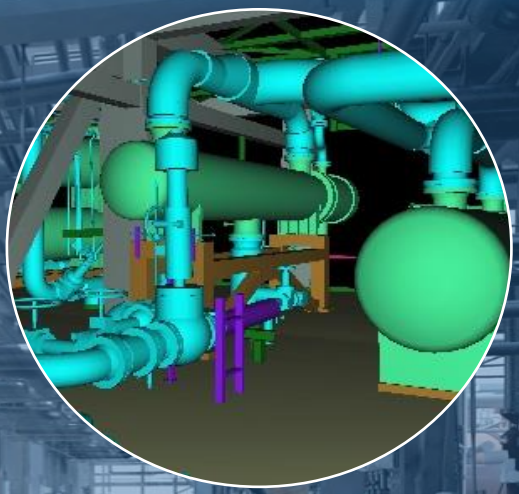
Web-based Asset Data Management

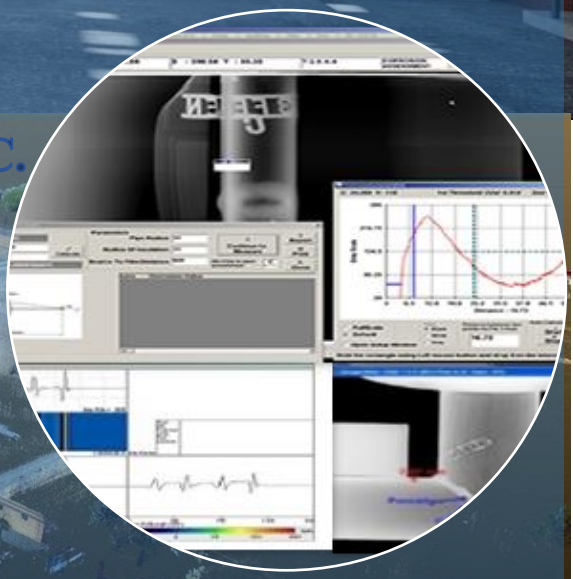


3D Modeling CADWorx/SP3D/ PDMS/E3D

Edoxx

Technical Services LLC.

Laser Scanning Services



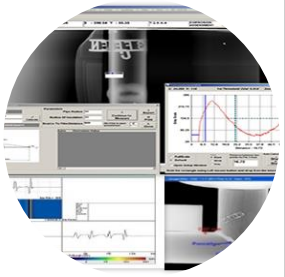
Reverse Engineering & Technical Services

Industrial Internet of Things (IoT)

Mechanical Integrity & RBI

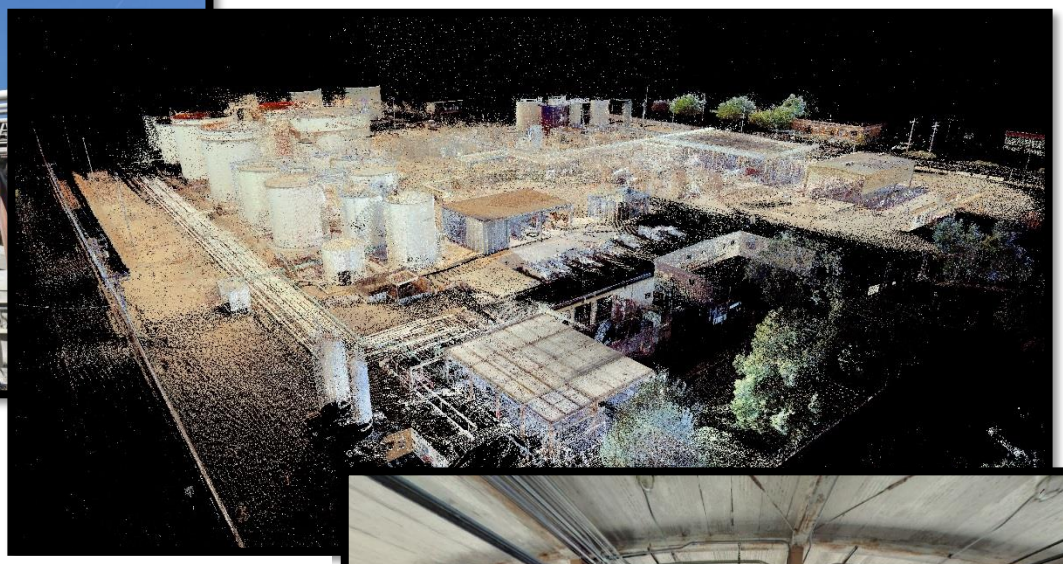
- **Field Laser Scanning (Offshore/Onshore)**
- **Web-based Data Visualization & Management**
  - Keep Track of Scan Projects Based on the Survey Date
  - Categorize Scan Locations by Process Area
  - 4K Bubbleview Skin Over Point Cloud Data
  - Do accurate Dimensional Measurements
  - Leave Notes and Equipment Tags on the Scanned Equipment
  - Bubble Views & True Views

