Potentially explosive atmospheres according to ATEX

- From 1.1.2003 onwards within the European Union only materials that comply with EU directive 94/9/EG (ATEX 100a) must be installed in new systems.
- The change creates a complete separation between dust-explosion protection and gas-explosion protection.

Zone definitions*:

GAS-explosive area	DUST-explosive area
Zone 0 - gases An area in which an explosive atmosphere comprising a mixture of air and flammable substances in the form of gases, vapours or liquid aerosol is present continuously, for long periods or frequently.	**Zone 20 - dust** An area in which an explosive atmosphere in the form of a cloud of combustible dust in air is present continuously, for long periods or frequently.
Zone 1 - gases An area in which it is expected that an explosive atmosphere comprising a mixture of air and flammable substances in the form of gas, vapour or liquid aerosol may occur occasionally during normal operations.	**Zone 21 - dust** An area in which it is expected that an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur occasionally during normal operations.
Zone 2 - gases An area in which it is not expected that an explosive atmosphere comprising a mixture of air and flammable substances in the form of gas, vapour or liquid aerosol occurs during normal operation; but if it does occur, then only for a short period.	**Zone 22 - dust** An area in which it is not expected that an explosive atmosphere in the form of a cloud of combustible dust in air occurs during normal operations; but if it does occur, then only for a short period.

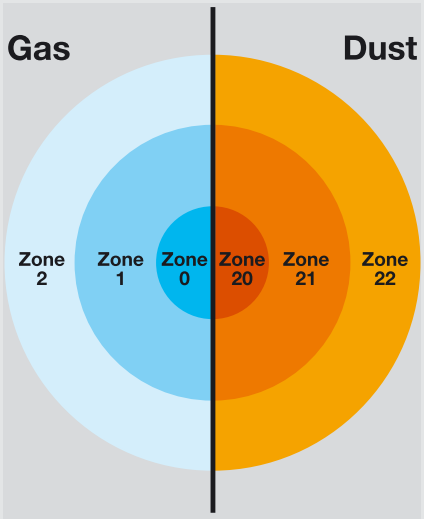
Selecting the equipment*

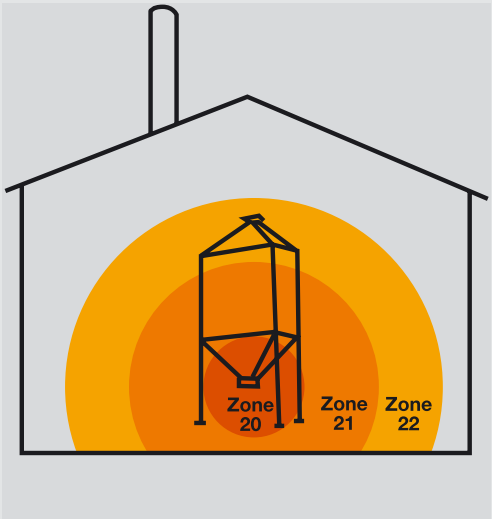
1. The proprietor specifies the separation into explosive areas (dust/gas), the zones and the type of material (atmosphere/dust) with flash point, ignition temperature, conductive or non-conductive.

2. This information must be used to define the requirements in regard to selecting the right equipment.

3. The device ID must provide information about where and in which areas the equipment must be used (device category and, consequently, allocation to the hazard zone).

* Please consider possible different local regulations.





Device marking:

HENSEL	Manufacturer
Ex	Special marking according to EU directive 94/9/EG (ATEX)
KX 2025	Type
CE	compliance according to EU Directive 94/0/EG
Ex	Explosion-proof according to European standard
nA	Protection type “n”: Protection type that is used on electrical equipment, so that during normal operations and under certain unusual conditions defined in EN 50 021:1999 they are unable to ignite a surrounding explosive atmosphere. Class A: non-sparking equipment
II	Device group II: These devices are for use in all areas which may be endangered by an explosive atmosphere apart from underground mines and above-ground mining systems.
3	Category 3: Devices in this category are for use in areas in which it is not expected that an explosive atmosphere caused by gases, vapours, liquid aerosols or dust/air mixtures will occur but if they do occur, then generally only seldom and for a short period.
G	Ex-atmosphere G = Gas
D	Ex-atmosphere D = Dusts
T 80° C	Maximum surface temperature for the device: temperature that can occur under the most unfavourable conditions on the surface of the device. Compare with specification for ignition temperature.
T6	Temperature class T6 = 85° C
IP 65	Degree of protection according to IEC 60 529
690 V	Rated voltage
2009	Year of manufacture