MiRETTI

Explosion Proof Protection Systems for Mobile Vehicles

Miretti EX/DX Systems enable trucks to be operated in paints / coatings, pharma, foods & flavours, inks, bottled gases, aerosols, army, oil & gas industries
Leader in the Explosion Protection of Mobile Vehicles for over 40 years
Miretti Explosion Proof 700+ Diesel and Battery Electric vehicles annually
Our Group is an Approved Supplier to all of the leading Material Handling OEM’s

We operate all over the world: USA, Italy, China, Germany, UK, France, Benelux, Switzerland, Austria, Scandinavia, Hungary, Australia, Singapore.

Miretti EX Solutions are available for OEM’s including Hyster and Yale, Toyota, Jungheinrich, Linde, MCFA, Doosan, Genie, Haulotte, Manitou, Dieci, Hitachi, Caterpillar, New Holland, Volvo, Merlo, JLG, Terex, Mitsubishi.
Miretti Class I Division 1 (EX-DX)

Miretti can convert almost all brands of forklift trucks and vehicles for a safe operation in Division 1 areas; in fact many with standardized designs. All sources of ignition (e.g. electrical, static, mechanical, heat sources and other) are protected so that the equipment can operate safely within potentially flammable atmospheres.

Conversions may include explosion proof EX enclosures for arcing and sparking components, surface temperature control and limitation, EX components, EX intrinsically safe circuits, EX encapsulation, EX battery, stainless steel or brass sheathed forks etc.

Miretti ensures that converted equipment is fully compliant to NFPA505, UL583, UL558 standards and to relevant local regulations.

Electric / Diesel

Miretti explosion proof protections provide a safe solution for both electric and diesel vehicles for use in Div.1 and Div. 2 areas (gas groups C and D; temperature class up to T3 or T4). The technology applies for both AC and DC motors. Applied to a wide range of vehicles that can include forklift trucks, sweepers, mobile cranes, tow tractors and other industrial machines.

Miretti explosion proof diesel conversions are designed not to have an impact on the functionality and compliance standards of the original diesel equipment (e.g. Tier 4 engines).
Miretti EX and DX Explosion Protected Vehicles

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www.exequipment.com
Miretti Class I Division 2 (EE/DS/DY)

Miretti can convert almost all brands of forklift trucks and vehicles for a safe operation in Division 2 areas with many standardized designs. Combinations of conversions effective against both explosive gas and dust are available according to the Customer’s requirements. Type of Protections:

- **EE** for electric industrial equipments
- **DS** for diesel industrial equipments

**Focus on… CoatEX**

CoatEX provides a thermal barrier between hot engine surfaces (e.g. turbochargers and exhaust manifolds) and the external atmosphere. CoatEX enables the OEM “dry” turbocharger and manifold to be retained reducing Division 1 and 2 conversion costs and minimising risk of failure by fitting non OEM turbo and water cooled manifold.

**Truck FilterEX Cooler**

A ‘compact’ exhaust cooling system with integral self-cleaning exhaust flame arrestor (and spark arrestor subject to test).

Enables maximum engine ‘uptime’ as the self-cleaning flame arrestor can operate for approx. 1000 hours before requiring cleaning.

Reduces costly service maintenance against option of conventional exhaust flame arrestors that need to be changed every 20 hours.

**DPF Systems**

Miretti can Explosion Proof Protecs different typogies of DPF Systems for TIER 4 Engines by CoatEX insulation.
Our Special Projects

Wheel loaders, tow tractors, mobile cranes, scrubbers, access platforms, dump trucks, cranes, tankers, tower light etc…

Miretti also provide Explosion Protections for the Oil & Gas, Coal Mining & Tunnelling industries.
Class I Division 1

**Electric EX**

1. EX Traction motor
2. EX Pump motor
3. EX Steering motor
4. EX Battery cutoff enclosure
5. EX Battery box
6. EX Inverter
7. Fork Sheathing

Other parts: EX instrumentation and controls, horn.

Options: Antistatic wheels, lights, flashing beacon and reverse gear horn.

**Diesel DX**

1. Exhaust manifold
2. Flame arrestor and shut down valve
3. EX Generator
4. EX Starter
5. Truck Filterex Cooler
6. Spark arrestor
7. EX Electronic ECU
8. EX Battery box
9. Fork Sheathing

Other parts: Antistatic fan, EX Instrumentation and controls, Horn.

Options: Antistatic wheels, lights, heating kit, flashing beacon and reverse gear horn, wipers.
our Certifications, your Safety

Our products are certified according to NEC, UL583, UL558 and, if required, also to ATEX, CNEX, IECEX, and other national standards. Our Explosion Proof vehicles are approved by FM or equivalent NRTL.

Truck Rental

Miretti provides explosion proof forklifts for short term rental.

After Sales Service and Training

The Miretti after-sales service, present in most countries, ensures fast response times, dedicated assistance, telephone and on-site support and the availability of specific spare parts for more than ten years to help maintain constant productivity for customers.

Conversions are studied and implemented using solutions that simplify and speed up machinery maintenance. Maintenance interventions are carried out by skilled personnel, authorised and trained for the purpose in our head offices.

The Miretti After-Sales Service and the availability of local technical support through training courses for service engineers (carried out at the Milan HQ or locally when available) will support the client step by step in ensuring continuous uptime and protection of their environment.

Annual and/or three yearly Safety Audits for the EX protection system are available on request.

Why choose Miretti?

Miretti has been leader since 1973 in the Explosion Proof Protection of vehicles and boasts impressive experience in the field. The company operates all over the world with branches in USA, China, Germany, UK, France, Hungary, Benelux, Australia, Singapore.

Miretti is ISO 9001:2000 certified and is an approved supplier for the most important world producers. Constant research focuses on new technologies and innovative solutions. All explosion proof conversions are developed and implemented in agreement with OEM Original Equipment Manufacturers to maintain original safety levels and ergonomics in conformity with local standards and regulations. Miretti ensures a reliable after-sales service, qualified technicians, quality and fast maintenance.
since 1973 Leader in EX Protections
our Expertise and Know-How in Industrial, Oil&Gas, Coal Mining & Tunnelling Sectors
Quality & Innovation
Tri-Certification & Testing
Reliable Customized Solutions
Training & Product Education
Research & Development
After Sales Service
Engineering Excellence
Worldwide Footprint

Miretti is at the forefront of New Technologies & Innovative Solutions