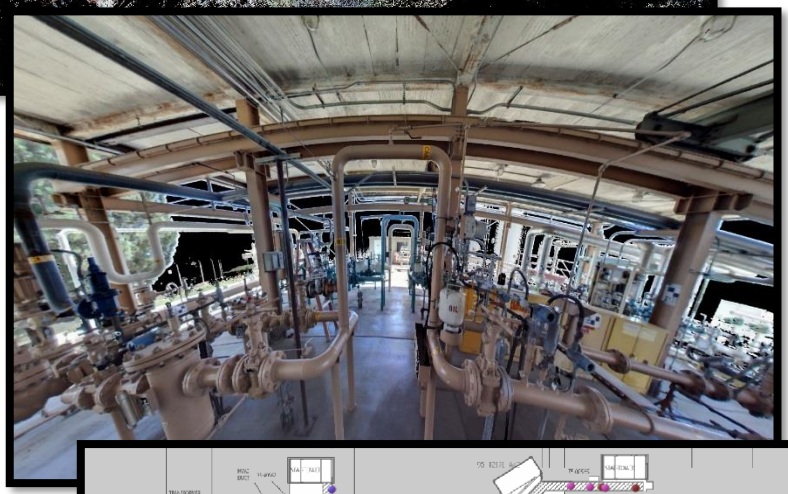
- **Production of 3D non-intelligent Model (Cyclone)**
- **3D Intelligent Modeling**
  - CADWorx/ SP3D/ PDMS/ E3D Software Linking Components of P&ID/PFD/ISO to 3D model
- **Equipment/Piping Engineering Data & Documents Loaded on 3D Model**
- **Mechanical Integrity & Reliability Data Visualization**
  - Mechanical Integrity Inspection Data, NDT Data, RBI Matrix, Corrosion Monitoring Locations (CML) Data
- **Dynamic Models**
  - Flow Simulation & Virtual Training Procedures with Animated Avatars
- **4D Web-based Access to Digital Asset**
  - User-friendly & Simplified Web platform
  - 24/7 Access to Digital Assets
  - Keep Track of Revisions, Add New Data/Documents



- **Data Consolidation & Cataloging**
  - Gathering & Digitalizing Existing Engineering Data & Documents (P&IDs, PFDs, Gas)
- **As-built 3D Model & Data Generation**
  - As-built PFDs, P&IDs, ISOs, Gas, Plot-plan, BOM, MTOs
- **Technical Services**
  - Process Piping Design
  - Thermal & Mechanical Calculations of Static Equipment
  - Stress Analysis (Caesar)
  - API 650/653 Tank out-of-roundness Reports

