



**DYNACO**  
High Performance Doors



THORNE &  
**DERRICK**  
INTERNATIONAL

Thorne & Derrick  
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# EVERYTHING UNDER CONTROL?

**Discover the Dynaco S-5 Atex roll-up doors  
for Atex zones 1/21 and 2/22**





# WHAT'S ATEX?

**Atex derives from the french words «atmosphère explosive».**

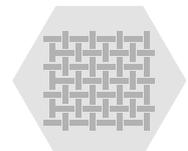
- > Wherever flammable gases, vapours or combustible dusts are in contact with oxygen, any source of ignition could cause an explosion.
- > All sources that could generate an explosion, such as sparks, flames, increasing temperatures or static energy, are to be avoided.



# YOU'RE CONCERNED TOO

## Various industries are confronted with Atex environments:

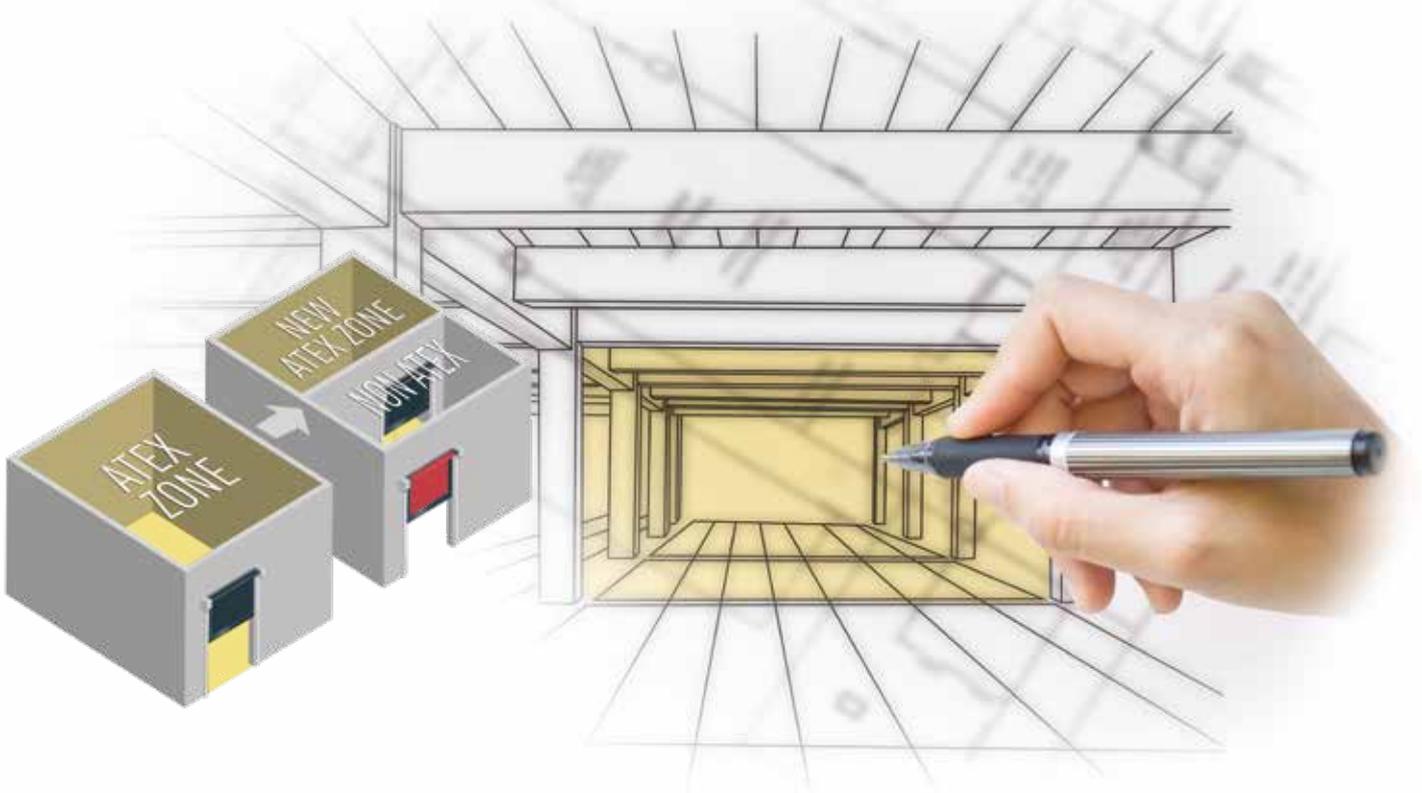
- > chemical and petrochemical industry
- > pharmaceutical plants
- > food processes involving flour, cereals or grains
- > textile and wood industry
- > industrial painting & spray booths
- > processes generating dust
- > processes using solvents
- > and many more...



