



## PROJECT SHEET

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**PARSONS ELECTRIC, INC.**

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LEXINGTON, KENTUCKY 40511  
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### **KENTUCKY ADVANCED FORGE, LLC (KAF)**

NEW MANUFACTURING FACILITY  
GEORGETOWN, KENTUCKY  
34,169 sf

#### **PROJECT DESCRIPTION:**

KAF manufactures forged crude materials for precision shapes in the automotive industry. The project consisted of a new manufacturing facility adjacent to their existing facility within Aichi Forge and Gear Works.

The facility features conventional steel construction with CMU wainscot, metal siding, 2-story office, 48 foot tall high bay, and production line with press pit. The interior consists of two forging lines (one future), loading docks, semi-truck drive-thru, parts storage, open office areas, conference room, break rooms, computer room, locker rooms, restrooms, and electrical mezzanine. Parsons provided design/build services for the lighting, power, and fire alarm systems, preparing all construction drawings and providing installation of the electrical systems.

A new 300 amp, 12.47 KV service was provided. Power distribution system consists of an outdoor 15 KV switchgear lineup, 2500 KVA unit substation and 1500 KVA pad-mount transformer dedicated to the induction heater. The power distribution system also includes a 15 KV induction heater switch, (2) 225 KVA transformers, motor control center, and (6) panels. Parsons designed a cable tray distribution system, which provides KAF with maximum flexibility for future equipment additions. Parsons designed and installed power to the 2000 ton press, 300 ton billet shear, 900KW 6600V induction heater, sizing press, air scrubber, air compressor house, and bridge crane.

Lighting systems included 1000 watt metal halide high bay fixtures in the high bay, fluorescent high bay fixtures in other manufacturing areas, energy efficient fluorescent fixtures in office and support areas, and security lighting on the exterior. Lighting controls were designed to conform to the latest energy conservation code and include ceiling and wall mounted occupancy sensors. Exit and egress lighting to meet the building code requirements was also provided. Parsons provided all lighting system design.

The fire alarm system is designed to meet the requirements of the Kentucky Building Code per NFPA 72.