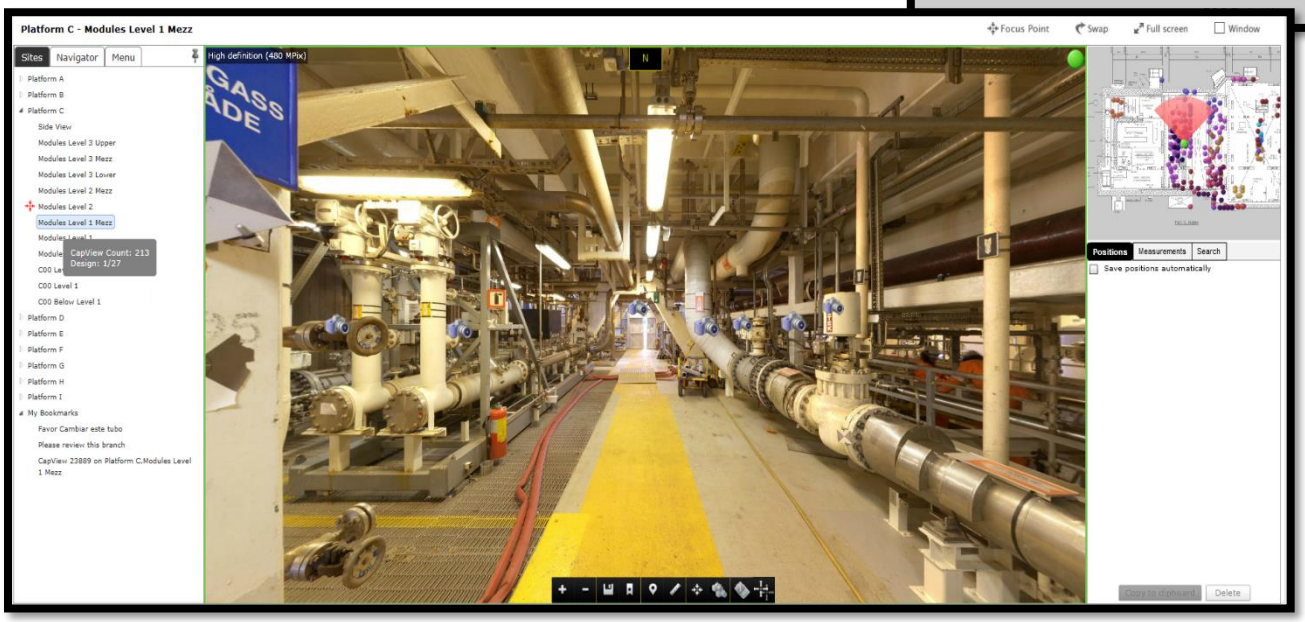
- **Access to Real Time Data Collected from Equipment**
  - Cost Saving by Implementing Vital Signs and Internet of Things in Operation & Maintenance
  - Providing a single source for all industrial automation data in IoT Platform.
  - Asset Data Monitoring & Online Interaction with Equipment
  - Analysis of Complex Data, Alarms and Signals Generated by the connected devices and Translate into Simple Actionable Alerts





Laser Scanning & Data Management

- Field Laser Scanning
  - Above Ground Scanning (Offshore/Onshore)
  - Underground Scanning & Pipe-Rout Mapping
- Point Cloud Data Registration using LFM/ Cyclone
- Bubble Views & True Views
- Online Data Visualization & Management
  - Web-based Platform
  - Unlimited Number of Users
  - Keep Track of Scan Projects Based on the Survey Date
  - Categorize Scan Locations by Process Area
  - Select Scan Locations on Plot Plans to be Visualized
  - 4K Bubbleview Skin Over Point Cloud Data
  - Do accurate Dimensional Measurements
  - Leave Notes and Equipment Tags on the Scanned Equipment



