300	12	Ø 390	685
Ø 350	14	Ø 424	930
Ø 400	16	Ø 473	1240
Ø 450	18	Ø 545	1570
Ø 500	20	Ø 574	1950

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
Ø 600	24	Ø 676	2790
Ø 700	28	Ø 790	3815
Ø 750	30	Ø 842	4380
Ø 800	31	Ø 880	4985
Ø 900	36	Ø 980	6325
Ø 980	39	Ø 1070	7500
Ø 1200	47	Ø 1290	11766

Other sizes available

TECHNICAL INFORMATION

STIF MODEL	DESIGN	Pstat @ 22 °C	EFFICIENCY RATIO	MAX VACUUM	KST MAX
VD	Single domed Integrated frame	100 ≤ Pstat ≤ 500 (±15%) Pstat < 100 (±20%)	80 % - 100 %	200 mbar	500 bar.m/s



VIGILEX VD-HV® VACUUM RESISTANCE: 200 - 500 MBAR

APPLICATIONS

The **VIGILEX VD-HV** is a strong domed panel, designed for use in applications where the operating pressure approaches the burst pressure, or where high vacuum pressure may exist. In the need for applications where the explosion vent is exposed to pulsating duty such as reverse jet cleaning systems on dust collectors with high vacuum.

With a large flange and gasket included, the one layer domed panel **VIGILEX VD-HV** meets all your safety issue to protect equipment and facilities. The standard burst pressure is **0.1 bar (max. 0.5 bar) at 22 °C (72 °F)**.

STANDARD CHARACTERISTICS

- Design: Single flat sst 304 L
- Fully frame black EPDM gasket (-40°+80°C)
- Integrated stainless steel flange



Fully frame black EPDM gasket (-40°+80°C)

OPTIONS

- Panel material stainless steel 316L
- Fully frame white silicone FDA gasket and 1935/2004 CE (-60°+200°C)
- High temperature graphite gasket (-200°+500°C)
- Integrated stainless steel 316L flange

CERTIFICATIONS

Ex II GD

EN 14 491
EN 14 994
EN 14 797
EN 1127.1

EU Certificate: *INERIS 15ATEX0001X*

Production quality assurance notification: *INERIS 08ATEXQ406*

ACCESSORIES for VIGILEX VD-HV *(See pages 36-37)*

- Burst Sensor
- Duct discharge
- Weather protection vigilex WI
- Vacuum safety grid

Explosion vent panel **dimensions**: VIGILEX VD-HV®

RECTANGULAR & SQUARE

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Pulgadas	(mm)	(cm²)
150 x 600	6 x 24	230 x 680	885
170 x 470	6 x 19	250 x 550	785
205 x 290	8 x 11	285 x 370	580
220 x 420	9 x 17	300 x 500	910
229 x 229	9 x 9	310 x 310	515
229 x 305	9 x 12	310 x 386	690
247 x 610	10 x 24	327 x 690	1485
270 x 458	11 x 18	350 x 538	1220
300 x 500	12 x 20	380 x 580	1480
305 x 457	12 x 18	386 x 538	1385
305 x 610	12 x 24	386 x 690	1845
340 x 385	13 x 15	404 x 449	1290
340 x 440	13 x 17	404 x 504	1430

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Pulgadas	(mm)	(cm²)
350 x 650	14 x 26	430 x 730	2255
375 x 655	15 x 26	460 x 740	2445
410 x 410	16 x 16	480 x 480	1660
457 x 890	20 x 28	537 x 970	4040
470 x 610	18 x 24	550 x 690	2845
490 x 490	19 x 19	570 x 570	2380
490 x 590	19 x 23	570 x 670	2865
525 x 668	21 x 26	630 x 765	3480
586 x 920	23 x 36	666 x 1000	5360
610 x 610	24 x 24	690 x 690	3695
653 x 653	26 x 26	735 x 735	4260
920 x 920	36 x 36	1000 x 1000	8425

Other sizes available

ROUND

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Pulgadas	(mm)	(cm²)
Ø 200	8	Ø 268	310
Ø 250	10	Ø 330	480
Ø 300	12	Ø 390	685
Ø 350	14	Ø 424	930
Ø 400	16	Ø 473	1240
Ø 450	18	Ø 545	1570
Ø 500	20	Ø 574	1950

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Pulgadas	(mm)	(cm²)
Ø 600	24	Ø 676	2790
Ø 700	28	Ø 790	3815
Ø 750	30	Ø 842	4380
Ø 800	31	Ø 880	4985
Ø 900	36	Ø 980	6325
Ø 980	39	Ø 1070	7500
Ø 1200	47	Ø 1290	11766

