

# **Mining Industry**

# Leveraging smart technology to improve risk management and protect worker health and safety in the mining industry

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# Dynamic Risk Management

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Dynamic Risk Management

Safety cases are no longer static documents but rather integrated into an operational safety environment that allows for real-time barrier analysis and cumulative risk assessment. GOARC's Permit to Work software seamlessly integrates the cumulative risk assessment with the permit to optimally decrease the risk level. Data is available 24/7 and is constantly refreshed, enabling smart and rapid data-based decisions. Data and details made available by the GOARC Permit to Work module include photographs and videos of the field, timestamp, location stamp, diagrams, charts, clips, storage and retrieval information, and more.

# View and monitor operations and gain critical insights with

Data integration and advanced analytics

data on the real-time status of workers underground and tasks in the field to maximize personal and process safety.

Centralized data visualization with advanced AI and ML

analytics for risk identification and assessment Seamless flow and integration of data across mining operations, including internal and external data sources, IoT

analytics for improved data-driven decision-making, predictive

- sensors, connected workers with PPE and mobile devices, employee report analysis Bi-directional communication between connected workers, supervisors, and control center enables real-time notifications
- and response time and hazard alerts to prevent dangerous collisions and accidents Reliable, actionable insights for informed risk assessment
- Access valuable data in the field to improve safety
- performance; records and investigation reports: explosions, falls of ground, environmental concerns



# One source of information – a centralized network collects

Integrated command center

- silos of information
- Updated records and investigation reports, analysis

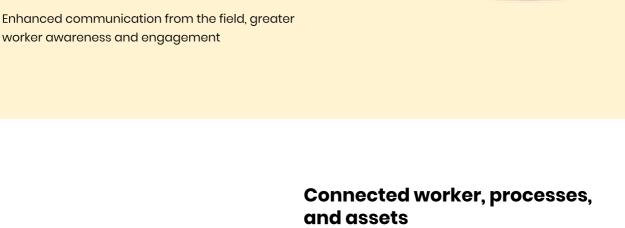
management

- Real-time alerts and response, rapid emergency
- Enhanced communication from the field, greater



# and aggregates massive amounts of data, breaks down

- Integrate data, analytics, and workflows



## Consolidates critical data from all sources to support worker safety and facilitate critical event preparation, prevention, and management in a connected environment.

Permit-to-work activities to control potential escalation

Configured map indicates safe-haven locations and emergency egress routes

GPS location pinpoints reported risk events

- Wearable detectors and transmitters monitor air quality, track remote worker location and progress of
- Access to critical information in the field, standardized and accessible personal and process safety

Skills training for the younger workforce, retaining

- Gamification
- **GOARC's Value** Reach Operational Excellence with GOARC's technology

emergency team

procedures

Active learning from reports

information and experience

Al & Machine Learning **Connected Worker** Command center Artificial intelligence and machine GOARC's Connected Worker The only centralized command center with real-time data learning to identify and monitor solution enables a full digital view

of facility activities, converging

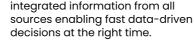
personal and process safety with



Permit to Work

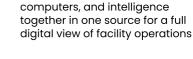
**Emergency Management** 

predictive and prescriptive metrics,



**Asset Management** 

**Unique Visualization and Dynamic Personalized Routines** Shift Management **Operator Rounds** 



**Audits Emergency Preparedness** 

Incident Management

visualized. Combining command,

control, communications,





and monitor KPI's

# **Control of Critical Event**

- Work Management Flexible system with Integrated end-todynamic routines
  - end emergency communication and handling
    - with push notifications
      - Emergency equipment audits, training and emergency drills

Detects anomalies

and notifies workers

# **Asset Performance Management**

Hazard Management

- Track, analyze and manage asset lifecycle
- maintenance with a standardized and optimized process

From inspections to

Analyzes device

properties to predict failures and performance degradation



# against potential dangers Data-driven

Proactive protection

actionable insights

and alerts

Al-enabled

LOTO

analytics and case management tools

**Industries** 

**Petrochemicals** 



Mining

teva











# Trusted and used daily by



Oil & Gas



Chemicals

DEKRA





FirstEnergy.

**Utilities** 



Manufacturing

**About GOARC** GOARC's industrial safety solution delivers a real-time view of a plant's operational reality 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.