



PROJECT SHEET

PARSONS ELECTRIC, INC.

116 TRADE STREET
LEXINGTON, KENTUCKY 40511
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ASAHI BLUEGRASS FORGE CORPORATION (ABF)

Forging Facility Expansion
Richmond, Kentucky
37,523 sf

PROJECT DESCRIPTION:

ABF manufactures press forgings for the automotive industry, producing parts such as gears, bearings, and joints, as well as transmission parts. The facility expansion was designed for up to two new forging lines and contains the hot forging operation, finishing area, maintenance, machining, mechanical/electrical room, steel bar stock canopy, storage canopy, and relocation of two existing canopies. Parsons provided design/build services, preparing all construction documents, and installation of the electrical systems.

A new 4000 amp 277/480 volt electrical service was added to serve the expansion. The power distribution system consists of a lighting panel, mechanical equipment panel, receptacle panels, motor control center, and process equipment panels. Feeders to the 1300 KVA induction heater, 3000 ton press, trim press, and bar cutting equipment were also included. Parsons coordinated the power distribution system design with ABF, the local utility company, and the induction heater supplier. As part of this effort, passive harmonic filters were designed and installed to eliminate harmful harmonic currents produced by the induction heater and correct the facilities' power factor.

Lighting systems included LED high bay fixtures in the forging, finishing, maintenance, machining, and mechanical/electrical areas; surface mount LED fixtures for the canopies; LED wallpack fixtures for building perimeter security lighting; and exit/egress lighting designed to meet building code requirements.

The existing fire alarm system was modified and extended into the building expansion areas.