

# ATEX



explosionprotection

EasyVent

English



# Since more than 25 years



**Everyone knows:** The ATEX guideline EG ATEX 2014/34/EU is valid throughout Europe. One of the masterminds behind the design of these regulations is Dr. Ing. Franz Alfert, who has been working on developing tailor-made solutions for explosion protection for many years. As he was unable to find any one supplier to cover the production and supply of his ideas and concepts, he founded ATEX Explosionschutz GmbH. He was now able to deliver one-stop solutions for a wide range of industry sectors.

## **We are qualified and focused on flexible solutions.**

Since then ATEX has been working on solutions that are tailored to the individual customer to protect people, environment and facilities, especially where flammable dust is produced, handled, packed and stored. ATEX solutions and products are now in use worldwide. ATEX headquarters are located in the middle of Germany a few kilometres East of Ruhrgebiet, where we currently employ more than 80 people. ATEX Worldwide now has a workforce of over 140 people.

## **The ATEX goal:**

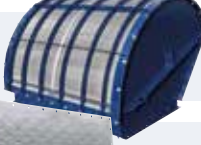

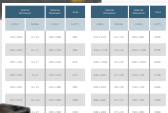



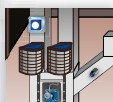
**We are always close to our customers**







## Summary

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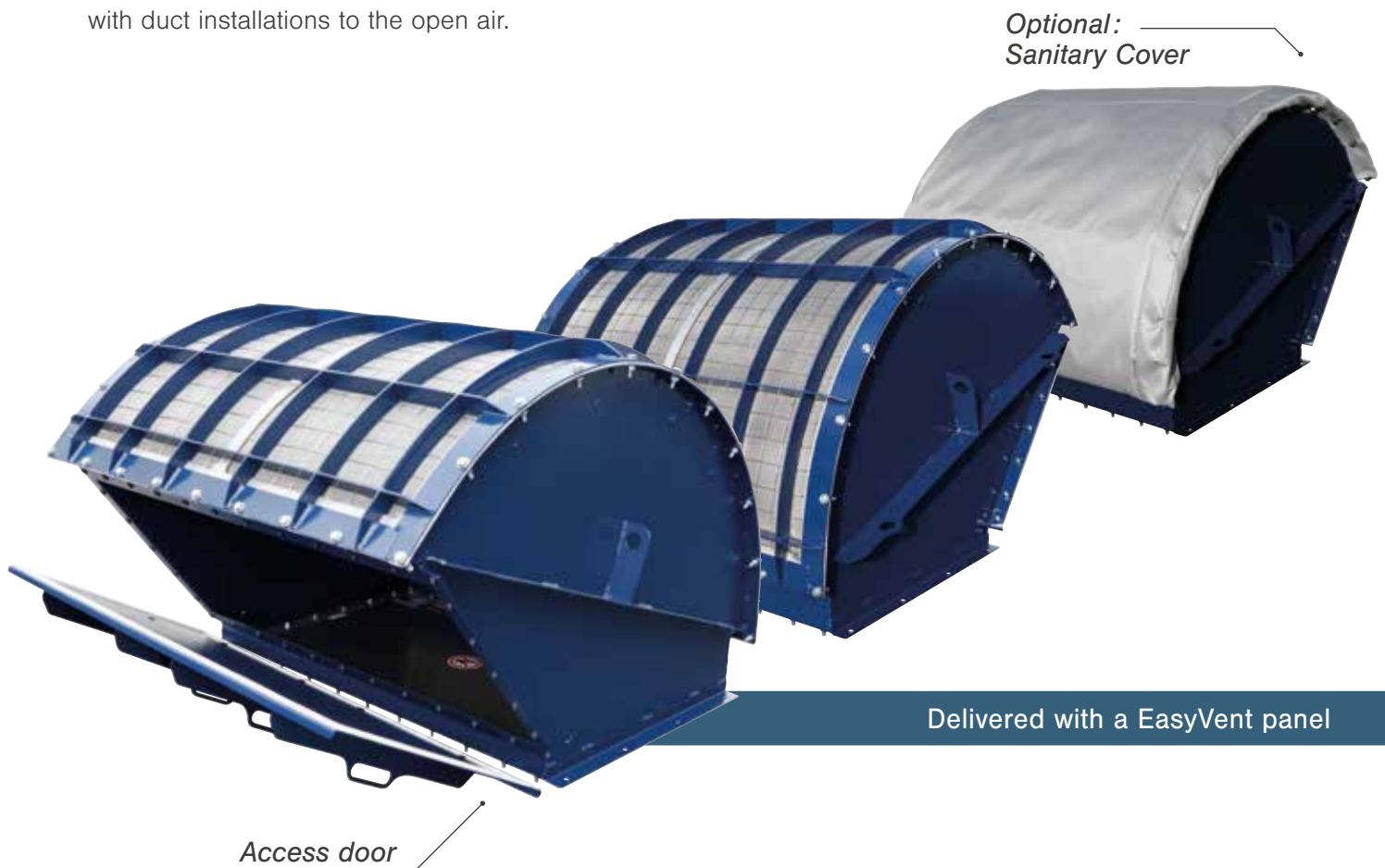
# Flameless explosion venting

