

# Pharmaceuticals Industry

## Integrating advanced technologies on a centralized platform to improve process safety, performance, and productivity in the Pharma industry

management challenges in drug development and manufacturing processes. The risks of working with hazardous materials and potentially dangerous chemical reactions require continuous risk assessment and control of laboratory operations and conditions. Market demands necessitate rapid adaptation, accelerated development and production while maintaining costeffectiveness, strict regulatory requirements, and quality assurance. Faster and more complex manufacturing processes require real-time monitoring to prevent mechanical failures, ensure optimal speed, critical equipment settings, and safe operating procedures.

The Pharma industry faces multiple safety and performance



GOARC's safety solution provides dynamic risk assessment and enables proactive and preventive measures to ensure process safety and operational excellence in pharma plants. Reliable monitoring and real-time data on assets, workers and processes enables hazard identification, mitigates mechanical issues, reduces stops, and prevents production deviations that are critical to performance, worker safety, product quality and production capacity. Improved communication, data transfer and accessibility to safety information ensures rapid response in emergencies and enhances safety in a connected worker environment.

Addressing the critical importance of process safety, rapid decision-making and quality control in the Pharma

industry's fast-paced development and production environment, GOARC's platform offers centralized control, connecting management, workers, assets and processes, and empowering connected workers. Al-based analytics and insights and reliable communication in an integrated system are vital for proactive and preventive risk management, safety performance, and increased productivity.

### Integrated data and advanced analytics Gain critical insights on real-time status of laboratory processes and production

to maximize personal and process safety, facilitate performance management, and ensure implementation of best practices and quality control

materials hazards and malfunctions of sensitive equipment Centralized data visualization with AI and ML analytics for

Real-time identification of potential laboratory process and

improved and rapid data-driven decision-making and risk assessment to facilitate corrective and preventive actions and ensure compliance Seamless flow and integration of data from labs and production

floor including external and internal data sources, IoT sensors and other connected equipment, operational data, real-time

- Bi-directional communication between connected workers in the laboratory and manufacturing and centralized command center enables real-time alerts and notifications and quick response time to prevent and mitigate laboratory safety
- documentation ensure quality and prevent product deviations Monitor process-critical parameters in lab processes and in

Reliable data transfer, data analytics and accurate

manufacturing equipment in real time



## One source of information – a centralized network collects

Integrated command center

worker status and equipment checks

hazards and improve productivity

- and analyzes huge amounts of data Centralized control and validation of work processes at all
- levels of the pharma plant Real-time view of operations and performance for remote
- asset management, hazard control, quality control, and worker safety Updated records and investigation reports
- Enhanced process safety with end-to-end visibility across plant and operations including laboratory, production lines,
- and maintenance procedures





### Monitor development process in the lab, data collection, maintenance and operating procedures

**Critical reports and investigations** 

- Monitor process-critical parameters in the laboratory, make real-time process, settings and materials adjustments and identify hazards
- Detailed equipment status reports enable effective response to minimize risk of mechanical stress and failures that can cause material loss, injuries, delays in

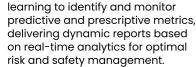
production and reduced capacity

Aggregated data and reports and accurate, complete documentation for quality and incident investigations

Reach Operational Excellence with GOARC's technology

Al & Machine Learning **Connected Worker Command center** 

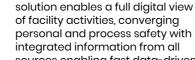
GOARC's Connected Worker



Permit to Work

**Emergency Management** 

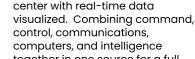
Artificial intelligence and machine



**Asset Management** 

## sources enabling fast data-driven decisions at the right time.

**Unique Visualization and Dynamic Personalized Routines** 



## together in one source for a full digital view of facility operations

**Emergency Preparedness** 

Incident Management

**Audits** 

LOTO

The only centralized command

**Our Solutions** 

**Operator Rounds** 

Hazard Management



### Analyze all work processes across the facility and set and monitor KPI's

# **Critical Event**

Shift Management

Management Integrated end-to-

end emergency

communication

Detects anomalies

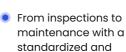
and notifies workers

and handling

with push notifications Emergency equipment audits, training and

emergency drills





lifecycle

Track, analyze and

optimized process

Analyzes device

manage asset

predict failures and performance degradation

properties to



and alerts

Al-enabled

Health & Safety

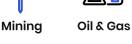
Proactive protection

# management tools

analytics and case



teva







**Industries** 



Pharma





FirstEnergy



Trusted and used daily by



**AICL** 



DEKRA





with superior visualization and dynamic work activities and risk management. It connects people and aggregates disparate data from systems, sensors, and the human-derived activities - delivering meaningful, actionable insights across the organization.