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GEROTTO Tank Cleaning Robot (Atex Zone 0)
with 20" container





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Description

The **GEROTTO Tank Cleaning Robot (Atex Zone 0) - GTCS** is an innovative solution for cleaning storage tanks in ATEX Zone 0.

De GTCR is designed with following specifications:

- Controlling of the system/unit in a safe area (**Less Men Entry, not 100% No Entry**), safe distance
- Accurate and precise interventions
- Cost reduction
- High quality
- Atex Camera System available





GTCR-ATEX-0 GEROTTO Tank Cleaning Robot with a 20ft container

20ft container

20ft marine container, including the allestment of:

Compartments including the storage for:

- ATEX Zone 0 tank cleaner robot.
- Auger configuration with steel frame for easy handling of the equipment with forklift.
- ATEX Zone 1 hose reel with 50 or max. 75 meters of umbilical connection mounted on it.
- Manual hydraulic ramps for entering the manhole.

Compartment for the operator for controlling the machine with ATEX Zone 1 manual control system to controll all the systems:




- Screens for controlling the CCTV system
- Desk
- Chair
- ATEX Zone 1 lightning system for the operator cabin
- ATEX Zone 1 lightning system for storage side of the container
- Walls, doors and roof temperature insulated for hot/cold working operation

Compartment for the hydraulic power pack:


- Installation for the hydraulic hose reel for the suction hose.
- Space for the hydraulic power pack with removable structure to work with power pack IN (non ATEX) or OUT (ATEX Zone 1).
- Customization of the container to work with doors closed.





GTCR-ATEX-0 GEROTTO Tank Cleaning Robot with a 20ft container	
GTCR	<p>Tank Cleaning Robot (ATEX Zone 0)</p> <ul style="list-style-type: none"> - Suction pipe 4" (100mm) with quick couplings. - 4" stainless steel male cam lock coupling on the back of the machine. - 75 meter umbilical with quick couplings connecting the GTCR to the manual control unit. - Manual control unit: manual operated hydraulic valves with safety by-pass lever. 
Counterweight	<p>Chemical resistant counterweight kit</p> <p>2 x counterweights per side configured to be attached on the GTCR with a quick screw connection system. Weight of the counterweights are 30 kg each for a total of 120kg weight.</p> 
HRA	<p>Hydraulic hose reel ATEX Zone 1 for umbilical</p> <p>For the hydraulic connection from the GTCR to the hydraulic manual command levers. Max length of the hydraulic connection inside the hose reel is 75 meter. Hydraulic on/off lever for rolling and unrolling the hose reel. Stainless steel structure. Lifting points for easy handling. The system will be mounted on a skid moved by a forklift.</p> 
HRSH	<p>Hydraulic hose reel ATEX Zone 1 for suction hose</p> <p>Suitable to hold 60 meter of 4" suction hose. Hydraulic manual lever command for rolling and unrolling the hose reel. Hydraulic motor included in the supply. Stainless steel structure. Suitable to be moved with fork lift and crane. Suction hose not included in the supply. Installation in the 20ft container.</p>
RAMPS	<p>No Men Entry ramps</p> <p>Manual hydraulic ramps with anti spark safety. profiles for entering the manhole with the needs of any men-entry operations.</p>
RAMGT	<p>Manhole suction and umbilical guide tool</p> <p>Guide tool, mounted on the frame of the ramps for guiding the suction hose and umbilical. Suitable to be installed after entering the manhole with the GTCR.</p>

