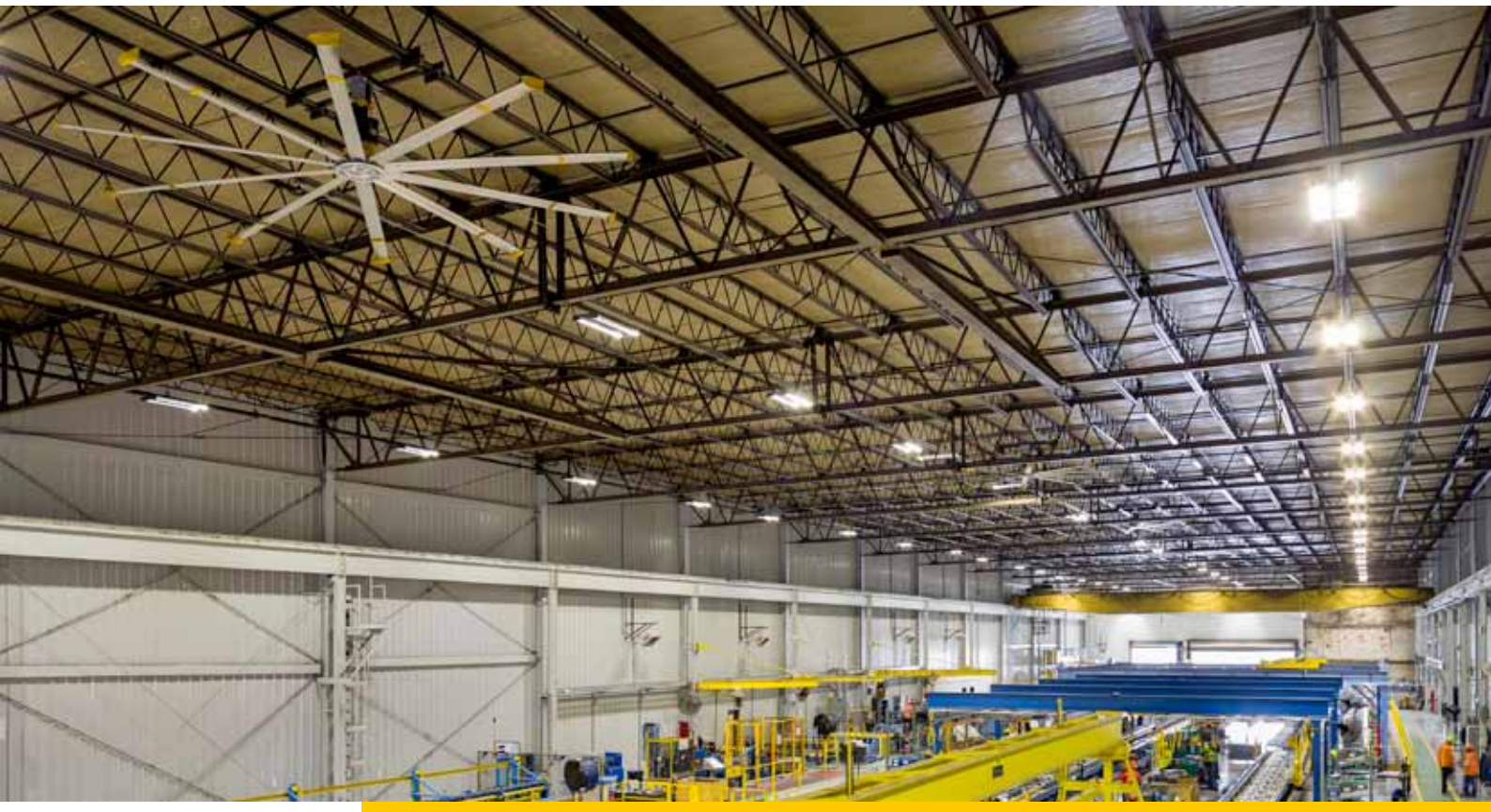
HVLS FANS INSTALLED IN FACILITY WITH OVERHEAD CRANE



BIG ASS® FANS

No Equal

HVLS FANS INSTALLED IN FACILITY WITH OVERHEAD CRANE

Company provides custom airflow and lighting solution

The Problem

BlueScope Buildings is the world's leading supplier of pre-engineered metal buildings, fabricating components in 18 manufacturing plants on four continents. One such plant in North Carolina, USA is where the company fabricates long-bay trusses and other structural components from hot-rolled steel. In summer, workers at the plant coped with stiflingly hot conditions, but the sheer size of the facility made air conditioning too costly to consider. Small floor fans didn't provide nearly enough airflow to keep all 54 workers cool. Managers knew high-volume, low-speed fans provide cooling airflow facility-wide and are used in similar buildings throughout the world.

"I'd seen Big Ass Fans before, and I always wanted to try them," said David Volk, plant manager. However, Bluescope was concerned that the building's overhead bridge crane, which only left a gap of less than 2 metres between the ceiling and the top of the crane, would prevent them from installing fans.

The oppressive heat in the summer was made worse by outdated metal halide lights in other parts of the facility. Metal halides generate about 175°C of heat, which adds up quickly – 25 standard 400-watt metal halide fixtures produce about the same amount of heat as a 45,000 BTU gas-fired heater. Additionally, metal halide fixtures use twice as much energy of the most efficient modern lights, and require nearly constant maintenance. Lamps were constantly burning out, requiring workers to either work in low-light or stop production while new lamps were installed.