Other sizes available

TECHNICAL INFORMATION

STIF MODEL	DESIGN	Pstat @ 22 °C	EFFICIENCY RATIO	MAX VACUUM	KST MAX
VD-HD	Single domed Integrated frame	100 ≤ Pstat ≤ 500 (±15%) Pstat < 100 (±20%)	80 % - 100 %	500 mbar	500 bar.m/s

NEW



VIGILEX® VL-HV® & VL-R-HV®

VACUUM RESISTANCE:
100 MBAR TO 400 MBAR DEPENDING ON DIMENSIONS

APPLICATIONS

The **VIGILEX VL-HV* & VIGILEX VL-R-HV**** is suitable for all applications with high vacuum or working pressure (50 % of static burst pressure) such as cyclones, dust collectors...

With an integral flange ready to install, covering the breaking point, the **VIGILEX VL-HV & VIGILEX VL-R-HV** ensures a strong mechanical durability. The attached wide gasket provides the **VIGILEX VL-HV & VIGILEX VL-R-HV** a perfect dustproof seal.

The standard burst pressure is **0,1 bar at 22° C (72° F)**.



Fully frame
black EPDM gasket (-40°+80°C)

STANDARD CHARACTERISTICS

- * : Single flat sst 304L
  ** : Curved panel sst 304L
- Fully frame black EPDM gasket (-40°+80°C)
- Integrated stainless steel flange

OPTIONS

- Panel material stainless steel 316L
- Fully frame white silicone FDA gasket and 1935/2004 CE (-60°+200°C)
- High temperature graphite gasket (-200°+500°C)
- Integrated stainless steel 316L flange

CERTIFICATIONS

Ex II GD

EN 14 491
EN 14 994
EN 14 797
EN 1127.1

EU Certificate: *INERIS 15ATEX0001X*

Production quality assurance notification:
INERIS 08ATEXQ406

ACCESSORIES for VIGILEX VL-HV & VL-R-HV *(See pages 36-37)*

- Burst Sensor
- Duct discharge

Explosion vent panel **dimensions**:

VIGILEX VL-HV®&VL-R-HV®

RECTANGULAR & SQUARE

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
110 x 290	4 x 11	174 x 354	310
150 x 600	6 x 24	230 x 680	885
170 x 470	7 x 19	250 x 550	785
220 x 420	9 x 17	300 x 500	910
229 x 229	9 x 9	310 x 310	515
229 x 305	9 x 12	310 x 386	690
247 x 610	10 x 24	327 x 690	1485
270 x 458	11 x 18	350 x 538	1220
300 x 500	12 x 20	380 x 580	1480
300 x 600	12 x 24	350 x 650	1780
305 x 457	12 x 18	386 x 538	1385
305 x 610	12 x 24	386 x 690	1845
319 x 765	12 x 30	405 x 850	2425
340 x 385	13 x 15	404 x 449	1290
340 x 440	13 x 17	404 x 504	1430
350 x 650	14 x 26	430 x 730	2255
375 x 655	15 x 25	460 x 740	2445
390 x 620	15 x 24	470 x 700	2395
410 x 410	16 x 16	480 x 480	1660
420 x 520	16 x 20	500 x 600	2165
420 x 920	16 x 36	500 x 1000	3835
457 x 890	20 x 28	537 x 970	4040
470 x 610	18 x 24	550 x 690	2845
480 x 680	19 x 27	570 x 770	3260
490 x 490	19 x 19	570 x 570	2380
490 x 590	19 x 23	570 x 670	2865

INTERNAL DIMENSION		EXTERNAL DIMENSION	AREA
(mm)	Inches	(mm)	(cm²)
520 x 520	20 x 20	600 x 600	2680
520 x 620	20 x 24	600 x 700	3200
520 x 1020	20 x 40	600 x 1100	5270
580 x 780	23 x 30	670 x 870	4495
580 x 1180	23 x 46	670 x 1270	6805
586 x 920	23 x 36	666 x 1000	5360
610 x 610	24 x 24	690 x 690	3695
610 x 1118	24 x 44	690 x 1198	6785
645 x 645	25 x 25	735 x 735	4130
645 x 1130	25 x 44	735 x1220	7250
653 x 653	26 x 26	735 x 735	4260
680 x 680	27 x 27	770 x 770	4595
720 x 1020	28 x 40	800 x 1100	7305
780 x 780	30 x 30	870 x 870	6050
780 x 1180	30 x 46	870 x 1270	9160
800 x 1000	31 x 40	890 x 1090	7960
880 x 880	35 x 35	970 x 970	7705
915 x 1118	36 x 44	996 x 1198	10 200
920 x 920	36 x 36	1000 x 1000	8425
980 x 980	39 x 39	1070 x 1070	9560
1000 x 1000	40 x 40	1080 x 1080	9960
1020 x 1020	40 x 40	1100 x 1100	10 360
1080 x 1080	42 x 42	1170 x 1170	11 620
1130 x 1130	44 x 44	1220 x 1220	12 720
1180 x 1180	46 x 46	1270 x 1270	13 875

