



illuminating savings 24/7



Astro Shapes to save \$122,000 each year with GE Lighting
Albeo™ LED high bay fixtures illuminate production space day and night

THE SITUATION

Astro Shapes, located in Struthers, Ohio, extrudes aluminum for architectural-grade, commercial and residential markets, including light fixtures. As a company that operates 24/7, Astro Shapes counts on reliable light fixtures to illuminate its production space. The business also looked to improve its energy use because the lights are always on. So, when its leadership realized it was time to replace the legacy lighting, the easy choice was to use a product Astro Shapes played a part in creating.

THE SOLUTION

Plant Manager Bill Cene was motivated to replace the old lighting with more energy-efficient fixtures that would create a consistent look in the plant while reducing energy and maintenance needs. Senior Lighting Consultant Joe Stoner, with Lighting Services Inc., provided a detailed analysis and comparison of different manufacturers' LED light fixtures, including their wattage, efficacy and annual energy cost. One fixture came out on top: GE's Albeo™ ABV1 high bay light fixture, which has a superior efficiency of 137 lumens per watt. And since Astro Shapes extrudes components of the Albeo fixture, it was a "win-win" decision to proceed with the installation.

The legacy lighting was replaced in 2014 with 606 Albeo LED high bay light fixtures. Three lumen packages were used in the facility to best suit the ceiling heights, which ranged from 18 feet to 35 feet.

"The light levels averaged from 9 to 25 foot-candles (fc), and now we're at 45-plus fc. We're noticing that people are more enthusiastic because of the brighter environment."

- Bill Cene, Astro Shapes Plant Manager

The new Albeo fixtures are expected to provide annual energy savings of more than 1.85 million kWh, which translates to more than \$10,000 in monthly cost savings—or \$122,000 each year—compared to the old lighting. Additional savings are found through diminished maintenance needs, calculated at nearly \$7,000 annually, due to the rated 100,000-hour life of the Albeo fixtures compared to a rated 20,000-hour life of metal halides.

For more information, visit lighting.com/industrial.



OPERATING IMPACT

- More than \$10,000 in monthly cost savings
- Increased foot-candle levels to 45 fc, up from a range of 9–25 fc.



ENVIRONMENTAL IMPACT

- Diminished maintenance needs due to the rated 100,000-hour life of the Albeo fixture
- Nearly \$7,000 savings annually



imagination at work