## Introducing the EasyVent range from ATEX, a new flameless device designed for explosion protection, to meet your safety requirements

To protect indoor machinery the EasyQuench AQ guarantees flameless venting and dust protection. No burnt or unburnt dust passes off. Even high temperature is reduced to a minimum. During normal venting an explosion is freely discharged, allowing flames and dust to exit from the process vessel. When the process is located indoors, ducts are generally used to convey the explosion outside the building. However, the cost and options of implementing explosion vents and ducts are limited.

The EasyQuench AQ is an ATEX approved flameless explosion vent (EC Certificate Number: INERIS 15ATEX0039X).

It is used with great effect indoors and outdoors. It is the best and easiest solution instead of cumbersome and expensive solutions with duct installations to the open air.



# EasyQuench AQ model



The EasyQuench AQ provides low pressure resistance effectively eliminating flame and heat emissions thereby easing indoor installation and positioning of relevant machinery. The EasyQuench AQ is rectangular and supplied with a standard rectangular bursting panel.

The EasyQuench AQ is available in different sizes and is delivered with a burst sensor.

The EasyQuench AQ is certified by the French notified body INERIS and will comply with the latest standard for Flameless Explosion Venting Devices: EN 16009: 2011.

## EasyQuench AQ specifications

EasyQuench AQ	In combination with Vent Panel			Bolt Specs	
Model	Nominal size (mm/inch)	Nominal square (m <sup>2</sup> /ft <sup>2</sup> )	Weight (kg)	Qty	Size
<b>EasyQuench AQ 170x470</b>	170 x 470 mm - 7 x 19 in	0,0785 m <sup>2</sup> - 0,845sqft	62 kg	20	M10x30
<b>EasyQuench AQ 270x458</b>	270 x 458 mm - 11 x 18 in	0,1220m <sup>2</sup> - 1,315sqft	85 kg	22	M10x30
<b>EasyQuench AQ 300x500</b>	300 x 500 mm - 12 x 20 in	0,1480m <sup>2</sup> - 1,595sqft	105 kg	24	M10x30
<b>EasyQuench AQ 305x610</b>	305 x 610 mm - 12 x 24 in	0,1840m <sup>2</sup> - 1,980sqft	115 kg	26	M10x30
<b>EasyQuench AQ 350x650</b>	350 x 650 mm - 14 x 26 in	0,2250m <sup>2</sup> - 2,425sqft	125 kg	26	M10x30
<b>EasyQuench AQ 490x590</b>	490 x 590 mm - 19 x 23 in	0,2865m <sup>2</sup> - 3,084sqft	145 kg	32	M10x30
<b>EasyQuench AQ 610x610</b>	610 x 610 mm - 24 x 24 in	0,3695m <sup>2</sup> - 3,975sqft	160 kg	32	M10x30
<b>EasyQuench AQ 586x920</b>	586 x 920 mm - 23 x 36 in	0,5360m <sup>2</sup> - 5,770sqft	170 kg	42	M10x30



