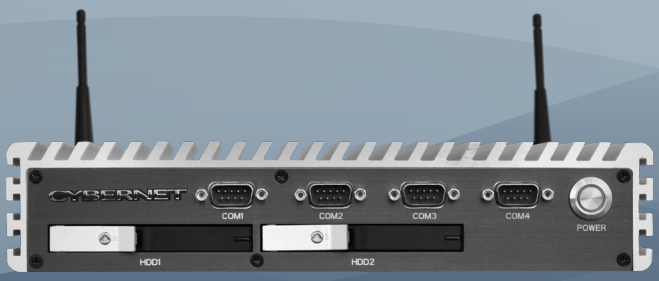
CYBERNET
When Reliability Matters

Industrial Case Study



Drill Bit Manufacturer Chooses Cybernet for Factory Floor

Customer Bio

Ulterra specializes in manufacturing PDC drill bits, and holds the top spot in North America for the gas and oil industries. With manufacturing plants and repair facilities located across the globe — from North America to South America and the Middle East — Ulterra is firmly ensconced as an industry leader.

ULTERRA

Ulterra Drilling Technologies, L.P.
Industry: Industrial
Product: Cybernet iPC R2ix
HQ: Fort Worth, TX

Challenge

Few factories are neat and tidy places, but milling drillbits creates a massive amount of metal particulate and graphite dust that tends billow through the air and creep into every tiny crevice. This includes the thin-client PCs that Ulterra Drilling used for tracking orders, inventory, and for guiding the entire manufacturing process. The PCs were dying practically as fast as Ulterra could replace them — each would last only two to three months before giving up the ghost. Ulterra ended up keeping a stock of spares on stand by to swap out the computers as soon as they died. Spending $300-$400 per unit every three months became untenable.

The problem with off-the-shelf, consumer-model PCs is that they aren't designed with hostile environments in mind. Their cooling fans sucked the graphite and metal particles right into the case, spreading conductive metal debris all over sensitive electronics. Ulterra needed a better solution, a computer that could handle the harsh rigors of the modern manufacturing process.

Solution

Ulterra began to research "rugged industrial PCs," and eventually came upon Cybernet Manufacturing's line of iPC models.

Ulterra's main plant in Fort Worth, Texas requested and received a pair of iPC R2ix mini rugged computers to put through their paces as demo units. When the iPCs arrived, they were immediately put to work in the unforgiving environment surrounding the drillbit mills and used around the clock by workers on the factory floor.

The Cybernet iPC R2ix's sealed case kept the components protected, and the fanless cooling technology prevented graphite and metal dust from being sucked right into the device. Their universal-mounting compatibility made them quick and easy to install virtually anywhere in their facilities.

Results

After four months without a single glitch, Ulterra saw the immediate value add and made their decision. They ordered 20 more units right to the same facility, and would eventually order more for all of their locations. Using Microsoft's standard System Center Configuration Manager, Ulterra's could image the new Cybernet units the way they've always done it and get the computers delivered, installed, and working on the factory floor often in the same day.

Ulterra reported that the VESA mounting options allowed the Cybernet PCs to be installed in multiple locations with no problem at all - they had to be flexible, because not every work station was exactly the same. The Cybernet machines have provided an immediate ROI. The first installed units have more than paid for themselves when compared to the commercial grade units they were having to replace every two or three months. Ulterra already have plans to fill their new Canadian manufacturing plant with Cybernet's rugged PCs and are upgrading their current facilities with Cybernet units as their old units fail.

> *"Half of our manufacturing site is in Canada, and those guys were down here and saw them and immediately said, 'we need some.' We're in the process of tearing out our old machines in Canada and putting Cybernet in."*
>
> - D.G., Director of IT and Operations
> Ulterra Drilling Technologies, L.P.