

CHASING X Industrial ROV Turns Venezuela Offshore Platform Inspection Into Lifecycle Asset Data

INMARVENCO combined five layers of subsea inspection data in one diverless workflow, linking field operations with engineering review and future comparisons.

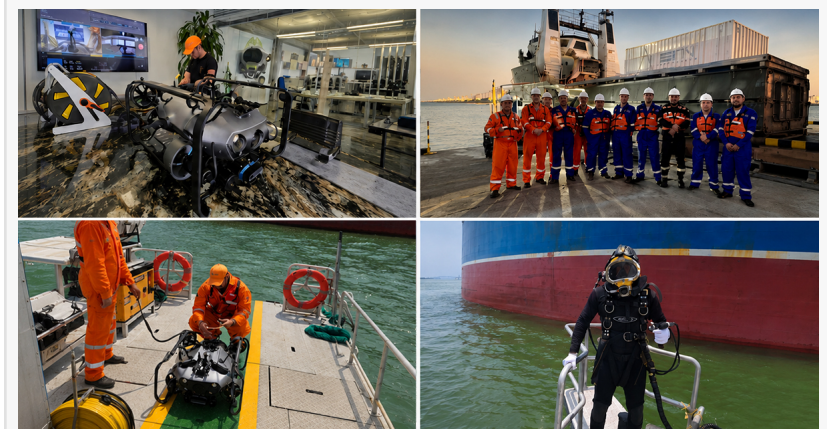
MARACAIBO, VENEZUELA, July 6, 2026 /EINPresswire.com/ -- An offshore inspection can produce hours of underwater footage and still leave engineering teams with a difficult question: What, exactly, has changed?

In April 2026, Venezuela-based marine engineering and underwater services provider INMARVENCO C.A. used the [CHASING X industrial ROV](#) platform to complete a diverless [offshore oil platform inspection](#).

The project combined five layers of subsea inspection data in one remotely operated workflow: 4K video, multibeam sonar imagery, 3D structural models, ultrasonic thickness measurements, and cathodic protection readings.

One [industrial ROV platform](#). Five data layers. No commercial divers in the water.

The result was a structured record of selected pipeline nodes, support members, and structural connections for engineering review, maintenance planning, and future comparison.



A four-image overview of the CHASING X Industrial ROV project in Venezuela, covering system preparation, inspection team mobilization, vessel-side deployment, and offshore field operations.



INMARVENCO deploys the CHASING X Industrial ROV for an offshore oil platform inspection in Venezuela.

Offshore Oil Platform Inspection Is Becoming a Data Challenge

Offshore platforms operate for decades while submerged structures remain exposed to corrosion, marine growth, currents, and material degradation.

Commercial diving remains essential for many offshore tasks, but depth, bottom-time limits, decompression procedures, and personnel exposure affect how inspections are planned. Video can document visible conditions, yet it cannot independently provide structural geometry, wall-thickness data, or cathodic protection performance.

Asset integrity teams increasingly need information that helps them evaluate change, prioritize follow-up work, and compare components across inspection cycles. For offshore operators, the inspection deliverable is becoming as important as the field operation.

Five Data Layers in One Deployment

The Venezuela project was conducted under sea state 2 conditions. Marine growth covered parts of the platform, suspended particles reduced visibility, and the ROV had to work close to pipeline nodes, support members, and structural connections.

INMARVENCO configured the CHASING X industrial ROV platform with a UVision UScanner 3D underwater scanning system, multibeam imaging sonar, an ultrasonic thickness sensor, a cathodic protection probe, and a low-light 4K camera with a 12,000-lumen lighting system.

The camera documented visible conditions, while multibeam sonar supported navigation where turbidity limited the optical view. The UScanner converted selected components into measurable 3D models. Ultrasonic measurements added wall-thickness information, while cathodic protection readings supported evaluation of the platform's corrosion-control system.

Together, the outputs created a multi-source record covering appearance, geometry, and condition-related information. Combining complementary technologies in one workflow created a clearer connection between field inspection, engineering review, and maintenance planning.



The CHASING X was configured with 3D scanning, sonar, ultrasonic thickness measurement and cathodic protection inspection technologies.

Stability, Safety, and the Offshore Work Window

Usable 3D scans and close-range measurements depend on controlled positioning near the structure.

The CHASING X uses an OctoDrive eight-thruster vector propulsion system and the AnchorX intelligent omnidirectional current-resistance system. Rated for current resistance of up to 4.5 knots, the industrial ROV platform supported maneuvering around the structure and stable positioning for sensor work. Its maximum operating depth is 350 meters.

From a surface-control station, the team conducted 4K observation, sonar-assisted navigation, 3D scanning, wall-thickness measurement, and cathodic protection assessment without deploying commercial divers.

Incoming information could be reviewed during the operation, allowing the team to verify coverage and revisit areas requiring closer observation. Remote operation also reduced personnel exposure.

This capability becomes especially relevant when offshore work windows are limited by production schedules, vessel availability, weather, and other maintenance activities. Integrating visual inspection, sonar, 3D scanning, and nondestructive testing on one platform can allow more time for data collection rather than switching between separate systems.

The value is not simply faster deployment. It is the ability to use a restricted offshore work window more effectively.

A More Agile Offshore Inspection Tier

Large work-class ROVs and commercial diving remain indispensable for heavy intervention, repair, and complex subsea work. CHASING X is not intended to replace every offshore inspection method.

Its value lies in the operational space between diver-based surveys and larger ROV campaigns.

For routine offshore oil platform inspection, targeted structural assessment, and follow-up surveys, a compact industrial ROV platform can offer a smaller deployment footprint and flexible payload configuration. This allows operators and service providers to match the platform to the task rather than mobilize more infrastructure than the scope requires.

The open payload architecture of CHASING X allowed INMARVENCO to configure the vehicle around the project's data requirements. The same platform can support periodic surveys, targeted reinspection, post-maintenance verification, and closer assessment of previously identified components.

From an Inspection Event to a Lifecycle Asset Record

A diverless, multi-sensor offshore oil platform inspection changes how information moves through an offshore organization.

Visual records support immediate review. Three-dimensional models establish a geometric reference. Thickness and cathodic protection data add condition indicators.

Retaining these outputs together gives engineering, maintenance, and asset management teams a shared record for future comparison.

During future inspections, teams can refer to earlier models, measurements, and imagery rather than relying only on written descriptions or footage captured from different angles.

For offshore operators, this can support maintenance prioritization and follow-up planning. For inspection contractors, it creates an opportunity to move beyond delivering footage and field reports toward providing structured data for engineering review.

Actual cost and efficiency gains vary with depth, environmental conditions, inspection objectives, and offshore support requirements. The Venezuela project nevertheless illustrates a broader shift: underwater inspection is moving from documenting an event to building an asset record.

The next stage of offshore oil platform inspection will not be defined only by how clearly operators can see below the waterline. It will be defined by how consistently they can measure change and how effectively that information can support action.

About CHASING

Founded in 2016, CHASING develops and manufactures intelligent underwater equipment and robotics solutions. Its portfolio includes industrial ROV platforms, professional underwater inspection robots, consumer underwater drones, intelligent pool-cleaning robots, and smart underwater imaging technologies.

CHASING solutions are used worldwide across offshore energy, marine engineering, infrastructure inspection, aquaculture, scientific research, emergency response, and underwater exploration.

For more information, visit https://www.chasing.com/en/chasing-x-overview.html?utm_source=pr_distribution&utm_medium=pr&utm_campaign=CHASINGX_20260703

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