

# ESSENTIAL PROTECTION. ADVANCED FOR YOU.

GEA T.VIS® E-20 valve control top for Ex atmospheres





# A NEW STAR IS BORN.

For safe operation in your explosive process area:  
Meet the GEA T.VIS® E-20 valve control top.

## **Essential protection.**

In every area of industry, there are process steps that take place in potentially explosive environments. The process equipment used in these Ex zones must be designed to be explosion-proof and comply with mandatory standards. The GEA T.VIS® E-20 control top provides a maximum level of protection, certified worldwide, for hazard zones 1/21. As part of the modern T.VIS® valve automation concept, this control top is the key to future-proof, digitally optimized plant operation.

The explosion-proof T.VIS® E-20 was developed to meet the requirements and wishes of the beverage, food, and chemical industries, where hazardous gases can occur during processing. Likewise, dust explosion was taken into account to enable valve operation in powder atmospheres e.g. in the dairy and pharma industries.

## **World's first 360° 2-color LED status identification**

You can check the correct function of the valve at any time, both digitally in your PLC and visually in the field: The 2-color LEDs for status detection are safely integrated inside the control top and are visible all around via an illuminated dome on the control top cap.

# ACCESS ALL AREAS – GAS AND DUST

On the safe side:  
The GEA T.VIS® E-20 covers all  
1/21 explosion hazard zones.

The T.VIS® E-20 is designed and approved for safe operation in gas and dust explosion hazardous areas. This concerns, among other things, the processing of alcoholic beverages and personal care products, but also valve control in areas with dry milk, flour or pharmaceutical powders present.

The explosion-proof design of the control top ensures intrinsically safe operation below the minimum ignition energy of hazardous substances. The on-site connections for feedback signals and valve actuation are made by direct wiring to internal spring-loaded terminals.



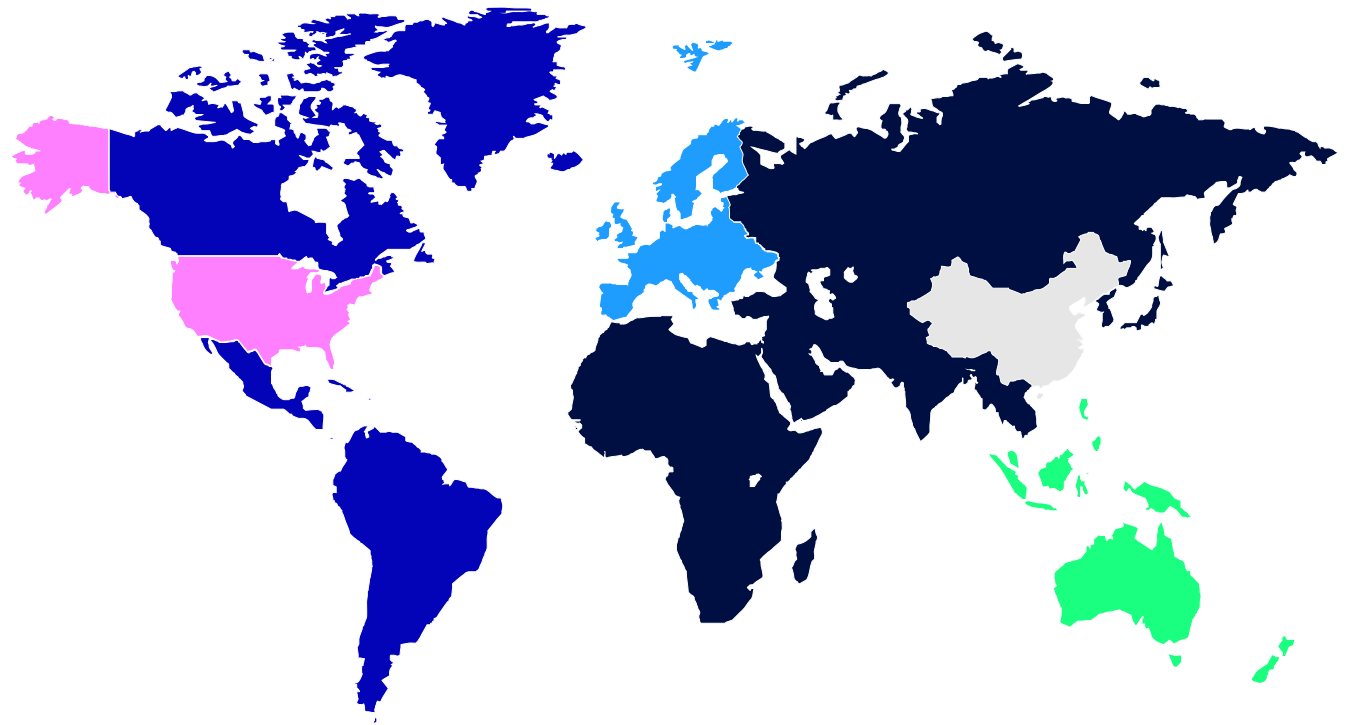


# CERTIFIED AROUND THE GLOBE

We support you wherever you are.  
Officially approved wherever you go.

As a world's first, the new T.VIS® E-20 control top is certified and approved worldwide for operation in ex atmospheres, in compliance with IECEx, CCCEx, UKEx, HazLoc and ATEX standards.

The certifications also apply to the individual parts of the unit, allowing them to be replaced by the facility's in-house service team, with the exception of the sensor module.



 ATEX

 HazLoc (NEC/CEC)

 IECEx

 Mix of IECEx, NEC and national directives

 Mix of ATEX; IECEx, NEC and national directives

 Since 2020 CCCEx mandatory in China (Basics IECEx)

# ADVANCED FOR PERFECT AUTOMATION

As part of the T.VIS® concept of future-proof design and functionality, the E-20 combines highest reliability and safety with simplest, time and space saving application.

Two magnetic sensors are assembled in a single module as standard to detect the valve positions for start/safety and end position and provide the corresponding feedback signals. The two sensors are mounted on guide blocks. They can be individually adjusted over the entire stroke of the valve via two threaded spindles. The sensor module also provides the optional connection for pilot valves to control the valve actuators.

## **Fitting in smallest spaces**

Thanks to its low overall height, the new control top is particularly easy to install, configure and maintain, even in confined process areas with a high complexity of piping and equipment.

## **More safety every day**

Thanks to the modern T.VIS® design, fault risks from humidity or vibration have been minimized, ensuring reliable operation. The unit is proven to be shock-resistant up to 10 g. To protect the built-in solenoid valves the supply air connection is equipped with a replaceable filter.

Maintenance work can be done without the risk of accidents, because status indication is now realized via integrated LEDs, not with a moving shaft extending from the control top.



# GEA T.VIS<sup>®</sup> E-20 CONTROL TOP AT A GLANCE



## For safe valve operation in your explosive areas

The world's first control top with 360° visibility, 2-color LED status identification stands for future-proof design, ease of use and maximum safety of operation in compliance with applicable standards worldwide.

- ☑ Safe operation in gas and dust atmospheres in 1/21 zones
- ☑ Certified according to IECEx, CCCEX, UKEx and ATEX standards
- ☑ Two adjustable sensors in a combined module for valve position detection and feedback
- ☑ Connection options for three solenoid valves to control valve actuation
- ☑ Intrinsically safe operation of sensors and solenoid valves
- ☑ Reliable, shock and vibration-resistant design
- ☑ Minimum space requirements
- ☑ Safe for maintenance work



Get more information at our website.