



MIRRICO
GROUP OF COMPANIES

Sludge can't stop tanks



NO-Man Entry Technology/ ATEX Zone 0
Certified Equipment / Short duration of
cleaning operations / Environmental
sustainability / High Level of Industrial Safety
and Safety for Staff

MARTin

MARTin — robotic technology
to perform cleaning operations
with oil tanks and oilfield equipment



The MARTin Technology uniqueness

Adaptability and mobility

Suitable for cleaning oil tanks of any type (volume from 500 to 100,000 m³).

Fast mobilization and transportation from one oil tank to another one.

Increased cross-country ability, maneuverability and stability of the robotic cleaner due to a know-how, i.e., two-section base with a sliding system of 4 caterpillars.

Ability to clean hard-to-reach places by means of remote installation of the pump at any place inside the oil tank with the simultaneous operation of the robotic cleaner at another place within the tank.

Safety and sustainability

Simple and reliable design with a usage of durable materials

Safe for staff: no-man entry operations in explosion-risk zone 0 and 1

Capability to override barriers up to 45 cm height (e.g. steam tubes barriers on the bottom of the tank)

ATEX zone 0 certified equipment:

- Robotic cleaner platform



II1GExdIICT5Ga/GbX

- Video surveillance system



II1GExd+pxIICT6Ga/GbX

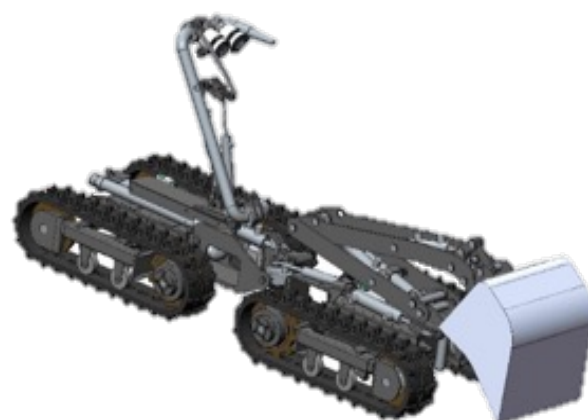


Robotic cleaner



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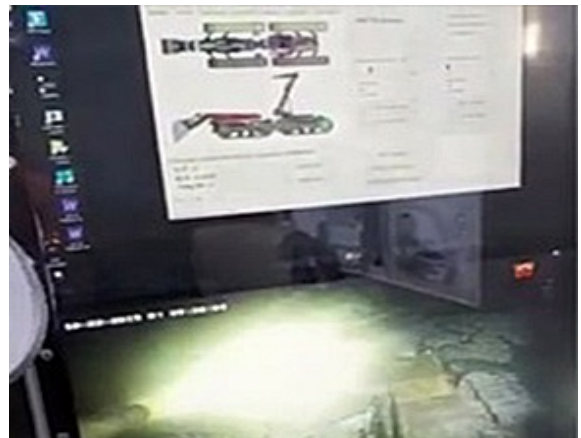
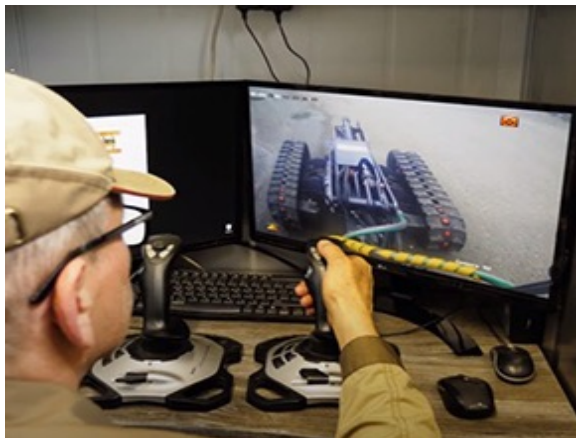


MARTin – no-man entry tank
cleaning complex



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Photos of the robotic cleaner



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Oil tank before cleaning



Oil tank after cleaning with robotic MARTin equipment



Features



Features	Value
Volume of the AST tank can be cleaned, cbm	From 500 to 100,000
Min. diameter of a man-hole to run inside by the robotic cleaner, mm	600
Robotic cleaner drive type	Hydraulic
Robot cleaner undercarriage type	Crawler
Lighting, video shooting real time	Yes
Electrical power rated , kW	54
Ambient operation temperature, °C	from - 5 to +50
Discharge capacity of on-board pump:	
Low viscosity sludge , cbm/h	from 30 to 60
High viscosity sludge , cbm/h	from 10 to 20
Opportunity to clean:	
Tank's walls	Yes
Tank's bottom	Yes
Tank's roof	Yes
Tank with internal piping (steam tubes, etc)	Yes



Robotic platform— general information



	Value
Quantity of sections of the robotic cleaner	2
Lighting & video shooting CCTV system	real time mode, 360 ° rotation, night vision, 4K, 3,000 Lm searchlight
Ability to move straight, back, right, left	Yes
Dimensions in minimized form ,mm	2,000 (L) x 550 (W) x 450 (H) mm
Dimensions in deployed form, mm	2,206 (L) x 808 (W) x 1,120 (H)
On-board hydraulic PMG generator	Yes
Weight (without outboard equipment), kg	450