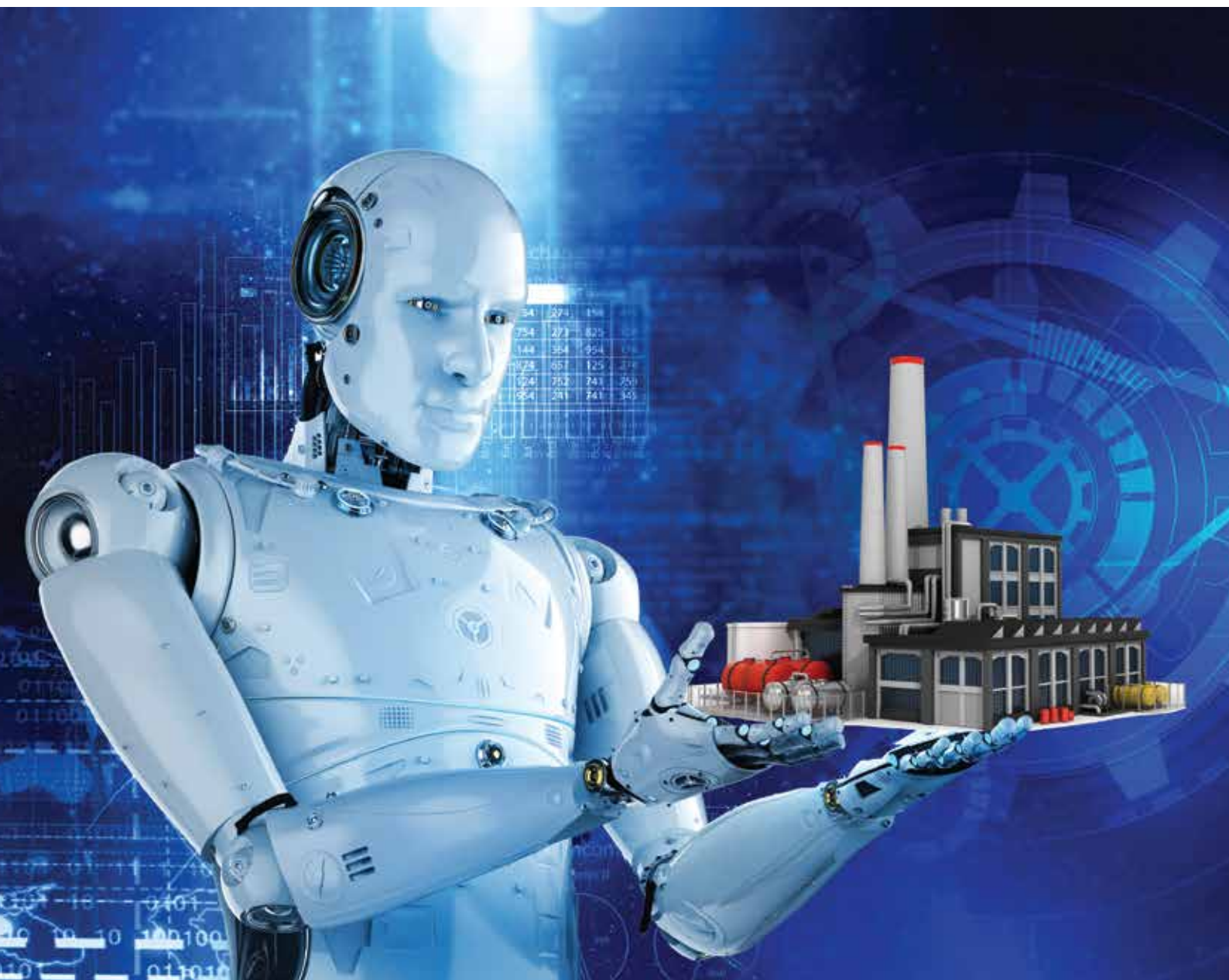


Cloud Based-Process Intelligence

Empowering Decision Making

Quick system implementation | Links across all brands | Modular future expansion



WHAT IS GENiE™ SMART FACTORY?

Ahead of the curve in Industry Internet of Things (IIoT) and Industry 4.0, **GENiE™** is a SMART FACTORY that fulfils your information wishes. **GENiE™** empowers decision making to achieve maximum yield and productivity. What puts **GENiE™** SMART FACTORY at the edge, is its capability for predictive maintenance using Artificial Intelligence (AI), thus preparing you well in advance before any unexpected failure takes place. Users are alerted in real time on the precise predictions via their smart devices.

