



**BIG ASS
FANS**

CASE STUDY

AUTOMATION NEVER FELT SO COOL

CommandSense[™] is a comfort-first building automation system designed for industrial spaces in challenging environments. Driven by real-time sensor data, CommandSense takes control of both Big Ass Fans and your existing ventilation system to ensure year-round comfort.

YEAR-ROUND COMFORT IN EVERY ZONE

📍 Lexington, Kentucky

Keeping people comfortable in industrial facilities is a crucial, but often overlooked aspect of manufacturing. When people are comfortable, they're healthier, happier in their work and more productive.

In a tough job market, a comfortable workplace can be key to workforce retention and productivity. And with new heat stress regulation, keeping the workplace cool is a matter of compliance.

But many industrial spaces are not particularly well

insulated and are prone to big temperature fluctuations when the weather changes. With high ceilings, heavy machinery and loading docks in the mix, it becomes even harder to maintain comfortable conditions. And, of course, there's no HVAC.

That was the situation at the factory where we first implemented CommandSense[™]. Located in Lexington, Kentucky, where the average temperature in July is 87°F with 50% humidity*, it was the perfect site to stress test the solution in real working conditions.

*according to ASHRAE

To keep staff cool and comfortable, the facility is equipped with overhead HVLS and directional Big Ass Fans combined with the building's legacy intake and exhaust ventilation system. Heaters are used to keep the building warm when things get chilly in winter. Each of these systems was operated independently, and ventilation in each zone was manually adjusted when the weather changed.

We installed CommandSense to help the facility operations team move from reactive mode to being informed and in control. CommandSense controls fans and ventilation automatically, based on sensor data and predetermined thresholds, with sensitivity to adjust temperatures in each zone across the facility.

With the whole system unified and working together, the building was consistently more comfortable, while energy usage decreased in each season of the year. With detailed performance visibility, including number of rotations for each fan, it became easier to get ahead of downtime and predict which units needed maintenance.

CommandSense's data visualization dashboards allow you to see what's going on, how you've progressed, and where you can improve. And in this case, the results were clear: fewer heat stress incidents, reduced energy costs, and much less time messing around with the ventilation.

THE NUMBERS DON'T LIE

**MITIGATE HEAT
STRESS RISK**

BY UP TO

60%

SAVE UP TO

\$1M

IN 5 YEARS

**BOOST EMPLOYEE
PRODUCTIVITY**

BY UP TO

50%

3.5x

**LESS OPERATING
COST THAN HVAC**

4.9x

**LESS ENERGY THAN
TRADITIONAL HVAC**

“With CommandSense, we no longer need to manually adjust fans and heaters. The system's real-time data and remote monitoring capabilities have freed up valuable time for our team.”

