CASE STUDY   MAINTENANCE MANAGER

A BRIEF LOOK AT THE BENEFITS OF IVOLVE'S MAINTENANCE MANAGER

This article looks at some real-world examples of how iVolve's *Maintenance Manager* module has been used at mine sites to save both time and money, providing a tangible and significant return on the investment to iVolve's customers.

BRAKE TEMPERATURES

Many customers use third-party alarming systems that trigger events before the OEM system, providing an extra level of safety for the machine. Unfortunately these third-party systems tend to be non-specific and will lock-out a truck without the operator knowing exactly why.

By consulting the iVolve software, maintenance staff can often save time by determining the cause prior to attending the machine.

In the case where the truck is parked for hours until someone is available to check it out, the brakes have cooled and the maintenance staff are unable to tell (with infrared sensors, for example) which brake is running hot. iVolve's *Maintenance Manager* gives a full history of all four brake temperatures, further reducing the diagnosis time.

In one instance at a customer site, an operator was being suspected of abusing a truck and frequently causing brake temperature alerts. The iVolve *Maintenance Manager* history, however, illustrated that the brake temperatures were showing very brief spikes, rather than the typical rise-and-fall over a longer period of time. The problem was diagnosed as an electrical/sensor fault and saved the operator from being incorrectly accused.

DOWNLOADS

Cat Downloads can provide a lot of benefit to maintenance operations, but there are numerous things that can go wrong, particularly because there are people involved with pulling up the truck, climbing on-board and executing the download. Laptops break, production won't release a truck, storage buffers fill, download files get lost - these are all common examples of what can go wrong. iVolve's *Maintenance Manager* automatically collects maintenance data in real-time and stores it in a database where it is available indefinitely for reporting.

PAYLOAD

Most people are aware of the benefits of the *iVolve FMS Production Manager* module in lifting average payloads per truck, but *Maintenance Manager* also plays a part in safely raising payloads. Using standard fault-finding techniques, it can take a considerable amount of time to determine the cause of chassis problem in trucks.

Most maintenance supervisors do not have the time to monitor the payload history of a truck, but the *Maintenance Manager* module assists in a Root Cause Analysis of the issue. Rack and Bias events can point to operator abuse, unserviceable suspension cylinders or poor road conditions - all of which will cause premature wear and tear on components.

BOOST PRESSURE

In another real example, *Maintenance Manager* showed a truck's Boost Pressure fluctuating wildly. Maintenance staff called up the operator to ask if he was getting any warnings, and the operator confirmed that he was receiving – and immediately acknowledging – *Boost Pressure Low* warnings.

The truck was immediately stood down for inspection and found to have a damaged turbocharger. If it had been left, and the turbocharger exploded, it potentially could have damaged the engine enough to require replacement. In this instance, *Maintenance Manager* saved the client hundreds of thousands of dollars in parts, labour and downtime.

"Maintenance Manager has an excellent set of features that can greatly assist in attending to minor problems quickly before they become a major cost."

Ashley Navin, Field Service, GB Auto Electrics