**ATEX certification :**  
By French notified body INERIS

**Applications:**

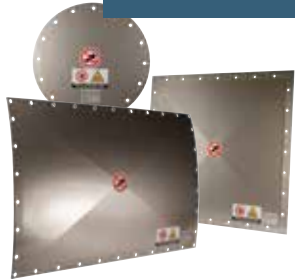
- Kst max 500
- Pmax ≤ 10 bar
- Pred ≤ 2,3 bar
- Pstat = 0,1



## EasyVent AL

Designed for single flat or round filters and sanitary applications

Standard vacuum resistance : 50 mbar



### Standard Characteristic:

- Fully frame black EPDM gasket (-40°+80°C)
- Integrated stainless steel flange
- Can be rolled : radius on request

### Option AL Sanitary:

- Panel material stainless steel 316L
- Full frame silicon FDA gasket (-60°+200°C)
- Integrated stainless steel 316L flange
- Can be rolled : radius on request

## EasyVent AD

Optimal for vacuum process with pulsating /cycling

Standard vacuum resistance : 200 mbar



### Standard Characteristic:

- Fully frame black EPDM gasket (-40°+80°C)
- Integrated stainless steel flange
- Other vacuum resistance available

### Option AD Sanitary:

- Full frame silicon FDA gasket (-60°+200°C)
- Integrated stainless steel 316L flange
- Other vacuum resistance available

## EasyVent AL-S

Designed for single flat or round applications : filters, silos, ...

Standard vacuum resistance : 50 mbar



### Standard Characteristic:

- Additional flanges needed
- Black EPDM gasket (-40°+80°C)
- Can be rolled : radius on request

### Option AL-S Sanitary:

- Additional flanges needed 316L
- Full frame silicon FDA gasket (-60°+200°C)
- Can be rolled : radius on request

## EasyVent A-Flex

Designed also for round shaped equipment.manual running.

Standard vacuum resistance : 50 mbar



### Standard characteristic:

- Design single flat, can be rolled by hand
- No additional flanges needed
- Black EPDM gasket (-40°+80°C)
- Available sizes on demand

### Option A-Flex Sanitary:

- Full frame silicon FDA gasket (-60°+200°C)
- Integrated stainless steel 316L flange
- Available sizes on demand



## Rectangular & Square

Internal Dimension		External Dimension	Area
( mm )	Inches	( mm )	( cm <sup>2</sup> )
150 x 600	6 x 24	230 x 680	885
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
250 x 480	4 x 21	350 x 580	1200
270 x 500	11 x 20	360 x 590	1330
280 x 530	11 x 21	380 x 630	1480
300 x 600	12 x 24	366 x 666	1605
305 x 457	12 x 18	386 x 538	1385
319 x 765	12 x 30	405 x 850	2480
340 x 385	13 x 15	404 x 449	1250
340 x 440	13 x 17	404 x 504	1430
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
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	580 x 780	3260
490 x 590	19 x 23	570 x 670	2865
525 x 668	21 x 26	630 x 765	3475
580 x 780	22 x 30	680 x 880	4520
586 x 920	23 x 36	666 x 1000	5360

