Increasing pressures to reduce costs. A younger and inexperienced workforce now populating manufacturing plants. Intensifying accountability for worker safety and security. Zonith understands the reality of today’s manufacturing sector and offers applications to ensure worker safety and security, as well as increase workplace efficiency and reliability. Zonith applications can be tailored to respond to unique operational problems or challenges, and can be creatively bundled to forge solutions that fit specific needs. Learn more about Zonith’s application suite and its manufacturing solution in this brochure.
### Alarm Management

Zonith’s Alarm Control System (ACS) ensures that alarm management and notification is automatic, efficient and reliable. It does so by automatically dispatching safety and business critical alarms to DMR/TETRA radios and other mobile devices. ACS dispatches notifications to the right person based on the time of day and the competency necessary to respond to the alarm. When an alarm is raised, ACS immediately identifies the available employee responsible and escalates the alarm until it is acknowledged, resolved and closed.

### Bluetooth Indoor Positioning

Zonith’s Indoor Positioning System (IPS) allows organisations to locate and track employees and assets using any Bluetooth device, including DMR/TETRA radios, and MOTOTRBO radios equipped with a Bluetooth adapter. IPS provides real-time location data of radio and mobile phone users using strategically placed Bluetooth beacons. It can be used in conjunction with ACS to trigger an alarm notification if a worker or asset enters or leaves certain predefined zones, or with CLW to provide location data of a worker in distress.

### Centralised Lone Worker

The Centralised Lone Worker (CLW) application acts as a safeguard for lone workers’ well-being. The application automatically sends messages and monitors responses from digital radio and mobile phone users to ensure the safety of lone workers. If an employee fails to respond to an ‘alive check’ request within the allocated time frame an emergency alarm is automatically raised to the appropriate personnel. Response teams receive the CLW alarm directly on their mobile device thus ensuring rapid response.

### Man Down Notifier

Man Down Notifier (MDN) monitors workers to identify if they have suffered a fall or accident. It does so by monitoring the radio’s accelerometer (motion sensor) for a lack of movement, a horizontal tilt, or both. False alarms are significantly reduced with its rich functionality, including recalibration, pre-alarm and configurable parameters. When triggered, MDN automatically dispatches a notification to the appropriate response group or individual.

### Two-Way Radio Telephony

Digital radios can now communicate seamlessly with phones while having similar functionality found on a cellular device. RBX +Plus leverages existing radio and telephony infrastructure in a new way by giving customers the ability to truly control their mobile communications coverage area. RBX +Plus also greatly reduces recurring communications costs all the while providing remote workers with continuous connectivity.

### Radio to Radio Recording

The Zonith recording solution enables network administrators to record, log and playback any group call on MOTOTRBO two-way radio networks. This solution also allows users to record both radio-to-radio and phone-to-radio conversations. R2R can be deployed in all MOTOTRBO radio configurations.
Indoor Positioning System

Receive Alarm Notifications from the Building Management System (BMS)

ACS listens for alarms generated by the Building Management System. Depending on the type of alarm, ACS notifies the appropriate worker based on competency, time of day and choice of mobile device. A text message is automatically created and sent to the worker on his DMR/TETRA radio or mobile device with information regarding the alarm. The alarm is accepted with the push of a button and easily closed once it has been looked after. With ACS, response times to alarms are significantly decreased and the need to physically run to a notification panel is eliminated.

Receive Notification of Alarms from Production Machinery

ACS can also listen to alarms generated by the machinery on the production floor. Radio users can receive notification messages when the equipment fails, when a production cycle ends, or other event-based information that is critical to the production schedule. Based on the type of alarm, competency and time of day, ACS will notify the appropriate worker to respond to the notification via text message, which can be accepted with the push of a button. Once the action is complete or the alarm has been looked after, the alarm is easily closed from the radio. With ACS, critical information is delivered right to the worker’s mobile device and task acceptance can be registered, allowing management peace of mind.

Send Job Tickets and Track Task Completion

Eliminate the need for physical work tickets and unresponsive work order management processes. ACS allows supervisors and dispatchers to send job tickets to mobile workers directly on their MOTOTRBO radios and other mobile devices. The workers choose to accept or decline the job tickets sent to their MOTOTRBO radios. The tickets are escalated to the next capable worker if the first worker ignores or declines the task. Sending work order tickets with ACS significantly eases the process of sending task-related information to mobile workers and allows for workflow to be responsive and flexible.

Track and Locate Assets and Employees

The Indoor Positioning System locates and tracks Bluetooth devices, such as DMR/TETRA radios, Bluetooth tags, and other ‘always discoverable’ mobile devices. By installing strategically placed IPS beacons throughout the building, supervisors and dispatchers can easily track and locate important assets and employees within the facility’s coverage areas. Coverage can be designed to be comprehensive, monitor risk or safe areas, or track entries and exits of important doors and corridors.
Monitor the Well-being of Mobile Workers

Maintenance workers and security guards are two mobile groups that often work by themselves and are very important to the daily operations of all facilities. To ensure their safety, Zonith offers two personal safety applications: Man Down Notifier and Centralised Lone Worker.

With its intelligent calibration feature, MDN provides lone workers with proactive and reliable motion-based monitoring. When a radio tilts over a certain angle, a warning alarm will sound which will create a real alarm if not cancelled. Alternatively, CLW pings lone workers every few minutes to ensure they are responsive and well.

Automatically Activate Lone Worker Monitoring Based on Location

The Indoor Positioning System locates and tracks Bluetooth devices, such as DMR/TETRA radios. By pairing IPS with CLW, the lone worker monitoring application is automatically enabled when an employee enters a designated dangerous area or disabled when entering a safe zone. Location-based activation and deactivation of CLW ensures that lone workers are monitored only when they require the additional protection.

Link Call Boxes to Security Radios

The integration of call boxes to security guards’ radios is a great example of how RBX +Plus call groups add significant value to any radio network. When a distressed employee makes a call from an emergency call box phone, the RBX +Plus rings all radios from the emergency response team. The first available responder who picks up the call is automatically connected with the distressed employee, ensuring that the individual seeking help is looked after without delay.

Connect Radios to Telephony Allowing Seamless Communication

RBX +Plus allows for radios to make and receive private calls to external phone numbers and internal extensions on the PBX. The RBX +Plus has a rich graphic interface that simulates standard features found in cell phones. With RBX +Plus, a radio user never has to leave the production floor to communicate as all communication barriers are eliminated for the radio user. Talkgroups enable a phone user to communicate with a group of radios by dialing into the talkgroup’s extension. Doing this virtually transforms the phone into a radio and allows for seamless radio chatter between all talkgroup members. For example, the Director of Operations could communicate with all of the team supervisors on the plant floor by dialing extension 4500 from his desk phone. He would then be bridged into the call as if he was another radio on the talkgroup.