TECHNIP ENERGIES

# CyXense® Commander

## Heterogeneous robotics fleet management system

## Description

CyXense® Commander is a supervision system used to execute teleoperated, remotely controlled or autonomous inspections, maintenance or repair tasks on low-manned or unmanned installations.

The software is a T.EN Marseille's proprietary development designed to control and simultaneously operate a heterogeneous fleet of robotic devices (in-house or 3rd party) such as drones, ground crawlers and underwater drones. CyXense® Commander can be connected to any ICSS & CMMS to automate reporting plus data and alarm management.




## Functions

- Robotics mission design & planning
- Mission simulation and roi estimates
- Fleet supervision
- Autonomous navigation
- Dexterous manipulation supervision
- Long-distance operations
- Interface with ICSS & CMMS:
  Data management, alarm management, reporting, automated interactions

## Typical deployments

- Oil & gas unmanned or low manned onshore & offshore assets
- Other energy assets such as nuclear plants, offshore wind farms and remote PV plants
- Harsh environments including areas of explosion risk, contamination, etc.
- Remote locations
- Construction yards

## Value Proposition

**General**

CyXense® Commander allows the distant, live and simultaneous supervision operation of robots by a single operator. It helps generate production gains through the execution of multiple inspection & maintenance missions and operational benefits when coupled with digital capabilities.

### Benefits prior to deployment

The simulation tool allows the estimation of gains potentially generated by robotics deployment on an asset.

### Productivity & uptime

CyXense® Commander supervises the inspections and interventions of robots to improve equipment reliability and uptime.

### OPEX reduction

Significantly reduces manhours, unplanned visits and investigations during operations.

### HSE & risk

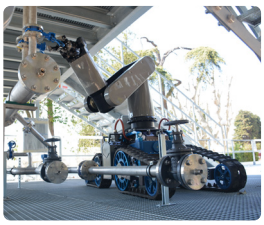
Improve HSE by supervising operational activities and human risk exposure.

# System Overview

**Robotic control room**

Powered by

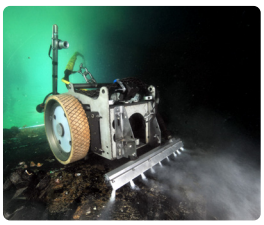
cyXense Commander



**Heavy IMR UGV**



**Inspection UGV**



**Huil Cleaning & Inspection**



**Subsea Inspection AUV**



**Aerial Drones**

## Robotics simulations

CyXense® Commander simulates robotics scenarios from existing 3D models. This function confirms equipment accessibility and assesses overall accessibility of the robot on the installation.
CyXense® Commander also is integrated with a chronometer to measure and improve the efficiency of inspection and maintenance tasks.



## Dexterous manipulations supervision

CyXense® Commander provides dedicated dexterous manipulation to control equipment like valves and electrical cabinet or perform liquid sampling and performance checks. Dexterous manipulation can be executed in autonomous or teleoperated mode.



> “A single software managing a fleet of robots to supervise, execute and coordinate a wide range of operation, inspection and maintenance activities.”


TECHNIP ENERGIES

**Fabrice Rey**
Business Developer Manager
fabrice.rey@ten.com

**Rodrigo Farjala**
Business Developer Operation Automation
rodrigo.farjala@ten.com


© TechnipEnergies 10.2026