

# Dave Littleton Ford – Smithville, MO Plasma Lighting Retrofit Case Study

#### **About the Client**

Dave Littleton Ford is a family owned dealership in Smithville, MO since 1969. The Blue Oval Certified Ford dealer provides sales, service, Ford parts, and accessories. Littleton Ford is home of KC's best prices on new and pre-owned Ford vehicles.

### Project Cost/Savings...

Total Cost: \$37,719

Utility Rebate: \$7,299

Accelerated Deduction: \$16,000

Net Price: \$24,820

Annual kW Savings: 79,288

Annual Energy Savings: \$9,770

Projected R.O.I.: 30 months



#### Project Features...

#### **About the Project**

Reduced fixture count

- •Replaced (16) 1000W 1-for-1 with ST400 plasma fixtures
- •Replaced (24) 400W with (6) ST400 plasma fixtures
- Upgraded (12) 1000W shoebox floods with pulse start technology
- •65 percent of project cost paid with rebates and incentives

#### Savings

- Cut demand usage in half
- •Reduced 146,799 pounds of carbon dioxide
- •Equivalent to annual greenhouse emissions from 7,465 gallons of gasoline or electricity used in 8.3 homes
- •Annual utility and maintenance savings of more than \$9,700

#### About Worldwide Energy...

As commercial energy efficiency experts, we help our clients minimize utility expenses with energy efficiency lighting, efficient heating & cooling, and building envelope solutions.

Our efforts focus primarily on the areas that provide the greatest utility cost savings and where financial incentives create a rapid return on investment.

Worldwide Energy offers a total turnkey solution; utility rebate and Federal EPAct filing services (provided at no additional charge); complete design & installation services; recycling and project financing. Our services usually have a 2 year or less return on investment.

## **Dave Littleton Ford**

1098 S. US 169 Highway, Smithville, MO

#### **Client Objectives**

Dave Littleton Ford had several objectives including:

- Attractive lighting to show case their auto offerings
- Reduced energy consumption
- Reduced annual maintenance expense
- Professional installation in a limited time frame
- Rapid return on investment

#### The Scope of Work

Dave Littleton Ford is a certified Ford dealership in Smithville. They have a large outdoor showroom that needed new lighting to display their inventory in a more attractive light, while saving energy.

A total of 40 - 1000 and 400W HID light fixtures were replaced with 24 Plasma fixtures and 12 1000W floods were upgraded to pulse-start HID technology. The light emitting plasma (LEP) fixtures produce bright, full color spectrum light for beautiful display qualities with a broad distribution, so fewer fixtures were needed to produce the desired light levels.

Littleton Ford received over \$7,000 in utility rebates, and received a bonus depreciation deduction of about \$16,000. The dealership will save \$9,770 annually with a return on investment of 30 months.

#### **Recommendations & Benefits**

**Better Visual Acuity** – the specified LEP fixtures will result in significantly higher visual acuity and color rendering; the LEP technology provides high fixture efficiency and up to 20,000 lumen output.

**Reduced Maintenance, Repair and Replacement Expenditures** – the plasma lighting is maintenance-free up to 12 years with 50,000 hour lamp life resulting in lower maintenance costs.

#### **After Photos**