Other sizes available

TECHNICAL INFORMATION

STIF MODEL	DESIGN	Pstat @ 22 °C	EFFICIENCY RATIO	MAX VACUUM	KST MAX
VL-HV VL-R-HV	Single flat or curved Integrated frame	≤ 0,1 bar (±25%)	80 % - 100 %	100 à 400 mbar depending on size	500 bar.m/s

VIGILEX ARCVENT®

NEW



VIGILEX ARCVENT®

APPLICATIONS

The new **VIGILEX ARC VENT** range is specifically designed for installation on **BESS (Battery Energy Storage Systems)** and on external walls of electrical switch rooms to relieve overpressure caused by explosions due to gaz explosion or arc flash.

These safety elements are certified and tested to open at the required pressure. They are generally installed on the roof of BESS containers to safely direct the explosion upwards and thus protect property and people. The **ARC VENT panels** are **IP66** and **ATEX EN 14994 certified**.

ARCVENT®

STANDARD CHARACTERISTICS



- Designed single flat SST 304L
- **Grey silicone gasket UL 50 E - UL157**
- Arc Flange included gasket, no water retention and vibration resistant system

ARC-VENT® INS⊖ A & INS⊖ B

STANDARD CHARACTERISTICS

- INS⊖A Insulation foam glued bellow the membrane
- INS⊖B Insulation protection with Aluminum box
- Designed single flat SST 304L
- **Grey silicone gasket UL 50 E - UL157**
- Arc Flange includes gasket, no water retention and vibration resistant system



ARC-VENT® INS⊕ MAX

PATENTED

STANDARD CHARACTERISTICS



- Design: one-piece pressed membrane with insulating foam armaflex UL 94 VO integration
- All Stainless steell 304L
- Flange + gasket included
- **Grey silicone gasket UL 50 E - UL157**
- No water retention and vibration resistant

OPTIONS

- White Silicone (-60 °C +200°C)
- Black EPDM Gasket (-40°C +80°C)
- Flat Grid (not for INS⁻)
- Inductive Burst Sensor

CERTIFICATIONS

Ex II G

IP66

NFPA

EN 14 994
EN 14 797
EN 1127.1

NF EN ISO 9227: 2012
NF EN 8993: 2010
NF EN 10289: 1999

EU Certificate: *INERIS 25ATEX0004X*

Production quality assurance notification: *INERIS 08ATEXQ406*



NEW

VIGISPACE®

VIGISPACE® Ex CE

APPLICATIONS

When an explosion occurs outdoors, the explosion vent opens fully and relieves the explosion pressure and flame in the surrounding environment. This can cause the explosion or fire to spread and affect buildings, vehicles or personnel.

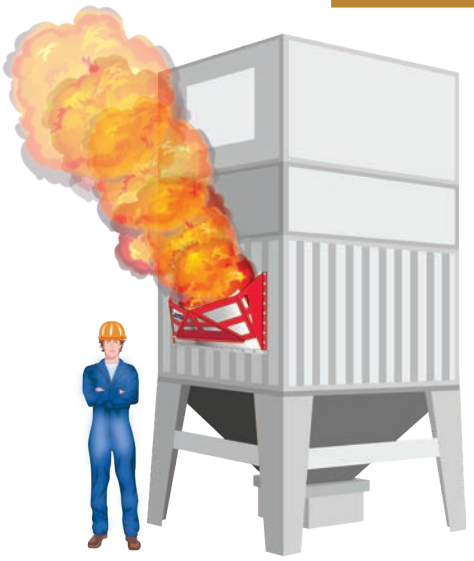
In order to avoid this risk, we designed the **VIGISPACE** to guide the pressure and flame discharge and avoid collateral damages. In fact, the **VIGISPACE** will limit the opening angle of the explosion vent and guide the pressure, flame and heat relief up to upwards.

