IS THAT A SHEEP? NO, IT'S A COMPUTER.
COTTON LINT ABOUNDS AT TEXTILE MILLS, POSES PROBLEMS FOR MACHINERY.

As you look across the valley in North Carolina, you see roughly 20 factories belonging to our customer, a textile manufacturer specializing in cotton. Each of these textile mills is mechanized to streamline production and increase labor efficiency – every aspect of the manufacturing process is tracked to monitor progress and effort. But in order to do so, there were environmental and operational roadblocks that needed to be overcome.

Operational

It's almost 5 o'clock and there's a traffic jam in the factory. Thousands of people work in the plant, and at the start and stop of every shift and lunch break they form a line at the only time clock in the building. In order to clock out at the time they're supposed to, employees stop working as much as 15 minutes early and start lining up. If there was a time clock in each work cell, employees could work their full shift and still get out on time with no loss of labor for the employer.

Tracking labor may start at the time clock, but doesn't end there. Work-in-progress (WIP) applications also present the need for badge readers (and barcode scanners for that matter) in each work cell. At the loom weavers and dye areas, employees must track job number, material type, processes and any down time that would affect the production time allocated for the job. The work-in-progress (WIP) tracking makes sure the correct labor for any operation, clean up, repair, etc. is applied to the specific job simply by scanning a barcode.

Here's how it works: employee swipes badge to bring up job (i.e. work order) and scans the work order barcode on the paperwork given to them. As labor events happen, the employee scans a barcode that corresponds to the event (there's a binder full of laminated barcodes). When the end product is complete (be it a shirt, dress, pant…) they will have captured the real labor costs of making it. But, without a badge reader (and don't forget the barcode scanner) in each area, WIP is M.I.A.

If you're thinking this is just a matter of quantity, think again. It's largely about quality – more specifically durability.

Environmental

Inside textile mills, the hustling sound of thousands of looms shuttling back and forth is deafening without earplugs. It is extremely loud. It's also extremely dusty. Cotton lint sticks to your pants, your shirt, your hair…anything it comes in contact with. In some places, it is necessary to wear a mask to prevent breathing it in. Cotton lint collects on top of

Listen to how loud just one cotton loom machine is and multiply by hundreds if not thousands.

machines, turning computers into sheep. Okay, not literally, but it is so bad you have to huff and puff and blow the cotton off in order to work on it. That is, if it still worked. When fans get clogged with cotton lint it causes hard drives and any other spinning parts to stop working.

The high level of cotton is worsened by high levels of humidity. Because of the amount of water and other liquids used in finishing processes like scouring, de-sizing, bleaching, dyeing and shrinking, it is extremely hot and damp inside the mills. The dampness alone is so heavy it causes the ports on the back of devices to rust and eventually kills the electronics.

Solution

Our customer needed a rugged computer that could withstand the environment, be used for multiple job applications and be stationed at each of the looms and dyeing and thread machines, as it would be used as a time clock and WIP tracking device.

INDUCOMP brought in a sealed, industrial computer with a barcode badge reader, Motorola laser gun and elastomeric sealed keyboard. The units had a cover plate over the area where the ports were. They each had a low processor that was heat-sinked to the back of the case. This allowed the device to be blown off or wiped down without damage. The units were mounted on a swivel-forward-and-backward, rugged desk stand that fixed to either machine or workstation desk. Our solution provided the extra advantage of carrying a small footprint that fit comfortably in the workspace.

Don't be sheepish *when it comes to putting a computer into your hostile environment; use a proven, reliable* INDUCOMP industrial computer*.*

Call us today and get started on a custom solution to your unique needs!

(636) 257-2111