STRUCTURE
COMMANDER
TECHNICAL DATASHEET

+20 YEARS
SUBSEA INSPECTION EXPERIENCE

1050+
STRUCTURES INSPECTED

+80
CUSTOMERS

MCS

OVERVIEW

MCS is a leader in subsea data management and inspection of underwater structures. We have developed an innovative system to help our customers ensure the integrity of their structures and to ultimately extend the life cycle of their assets.

OUR APPROACH

Our Structure Commander enhances periodic inspection and condition monitoring to detect and assess damage and degradation. The solution consists of integrated modules which work together for data acquisition, online eventing, digital video recording, task scheduling, data processing and reporting with an easy-to-use interface and real-time, 3D viewing.

It's capable of handling any subsea structure including:

- Steel Jackets
- Floating Platforms
- FPSOs
- Subsea templates
- Subsea manifolds
- Subsea wellheads
- SDAs, UTAs, TIBs, PLETs, PLEMs

TYPES OF INSPECTION / SURVEY:

- General Visual Inspections
- Close Visual Inspections
- Cathodic Protection Measurements
- Marine Growth Measurements and Identifications
- Flooded Member Detections (FMD)
- NDT
- Scour
- Seabed Survey

BENEFITS

- Real-time viewing and highly accurate data allow for faster reporting times.
- It's scalable and fully secure and encrypted to prevent data loss or corruption.
- Data processing can be completed onshore which results in cost savings.

GENERATING VALUE

Our Structure Commander presents highly accurate data of an inspected asset including all structure information, planning and work pack scopes, all linked to an interactive 3D visualization model.

High Performance – Full capability of processing and reporting all collected data including captured videos and all other sensor information to produce reports in any format including GIS deliverables.

Digitalization – Transform your assets into digital models and make the most of a modern, paperless inspection process.

Optimize IRM programs – Gather valuable information, such as degradation state and efficiency to optimize your assets.

Anomaly Management – The system has full capability to manage anomalies by Listing, tracking, reviewing and close out.
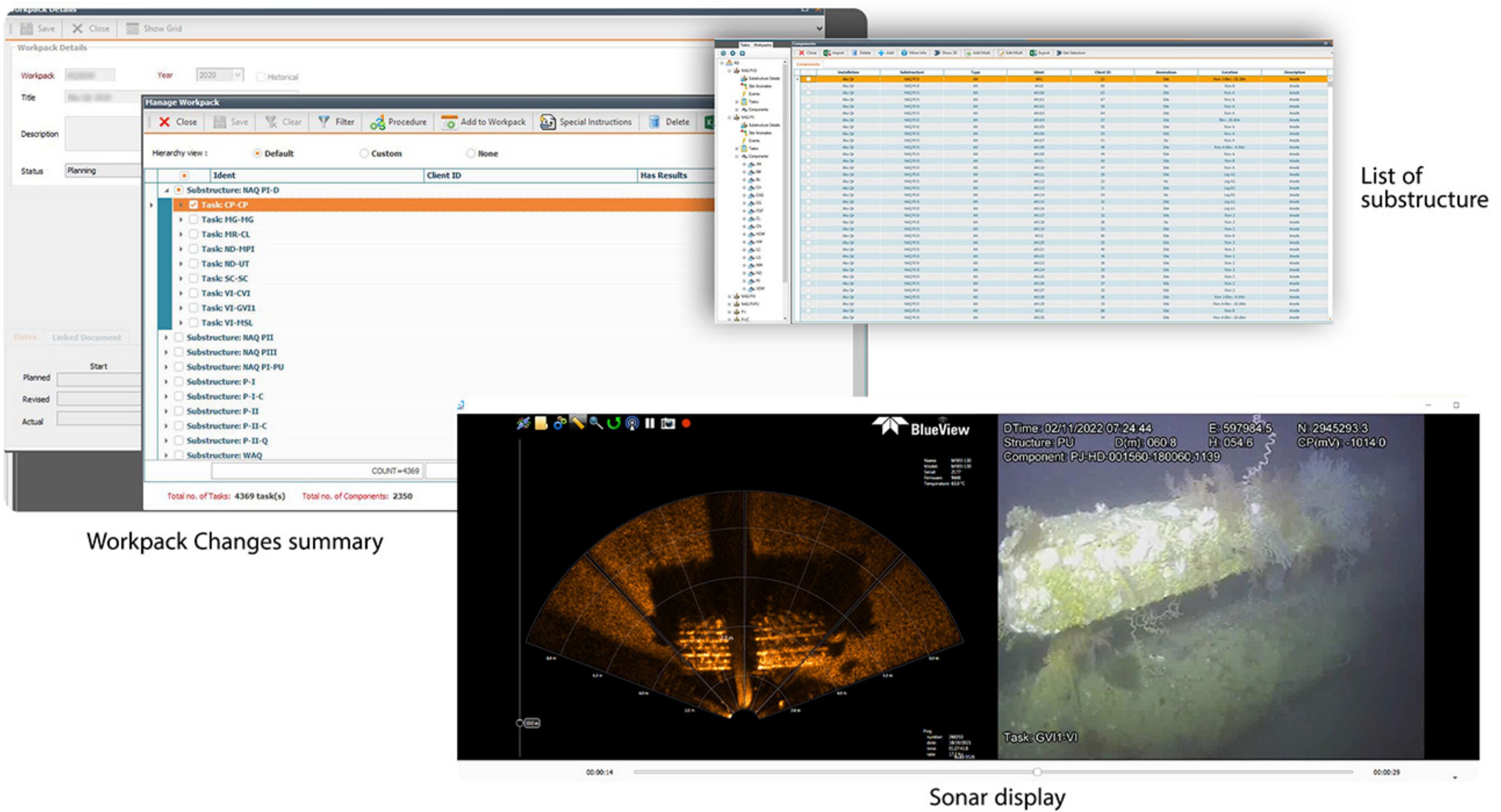
Data Driven – Quality of data can reduce inspection requirements and help you make the right decisions.

