

GMB Lighting and Trading

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CASE STUDY:

**128th Air Refueling Wing,
Mitchell International Airport,
Milwaukee, WI**

SOLUTION DELIVERED



PROJECT OVERVIEW

Problems Encountered

A large percentage of 400 watt metal halide street side fixtures had burned out making the main entrance to the base very dark increasing concerns over safety and security. The facility manager for the base, along with their electrical contractor, jointly decided now was a good time to explore new energy saving LED technology.

Switching over to LED light engines and replacing the existing metal halide bulbs and ballasts, the airport would reduce their outdoor lighting costs immediately.....by 50-70% since LEDs use a fraction of the power. Along with their extremely long life of 80,000 hours.....the airport would reap additional savings on labor and maintenance costs since LED's last 4-5 times longer than metal halide bulbs.

Since the installation of 8 new LED retrofit kits into the existing fixtures, the airport staff are thrilled with the amount of light output at the main entrance; the enhanced whiteness of the light provides for improved security when looking at security monitors; and the very wide beam spread has eliminated the need for two fixtures/poles nearest to the guard shack.

| Current Fixture | New LED Kits | Improvement |
|---------------------------------|-----------------------------|-----------------------------------------------------|
| 8 - 400W Metal Halide | 8 - LED Industries G2-6 | More light, Better Quality Light, Improved Security |
| Total Input Watts = 425 | Total Input Watts = 113 | 73% Watts Saved (312W) |
| Annual Energy Cost - \$1,870 | Annual Energy Cost - \$425 | \$1,445 (77%) |
| Maintenance and Labor - \$2,800 | Maintenance and Labor - \$0 | Maintenance and Labor Savings \$2,800 |



Mr. Mike Day, Account Manager for D'Nesco Electric Company in Milwaukee, WI. Gladly reports that....."The facility manager for the 128th Air Refueling Station was interested and very knowledgeable about the advantages of LED lighting systems and was very eager to take advantage of the cost savings they would see by switching from metal halide systems to the newer LED retrofit kit technology. Since installing the new LED kits, we found out that we didn't need to use the two light poles nearest the guard shack because the LED kits nearby threw a much wider beam pattern than expected. This resulted in a bigger cost savings and faster ROI than we had expected."