Advantage: By reducing the dimension of the hazardous surface, the **VIGISPACE** helps to reduce the safety zone to a minimum and increases the useful space of your installations, while ensuring maximum protection against explosions.

The **VIGISPACE** must be used with **VIGILEX VL** or **VD**.

Explosion with VIGISPACE





CHARACTERISTICS OF USE

KST, MAX	≤200 bar.m/s	PSTAT	≤0.5 bar
PMAX	10 bar	HYDRAULIC DIAMETER	Dh≤1.2m
PRED OF THE ENCLOSURE	≤0.7 bar	EFFICIENCY	60%

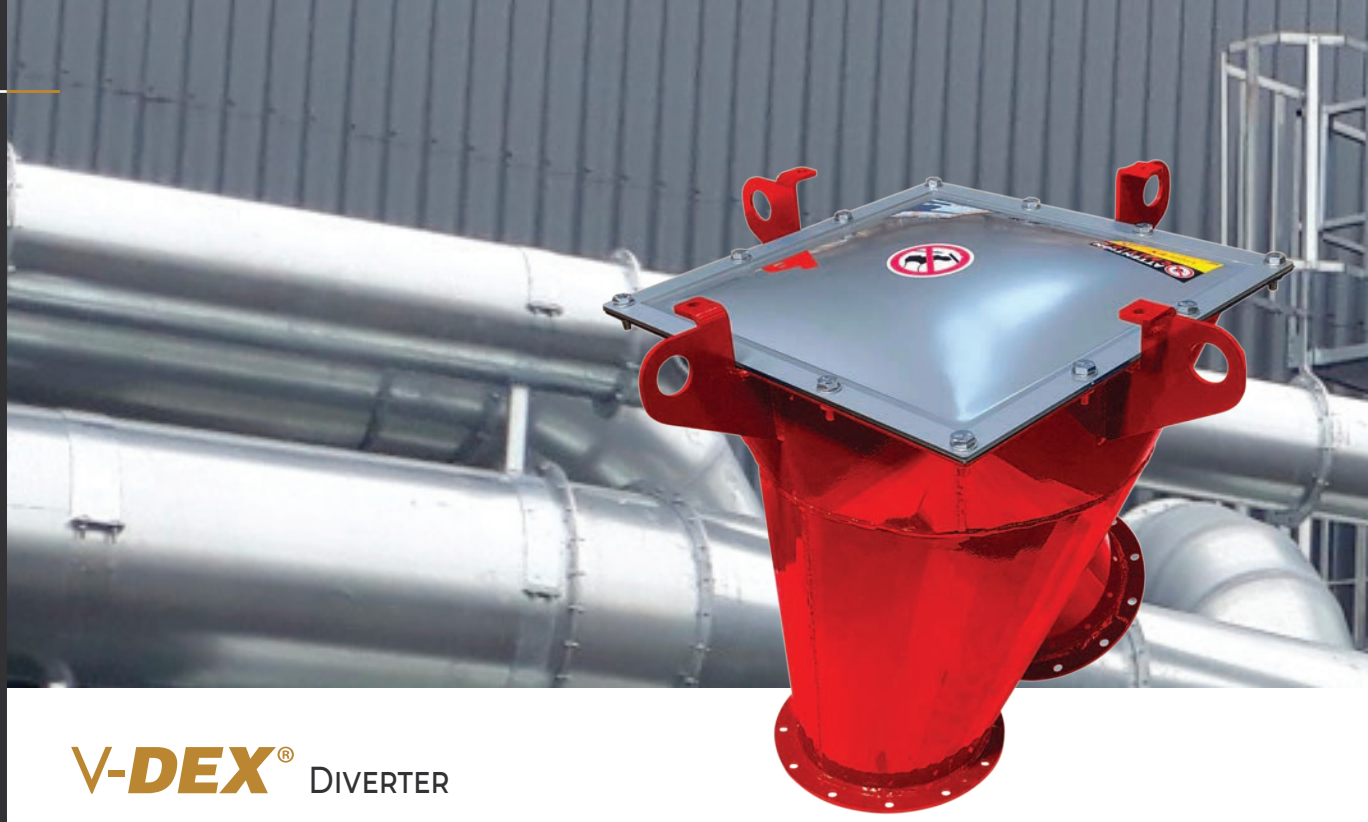
CERTIFICATIONS

Ex II D

EN 14 491
EN 14 797

EU Certificate:
INERIS 22ATEX0004X

Production quality assurance notification:
INERIS 08ATEXQ406



V-DEX® Diverter

APPLICATIONS

The **V-DEX** diverter is used to deflect explosions propagating through the ducts, preventing the spread of flames or overpressures in connected vessels.