Collaboration – Structure Commander allows our clients to discuss, share, and work together on specific projects and easily access current and past inspection campaigns.

Monitoring – Track the progress of your inspection campaign and planned work and import all historical data from previous

Data handling One system linking all the events, digital videos and 3D models related to your assets.

List of substructure

Workpack Changes summary

Sonar display

DEVELOPED FOR AGILITY

The Structure Commander adds value for our customers by handling and managing data to allow for better analysis which results in higher proficiency and productivity.

Data Migration – We can migrate and manage historic data into the Structure Commander, so all your asset information is in one place.
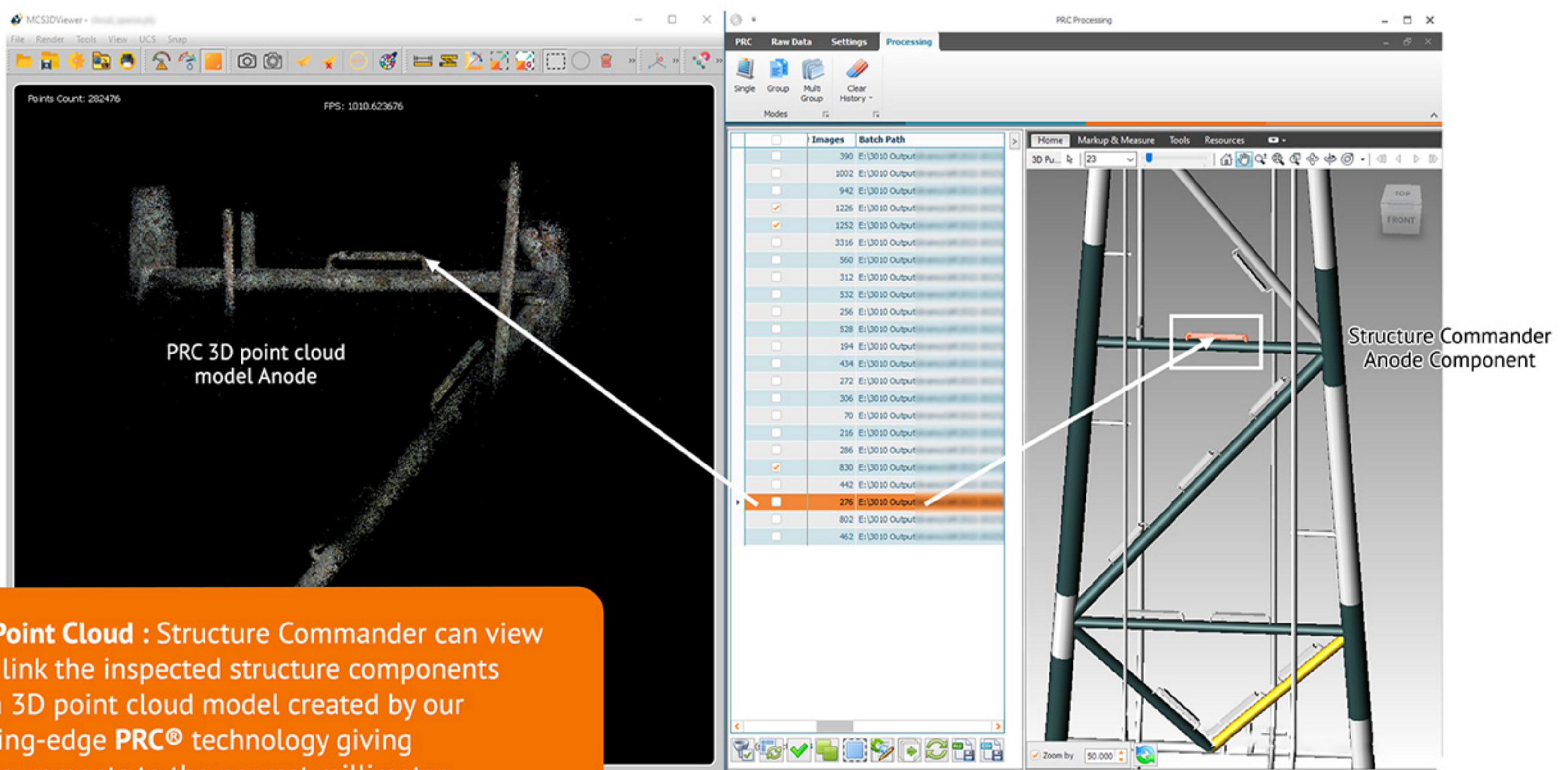
Multitasking – It can embrace data received from multiple ROVs and divers at the same time and generate dive logs, anomaly reports, photos, videos, and task results automatically and instantly onboard.

Operational Elements – It can edit / assign tasks for any selected components during online acquisition and to apply filters on task list and automatically reflecting outstanding tasks.

Flexibility – Link to any type of external documents including CAD and PDFs.

Digital Video – View and add video clips related to your asset.

Scalability – It can generate work packs according to client scope of work and Inspection procedures and attach any document or comment to any component or task.

PRC 3D point cloud model Anode

Structure Commander Anode Component

3D Point Cloud : Structure Commander can view and link the inspected structure components with 3D point cloud model created by our cutting-edge **PRC®** technology giving measurements to the nearest millimeter.

OUTSTANDING DELIVERABLES

Structure commander easy access viewer allow our clients to review and visualise the inspection results and makes it easy to manipulate data, filter, set queries, run statistics, and show trends to help you make decisions and take swift actions.

One dynamic Viewer – 3D interactive model synchronized with video and all other data.

