



PROJECT SHEET

PARSONS ELECTRIC, INC.

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LEXINGTON, KENTUCKY 40511
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AICHI FORGE USA, INC.

NEW 8000 TON PRESS LINE
GEORGETOWN, KENTUCKY

PROJECT DESCRIPTION:

Aichi Forge manufactures engineered hot impression die forging products for the automotive industry. Their processes include custom impression die forging and powdered metal sinter forging.

The project includes adding a new forging production line consisting of a 4 MW induction furnace, 5000 KVA transformer, 2500 KW and 1500 KW power supplies, 8000 ton forging press, trim press, (3) robots, and other support equipment. Parsons provided design/build services, preparing all construction drawings and installation of the electrical systems.

Parsons scope of work included:

- 300A, 13.8KV feeder to a 5000 KVA induction heater transformer.
- (2) 2500 amp and (2) 1500 amp, 480 volt, 3 phase, 3-wire feeders from the 5000 KVA transformer to the two induction heater power supplies.
- 1200 amp, 700 amp, and 200 Amp, 480 volt, 3 phase feeders to the 8000T press.
- Branch circuits to the induction heater cooling water system, (3) robots, and induction heater pinch rollers.
- (4) Ground detectors on the overcurrent devices feeding the induction heater power supplies.
- 200 Amp, 480 volt, 3 phase branch circuit to the trim press.
- Numerous underground empty conduits for control wiring between the various pieces of production line equipment.

All of the feeders and branch circuits were installed in either a cable tray distribution system or underfloor trench system. The new line was installed in the existing production area while other lines were in production. Parsons worked closely with Aichi Forge and their equipment vendors to provide an engineered power installation for the new production line.