GENiE™ information flow SMART



SECURE



MEANINGFUL



ACCURATE



RELIABLE



TIMELY

GENiE™ SMART FACTORY CORE TECHNOLOGIES



Real time information

instant dissemination of accurate and reliable info to all working levels



Predictive alerts

prevents unplanned breakdown, minimize risk, boost quality & increase safety



Analytic intelligence

predictive root cause identification, save energy, optimize resources

WHY GENiE™ SMART FACTORY?

without GENiE



Frequent breakdown



COST

Unexpected machine failure



Missing insights from data



Increase in costs to compensation



Inaccurate data

Real time alarms and alerts for machine failure



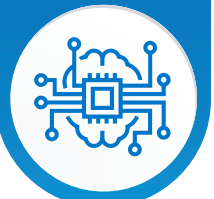
Predictive maintenance



AI root cause identification



Machine learning, avoids production losses

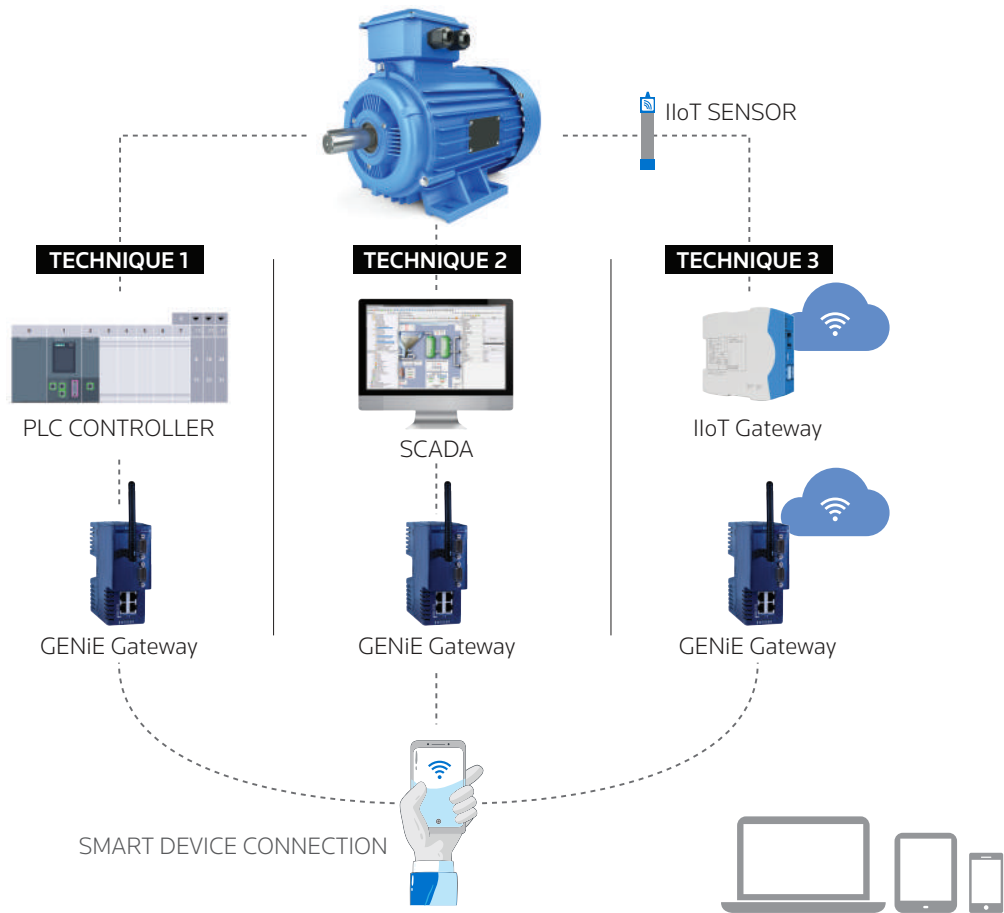


Smart devices provide precise data

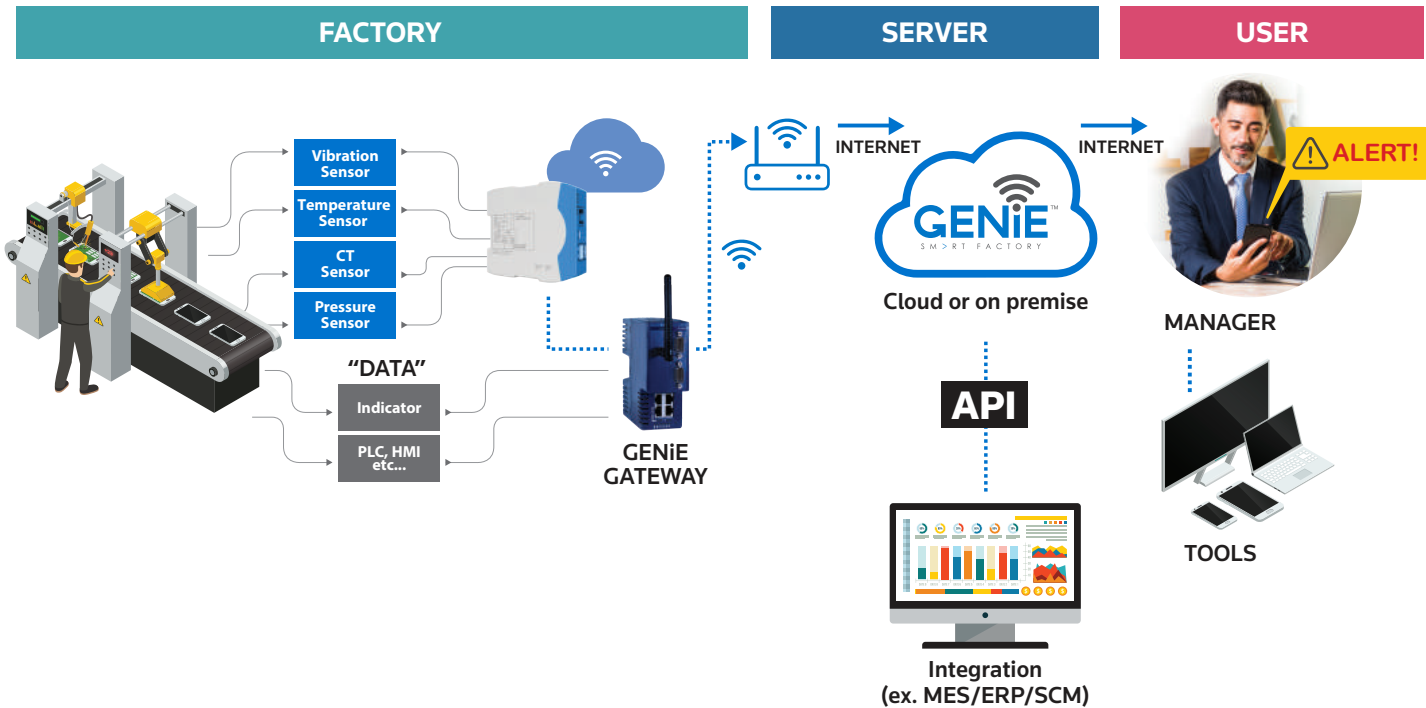


HOW GENiE™ SMART FACTORY WORKS?