Analysis Elements – The viewer allows our customer to view and search in two modes, task based, or component based.
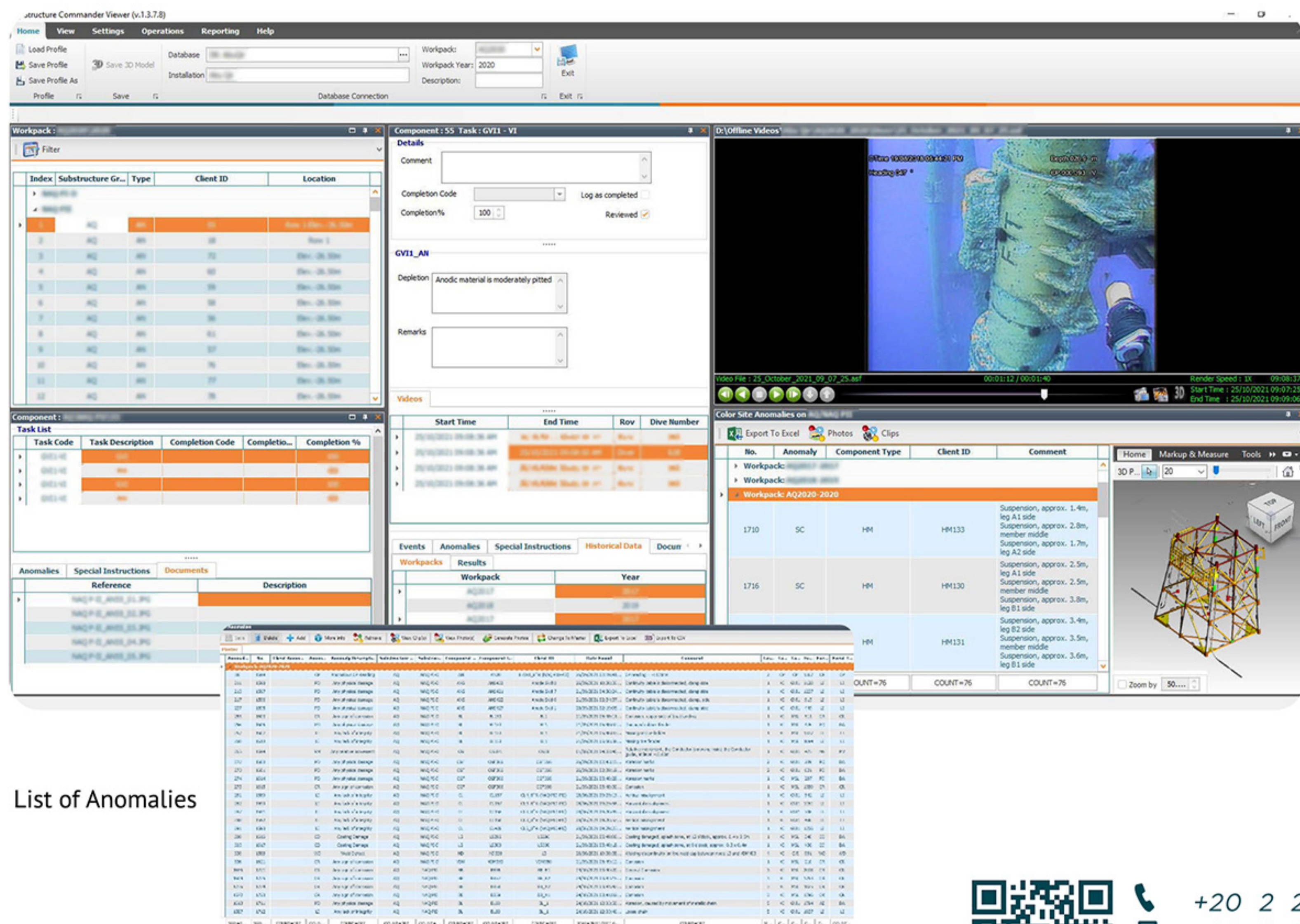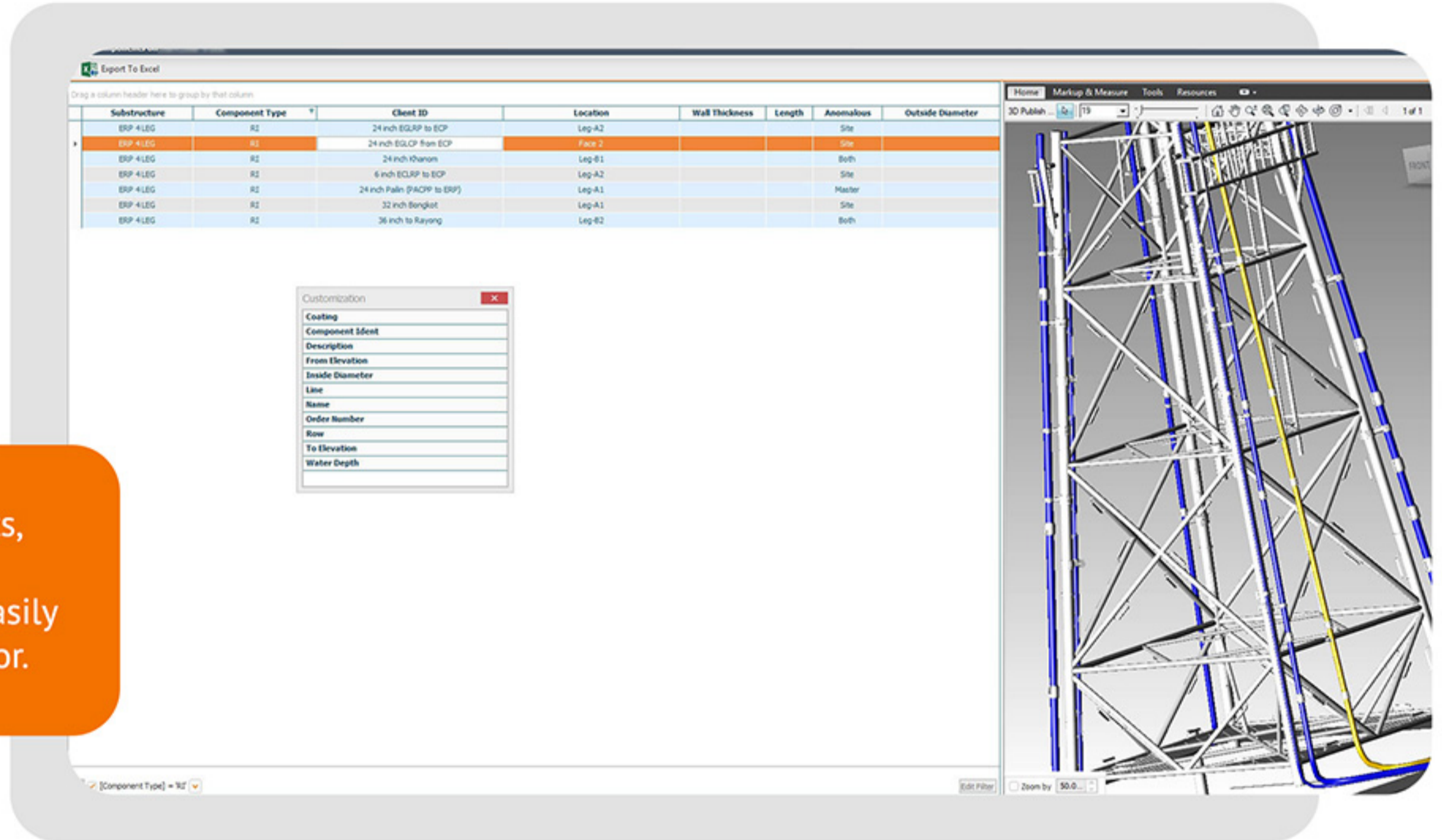
Less searching – Ability to browse a specific component (ex: member, riser, clamp, flanges, etc.) and its related inspection videos and other information.

Anomaly – Generate anomaly reports, photos, video for any item of interest automatically and instantly, as well as view all historical anomalies against components.

Informative – All video data to be synchronized together and to be viewed from structure commander viewer with the ability of display customized overlay based on the processed data such as CP, depth...etc.

Wider access – Web GIS technology allows you to browse all your inspected data.

3D Marker – This allows components, based on many different criteria including location and type, to be easily identified using 3D imagery and color.

Structure Commander Viewer

List of Anomalies

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