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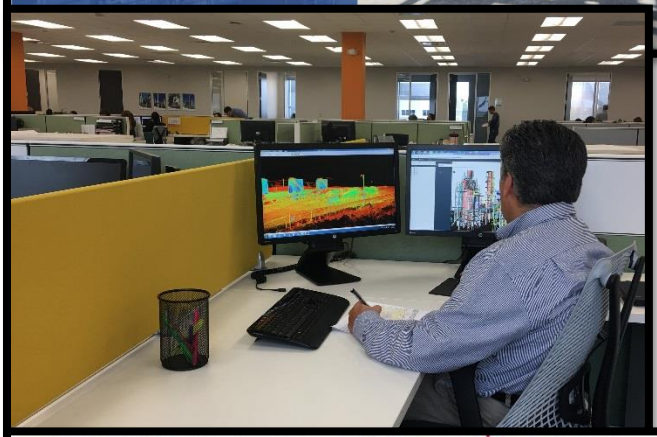
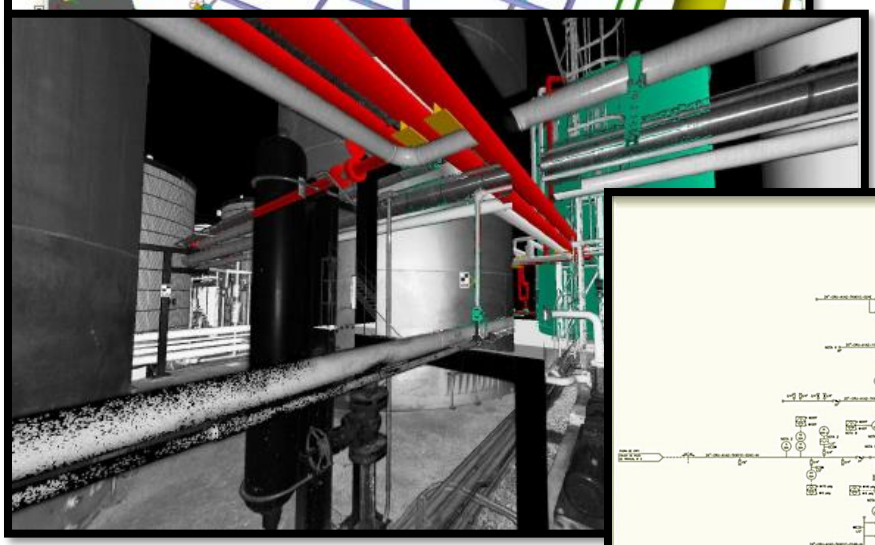
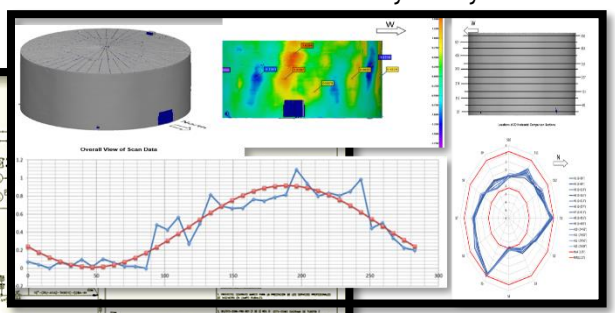
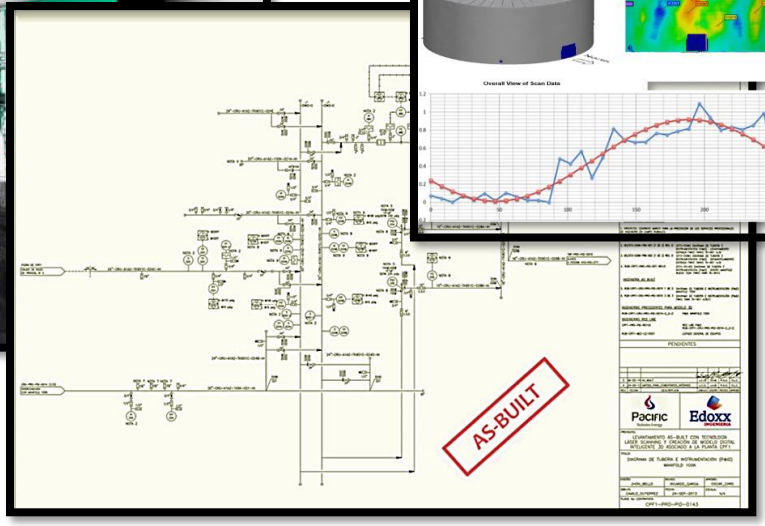








