

DELIVERED
PERFORMANCE

TECO PROJECT PROFILE



BROWNFIELD FIBERGLASS PLANT



CONFIDENTIAL CLIENT | USA

SUMMARY

This project was a brownfield upgrade of a decommissioned E-glass fiber manufacturing facility, purchased by the client from another manufacturer. The plant had been gutted, and the existing batch plant needed upgrading, and the storage capacities had to be increased.

The client solicited several bids for the project, but selected TECO because of our nearly 100 years of furnace experience including repairs, rebuilds, upgrades, and plant expansions, combined with our expertise in batch plants and raw materials, along with our proven fast-track engineering capabilities.

The location and identification of buried services represented a significant effort in the early stages of demolition.

SCOPE

SITE DEVELOPMENT

- Infrastructure, road modifications, truck routes, bridge inspections.
- Services/utilities, natural gas, water, electrical, sewerage
- Regulatory & zoning compliance
- Liaison with local authorities

CIVIL

- Complete civil engineering responsibility
- Site layouts
- Demolition
- Earthworks
- Pre-engineered metal building
- Restoration and alteration of existing buildings
- Process buildings
- Oxygen plant civil engineering
- Offices
- Fire alarm & suppression system

PROCESS ENGINEERING

- Structural/furnace steel and refractory
- New steel exhaust stack
- Process mechanical, cooling water, cooling wind, combustion, safety skids, compressed air, oxygen, and binder system
- Integration of customer purchased equipment
- Oxygen and gas flow control skids
- Glass forming section engineering
- Scrap fiber system
- Process HVAC system, and cooling water system
- Waste water treatment plant
- Chiller integration

ELECTRICAL ENGINEERING

- Primary power
- Medium voltage distribution
- Power conditioning
- Backup power: generator and UPS systems

BATCH PLANT & CULLET SYSTEM ENGINEERING

- Complete design and detailing of the raw material receiving, storage, dosing, mixing and delivery system
- Specification and integration of new pneumatic transfer systems
- Specification and integration of new raw material storage silos
- Rail and pneumatic truck unloading systems
- Pneumatic batch delivery to furnace bins
- Dust extraction systems

PROCUREMENT

- Procurement services
- Expediting, including customer purchased equipment
- QA/QC
- Freight consolidation
- International shipping, customs clearance, road haul within the USA
- Unloading and stacking of all equipment, including client's equipment

CONSTRUCTION

- Fabrication, installation, and commissioning

STATS

- 18-acre site
- 112,000ft² under roof
- Peak of over 350 personnel on site during construction
- 730,000 man hours worked, no lost time accidents
- 14 months from start of site work to completion

PROJECT HIGHLIGHTS

- Project completed on time and under budget.
- Client had no engineering capability; TECO provided in-house or contracted specialty engineering services to deliver the complete project.
- The project was awarded the clients gold safety award for no lost time accidents