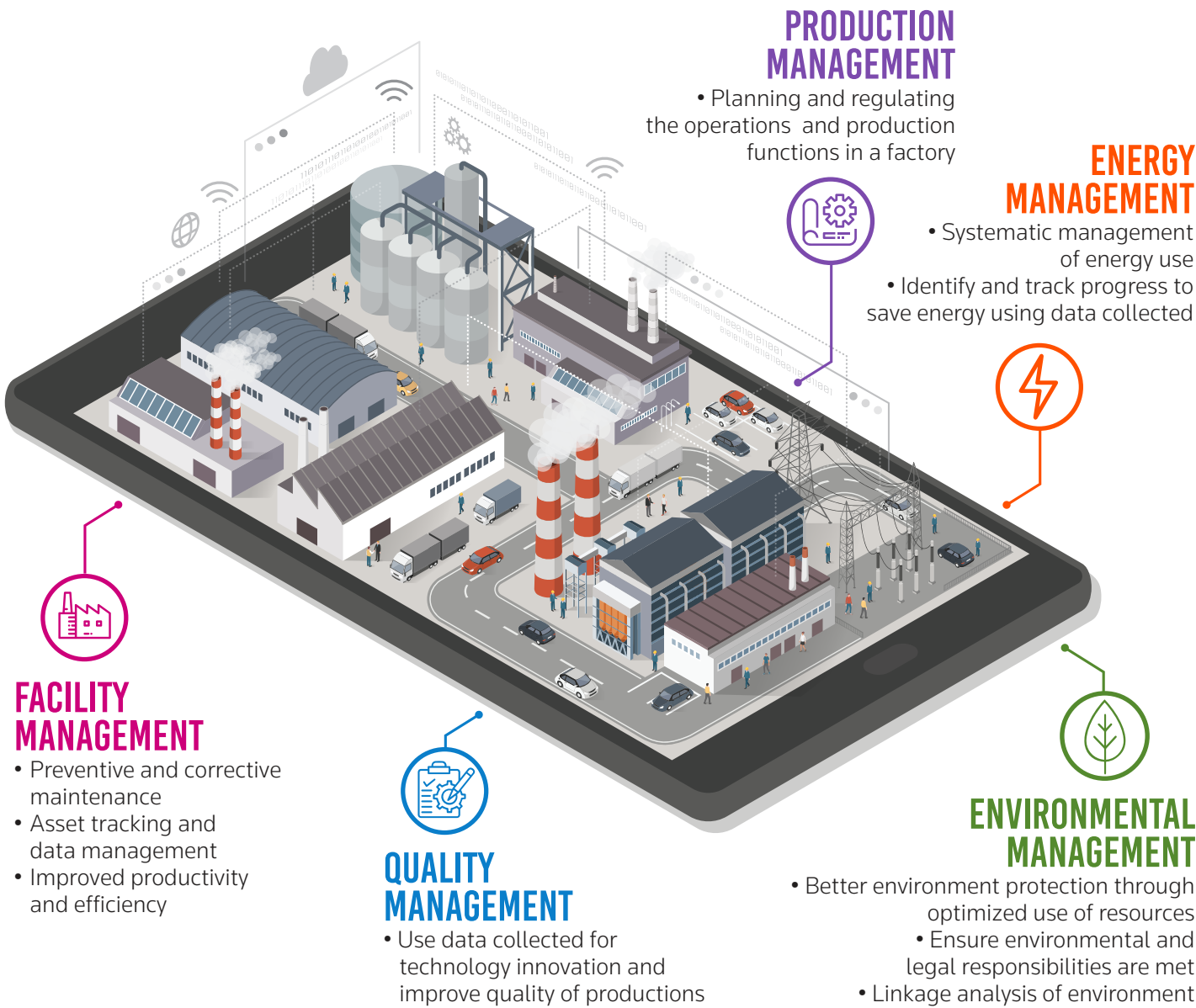
GENiE™ obtains real process values and parameters of your operations. It comes from data acquisition, aggregating, analysing and sharing. The data is projected onto a user-friendly dashboard interface to allow continuous monitoring of processes or machinery.



