

ALUMCO

CASE REPORT



About Alumco

Size of Facility: 19,992.23 ft²

Alumco is an ISO 9001:2015 certified foundry that specializes in commercial, industrial and military aluminum castings. They are a company with over 50 years of aluminum foundry experience and focuses on continuous quality improvement and exceeding customer expectations.

They have worked with many companies such as Dirac-Delta Technology, Slacan Industries and Environ Mills. For these clients, Alumco was able to incorporate aluminum into existing products to create more efficient manufacturing of these products.





Problems

Upon conducting an energy assessment for Alumco, Haneco's consultants found a number of issues regarding the facility. There were many large and heavy machines in the plant making it difficult to perform maintenance. This resulted in higher annual maintenance costs in addition to the large hydro bill caused by operating metal halide lights. This is because the existing fixtures consumed far more energy than that of fully retrofitted LED fixtures. Moreover, the facility had too many fixtures and very few lights which resulted in a very poor and inefficient lighting environment overall.

Outdated Technologies



1000W/400W MH High Bay Fixtures

MH lights used in warehouses and larger facilities take about 15-20 minutes to reach their normal operating temperature. MH lamps can only last between 6,000 to 15,000 hours whereas LEDs can last from 50,000 hours to 100,000 hours. There would need to be 2-5 metal halide lamps to equate to the lifespan of one LED.



Solution

The project was completed within one week. A major challenge we ran into was the floor space in the plant. Many of the machines, if not all, were built into the ground and could not be moved around. This made it very difficult for our electricians to navigate around the plant using the boom lift.

Haneco provided Alumco with a turnkey solution in order to immediately start saving money after installment. Alumco's maintenance costs decreased to virtually zero capital dollars, and the outcome as a result, are continued savings translated onto their monthly hydro bill.

Updated Technologies



350W/160W LED High Bay Fixtures

LED lighting is advantageous compared to HID lighting in many ways.

LEDs have a longer lifespan without deteriorated the quality of brightness and colour.

The maintenance and energy costs are decreased substantially. Also, LED lighting is more durable under extreme weather conditions and temperatures. This is because HID lights usually need to draw more power to produce the same amount of light; unfortunately, this results in the production of heat.

Results

Converting to LED lighting poses many benefits to any business. LED lighting provides constant brightness and consistent colour throughout its lifespan, while HID lighting will deteriorate in brightness as well as change in colour as time progresses.

For Alumco, upgrading to LEDs increased the lifespan of their lights from 6,000-15,000 hours to 50,000-100,000 hours, decreasing maintenance costs to nearly zero dollars. Haneco's certified staff also removed and disposed of all the mercury that was emitting from the old HID fixtures.

On top of the annual savings, Alumco received a rebate through the provincial government SaveOnEnergy program which covered a part of the project costs.

ANNUAL ENERGY SAVINGS

178, 431 kWh

GOVERNMENT REBATE

\$8,380

PAYBACK PERIOD

2.45 YEARS



ABOUT HANECO

WHY CHOOSE US?

Haneco Canada Inc. is a part of a multinational LED manufacturing expanding from South Australia, which is committed to creating a more sustainable future through energy efficient products.

With a proud history of efficiently retrofitting multiple businesses with LED alternatives in its home base, Haneco Canada can offer a wide range of products to meet the majority of lighting needs and utilize our technology to meet individual client needs by providing the best and most cost efficient solutions.

CONTACT US



(905) 604-8335



info@haneco.ca



www.haneco.ca



215 Shields Court, Unit 3
Markham, ON L3R 8V2