Internal Dimension		External Dimension	Area
( mm )	Inches	( mm )	( cm <sup>2</sup> )
610 x 610	24 x 24	690 x 690	3695
610 x 1118	24 x 44	690 x 1198	6785
629 x 1004	25 x 40	685 x 1059	6050
645 x 645	21 x 26	740 x 740	4130
653 x 653	26 x 26	740 x 740	4260
680 x 680	27 x 27	780 x 780	4595
680 x 880	27 x 35	780 x 980	5980
780 x 780	30 x 31	880 x 880	6080
780 x 980	30 x 39	880 x 1080	7640
780 x 1180	30 x 46	880 x 1280	9160
800 x 1000	31 x 40	890 x 1090	7960
880 x 880	35 x 35	980 x 980	7700
900 x 900	35 x 35	990 x 990	8060
915 x 1118	36 x 44	996 x 1198	10200
920 x 920	36 x 36	1000 x 1000	8425
920 x 1380	36 x 54	1000 x 1460	12420
940 x 1440	37 x 56	1000 x 1500	13250
980 x 980	39 x 39	1080 x 1080	9600
1000 x 1000	40 x 40	1056 x 1056	9680
1020 x 1020	40 x 40	1100 x 1100	10360
1080 x 1080	42 x 42	1180 x 1180	11600
1130 x 1130	44 x 44	1220 x 1220	12720
1180 x 1180	46 x 46	1280 x 1280	13875

## Round

Internal Dimension		External Dimension	Area
( mm )	Inches	( mm )	( cm <sup>2</sup> )
Ø 200	8	Ø 268	310
Ø 250	10	Ø 341	480
Ø 300	12	Ø 390	695
Ø 350	14	Ø 422	955
Ø 400	16	Ø 473	1250
Ø 450	18	Ø 545	1580

Internal Dimension		External Dimension	Area
( mm )	Inches	( mm )	( cm <sup>2</sup> )
Ø 500	20	Ø 574	1935
Ø 600	24	Ø 676	2790
Ø 700	28	Ø 776	3830
Ø 750	30	Ø 842	4400
Ø 800	31	Ø 890	5005
Ø 900	36	Ø 980	6335
Ø 980	39	Ø 1070	7510

## Technical information

ATEX Model	Design	Pstat@20 °C	Efficiency Ratio	Max vacuum	Kst. max	OPTION Sanitary
AL	Single flat Integrated frame	0,1 bar (±15%)	80 % - 100 %	50 mbar	500 bar.m/s	*
AD	Single domed Integrated frame		80 % - 100 %	200-500 mbar	500 bar.m/s	*
AL-S	Single flat		80 % - 100 %	50 mbar	500 bar.m/s	*
A-Flex	Single flat		80 % - 100 %	50 mbar	500 bar.m/s	*

## Vacuum safety grid

### EasyVent TI

Thermal insulation is provided by using AR-MAFLEX covered with aluminium foil preventing heat loss, condensation and offering UV protection.



## Weather Protection

### EasyVent WI

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



## Duct discharge

### EasyVent CAP

Range of duct discharge in either galvanised or stainless steel.



## Vacuum safety grid

### EasyVent GS & GD

Range of fall and vacuum protection in galvanised or stainless steel.



## Options

- Other sizes available on request
- Different burst pressure available on request
- Other gasket material available on request
- Bolts and earth lead
- Material stainless steel 316 L on request

