

## Phoenix, AZ EXOTIC METALS FORMING

**69%** REDUCTION OF ANNUAL ENERGY USAGE

**39%** INCREASE IN OVERALL LIGHT LEVELS

\$82,000

COMBINED ANNUAL ENERGY AND MAINTENANCE SAVINGS



**Lighting & Electrical Services** 

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Award-Winning Manufacturer Takes An IRON FIST TO HIGH ENERGY COSTS and Forms New Efficiencies With Solis

## The Opportunity

Founded in 1966, Exotic Metals Forming has worked relentlessly to establish itself as the trusted source for complex hard-metal fabrications in the aerospace and defense industries. With over 50 years of design and manufacturing expertise, they focus on delivering innovative technical solutions and world-class customer support.

So, it came as no surprise when this rapidly growing company started searching for new lighting solutions for its Phoenix Campus that could complement the high standards they have set for manufacturing excellence. This strategic location for the company makes up almost 92,000 sq. ft. of manufacturing and warehouse floor space under one roof. Lighting conditions at this facility had deteriorated to the point that crucial areas in manufacturing, unloading positions, and inspection zones had critically low light levels. It was not uncommon to see metal halide high bays and fluorescent tube fixtures out of commission or with different color temperatures (CCT) intermingled.

Aside from the high energy consumption and ongoing maintenance issues associated with lighting, employees had a difficult time staying productive with the diminishing visibility in the facility. With both energy efficiency and safety becoming significantly important, the team at Exotic Metals Forming quickly sought a new lighting system that could make a substantial difference overall for the business. Considering the size of the facility and the hours of operation, upgrading the lighting would be a logistical challenge. Therefore, finding a qualified facility solutions provider to install a new lighting solution without interrupting operations was crucial.



THE NEW LED LIGHTING UPGRADE HELPED TO ESTABLISH A SAFE ENVIRONMENT AT NIGHT FOR BOTH EXOTIC METALS FORMING EMPLOYEES AND VISITORS.

## **The Solution**

After vetting multiple vendors, the team at Exotic Metals Forming chose to partner with a nationally recognized energy service company (ESCO) who then enlisted the lighting experts at Solis USA. They knew that with more than 20 years of lighting and electrical maintenance projects under their belt that Solis USA would be the right choice to transform the campus with the appropriate energy-efficient lighting solutions. The team worked collaboratively to develop a turnkey solution that could be deployed very quickly throughout the facility without interrupting essential operations. Their primary goals? A lighting system that would focus on improving light levels and eliminate maintenance while reducing energy consumption.

For interior spaces, Solis USA would retrofit 332 metal halide high bays (458W each) with new LED high bays with a slim form factor. Not only were they designed for large mounting heights, but they would also produce more light in critical areas while delivering the footcandles on the ground necessary for employee tasks. They would also go on to replace aging T8/T12 fluorescent tubes in over 565 fixtures with new energy-efficient Type B LED tubes as well.

Moving to the outside, they would retrofit a mix of legacy fixtures that consisted of HID canopies (77W), high-pressure sodium wall packs (275W each), and metal halide pole lights (458W each) with new LED architectural luminaires. By the end, the team would complete a one-for-one replacement of 985 fixtures throughout the campus with LED technology that consumed less than half of the original amount of energy.

Overall, Exotic Metals Forming was thrilled with the entire installation process, the ongoing support, and the professionalism that the team at Solis USA brought to the table.



## **The Benefits**

With the new LED lighting system in place, the Phoenix Campus is now seen as the gold standard for energy efficiency for the rest of the company - with a multitude of benefits to show from it! The enhanced quality of illumination was immediately well received and made a noticeable impact on employee safety, morale, and the efficiency of operations.

Visibility has dramatically improved thanks to the almost 39% increase in light levels and overall uniformity. Employees have expressed how much safer they felt moving about the property, how it made them more productive, and that much easier to do their job. They were most excited that they no longer had to worry about maintenance associated with replacing lamps and ballasts in the facility for many years.

In addition to a reduction in maintenance, Exotic Metals Forming is enjoying the immediate financial impact of the energy conservation effort around the facility. They have reduced their energy usage up to 69% annually, and combined with the maintenance savings, amount to nearly \$82,000 annually.

# SOLIS

#### **Lighting & Electrical Services**



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### **About Exotic Metals Forming**

Exotic Metals Forming is a division of Parker Aerospace and a leader in state-of-the-art, high-temperature, high-strength sheet metal designs and fabrications for the aerospace and defense industry. For more information about Exotic Metals Forming, please visit: <u>www.exoticmetals.com</u>

### About Solis USA

For more than 20 years, Solis USA has been the leading provider of energy conservation services, as well as lighting and electrical maintenance throughout the western United States. For more information about Solis USA, please visit: www.solisusa.com