

Cepsa is conducting a pilot test in Tenerife to improve pipeline inspection and, thus, preventive maintenance

- **An ultrasound robot provides a thorough inspection of the interior of the lines from the outside.**
- **Maintaining pipeline operations during inspection, while reducing the number of people in the operation and its cost**

Cepsa has carried out, at its industrial facilities in Santa Cruz de Tenerife, a pipeline inspection pilot test using an ultrasound robot that allows a full coverage analysis and 3D mapping, which means an improvement in preventive maintenance and safety.

This new inspection system has recently been tested in three overflow pipes in the La Hondura maritime terminal of the Tenerife Refinery, with a total length of 120 meters, in order to determine their condition in terms of corrosion, cracks or internal defects, in order to guarantee their maintenance in adequate conditions.

The director of Cepsa in the Canary Islands, José Manuel Fernández-Sabugo, emphasizes that "this pioneering initiative in Cepsa demonstrates the company's commitment to the search for continuous improvement, as well as its constant commitment to improving the conditions of its facilities and to guaranteeing safety as a priority objective at all times."

One of the advantages of this new technique is that the pipelines remain active while the inspection process is being carried out, which in this case lasted for five days. This is an improvement over traditional manual inspections, as the associated software allows the presentation of a 3D thickness map that is very useful for locating the areas requiring action. The number of people involved in the inspection was also reduced, requiring only the presence of one operator and one field inspector.

The high maneuverability of the robot, as well as its high heat tolerance, allows a full mapping of the pipe to be carried out remotely and quickly, collecting a large number of thickness readings around the entire circumference of the pipe. In this way, the old operation, which required the use of scaffolding, is replaced, improving safety and logistics, in addition to reducing costs compared to conventional inspections.

The exhaustive analysis of the fast ultrasound robot also results in obtaining a larger amount of data than with conventional methods, which facilitates making maintenance decisions in a more agile and complete way.

The importance of preventive maintenance

This technique easily and quickly collects the numerous thickness readings, making it easy to accurately calculate the presence of possible damage. The information is stored in software so that maintenance actions can be carried out and to guarantee optimal preventive maintenance.

With all this, an important advance is achieved in the diagnosis of the real state of the interior of the pipelines and the commitment to continuous improvement in safety developed by the energy company is reinforced.

The good results of this system mean that it can also be applied to other assets, such as pressure equipment, storage tanks or boilers.

Canary Islands, December 09, 2022

Cepsa – Canary Islands Communications

comunicacion.canarias@cepsa.com

922 60 27 07 / 676 612 371

www.cepsa.com