GENiE™ SMART FACTORY FRAMEWORK



GENIE™ SMART FACTORY OVERALL BENEFITS



GENIE™ SMART FACTORY DASHBOARD



Alerts



Analysis Report

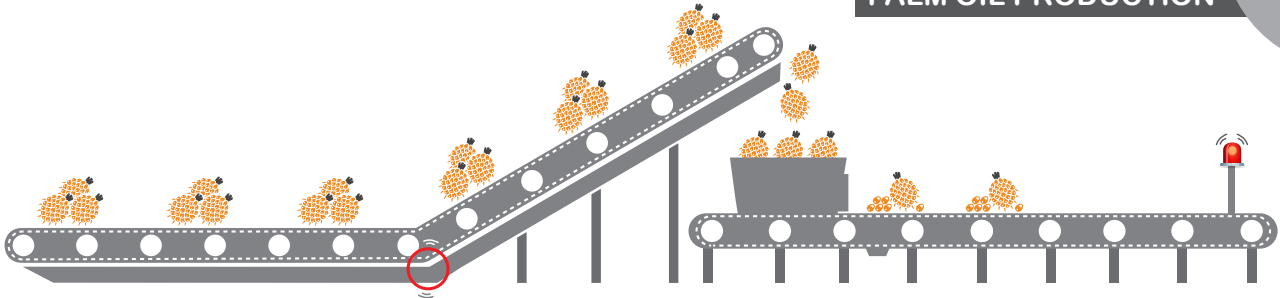


Real Time Monitoring

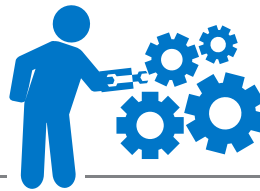
GENiE™ SMART FACTORY CASE STUDIES

PALM OIL PRODUCTION

1



Frequent conveyor
breakdowns
3-4 times / month



Loss of
production
& productivity



Unplanned
Downtime



Unplanned
Maintenance



Production
Output
Increase

without GENiE™

6 - 8 HOURS
DOWN ↓ PER-WEEK

\$80,000 - \$100,000
Annually

Industry
Standard



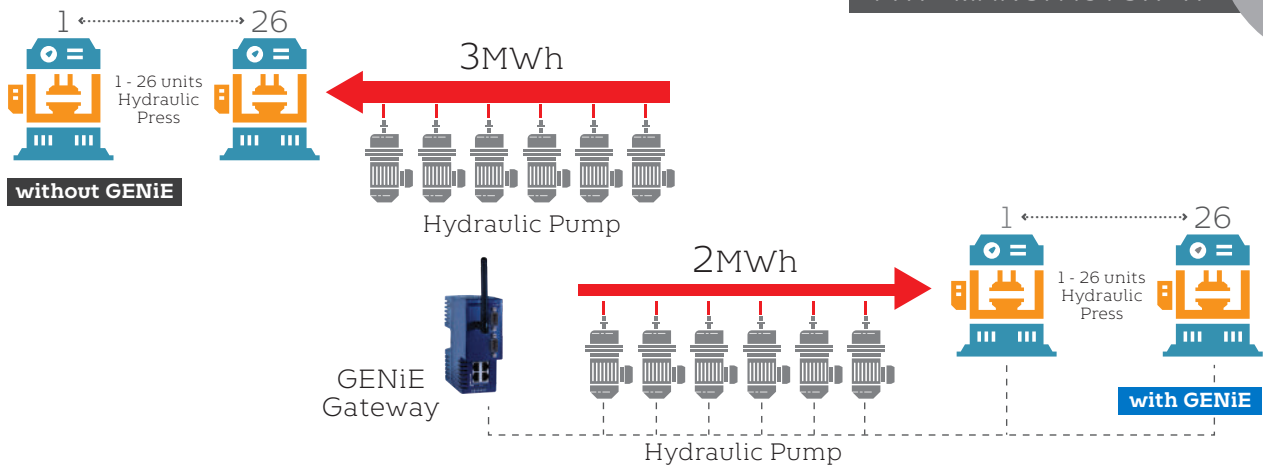
0

0

↑\$500K
profits

TYRE MANUFACTURER

2



Energy



Maintenance
Cost



Production
Output
Increase

without GENiE™

Hydraulic pump
running all the time

\$120,000 - \$160,000
Annually

Down time
losses



1 MWh
saving

0

↑\$600K
profits

APPLIED INDUSTRY



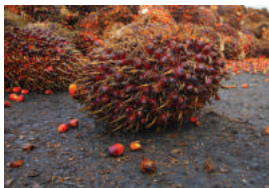
FOOD & BEVERAGES

- Critical control point - CCP
- Predictive alerts on maintenance and limit
- Production and management tool



RUBBER GLOVE

- Compounding Process Monitoring
- Abnormalities reporting



OLEO CHEMICAL

- Total integrated Tank Gauging System
- Alerts and monitoring for quality maintenance



CHEMICAL

- Dossing Analytics report for quality control and production management
- Information received is translated to overall deviation and corrective actions are initiated



WATER

- Filtration system condition monitoring
- Data analytics on operations to enhance the back-wash cycle



CEMENT

- Integrated Energy Monitoring for complete process of integrated plant
- Predictive alerts for breakdowns, machines efficiencies, safety control



MINING

- Slurry Pump wear and tear early warning
- Real time monitoring and electric power management



PHARMACEUTICAL

- Monitor batching Mixer Speed
- Quality control management
- Real time monitoring and data analytics



STEEL & ALUMINIUM

- Furnace control management of critical parameters including gas usage, temperature fluctuation, metal level, etc.