Bluescope needed to improve comfort and visibility, and the project needed to be done quickly to minimise impact on comfort and productivity.

The Solution

Bluescope enlisted the help of Big Ass Solutions, the parent company of Big Ass Fans and Big Ass Light, to provide facility-wide comfort and solve the lighting problem, too.

Operating under a tight schedule, Big Ass Fans maneuvered around the bridge crane to install four 5.5m Powerfoil X2.0 fans to better circulate the air, eliminating the need for ineffective floor fans.

Big Ass Fans offers a range of mounting options that allow the fans to be hung from numerous type of supports. In Bluescope's case, the fans were mounted directly to the bar joists that span the length of the building, allowing plenty of room for the crane to pass underneath.

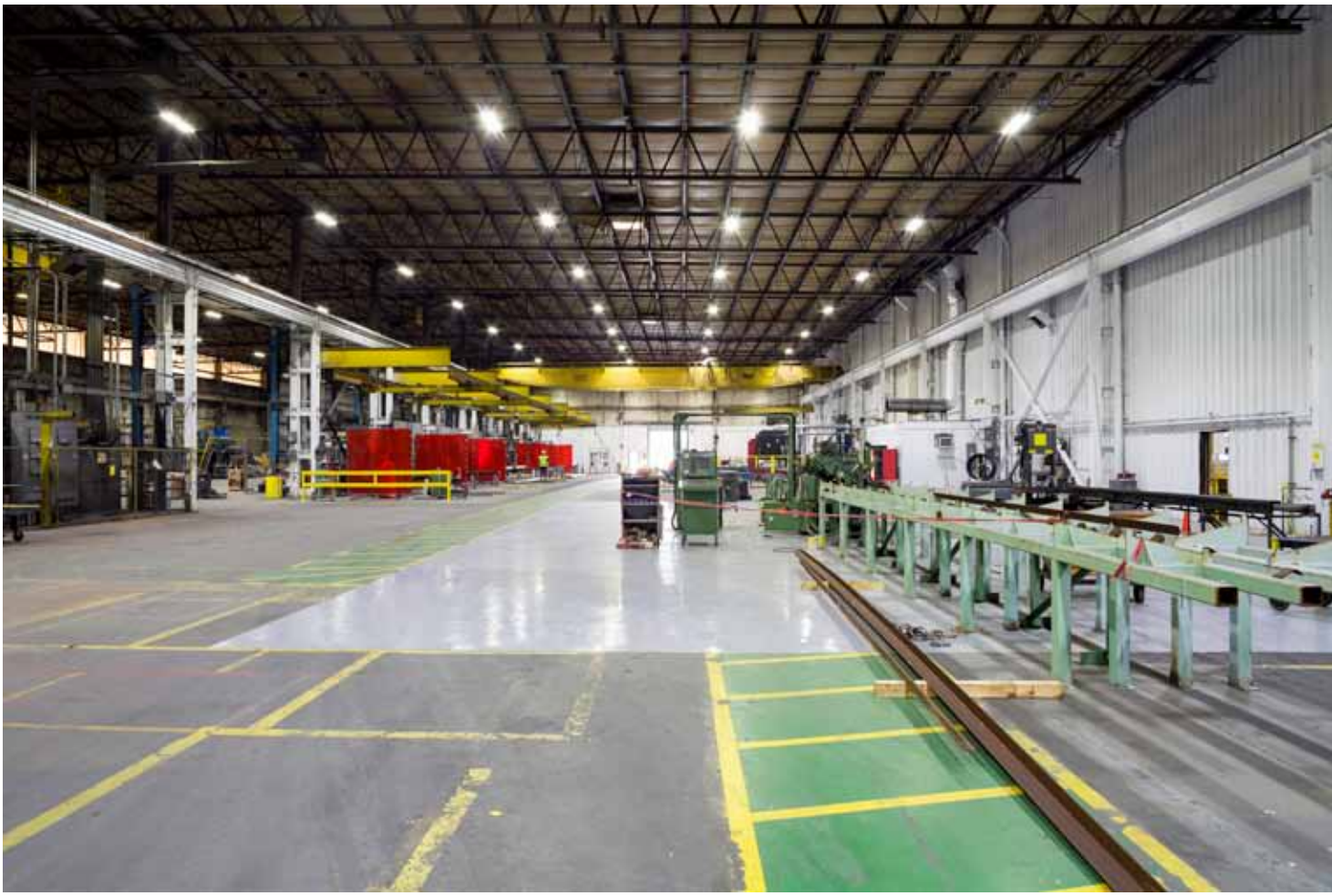
Big Ass Fans' in-house engineers made sure the fans were sized correctly, as well – smaller fans might not have provided facility-wide airflow, while larger fans might not have operated at peak efficiency due to being closer to the ceiling than normal.

"The fans work. Employees and visitors all say they make a huge difference," Volk said. "They give people the feeling it's much cooler during the long summer months."

Volk also ordered Big Ass Light LED fixtures for three buildings at the site. Designed to require no maintenance, the fixtures have a rated life of 150,000 hours – about 17 years of 24-hour-a-day operation – without requiring any more maintenance than the occasional cleaning.

Additionally, Big Ass Solutions minimised downtime for Bluescope. An onsite survey was completed within two days, and fans and lights were installed within three weeks. A Big Ass Solutions representative was on site to guide the process.

Workers are more comfortable because of the fans, the new LEDs produce more consistent light while lowering energy bills.



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