Industrial Automation Group

Based in Perth, Australia, Industrial Automation (IA) provides customers in mining, manufacturing, utility, agriculture, irrigation, and shipping industries with innovative solutions to meet their automation and control needs.

Mines Pay for Just What They Need With Remote Monitoring by Sierra Wireless AirLink® Gateways

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BUSINESS CHALLENGE

Working and digging in the vicinity of groundwater can be challenging formining companies. Massive dewatering pipes are used to extract water fromopen cut mine pits, with equipment rented at a daily rate. Unfortunately formining companies, they never know when they might hit groundwater, so theexpensive dewatering pipes are kept on-site – often sitting idle – in preparation for the unknown.

To alleviate the burden of daily fees for unused dewatering pipes, IndustrialAutomation was approached by one of its mining equipment customers tocreate a solution that would enable equipment usage tracking. This would allowthe equipment provider to charge a premium while also providing its miningcustomers with the satisfaction of paying only for the time the rented equipment was actually in use.

SIERRA WIRELESS AIRLINK® SOLUTION

IA developed a remote equipment monitoring solution powered by the SierraWireless AirLink® gateway. The solution is installed on each piece of fi eldequipment to allow transfer of usage data back to a central location for accurate hourly – instead of daily – charges.

“It’s a breeze to integrate Sierra Wireless AirLink products with third partyequipment,” explained Henk de Graaf, managing director at IndustrialAutomation Group. “We use Ethernet as the backbone, so it’s just a matter of plugging things in; it’s so easy.”

With its compact form factor, the gateway allows remote data collectionenabling integration within existing infrastructure and enclosures. The ruggeddesign of the gateway, as well as the wide temperature ranges in which it canoperate, ensures it is strong enough to perform in the harsh fi eld environments where industrial vehicles regularly operate.

RESULTS

Because of the remote usage monitoring enabled by IA’s wireless solution,its mining equipment customer has been able to move from a daily rentalfee model to a sophisticated new accounting system that allows them totrack actual machine usage. This not only allows the customer to accuratelycharge for usage, but it also allows them to track wear and tear on machinesto better plan for service and maintenance. Having the fl exibility to providedifferent pricing plans has also enabled IA’s mining equipment customerto attract clients such as the Boddington Gold Mine, which is the largestundeveloped gold mine in Australia and poised to become the highest producing mine over the next few years.

APPLICATION: REMOTE MONITORING

CUSTOMER CRITICAL CHALLENGE:

- More efficient use of equipment for extracting water from open mines
- Required tracking and transfer of equipment usage data from across Australia and overseas

SOLUTION:

- Integrated AirLink® gateways into mining equipment for usage tracking
- Provide persistent high-speed connectivity, remote data transmission, and a rugged design for use in harsh industrial environments

BENEFITS:

- Reliable connectivity for accurate equipment usage tracking and billing
- Ability to monitor usage from equipment spread across Australia and overseas
- Seamless integration with other monitoring solution components
- Improvement in customer satisfaction with payment for equipment usage and reduced idle machine time