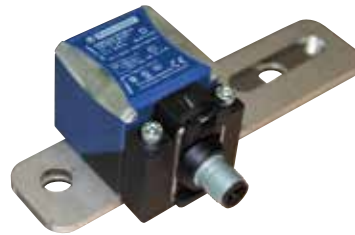


# Burst sensor



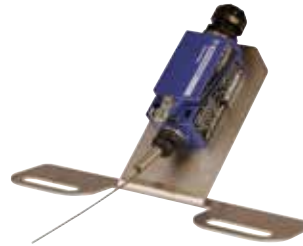
## Burst sensor EasyVent IND

Inductive proximity sensor ATEX zone 21  
Voltage: 12-48V DC



## EasyVent MEC

Mechanical burst sensor ATEX zone 21.  
Voltage: 12-240V AC/DC



## EasyVent MAC

Magnetic burst sensor ATEX zone 21.  
Voltage: 12-60V DC



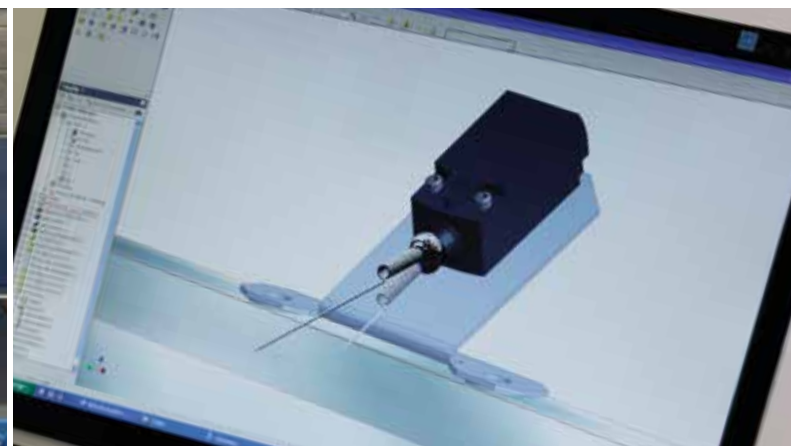
## EasyVent SEC

Breakable burst sensor ATEX zone 21.  
Voltage: 12-24V DC



## EasyVent CAB

Breakable cable burst sensor.



## The EasyVent explosion vent panels and flame arrestors are ATEX approved products certified by the French notified body INERIS.

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 EasyVent explosion vent panels offer a simple and efficient protection system which is designed to resist vacuum under cycling conditions and can be used in silos, cyclones, filters units and vessels.

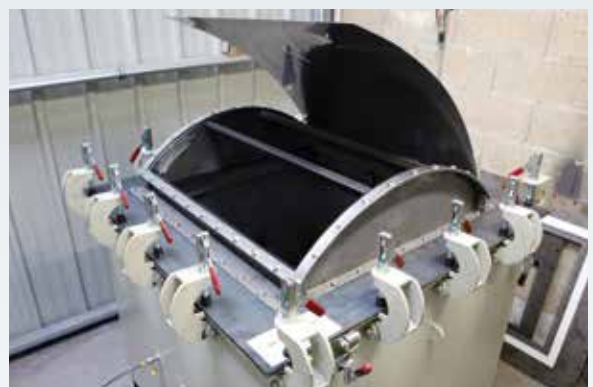
### Directive : EG ATEX 2014/34/EU



#### Conformity:

Ex II GD  
EN 14 491 / EN 14 994 /  
EN 14 797-2007 / EN 1127.1-2011  
EC Type examination certificate:  
INERIS 15ATEX0038X  
Production quality assurance  
notification: FSA 15ATEXQS019

### Quality control



We test the vent panels in our factory according to EN 14 797. These panels are manufactured under the CE examination certificate type INERIS 15ATEX0038X and the quality management system of the company is certified by the CE quality certification FSA 15ATEXQS019.

Explosion vent panels are supplied with a certificate of conformity complete with burst test results along with installation guidelines.