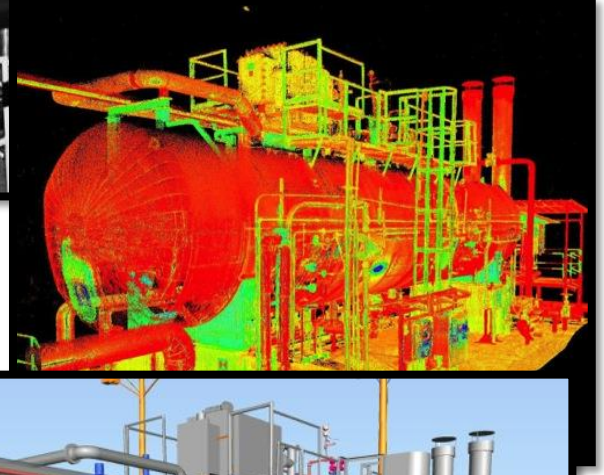
Reverse Engineering

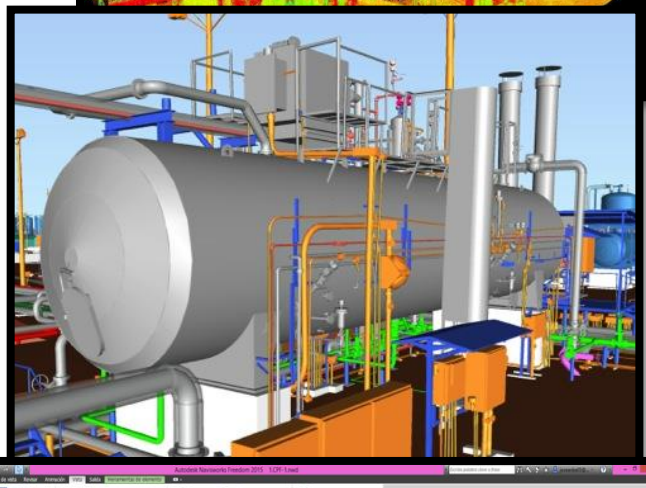
- Field Laser Scanning of Existing Assets
  - Point-Cloud Survey with 2mm accuracy
  - Plant Coordinate System Validation
  - Dimensional Control Services
- Data Consolidation & Cataloging
  - Gathering & Digitalizing Existing Engineering Data & Documents (P&IDs, PFDs, Gas)
- 3D Intelligent Modeling from Scanned Facility
  - CADWorx/ SP3D/ PDMS/ E3D Software
- As-built & Data Generation
  - As-Built 3D Model
  - As-built PFDs, P&IDs, ISOs, Gas, Plot-plan
  - As-built Bill of Materials (BOM)
- Technical Services
  - Process Piping Design
  - Thermal & Mechanical Calculations of Static Equipment
  - Stress Analysis (Caesar)
  - API 650/653 Tank out-of-roundness Reports
  - Heater's Internals Geometry Analysis