# WHY A DYNACO S-5 ATEX HIGH SPEED DOOR?

**Installing a Dynaco high speed roll-up door offers a lot of tangible advantages:**

- > Energy savings
- > Improved working conditions
- > Reduced risk of contamination
- > Smooth operation adjusted to your specific requirements
- > Safety for people and products
- > Suitable for use in explosion sensitive environments



## EXTRA COST SAVINGS

**Atex zones require special explosion proof equipment, extra safety measures, special certifications and inspections, etc.**

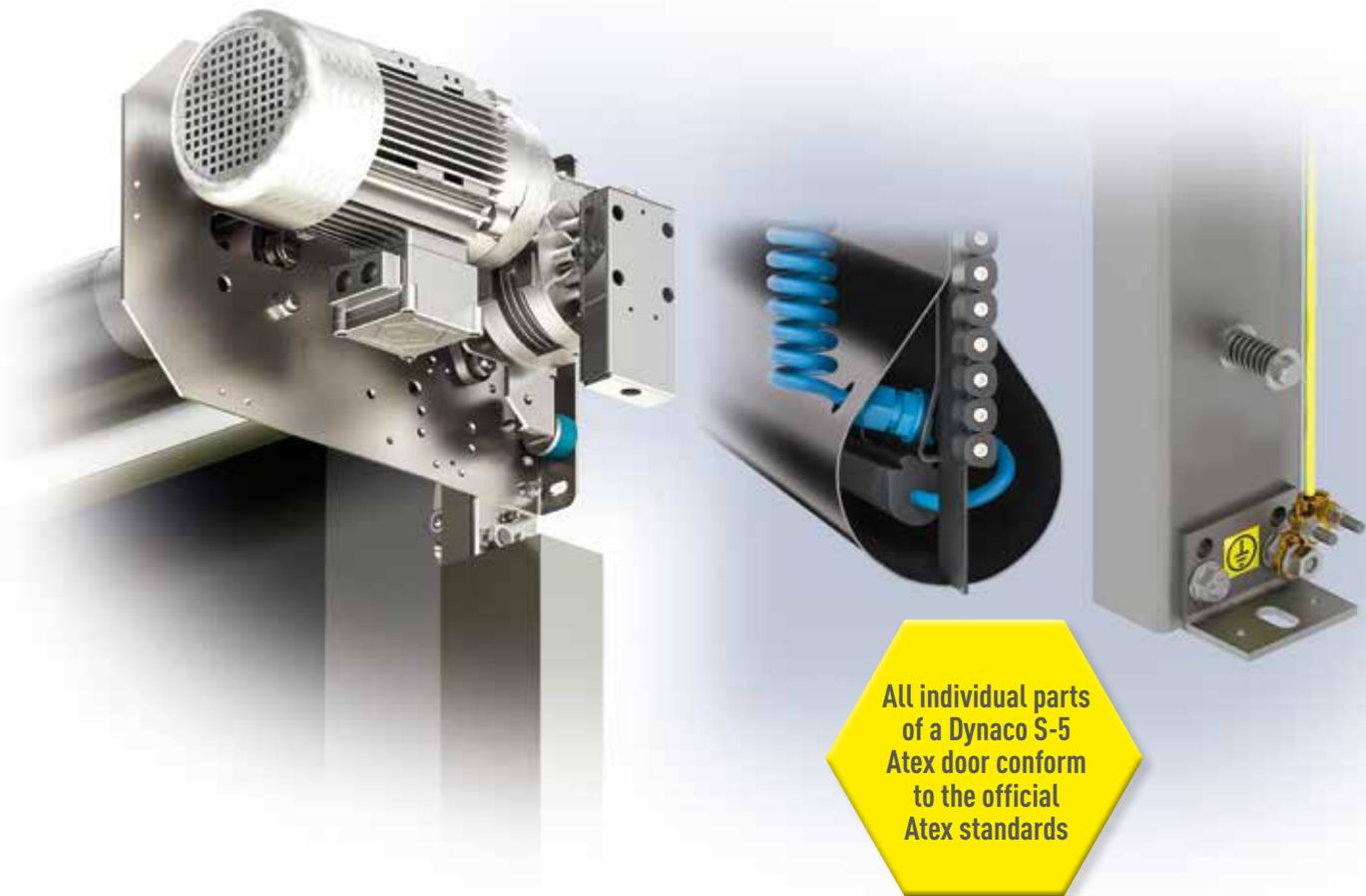
Dynaco S-5 Atex doors help to reduce Atex related costs:

- > They allow for easy partitioning of different zones, thus limiting the surface area that must meet Atex requirements to the absolute minimum.
- > They have a reduced footprint and require little space.
- > They come with an official certificate for the complete door, avoiding extra administrative work.

# ATEX RELATED TECHNICAL FEATURES

## Stainless steel structure

- > Parts have been thoroughly reviewed and validated.
- > All metal parts are made of stainless steel.
- > Including stainless steel drums, covers, bearings and gearwheels.
- > Standard earthing kit.



## Antistatic materials

- > All non-metallic parts with a surface larger than 20cm<sup>2</sup> are replaced by antistatic or conductive materials.
- > Bottom edge detector and photocells are protected via an intrinsically safe barrier (Ex i).
- > Includes complete door curtain and pulley in antistatic material.

# RULES & REGULATIONS

## European Directive 2014/34/EU applies

- > Defines different explosion groups depending on the presence of gases or dust.
- > Products are classified in 3 categories depending on the risk assessment in different zones.

### II **2/3 GD** IIC T4 IIIB 135°C

Product	Category 1	Category 2	Category 3
User zone	Zone 0/20	Zone 1/21	Zone 2/22
Zone criteria	Where an explosive atmosphere is continuously present for long periods of time. (>1000 h./year) Still safe with two faults.	Where an explosive atmosphere is likely to occur in normal operation. (Between 10>1000 h./year) Increased safety under abnormal operating conditions	Where an explosive atmosphere is not likely to occur in normal operation and if it does occur it will exist only for a short period of time (>10 h./year) Equipment which is appropriate under normal conditions
Hazard	Certain	Likely	Not likely
Approved categories	1G 1D	1G/2G 1D/2D	1G/2G/3G 1D/2D/3D

### II **2/3 GD** **IIC T4** IIIB 135°C

Explosion groups	Temperature class					
	T1	T2	T3	T4	T5	T6
Min. ignition temperature or max. surface temperature	450 °C	300 °C	200 °C	135 °C	100 °C	85 °C
I (Mining)	Methane					
IIA	Acetone Ammonia Benzene Acetic acid Ethane Ethyl acetate Methanol Naphthalene Phenol Propane	i-Amylacetate n-Butane n-Butane alcohol	Benzines Diesel fuels Fuel oils n-Hexane	Acetaldehyde		
IIB	Town gas	Ethylene Ethylene oxide	Hydrogen sulphide	Ethyl ether		
IIC	Hydrogen					Carbon disulphide

### II **2/3 GD** IIC T4 **IIIB 135°C**

Dust sub groups	Dust type
I	Coal Dust
IIIA	Flyings
IIIB	Non-conductive
<b>IIC</b>	<b>Conductive</b>



# PEACE OF MIND

**Dynaco S-5 Atex doors are officially certified  II 2/3 GD IIC T4 IIIB 135°C**

- > The Dynaco S-5 Atex doors are suitable for the vast majority of explosion sensitive environments.
- > They're applicable in indicated explosion groups for gases and dusts.
- > Each door is premounted and tested on our premises.
- > Each door is individually certified by an accredited European notified body for Atex regulations.





About Dynaco

Founded in 1987, the Dynaco brand has acquired an extensive expertise in high performance doors. Yet it continues to invest in order to exceed your expectations of quality and performance.

A network of certified and dedicated partners ensures an optimal service to customers worldwide. Furthermore we rely on our USA division and our licence partners in Russia, Japan, China, Vietnam and Brazil. Dynaco is part of Thorne & Derrick - the home to some of the world's most innovative and leading brands within the entrance automation industry. The comprehensive range of product brands includes Dynaco, Dific, Numehill and em.



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