

# IECEX / ATEX



*Putting safety first*





# Products for a safer and more secure work environment

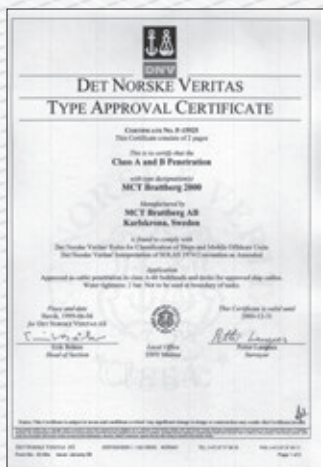


MCT Brattberg's concept for modular cable and pipe transits has been market leading for more than half a century. Our flexible system seals cables and pipes through the framework of the building without compromising safety. MCT Brattberg cable and pipe transits are tested and approved by the leading certification authorities and laboratories worldwide.

According to EU regulations and IECEx standards all working environments where explosive materials are present the ATEX Directive must be applied. This applies to areas with fuel production and storage, handling of chemicals and the build up of hazardous dust. MCT Brattberg has developed and tested an Ex-approved range of cable and pipe transits to protect adjacent locations in such areas.



# Tested and approved



When it comes to safety we lean on our long experience and independent tests. In the most hazardous environments around the world, people and companies can rely on our cable and pipe transits. It is a tough job where valuable assets are at risk. We are proud to say that our transits have been tested against explosion, fire, water, gas, chemicals, vibrations and corrosion, met the maximum requirements and thus been certified by the approval authority.

MCT Brattberg products are approved by DNV-GL and meet the Quality and Environmental standard requirements of ISO 9001, 14001 and OHSAS 18001, we also conform to the ATEX Directive 2014/34/EC and the IECEx requirements.

# Where valuable assets are at risk

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In high-risk environments, such as explosive hazardous areas, "Putting Safety First" is our number one priority. This is the reason why MCT Brattberg's products are installed globally.





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In the most hazardous environments around the world, people and companies can rely on our cable and pipe transits. It is a tough job where valuable assets are at risk. We are proud to say that our transits have been tested against explosion, fire, water, gas, chemicals, vibrations and corrosion, met the maximum requirements and thus been certified by the approval authority.

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We follow in engineer Brattberg footsteps when keeping our system flexible and safe. The system is based on standard units of Lycron through which cables and pipes are installed. Our products are made of the same high quality. To avoid any mix-up the Ex blocks are marked in both ends.

The system can adapt to any application and is easy to install. Safety lies in the simplicity. The system is intuitive, easy to understand and modify, which reduces the risk of installation error.

## System Flexibility

An explosion-proof transit is a matter of the whole system. There must not be any weak points. All modules complement and strengthen each other, from the smallest detail to the larger framework. Each component is constructed to sustain the impact of an explosion. Regardless different cable and pipe diameters an MCT Brattberg transit meets the demands for offshore and onshore. The frames are cut, welded, grinded, painted and stamped with logo and date.

The Lycron in the inserts is a synthetic halogen free polymer developed especially to withstand fire, explosions, temperature variation, ageing, vibration, radiation and pests. The inserts are injection moulded for accuracy. The dimensions have become the industry standard and have proved sustainable over time.

# IECEX & ATEX

## Some important notes

### User environment

IECEX & ATEX concerns all products to be used in places where explosive atmospheres may arise. Places where there can occur mixtures of air and flammable materials such as gases, vapours, mists and dusts.

### Products IECEX & ATEX

Ex does not only concern electrical equipment, but all equipment and protection system for use in potentially explosive atmospheres. In all premises within the worlds, where there is explosion risk, the equipment and protective systems must carry an Ex or ATEX Certificate.

IECEX stands for the certification by the International Electrotechnical Commission for Explosive Atmospheres. To be IECEX certified, all products must go through a monitored process by the International Electrotechnical Commission to ensure that they meet the minimum safety requirements. This process will determine if the products can be used in hazardous or potentially explosive locations.

### Scope

IECEX & ATEX conformity of products is compulsory. It also covers explosive dust/air mixtures as well as gases.

### Classification of equipment

The IECEX & ATEX contains classification into groups and categories which are defined by the marking on the equipment.

### Area Classification

Process plants are divided into Zones (European and IEC method) or Divisions (North American method) according to the likelihood of a potentially explosive atmosphere being present.

