

ALWAYS EVOLVING.

Hydrocarbon gas leak visualization.



Advantages of the Gasfinder over human operators.



Enhanced safety in getting people out of harm's way.



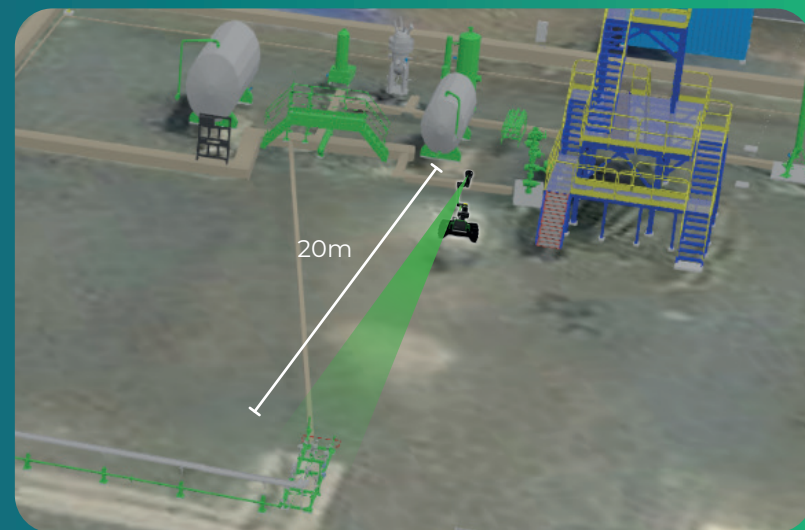
Repeatable performance with consistent alertness.



24/7 back to back operation with autonomous charging.



Tested in hot and cold environment for reliable missions in every condition.



Small leak detection value of 2g/s from 20m distance confirmed in third party tests.

Inspection and maintenance expertise in collaboration with:



Specifications.

General

Dimensions	1070 x 600 x 720 mm
Weight	85,0 kg
Speed	0,5 m/sec (±10 %)
Long Arm	4 DOF 1640 mm height

Sensors

Camera	4x 2K for 360° view 1x 4K in arm
Gas Finding Camera	Flir G300a
Navigation	3D LIDAR
Audio	Directional microphone
Gas Sniffing Device	Dräger X-am@ 8000 (H ₂ S, H ₂ , CO ₂ , ...)

Safety

ATEX	Zone 1
Rating	SIL2, PL-d On-board Safety controller
Signaling	Safety light on the top of the sensor tower

Environment

Climate	-20° C to +60° C IP67
Surface	All surfaces including grated floors, sand and snow
Stairs	Up to 45°

Battery

Running	Up to 240 min.
Charging <i>(in ATEX zone)</i>	20-80% in 45 min. 100% in 90 min.
Stand-by	340 min.

Site Requirements

Connection	4G or WiFi
Power	100 - 240 VAC 50/60 Hz max 6 A
Purging Gas	Nitrogen



Our other robots.

operator

A game-changing manipulation and inspection robot for the energy industry.



inspector V8

The world's toughest data gathering robot.



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gasfinder

Advancing robotics. Saving lives.

THE WORLD'S FIRST SPECIALIZED GAS DETECTION ROBOT.

Reducing emissions today.

The Gasfinder is a reliable and fast tool to identify even the smallest gas leaks. By deploying the Taurob Gasfinder, operators will be able to identify and monitor gas leaks earlier and apply corrective measures and maintenance efforts to reduce emissions.

Everywhere. Every condition.

Built for the extreme, the Gasfinder serves dutifully in harsh industrial environments, explosive atmospheres, adverse marine weather conditions and all sorts of terrain. Thanks to its PL-D certified safety controller, the Gasfinder conforms with ATEX and IP67 standards.

Analytics and maintenance.

Supported by the expertise of Dietsmann (the leading independent Operation & Maintenance specialist for continuous-production plants in the energy industry), we offer the whole package, from identifying and prioritizing leaks to suggesting repair and maintenance actions. Furthermore, the Gasfinder's flexible API can connect directly to client's or third party analytics software.

How robots can contribute to reducing greenhouse gas emissions.

Construction of assets.

A great quantity of CO₂ is emitted from constructing facilities due to high emissions of energy intensive production processes (e.g. steel).

Methane leakage.

Methane is 30x more harmful than CO₂ for the environment and 85% of methane emissions on off-shore platforms stem from small leaks imperceptible by humans.

Logistics and transportation.

Moving and accommodating workers causes incredible high levels of emissions, especially on off-shore platforms where helicopter flights are frequent.



LESS EMISSIONS BY DEPLOYING ROBOTS.

Leaner structures.

By using robots, the size and complexity of future installations can be reduced (e.g. no living quarters) which positively affects construction emissions of new platforms.

Reduced gas leakage.

Taurob Gasfinder can locate and quantify emissions from oil and gas operations and track deterioration over time on autonomous missions in every condition, consistently and precisely.

Unmanned facilities.

Eliminating human transportation and logistics significantly reduces CO₂ emissions.



Teleoperation

- First eyes on scene
- Fast incident response
- Manual inspection
- Spill monitoring
- Site surveying

Autonomous Inspection

- Mapping and teach-in of POIs
- Data gathering missions
- Anomaly detection
- Obstacle avoidance
- Stair climbing

Data Acquisition

- 4K Photos / Videos
- 3D LIDAR scans
- Audio clips
- Thermography
- Point clouds
- Gas sensor data

Data Processing

- In Cloud or on Edge
- API for client system integration
- 3rd party apps: Dial Gauges, etc.
- 360° Photos / Videos

3rd party integration.