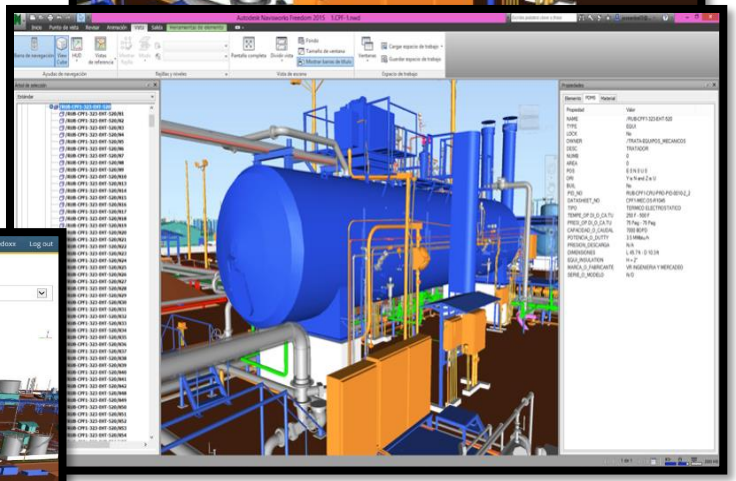
Edoxx

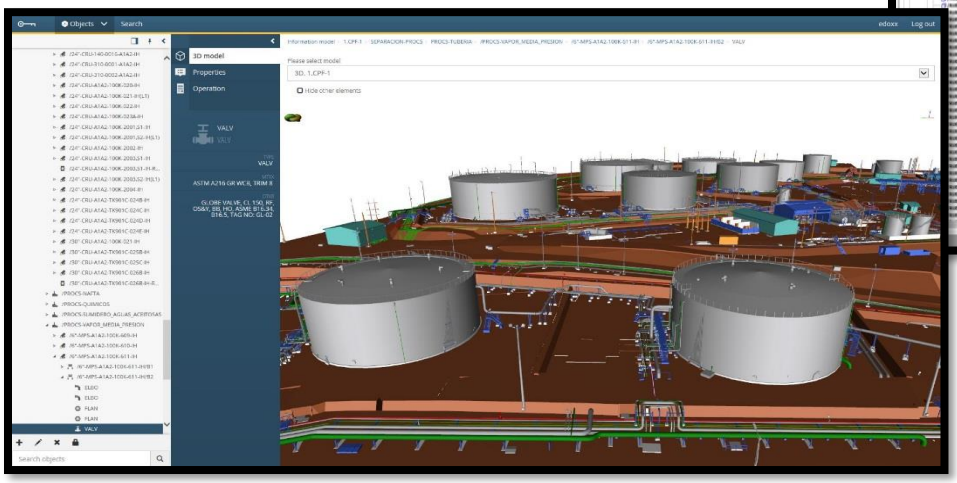
4D: 3D Model + Data

- Field Laser Scanning of Existing Assets
- Production of 3D non-intelligent Model (Cyclone)
- Production of Intelligent 3D Model
    - CADWorx
    - INTERGRAPH SmartPlant-3D
    - AVEVA PDMS
    - AVEVA E3D
- Linking Components of P&ID/PFD/ISO to 3D model
- Equipment/Piping Engineering Data & Documents Loaded on 3D Model
- Mechanical Integrity & Reliability Data Visualization
    - Mechanical Integrity Inspection Data
    - NDT Data
    - RBI Matrix
    - Corrosion Monitoring Locations (CML) Data
- Dynamic Models
    - Flow Simulation in the Process Pipes
    - Creation of Virtual Training Procedures with Animated Avatars
- 4D Web-based Access to Digital Asset
    - User-friendly & Simplified Web platform
    - 24/7 Access to Digital Assets
    - Centralized Document Control System
    - Keep Track of Revisions, Add New Data/Documents