This device reduces the risk of flame spread.

Standard characteristics

- Body: Painted steel
- Domed explosion vent panel VD

CERTIFICATIONS

Explosion Panel Certifications

EN 14797

EN 14491

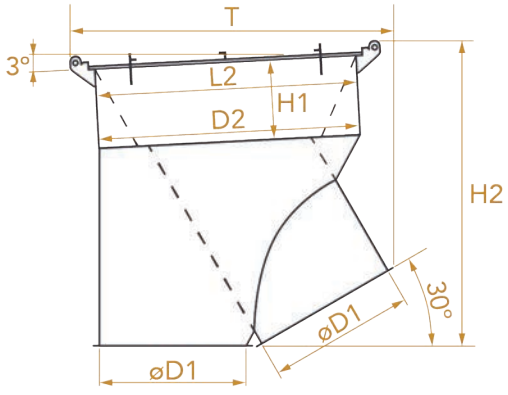
OPTIONS for V-DEX

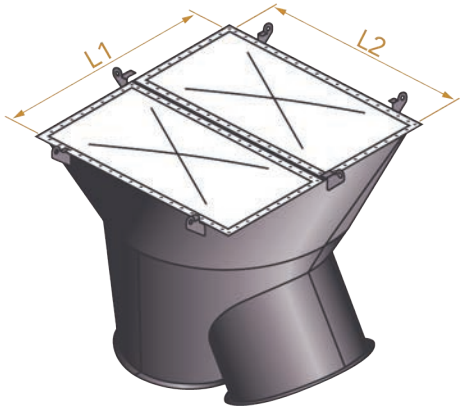
- Body: Stainless steel
- Duct discharge

Diverter dimensions:

V-DEX® Ex CE

CHARACTERISTICS OF THE EXPLOSION DEFLECTION DEVICE											
Number of panels	ø	mm	inch	H1	H2	D1	D2	L1	L2	T	Panel dimensions
x1	ø	200	8	150	555	200	410	410	410	685	VD 410x410
	ø	250	10	175	600	250	490	490	490	781	VD 490x490
	ø	300	12	200	700	300	610	610	610	875	VD 610x610
	ø	350	14	225	800	350	645	645	645	975	VD 645x645
	ø	400	16	250	900	400	780	780	780	1070	VD 780x780
x2	ø	450	18	275	1000	450	850	920	920	1165	VD 457x890 (Qty. 2)
	ø	500	20	300	1100	500	920	920	920	1260	VD 457x890 (Qty. 2)
	ø	550	22	325	1200	550	980	980	980	1355	VD 457x890 (Qty. 2)
	ø	600	24	350	1300	600	1070	1020	1020	1455	VD 586x920 (Qty. 2)
	ø	650	26	375	1400	650	1180	1180	1180	1550	VD 586x920 (Qty. 2)
x4	ø	700	28	400	1500	700	1250	1375	1130	1645	VD 610x610 (Qty. 4)
	ø	750	30	425	1600	750	1350	1455	1350	1740	VD 610x610 (Qty. 4)
	ø	800	32	450	1700	800	1430	1455	1350	1835	VD 645x645 (Qty. 4)
	ø	850	34	475	1800	850	1520	1605	1520	1930	VD 586x920 (Qty. 4)
	ø	900	36	500	1900	900	1600	1605	1520	2030	VD 586x920 (Qty. 4)
x6	ø	950	38	525	2000	950	1700	1785	1780	2125	VD 457x890 (Qty. 6)
	ø	1000	40	550	2100	1000	1780	1785	1780	2220	VD 530x850 (Qty. 6)





TECHNICAL INFORMATION

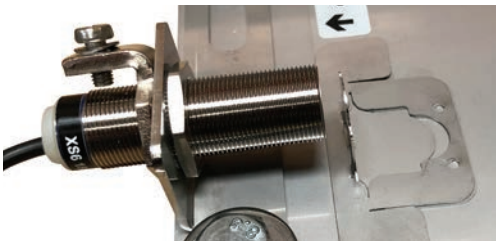
STIF MODEL	KST MAX	Pred. Max	PMAX	DUST
V-DEX	St2 ≤ 300 bar.m/s	0,8 bar	≤ 12 bar	Any kind of dust

BURST **SENSOR**

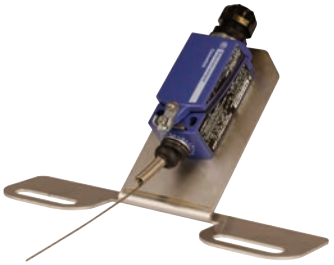
APPLICATIONS

The **BURST SENSOR** is a very efficient element to inform when your safety devices are open. Get the signal in realtime and increase the safety of your facilities.

