

Case Study

Vulcan Materials:

Vulcan Materials is a large producer of construction materials, manufacturing sand, gravel, crushed stone, asphalt, and concrete. They have more than 50 plants located in California, Arizona, and New Mexico with a second division of the company operating plants on the East Coast.



The Challenge:

Due to the nature of their business, primarily quarrying and rock crushing, dust, dirt and other airborne particles have always presented a threat to any electronics running at Vulcan Materials' plants. They had initially purchased Stealth computers to automate their plants, but had consistent issues with hardware failure. The Stealth computers they used had standard platter hard drives and fans that quickly became saturated with soot, dust, and dirt. Some of their hard drives, motherboards, and power supplies failed within the first year after purchase.

Furthermore, warehouse space was limited, and the Stealth computers were bulky for their shelves because they needed large enclosures and cooling devices to withstand the high desert temperatures. The final straw was the lack of timely support. Because Stealth support was located in Canada, they would oftentimes be quoted several weeks for repairs or replacement computers. Vulcan Materials needed something resilient enough to withstand the poor air quality and hot desert environments, but powerful

The Solution:

Vulcan Materials chose to go with the Cybernet IPC-R1 because of the fanless design and the solid state drives to avoid contaminants in the computers' builds. The computers made less noise for a quieter warehouse floor and came with side mounting brackets, freeing up desk and shelf space. The industrial grade components on the motherboard stood up against the desert temperatures and bad air quality.



“We’d open some of our old units and they’d be totally packed with dirt and fine dust. That definitely caused a lot of problems...That hasn’t been a problem with (the Cybernet) units”

Vulcan has also been upgrading their operating system from Windows XP to Windows 7, and the IPC-R1 can still run that OS as well as newer versions of Windows in the event they decide to further upgrade their systems.

The Result:

Vulcan Materials has been implementing the IPC-R1 over the course of the last several years. The same Cybernet computers that Vulcan initially purchased for their first plant are still operable today. They were so satisfied with the products that they began replacing all Stealth computers in their plants. Unlike with their previous vendor, in the rare instances there has been a need for service, turnaround time has been a matter of days rather than weeks. Vulcan will continue to systematically upgrade all of their computers to Cybernet models until all of their plants have been automated. End users have had no complaints with the computers’ ability to run the software. Most importantly however, because of no moving parts on each computer and industrial-grade, quality components, Vulcan’s has seen a positive ROI through the extended lifespan of the computers and the savings on maintenance costs.