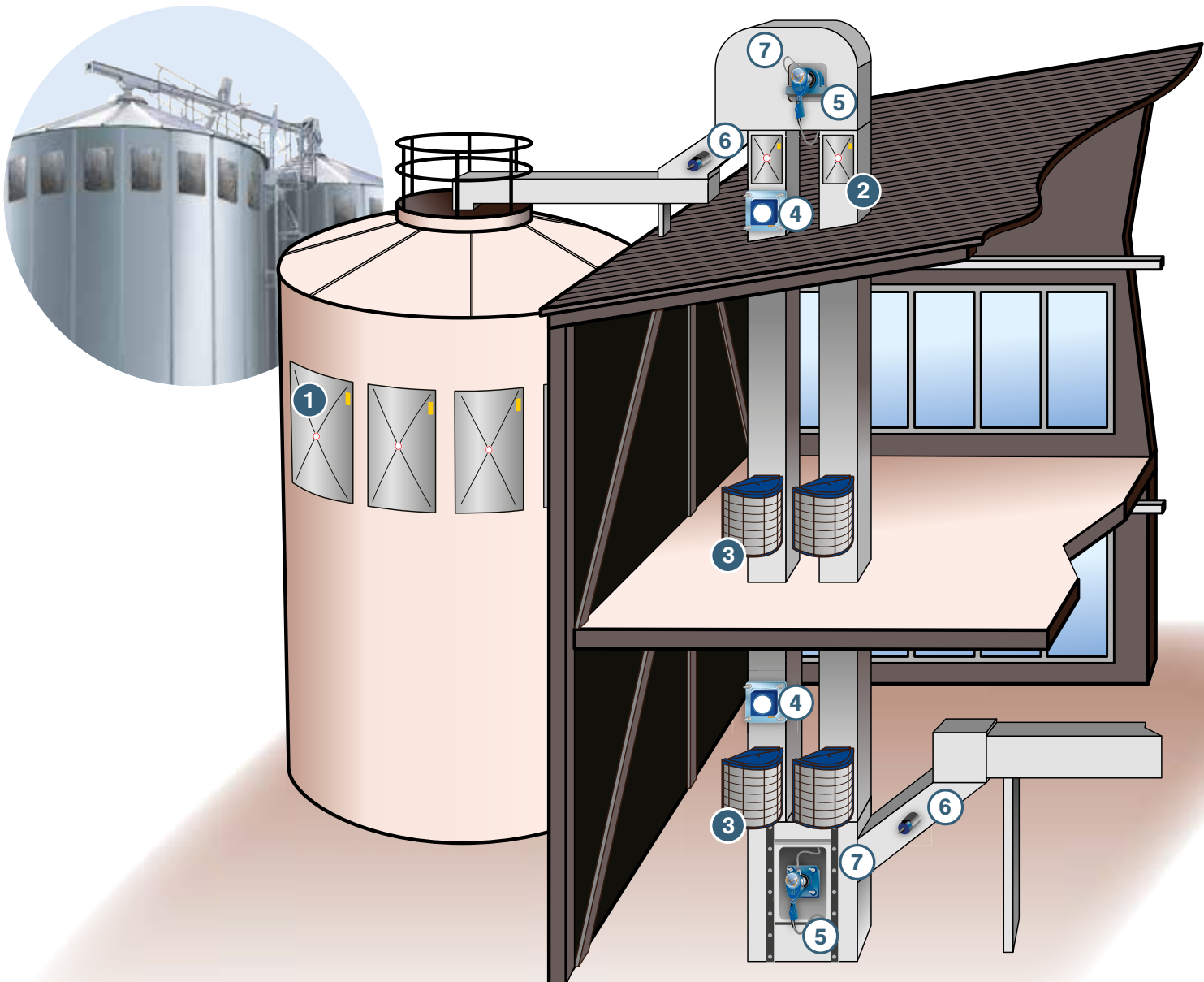
## Example of indoor and outdoor applications

### Explosion protection devices

- 1 Curved explosion vent panel
- 2 Flat explosion vent panel
- 3 Flame arrestor

### Safety equipments (sensorjet range)

- 4 Belt alignment system
- 5 Motion controller
- 6 Choke sensor
- 7 Bearing temperature sensor





# ATEX worldwide



## explosionprotection by ATEX

**ATEX Protection Systems and Safety Solutions have been developed by Fire and Explosion-Protection experts with extensive experience from industry and safety technologies.**

The ATEX Fire and Explosion Protection Concept combines the practical requirements of a production oriented industrial installation with the appropriate safety measures. This guarantees the undisturbed operation of your plant and enhances its productivity. The advantage of using ATEX Systems is recognised world wide.

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