VIGILEX INR
Inductive proximity sensor
Atex Zone 21
Voltage: 12-48 V DC



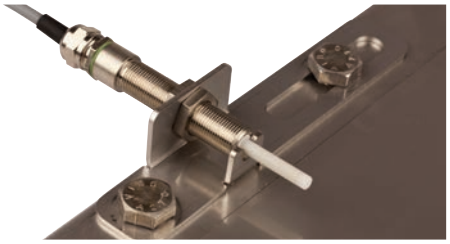
VIGILEX MEC
Mechanical burst sensor
Atex Zone 21
Voltage: 12-240 V AC/DC



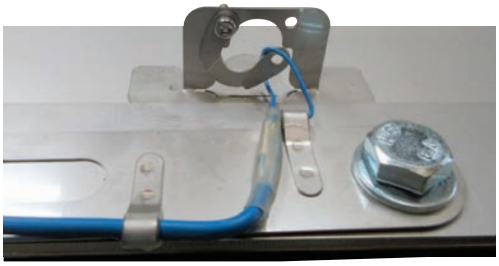
VIGILEX MAG
Magnetic burst sensor
Atex Zone 21
Voltage: 12-60 V DC



VIGILEX SEC
Détecteur d'explosion sécable
Atex Zone 21
Tension: 12-24 V DC



VIGILEX CAB
Breakable cable burst sensor
Voltage <ou = 1,5 DC
Current <ou = 100 mA
Power <ou = 25 mW



M-JET LINK
Connection box
Atex Zone 22
To connect burst sensor and control unit



OTHERS ***ACCESSORIES***

VIGILEX CAP

Discharge duct

Range of duct discharge in either galanised or stainless steel.



VIGILEX WI 100 (100 mm high)
VIGILEX WI 40 (40 mm high)

Weather protection

This lightweight weather cover offers protection to the explosion vent panels from the elements with the effects of wind, snow, hail and dirt minimised.



VIGILEX GS, GD & GF

Vacuum safety grid

Range of fall and vacuum protection painted, galvanized or stainless steel.



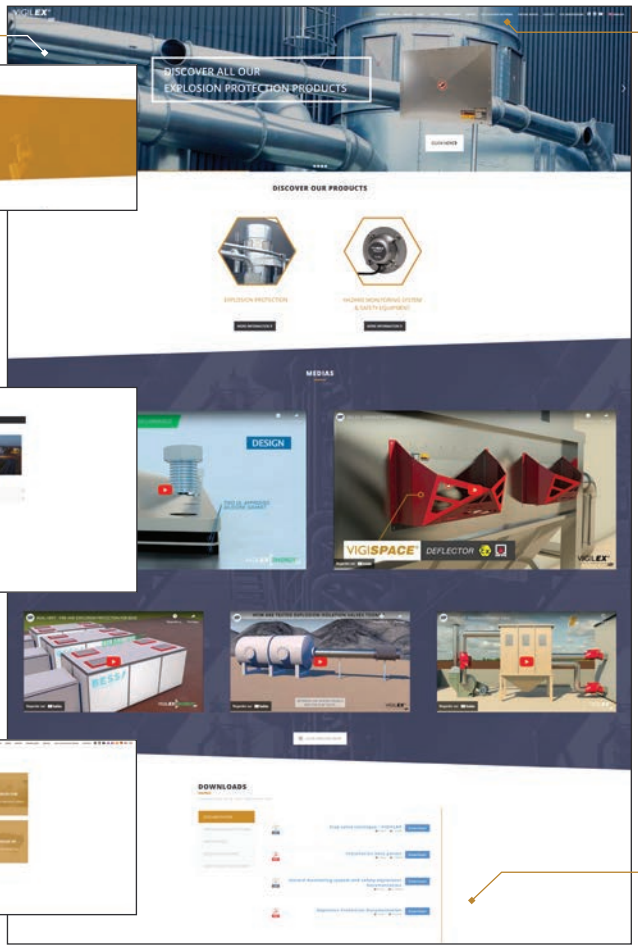


WWW.**VIGILEX**.EU

We give you the opportunity to access to all our documents (drawings, certificates, data sheets, brochures,...) on our website dedicated to our explosion protection sytem range.

