



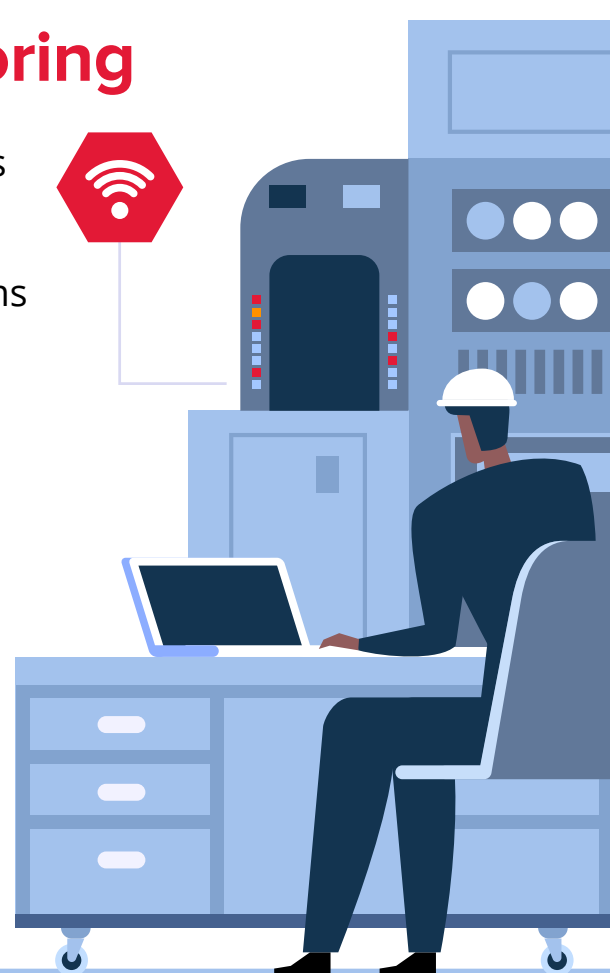
# THE TOP TECHNOLOGY IMPROVING SAFETY IN MANUFACTURING & MAINTENANCE

With the right tools and technology, manufacturers can greatly improve working conditions and enhance overall safety for their employees.



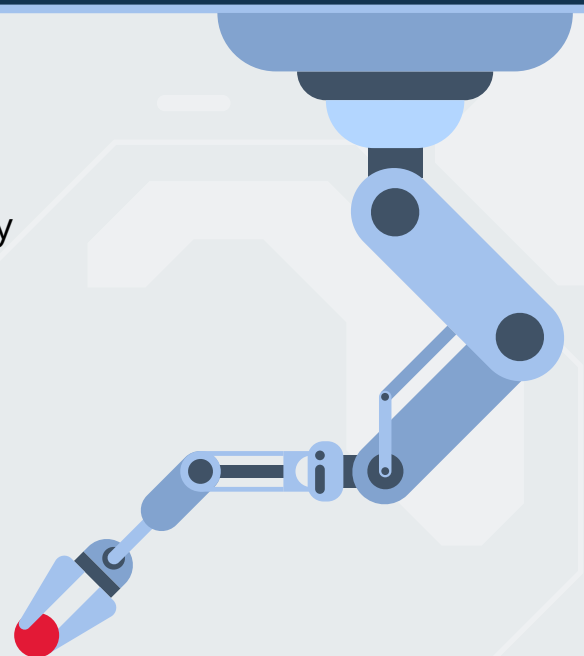
## Condition-based Monitoring

- Incorporates connected sensors, monitors and communications technology
- Helps detect potential equipment problems
- Reduces or possibly eliminates dangerous hands-on work
- Forms a foundation for a connected (smart) factory using sensor technology
- Supports predictive maintenance with real-time, remote monitoring
- Avoids unplanned downtime by identifying potential abnormalities in KPIs



## Robotic Technology

- Involves advanced autonomous technology known as collaborative robots, or cobots
- Works directly alongside humans to increase productivity
- Executes highly intricate and high value operations to alleviate certain dangers



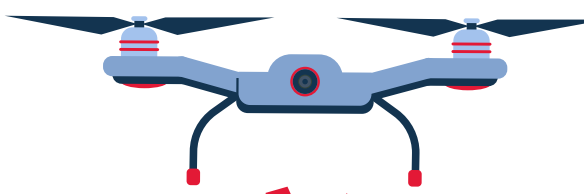
## Wearable Technology

- Facilitates individual safety with heads-up displays and visualizations
- Offers early problem detection for unsafe conditions
- Collects data autonomously which provides insight on improving safety conditions



## Drone Technology

- Performs “birds-eye” monitoring for enhanced problem detection
- Affords technicians numerous opportunities to avoid dangerous scenarios
- Presents remote testing solutions via onboard sensors and cameras



## Mobile Applications

- Empowers real-time monitoring and alerting of hazardous environmental factors
- Notifies personnel of changes/dangers immediately, regardless of location
- Delivers an on-the-go reference for workflows, checkpoints, instructions, etc.



## Artificial Intelligence

- Improves early detection and preventative maintenance capabilities
- Provides in-depth data analysis for greater insight and innovation
- Strengthens a wide range of decision-making processes



## Augmented & Virtual Reality

- Replicates actual parts and objects in a virtual space
- Enables more effective training and accurate maintenance measures
- Allows technicians to troubleshoot maintenance issues without equipment disassembly



**ATS**

Advanced Technology Services, Inc.

[advancedtech.com](http://advancedtech.com)

Sources: [advancedtech.com/blog/manufacturing-technology-cumulusds.com/7-game-changing-technologies-transforming-safety-in-industrial-construction-and-maintenance](http://advancedtech.com/blog/manufacturing-technology-cumulusds.com/7-game-changing-technologies-transforming-safety-in-industrial-construction-and-maintenance)