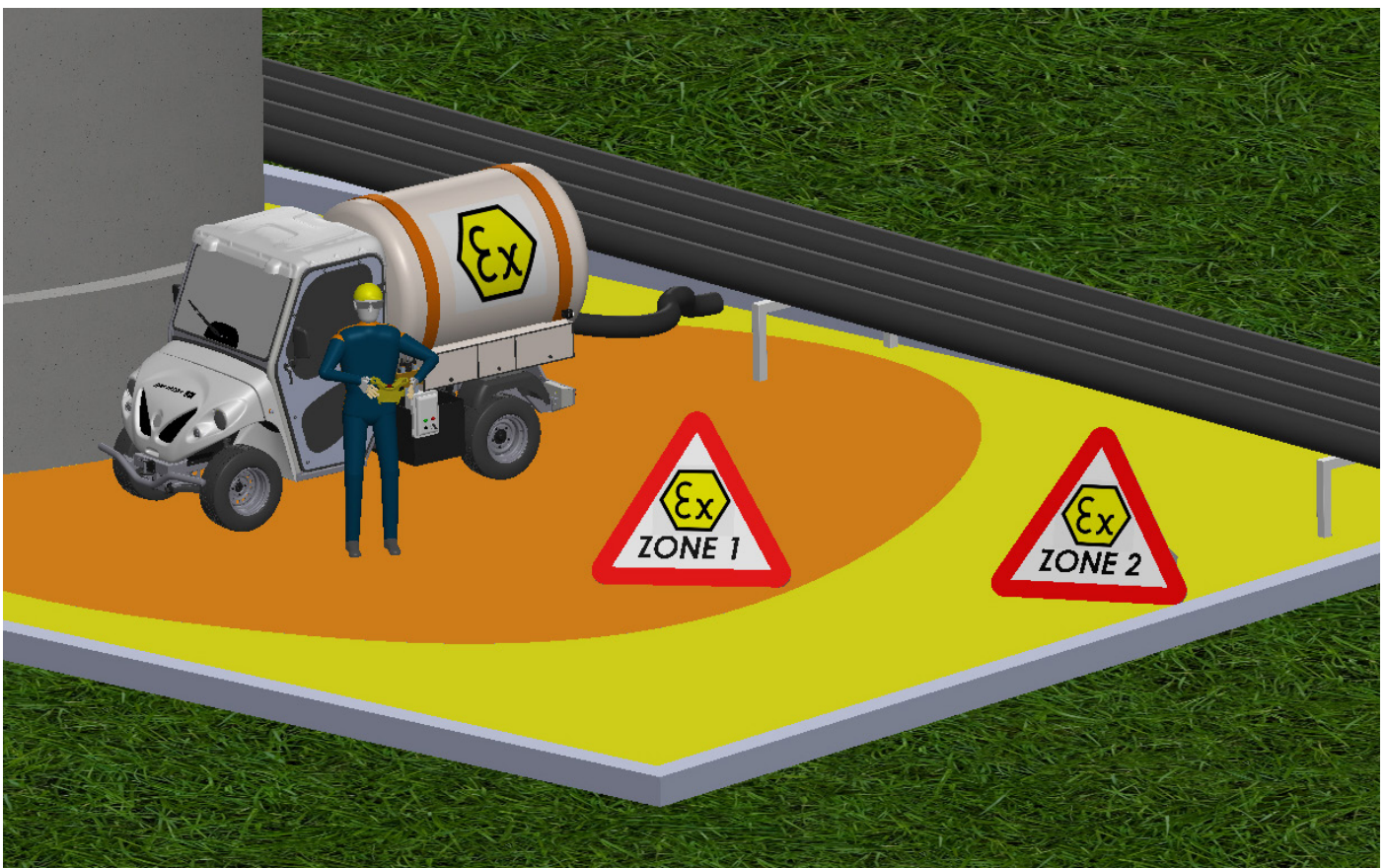


ELECTRIC VACUUM TRUCK ATEX

Created by the joint effort of Alkè and Gerotto, the new Electric Vacuum Truck ATEX is intended for cleaning operations in ATEX zones. Traditional cleaning methods usually require a standard vacuum truck placed in a safe area and used to suck sludge and material from ATEX zones with extensions of the hose. This solution is very expensive and could be unsafe.

With this machine, any harmful material can be removed directly inside ATEX areas. Since both the vehicle and the tank are ATEX certified [ATEX Marking Ex II (1) 2 G IIB T3], Electric Vacuum Truck ATEX is suitable for works in refineries, mines, cement plants, power plants, foundries and chemical industries.



Alkè experience in producing ATEX electric vehicles

Alkè designs its ATEX certified Electric Vehicles specifically for working in potentially hazardous environments. The type of vehicle to choose depends on the ATEX classification of the working area. ATEX certified Electric Vehicles are realized according to ATEX 94/9/EC, and cover both operations in surface activity (category 2 and 3/ zone 1 and zone 2) and underground activity (category M2).

Special versions (under request):

- Vehicles for environments with presence of explosive materials (fireworks, ammunitions, etc);
- Vehicles with temperature class T4 (135°C);
- Vehicles with combined protection 2G+2D.

Also, on request, certifications can be converted from ATEX to EX / EE conversions (USA regulations UL583).

Electric Vacuum Truck ATEX - Equipment specifications

Electric Vacuum Truck ATEX can be used to suck liquid waste and for vacuum excavation.

The suction system is composed by a liquid ring vacuum pump, with a maximum air flow level of 450 [m³/h], at a maximum vacuum of 60%. The pump can work at high vacuum power and has low noise level.

The sludge and liquid waste suction plant includes a stainless steel cyclone moisture trap, that retains mud and liquid impurities; the pump is automatically stopped by an electronic sensor if liquid is present in the line.

The operator can control all the equipment functions with a professional radio remote control. With the R.D.A. System (Remote Data Access) a telemetric board is installed, to transmit the main equipment functions via web.

The control panel is placed inside a stainless steel box, with stainless steel door. All cables are IP65 grade protected.

Work cycle	1	2	3
	Only drive	High speed suction	Low speed suction
Range	60 [Km] at 30 [Km/h]	10 [Km] at 30 [Km/h]	10 [Km] at 30 [Km/h]
Time	-	1 h working pump	2 h working pump

Electric Vacuum Truck ATEX can be built with ADR homologation and ATEX certification with protection grade Ex II (1) 2 G IIB T3.

The grounding system disperses to the ground the electrostatic charges generated during load and unload operations, thanks to a clamp connected to conductive parts of tank truck. If the ground resistance is acceptable, the electronic unit of the apparatus allows round connection and switches the SPDT contacts to enable/disable the pump of tanker (it is signaled by green light).



Features

Hose diameter:	80 [mm] / 3"
Hose length:	40 [m] / 131 [ft]
Liquid ring vacuum pump:	ATEX Marking Ex II 1/2 G IIB T4 Max air flow 450 [m ³ /h]
Grounding system:	ATEX Marking II 2 (1) G Ex d [ja] IIB+H2 T6 IP65
Gas detector certifications:	Ex II 2 G D EExd IIC T6 T85 Deg C
ATEX Zone 0 Certified working lights	Ex II 1 G, Ga Ex ia II B T4
ATEX Certified flammable gases detectors (chosen according to the gas to detect)	
Stainless steel tool cases	