Watch our videos





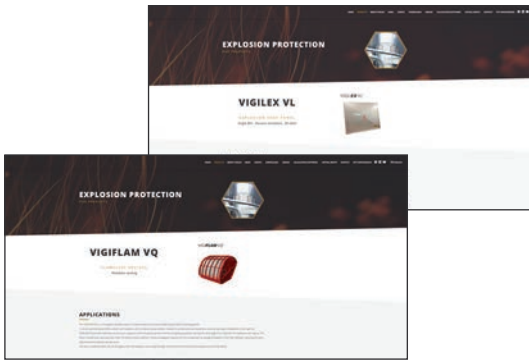
Access to our software for vent area calculation



Contact our experts



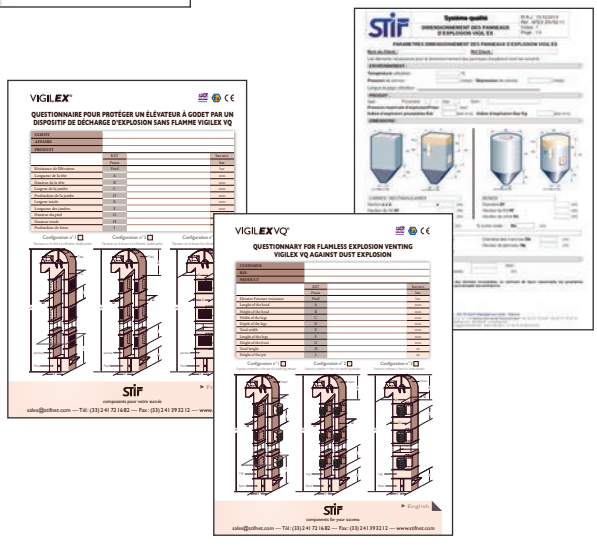
Download drawings of all our products range



Download our certificates & questionnaires



Find all the accessories you need to increase the performance of your safety equipment



QUESTIONNAIRES

By filling in the questionnaire, we can propose a solution designed to your requirements and conforming to the standards **EN 14991, EN 14994, VDI 3673** and **NFPA 68**.

VIGILEX® VENT

SOFTWARE FOR VENT AREA CALCULATION

According to the standards **EN 14491, EN 14994** and **VDI3673**, the vigilex vent software enables you to define the vent area needed to protect your aplication by yourself.

After your initial request to access on our site, you receive a code confirmation within 24 hours to have access to our vent area calculation software.

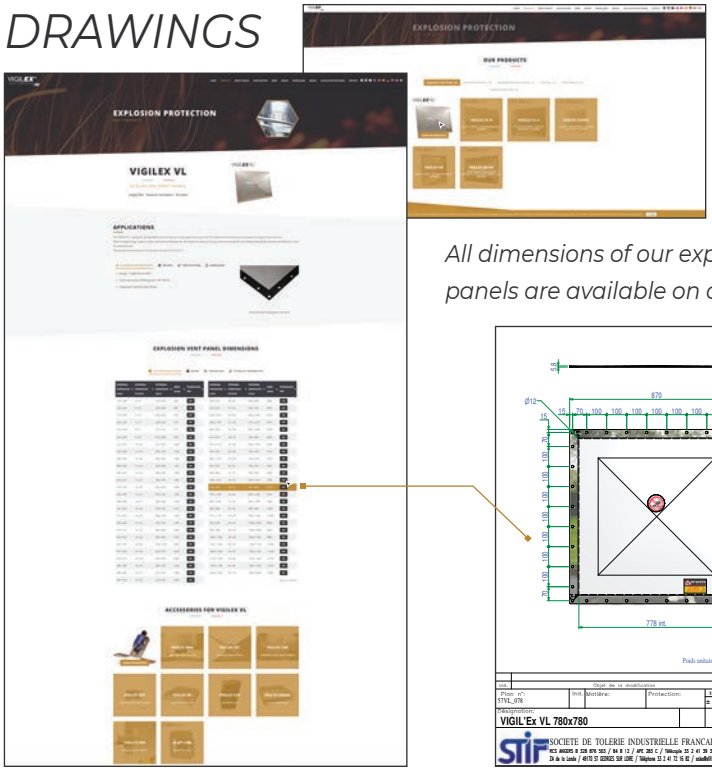
This software provide diferents vessels and machinary:

Silos, Filters, Elevators & Building.





