



PROJECT SHEET

PARSONS ELECTRIC, INC.

116 TRADE STREET
LEXINGTON, KENTUCKY 40511
859-233-9823

TOYOTETSU AMERICA, INC. (TTAI)

PQ Press Lines Switchgear Installation
Somerset, Kentucky

PROJECT DESCRIPTION:

TTAI manufactures stamped and welded automotive structural components including radiator supports, center body pillars, cross members, dash panels, lower arms, and brake pedals. This project consists of installing electrical power distribution equipment and their respective feeders for the new PQ process equipment and building expansion loads. All power distribution equipment and feeder conductors were furnished by TTAI. Their installation was by Parsons.

Power distribution equipment installed includes (1) 600 amp, 15KV outdoor fusible switch onto an existing lineup; (2) 3000 KVA unit substations each consisting of a 15KV primary switch, transformer, and secondary distribution switchboard; (5) 2000 amp, 480 volt distribution switchboards for press equipment; (2) 600 KVAR, 480 volt automatic power factor correction capacitor banks; (3) 1600 amp, 277/480 volt, distribution switchboards for building and air compressor loads; (8) integrated power centers consisting of 480 volt panel, step-down transformer, and 120/208 volt panel for laser equipment; (2) 400 amp and (1) 250 amp, 277/480 volt panels; (2) 225 amp, 120/208 volt panels; (2) 75 KVA step-down transformers; and (1) 1600 amp, 480 volt breaker added onto an existing unit substation.

The 15 KV feeders consists of 3 conductor interlocked armor cable with a PVC jacket installed in ladder type cable tray. Approximately 1000 feet of 12" wide cable tray was installed. The route crossed the building's 60 foot high bay and had to avoid existing bridge cranes and large presses. All 480 volt and below feeders consists of individual copper conductors in conduit. Approximately 58,000 lineal feet of conductors were installed.