An area in which an explosive mixture is continuously present or present for long periods has the following

#### Classification:

Gases: Zone 0 Class I Division I  
Dusts: Zone 20 Class II Division I

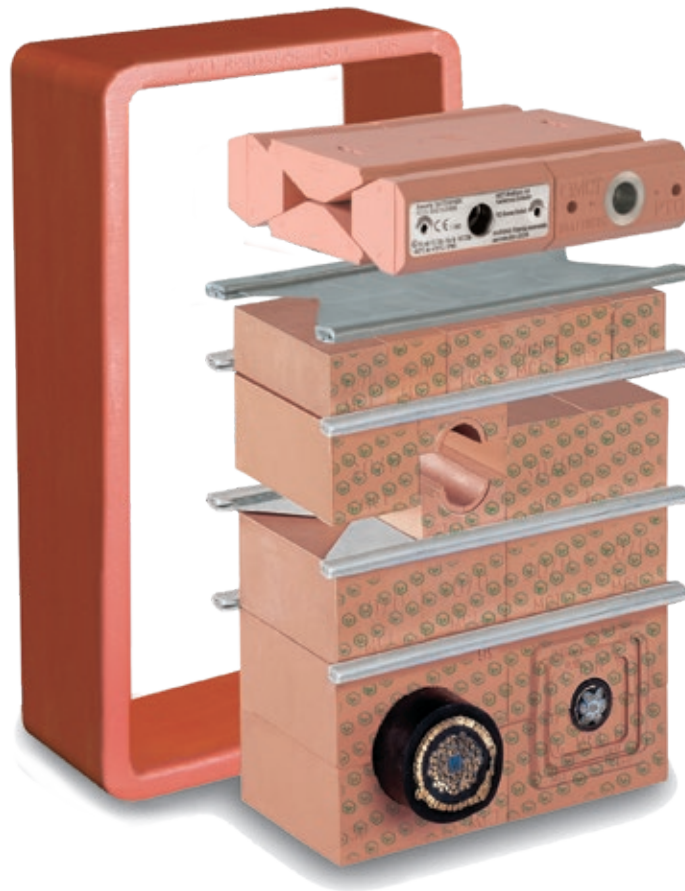
An area in which an explosive mixture is likely to occur in normal operation has the following Classification:

Gases: Zone 1 Class I Division I  
Dusts: Zone 21 Class II Division I

An area in which an explosive mixture is not likely to occur in normal operation and if it occurs it will exist only for a short time has the following Classification:

Gases: Zone 2 Class I Division 2  
Dusts: Zone 22 Class II Division 2





### Marking

The ATEX directive requires the product to be marked with the CE mark, the EX mark and the equipment coding.

### MCT Brattberg coding:

II2GD Ex eb IIC Gb Ex tb IIIC DbT -60.c to +70.c

- II = Surface and mining
- 2 = Zone 1/21 (1=Gas 21=Dust)
- GD = Gas & Dust
- Ex eb = Increased safety, b=zone 1,2
- IIC = All gases approved
- Gb = Gas zone 1 ( Zone 1 is also approved in zone 2. NOT ZONE 0 )
- Ex tb = Dust enclosure 6 (IP)
- IIIC = Conductive dust, also approved for A and B.  
A=Combustible flyings, B=none-conductive dust.
- Db = Zone 21, dust also zone 22  
-60.c to +70.c = Ex working temp min/max

### Do not hesitate to contact us.

When it comes to safety, no questions are too small or large.

## Ex / ATEX

In high-risk environments, such as explosive hazardous areas, "Putting Safety First" is our number one priority. This is the reason why MCT Brattberg's products are installed globally.

Ex for high risk ATEX environments.

All Blocks in the IECEx & ATEX system is marked.



### RGS EX System

Multi cable & pipe transits for offshore applications, Ex hazardous marine and land-based structures.



### RGB & RGG Ex

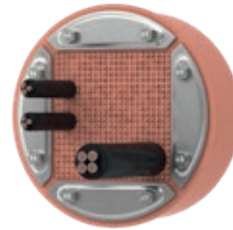
Ex rated multi cable & pipe transits for buildings and land-based structures.

## RGS Ex System

The system consists of a frame, rubber blocks and a compression unit.

The frame is welded or bolted to a Ex hazardous marine structure and packed with rubber blocks suited for each cable and pipe dimension.

The compression unit is inserted to compress the rubber blocks against cables and pipes to establish a tight seal.



### RGP EX System

Circular Ex rated multi cable & pipe transits for assembly in sleeves.

### Benefits of MCT Brattberg Ex systems

- Ex rated transit for hazardous environments
- Assists cable management
- Seals the penetration against the passage of fire, water, gas, sound and environmental hazards
- Can be combined with special EMC modules and for Grounding and Bonding
- Unlike other brands our system can be dismantled and re-used
- Marked blocks for increased safety
- No adaptation of standard blocks needed