DRAWINGS



All dimensions of our explosion panels are available on our website

CERTIFICATES



VIDEOS OF TESTS

Test for vent panel and flameless

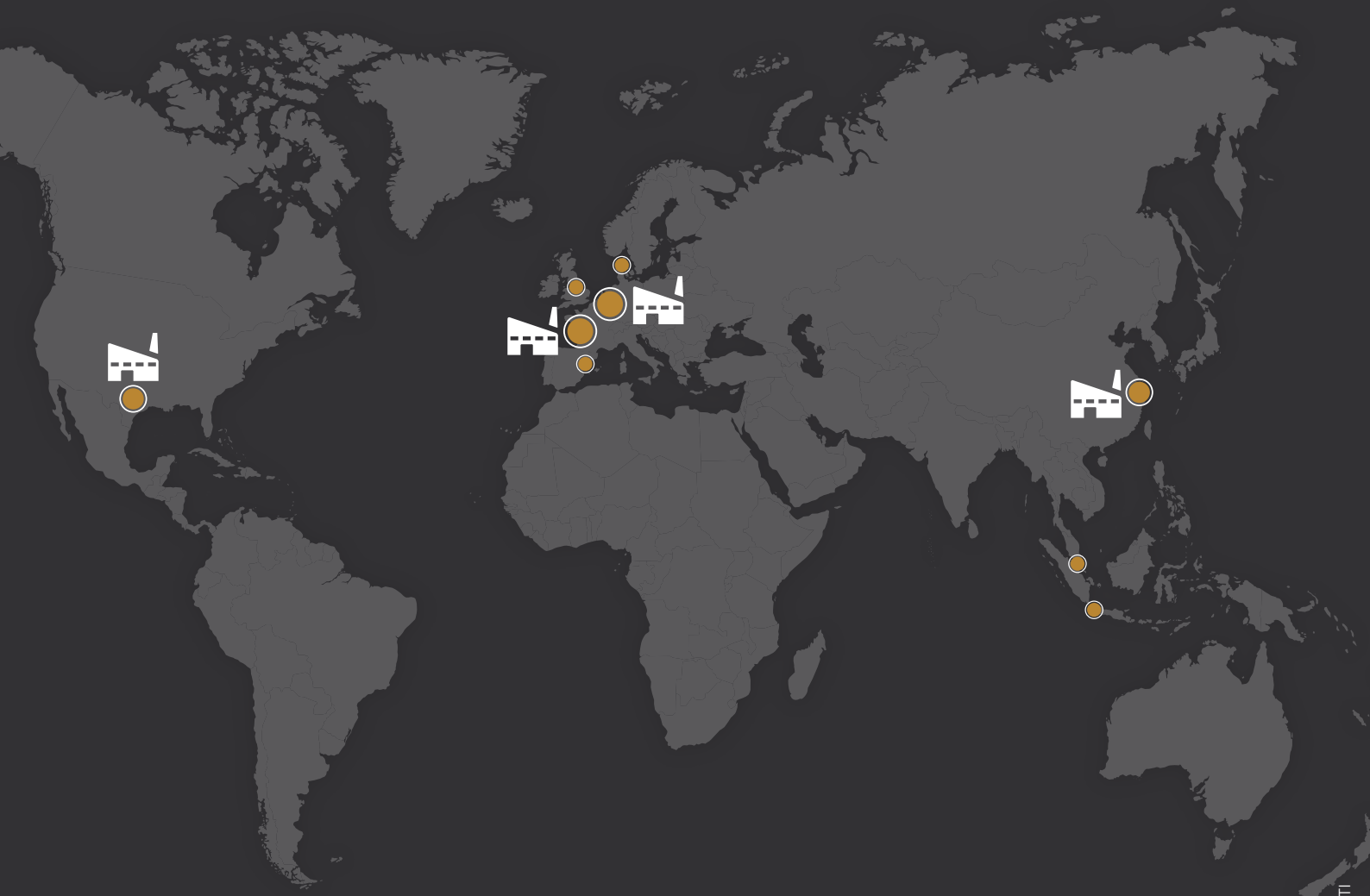




VIGILEX®

SAFETY PROTECTION By STIF

www.vigilex.eu



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STIF
components for your success

2026 05 — Document non contractuel — Conception/réalisation : AVANTI