

**EXCO-SYSTEMS**

EXPLOSION SAFETY  
**ANTI EXPLO™**

Anti Explosion  
Products



# ANTI EXPLO™ Technology

An explosion is the rapid release of large amounts of energy in a confined space due to chemical, physical, material or nuclear changes. Due to the sudden expansion the gas is heavily compressed.

Anti Explo material is a unique product made from a special metal alloy in accordance with the patented technology. In 100% of cases the Anti Explo eliminates an explosion of oil and liquefied gas in any type of container. The material works solely on the basis of physical principles and does not change the chemical properties of protected materials.

The Anti Explo Suppression System prevents the formation of destructive pressures after the ignition of vapors or gases. "Quenching" inhibits flame propagation by dividing a container into small cells. A porous filler mass of high heat absorptivity, Anti Explo absorbs the heat released during the reaction.

Anti Explo alloy is lightweight, high thermal conductivity, has a special degree of elasticity, is suitable for multiple applications and is maintenance free even in the most demanding conditions. Anti Explo can be represented as a grid or balls of different diameters.



# ADVANTAGES

- Completely (100%) eliminates any possibility of explosion of petroleum products
- Eliminates the need for expensive explosion protection constructions
- Works on the basis of physical principles (non-chemical, mechanical or electronic)
- Stabilizes the liquid fuel during transportation
- Prevent internal oxidation and corrosion of metal containers
- Provides complete security and increases fuel pumping speed
- Minimal tank capacity reduction – occupies only 1-3% of total volume
- Prevents the formation of static electricity
- Fully compatible with any type of liquid or gaseous fuel, and does not affect their chemical properties
- Neutralizes the effects of high-frequency radiation GSM and 3G
- Reusability without loss of properties and qualities of the material
- Prevents the growth of algae and mold inside the containers
- Reduces fuel evaporation
- It does not require special maintenance
- Extends the life time of containers



# GAS CYLINDERS

Filling of Anti Explo material in gas cylinders provides 100% protection against explosions under the influence of any external factors ranging from a lightning strike, fire, bullet damage etc. to the cylinder.

Filling of gas cylinders apply to newly manufactured cylinders as well as previously produced cylinders, no matter how many years ago. The volume capacity is reduced only by 1-3%. One 50 liter cylinder filed to the brim with Anti Explo material, will fit about 49 liters of gas.



# PETROL STATIONS

Petrol stations are defined by experts as areas where explosive atmospheres can be present under normal operating conditions. Petrol fumes, which are heavier than air, can accumulate in the chambers and shafts underneath a petrol station and mix with the air to form an explosive atmosphere. These fumes can either drift down from where customers are refueling their cars or be pushed upward from underground tanks due to overpressure.

To eliminate the possibility of an explosion, a petrol station's chambers and shafts should be filled with special material designed to prevent the formation of explosive atmospheres. Aluminum network products from Anti Explo have proven to be an excellent solution. Non-combustible and easy-to-maintain, Anti Explo products are already in place protecting petrol stations throughout Europe.

For full protection against the possibility of an explosion, we recommend complete inertization of a station's chambers and shafts. To achieve that, the entire volume of these chambers and shafts must be filled with Anti Explo. Once inertized, the possibility of an explosion occurring within one of these spaces is nonexistent.



# FUEL TRANSPORTATION

The "Anti Explo Explosion Suppression System" is a practical and innovative method of keeping fuel fires under control and preventing fuel containers from exploding. Made of an aluminum alloy and shaped with a three-dimensional honeycomb structure, it is available in different forms and can be customized to fit every container.

Anti Explo used for transportation of fuel tanks would not only secure the danger of explosion and fire, but also eliminates static electricity. The stabilizing effect on the rocking transportable fuel tanks allows you to carry a half-filled truck and eliminate the possibility of tipping over.

Initially developed for explosion protection purposes, Anti Explo has a variety of profitable usage areas. Application of Anti Explo prevents internal oxidation and rust in fuel tanks, thus increasing their life span.



# PIPELINES

For all piping (domestic or industrial) there is risk of fire breaking out and igniting the transported gas. The transportation of gas in pipelines carries the flame in a domino effect. Immense risk of a powerful explosion becomes dangerously present. When the flame retardant Anti Explo is installed in pipelines, the flame spread will be completely excluded and the danger of a powerful explosion is eliminated.



# OIL PLATFORMS

Accidentally spilled oil can easily penetrate the space under the floor and inside the complex structures on oil platforms. In addition to tank and pipeline protection on oil rigs, Anti Explo have the solution for collecting spilled flammable liquid built in special flooring. Installation is made directly on top of existing floors in the high risk areas.

In case of an emergency Anti Explo eliminates the possibility of an explosion, and limit burning petroleum, which will ensure rapid quenching of fire and safe evacuation of people.





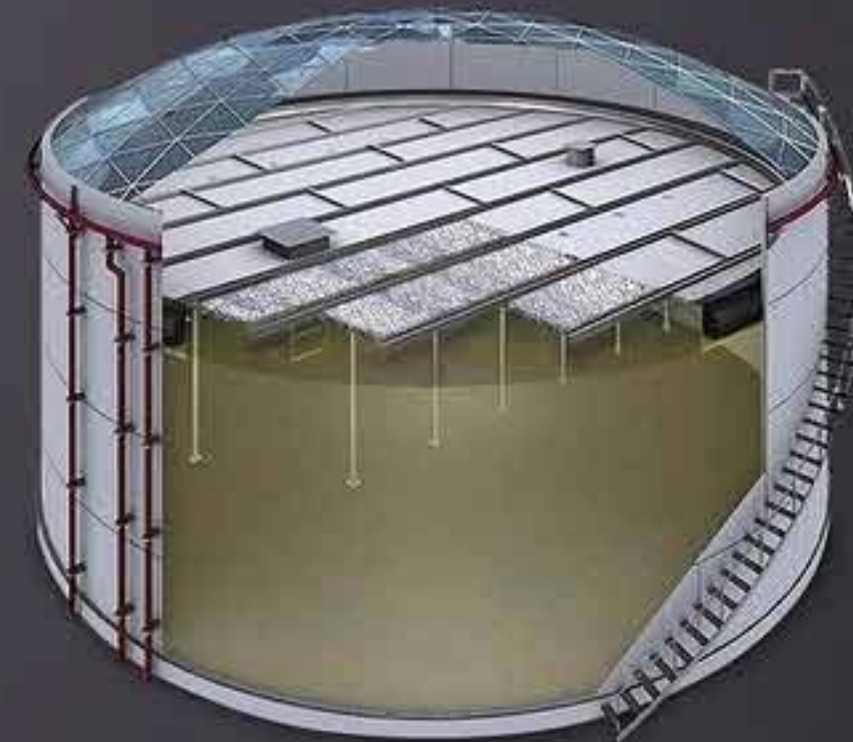
# STORAGE TANKS

Application of Anti Explo in oil storage tanks prevents fires and explosions caused by lightning, static electricity sparks, and flames nearby fire hazard in the operation.

Anti Explo also reduces the level of fuel loss by evaporation. Use of the material in valves Anti Explo increases the speed of refueling by decreasing formation of a turbulent flow.

For full protection against the possibility of an explosion, we recommend complete inertization of tank chambers. To achieve that, the entire volume of these chambers and shafts must be filled with Anti Explo.

Once inertized, the possibility of an explosion occurring within one of these spaces is nonexistent.



# CONTACT DETAILS

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