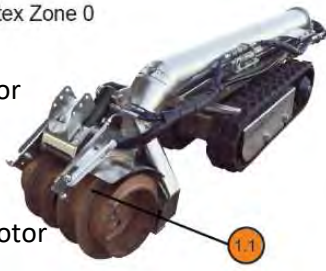





GTCR-ATEX-0 GEROTTO Tank Cleaning Robot with a 20ft container	
PPNA	<p>Non ATEX power pack with diesel engine</p> <p>Basic power pack solution Diesel engine 25 kw (37.5 hp) water cooled, EPA, noise reduction Rain and sun exposure protected Water/oil cooler designed for tropical countries Fuel tank for 8 hours autonomy Air filter with double cartridge Forklift moveable/ hook eyes for crane lifting Drip tray to collect oil/gasoil leakages Electric control box Basic control panel for engine parameters Manual speed control of engine Low fuel level switch Adjustable oil flow 25-35 l/m Adjustable oil pressure 150-250 bar Oil tank, filter, level sensor, manual valve on/off Pressure relief valve, manometer Piston oil pump with manual regulation of displacement Basic refinery safety kit Spark arrestor atex Manual battery breaker Grounding cable connection 25 meter umbilical connection between powerpack and container</p>
ECS	<p>ATEX Zone 1 ergonomic control system</p> <p>Ergonomic sit with variable height from the floor and variable frontal and rear movement. Adjustable arm holders. Command for left and right hand. Joysticks manipulators with servo controls for all the functions of the system. Modifications of the hydraulic system for installation. Modification of the desk structure. Hosing structure inside the control cabin.</p> 



GTCR-ATEX-0 GEROTTO Tank Cleaning Robot with a 20ft container	
SIL 2	<p>Power pack safety box For non ATEX hydraulic power sources for ATEX Zone 0 certified machines in operation with hydraulic oil parameters PLC control system Including all the necessary safety devices to guarantee that the GTCR will work with it. Including:</p> <ul style="list-style-type: none">- Correct oil pressure- correct oil flow- correct oil temperature- correct electrical grounding equipotential balance
CCTV	<p>ATEX Zone 0 certified CCTV system Composed by:</p> <ul style="list-style-type: none">- 4 x ATEX Zone 0 camera- 2 x ATEX Zone 1 certified monitor 19inch (Possibility to see up to 4 camera views in one screen simultaneously)- DVR device with wireless download on smartphone, tablet pc etc.- 2 x power supply intrinsically safe lightning system to be installed on the container in ATEX Zone 1- 2 x ATEX Zone 1 certified connectors to be installed on the container in ATEX Zone- 125 meter intrinsically safe cable- 55 meter power supply cable
TRAINING	<p>Training in the Netherlands Manual (English language) and training on location in Oud-Beijerland, the Netherlands</p>



Recommended options for GTCR	
AUGER 4	<p>Frontal hydraulic auger</p> <p>Special ATEX Zone 0 construction. Atex Zone 0 Frontal suction configuration with screw made in anti-sparks yellow metal and hydraulic motor for the screw rotation. Equipped with a stainless steel protection for the frontal screw and the connection of the hoses. Extra hydraulic hoses from the auger hydraulic motor with quick connection system. Hydraulic manual control unit suitable for auger configuration controls with manual flow regulator. Teflon made bottom profile for not damaging the coating of the tank's floor.</p> 
KWN	<p>Kit Water nozzle</p> <p>5 x high pressure/ low flow nozzles 1 x high flow / low pressure nozzle Orientable position and distance from the front of the machine</p>
MAGTRA1	<p>Magnetic tracks Type 1</p> <p>Composed by:</p> <ul style="list-style-type: none"> - Stainless steel special sprockets and rollers for the tracks chains. - Roller transmission tracks chains and special shoes for the magnets and the rubber pads. - Material resistant to chemicals 
MAGTRA2	<p>Magnetic tracks Type 2</p> <ul style="list-style-type: none"> -Stainless Steel special sprocket for the tracks traction system - Stainless Steel bend composition for holding the tracks in pace and Special composition of the pads for maximum traction of the magnets - Neodymium magnets with stainless steel covers and nickel treatment 
Squeegee	<p>Squeegee Tool</p> <p>Squeegee Tool 4" squeegee tool in stainless steel Anti-oil rubber profile for avoiding any risk of scratching the surface and spark. Closing and opening control through the hydraulic manual manifold.</p> 



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