HVLS fans are a great addition to any large facility or warehouse. They move air efficiently to keep employees comfortable and productive, help keep products dry to enhance sustainability and are an energy efficient supplement to expensive HVAC systems. But for companies that have 10, 20, even 30 or more fans, managing all those individual settings on a daily basis, is not the best utilization of time or resources. Industrial networked HVLS fan control systems, such as iFAN™ by Serco, can take you out of the business of managing fans and put you back into doing what you do best, managing your facility.

This was certainly the case for Roger Tudor, Maintenance Manager for the Dillard’s Fort Worth Distribution Center. This massive facility boasts more than one million square feet of warehouse storage space with over 70 conveyor fed dock positions. With only a portion of the facility utilizing air conditioning in the hot summers, Dillard’s and Tudor were looking for a way to keep the interior temperature down to create a more comfortable, safer work environment.

Keeping a facility of that size cool and comfortable in the triple digit heat is tough on any HVAC system, and that heat can be even tougher on employees. It was ultimately the need to conserve energy and improve employee comfort and productivity that drove Tudor to seek out not only installing HVLS fans, but also a networked fan control system that would allow for hands off fan management.

“The heat really became an issue in the summer time for employees working on the docks,” Tudor said. “We became concerned with not only their productivity, but also their safety, which is why we initially sought to add the fans.” he added.

Tudor worked with David Little, HVLS fan specialist with Serco distributor, Southern Dock Products Dallas, when he decided to install twenty-one, 24’ Serco VELOCITY™ HVLS warehouse fans to maintain a cooler temperature in the massive facility. “The deciding factor for me, was visiting the state-of-the-art fan lab at Serco’s headquarters in Dallas,” according to Tudor. “Actually seeing a side-by-side comparison of the Serco VELOCITY and their leading competitors sealed the deal for us as the Serco fans really just moved more air more efficiently.” he said.
In addition to installing the Serco VELOCITY fans, Tudor and Dillard’s also opted to utilize iFAN, the best in class industrial networked fan system to effortlessly control the fans located across this colossal facility. The system allows Tudor and his team to network their Serco HVLS fans to control them from a single, centralized interface. The science behind this unique networked fan control system is the award-winning 4SIGHT™ Management System that provides for increased levels of visibility and in turn productivity and efficiency. iFAN takes care of all the hard work, ensuring Dillard’s receives the maximum levels of performance and energy savings from their HVLS fans.

After the installation of their twenty-one fans and iFAN Networked Fan Control System, Tudor quickly realized the positive impact they were having on the comfort and productivity of employees and decided to add five more Serco HVLS fans to their operations after only three months.

These additional fans were easy to install and even quicker and simpler to integrate into their existing iFAN system. With very simple programming steps, the fans were up and running as if they were part of the original installation. “Adding the extra fans was a very seamless process, in fact, it seemed like it was all part of the original installation.” said Tudor.

The iFAN control system Dillard’s selected accommodates their twenty-six HVLS fans and provides employees with increased comfort and the facility with energy efficiency year-round. Tudor and his team can manage the fans from the all-in-one, high definition touch screen computer located in a locked storage area accessible only by authorized maintenance personnel. The controls even include custom graphic displays of the facility and fan locations to easily pinpoint a fan’s exact location if adjustments need to be made.

The control screen allows Tudor to easily make adjustments to individual fans, fans in predetermined zones or every fan in a facility at once. “We really like the features that allow us to control fans in zones. For example, we keep the designated maintenance shop area at a much lower fan speed to prevent blowing the chemicals and paint that we work with all over the facility.” Tudor mentioned.

The navigation buttons on the screen can turn the fans on or off, control temperature and even manage timer settings. “We run two shifts per day, six days a week and managing fan settings all day, every day just is not an option.” Tudor admitted. “With iFAN, the fans are programmed to turn on at 6:00 a.m. at 30 percent power and increase 10 percent each hour on their
own as the day warms up until they reach their optimal, energy efficient setting. I just set it and forget it." he added.

Centralized fan controls restrict access to ensure unauthorized employees are not changing the fan's settings. Constantly changing fan speeds and adjusting them from their most efficient settings, generally around 70 percent power, can lead to substantial decreases in your energy saving potential which is where iFAN comes in. "The energy savings we’ve seen has been substantial. After installing the VELOCITY HVLS fans and iFAN, we have been able to raise the thermostat in the summer without experiencing any negative effects or unhappy employees," stated Tudor.

Obviously summer is where the most significant savings has been realized for Dillard’s, but they have also been able to see savings during the colder months. While the winters in Texas tend to be very mild, there are always a few weeks each year where temperatures dip below freezing. During those times, Tudor simply switches the fans to run in reverse with a simple touch of the iFAN screen. The fans then push the warm air trapped at the ceiling down to ground level to create year-round savings and comfortable employees.

In addition to the convenience of year-round employee comfort and energy savings, Dillard’s has also experienced greater peace of mind when it comes to fire suppression, facility sustainability and protecting millions of dollars of inventory daily. iFAN may not be able to help prevent fires but it can certainly assist with fire suppression and fire code compliance. iFAN has the ability to interconnect with fire suppression systems to immediately shut off power to the fans when a fire alarm is triggered allowing the fans to stop completely within 90 seconds of activation.

"After installing the VELOCITY HVLS fans and iFAN, we have been able to raise the thermostat in the summer without experiencing any negative effects or unhappy employees."

- Roger Tudor, Maintenance Manager for Dillard’s DC, Fort Worth
Company: Dillard’s Fort Worth Distribution Center

Challenge: Keeping employees cool, comfortable and productive

Solution: Serco VELOCITY™ HVLS Fans, iFAN™ Industrial Networked HVLS Fan System by Serco

Industry: Retail Distribution

Geography: Fort Worth, TX

“After installing the VELOCITY HVLS fans and iFAN, we have been able to raise the thermostat in the summer without experiencing any negative effects or unhappy employees.”

- Roger Tudor, Maintenance Manager for Dillard’s DC, Fort Worth

HVLS fans are designed to keep employees comfortable and productive as well as serve as an energy efficient supplement to any HVAC system. Getting the most out of the fans was the key to increasing Dillard’s productivity and energy efficiency, and installing the iFAN industrial networked HVLS fan control system ensures that the operational efficiency and cost savings goals they set up for their fans and facility are being realized.

“Our employees are more comfortable and productive than ever. We used to have 48 floor fans that they would fight over daily,” Tudor laughed. “Moreover, we are experiencing increased energy savings and an all-around great experience with our Serco VELOCITY HVLS Fans and iFAN.” he said.

But managing Dillard’s fan operations and providing tracking metrics that ensure optimal performance is just part of what iFAN can do. The system also provides for centralized troubleshooting that can quickly identify operational issues and provide a variety of options for resolution. For example, giving users the ability to open the fan’s manual on screen to attempt to fix the problem internally is the first line of defense. If that method of resolution fails, the control system can even send a work order on behalf of Tudor to the local service provider with the diagnosed problem making sure they are prepared with the right parts to get the fans up and running quickly.