

Job Report

Explosion-proof refrigeration – ARCTOS makes it possible

Electrical and mechanical protection against explosions in accordance with ATEX



In the chemical and petrochemical industry as well as in other branches, production plants are often located within an area where explosions are possible.

Therefore, electrical and mechanical protection against explosions must be applied to refrigeration systems in accordance with **ATEX product regulations 94/9/EG** (ATEX 95).

In the construction of explosion-proof systems our experience pays off double: You will not only save time in planning, but also additional work obtaining the requisite approvals!

We avoid subsequent problems by selecting the correct materials and components and you will save time with the planning and documentation as our application documents are drawn up correctly.

Both points avoid additional costs in constructing and operating the plant as well as delays drawing up the ATEX declaration of conformity and possible later modifications.

ARCTOS has wide first-hand experience explosion-proof plant and maintains close contact to the certifying authorities.



Explosion-proof CO₂ / propene cascade refrigeration system in Sörup, ready for shipment.

Our latest ATEX project was realized in the chemical industry. In this case a CO₂ / propene cascade refrigeration system cools the synthesis of organic solvents.

In order to avoid the stringent safety regulations during assembly in an area where explosions are possible, the plant was constructed in a container. It was completed in our works and was installed as a unit on site. Thus site operational interruption was minimised.



Manufacturer's nameplates for both refrigerant circulation of the CO₂ / propene-cascade refrigeration system

ATEX-specification

Device category	II 2 G (zone 1, gas)
Ignition class	II B H2
Temperature class	T3
Surface temperature	200°C