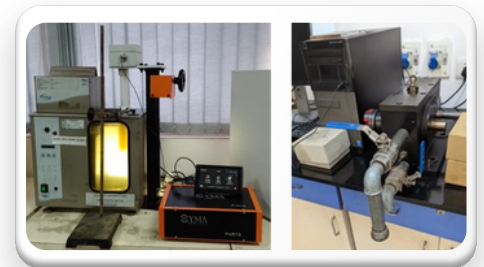


Continuous Oil Condition Monitoring

Oil monitoring is crucial process in lubrication industry to ensure operational efficiency and maintain equipment integrity. By closely monitoring oil properties enables early detection of potential issues within machinery. It also allows for timely oil changes or replenishment, extending the lifespan of machinery and reducing maintenance costs.

CHALLENGES

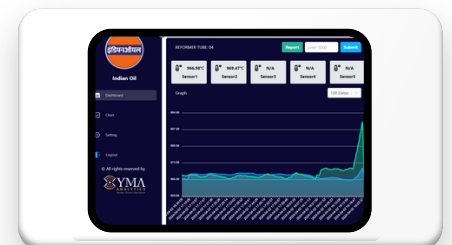
- Oil monitoring is challenging due to its complex process. Monitoring involves tracking parameters such as temperature, pressure, flow rates, and chemical composition throughout process stages which can require specialized equipment and expertise
- Obtaining representative oil samples for analysis can be difficult, especially in large or inaccessible machinery. Improper sampling techniques can lead to inaccurate results.
- Interpreting oil monitoring data and translating it into actionable insights that imply equipment health and performance is difficult



Installing XYMA Product, PoRTS in IOCL

SOLUTION

- Our XYMA Analytics product PoRTS is multi-parameter measurement sensor to continuously monitor viscosity, density and temperature of a fluid with high reliability and precision using single ultrasonic waveguide.
- The edge computing unit in the XYMA Electronics Unit is capable of performing advanced computations to extract temperature data from the received ultrasonic signals. The output from the edge classifiers is transmitted to the dashboard using industrial standard, wireless (or wired) communication technology using a transmitting unit. The status can be monitored in the client DCS system and also can be displayed in XYMA's customizable dashboard.
- It can measure the viscosity from 50 cP - 15000 cP, density from 700 kg/m³ - 1200 kg/m³, Temperature: 20°C to 400°C
- The AI- Powered soft sensors can provide 3D temperature profiles of any asset. The dashboard gives timely alerts to safely maintain industrial operations.
- Our XYMA sensors are compatible for all industrial standards and electronic unit is designed with ATEX certification assures that product has tested and met the necessary safety standards to operate in potentially hazardous environments.



Dashboard of process parameter