Inflammable substances, gases, fumes, mist or dust are an ever-present issue in many industrial sectors. This is because in conjunction with oxygen an explosive atmosphere can arise that poses a risk to life and limb in the event of a single spark.

In order to achieve the highest possible level of safety at all times, most countries have developed corresponding statutory requirements in the forms of laws, regulations and standards. During the course of the globalization process, great strides have been taken to create uniform guidelines for explosion protection.

With Directive 94/9/EC, the European Union had already created the prerequisite for complete standardization. In April 2016, it was replaced by the new Directive 2014/34/EU.

ATEX-compliant Flender couplings

Industries are subject to very high loading during day-to-day production processes. They transmit high torques, absorb large secondary forces and protect other, generally more expensive, drive train components.

A large proportion of the Flender couplings have been ATEX-certified for decades. We offer you an extensive range of safe connections for all kinds of applications. But for us, dealing responsibly with the issue of explosion protection includes constantly developing our product range further to ensure the safety of your plant and staff. This brochure provides you with a brief overview.

Our products bear the CE and EAC marks

In addition to the CE mark, our products also bear the Eurasian Conformity mark EAC of the customs union between Russia, Belarus and Kazakhstan. With this mark, we confirm that our products meet the technical requirements prescribed in these countries.

Flender offers a comprehensive range of couplings certified to the latest ATEX explosion protection directive.
ATEX-COMPLIANT FLENDER COUPLINGS

**PRODUCT**
- 

**DESCRIPTION**
- Written in capital letters.

**TYPICAL GASES**
- IIC → conductive dust
- III A → combustible flyings
- II C → hydrogen
- II B → ethylene
- II A → propane

**LEVEL OF RISK**
- M1: very high degree of safety
- M2: high degree of safety
- 1: very high degree of safety

**USE IN**
- Zone 0/20: Safe area
- Zone 1/21: Tank or frequently hazard exists occasionally
- Zone 2/22: Hazard exists rarely and for a short duration

**EQUIPMENT GROUPS**
- Equipment is not available in categories 1 and M1.

**GAS/DUST ATOMSPHERE**
- G: gas
- D: dust

**EQUIPMENT PROTECTION LEVEL (EPL)**
- Mb: category M2
- Db: category 2D
- M2: category 2D

**EQUIPMENT PROTECTION TYPES**
- Ex h: ignition protection types

**LETS REACH**
- 1,000 Nm … 588,500 Nm

**FUNCTIONS / FOR 1 FAULT FOR TROUBLE-FREE OPERATION**
- 2: double-jointed gear coupling

**HYDRODYNAMIC FLUID COUPLING**
- Double-jointed gear coupling

**MAXIMUM SURFACE TEMPERATURE**
- T6 → 85
- T5 → 100
- T4 → 135

**STANDARD TOOLS**
- Gear coupling

**SPECIAL CONDITIONS**
- X

**FUNCTIONS / FOR 2 FAULTS / FOR 2 FAULTS MUST BE DE-ENERGIZED IN THE EVENT**
- LEVEL OF RISK
- SUFFICIENT SAFETY through 2 protective measures / for 2 faults

**SUFFICIENT SAFETY THROUGH 2 PROTECTIVE MEASURES / FOR 2 FAULTS MUST BE DE-ENERGIZED IN THE EVENT**
- LEVEL OF RISK

**EQUIPMENT GROUP II**
- (OTHER POTENTIALLY EXPLOSIVE AREAS)

**EQUIPMENT GROUP I**
- (UNDERGROUND OPERATIONS AND MINES)