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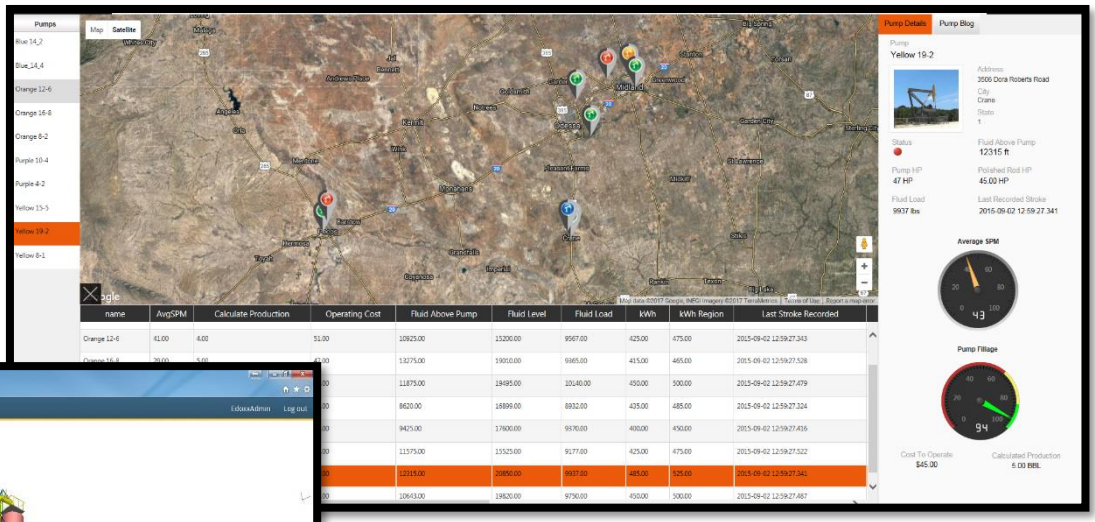
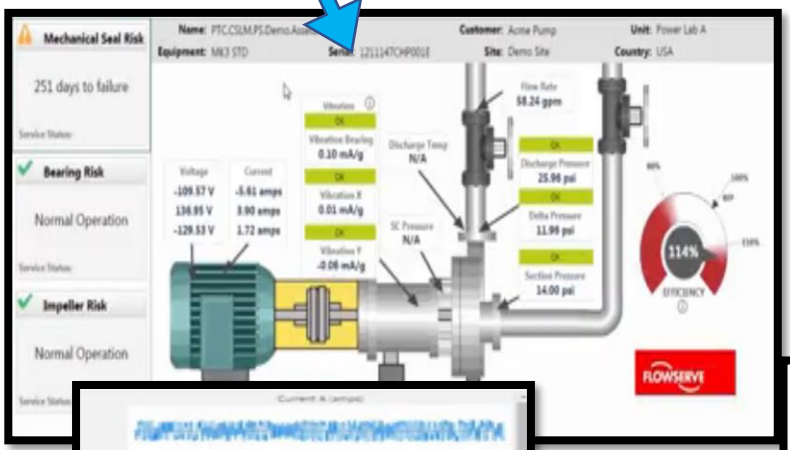
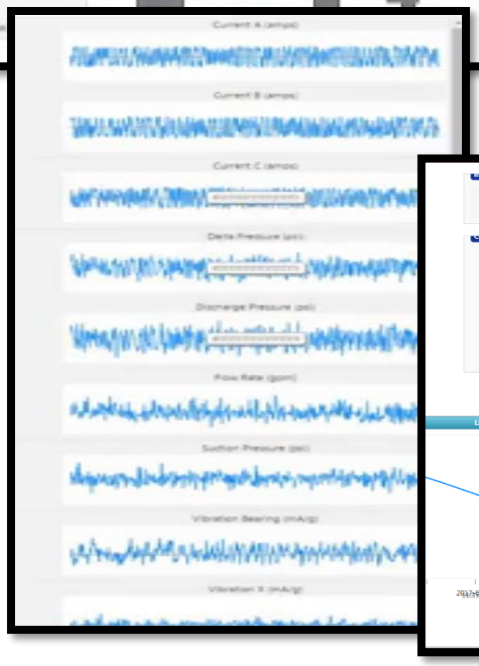
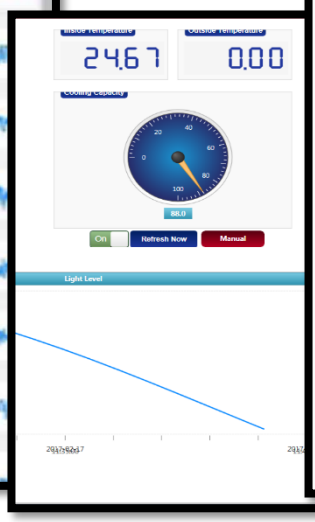


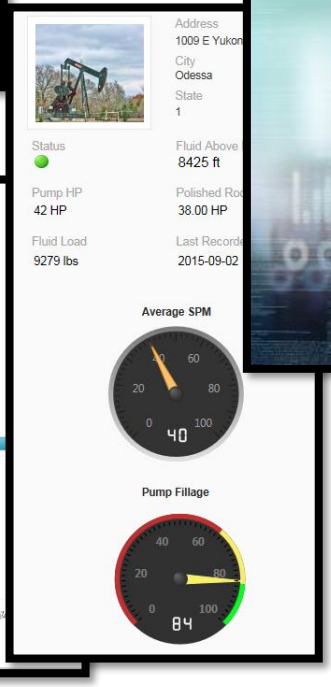
Industrial Internet of Things (IoT)

- Powerful Enterprise IoT Solutions that Deliver Transformative Business Value
- Cost Saving by Implementing Vital Signs and Internet of Things in Operation & Maintenance
- Providing a single source for all industrial automation data in IoT Platform.
- Integrated IoT-specific Development Tools & Capabilities
- Access to Real Time Data Collected from Equipment
- Asset Data Monitoring
- Online Interaction with Equipment
- Analysis of Complex Data, Alarms and Signals Generated by the connected devices and Translate into Simple Actionable Alerts









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