

Project Profile

ARMSTRONG TUNNEL MODERNIZATION: DESIGNED FOR LONG-TERM PERFORMANCE

LOCATION: Pittsburgh, Pennsylvania

ELECTRICAL CONTRACTOR: Thoroughbred Construction Group

DISTRIBUTOR: The Hite Company (a division of Mayer)

MANUFACTURER: Gibson Stainless & Specialty, Inc.

MANUFACTURER'S REPRESENTATIVE: Lightspec (formerly Gormley-Farrington)



PROJECT OVERVIEW

The Armstrong Tunnel in Pittsburgh, Pennsylvania, carries approximately 11,000 vehicles per day, along with pedestrian traffic. A recent modernization project focused on upgrading electrical and control systems to improve tunnel safety, monitoring, and traffic operations.

Thoroughbred Construction Group (TCG), a Pittsburgh-based electrical contractor, completed the electrical scope of work as part of the broader tunnel renovation. TCG has experience delivering electrical systems for municipal, transportation, and infrastructure projects.

SCOPE OF WORK

In addition to concrete, pavement, and signage improvements, the electrical scope of the Armstrong Tunnel renovation included:

- Installation of new LED tunnel lighting with a multi-level lighting control system
- Integration of fire alarm and suppression systems
- CCTV camera installation
- Advanced traffic control systems

These upgrades were designed to support long-term tunnel operation, visibility, and safety.

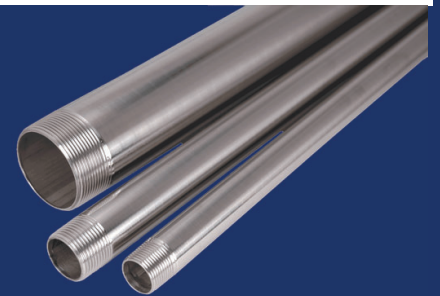
WHY STAINLESS STEEL CONDUIT

Gibson's stainless steel rigid conduit and fittings were chosen in select areas of the Armstrong Tunnel where exposure to moisture, road salts, and temperature variation was a concern. Tunnel environments can present ongoing corrosion risks, making conduit material selection a long-term performance consideration rather than a short-term installation decision.

Stainless steel was selected for its corrosion resistance and compatibility with 2-hour fire-rated electrical circuits, both critical requirements in transportation and tunnel applications where durability and safety are essential.

DISTRIBUTION AND PROJECT SUPPORT

The Hite Company, which has distributed Gibson Stainless products since 2005, supplied conduit and fittings for the project, working closely with the factory to meet project schedules and material requirements. Their coordination and product availability helped keep material flowing to the jobsite. Lightspec, Gibson's manufacturer's representative, supported coordination between the contractor, distributor, and manufacturer to ensure material selection and specifications aligned with project needs.



INSTALLATION AND PERFORMANCE EXPERIENCE

TCG noted that stainless steel conduit installed similarly to galvanized rigid conduit (GRC), with no significant differences in workability during installation.

Material availability and delivery timelines were also identified as key factors on the project. Gibson Stainless' ability to ship product within 24 hours resulted in material arriving onsite within approximately 48 hours, helping maintain construction schedules. TCG also emphasized the importance of domestically produced materials on infrastructure projects.

Compliance with Buy America and Build America, Buy America (BABA) requirements was a primary consideration on the project. Gibson Stainless' domestic manufacturing, inventory availability, and transparent certification documentation supported project compliance and procurement requirements.

CONCLUSION

The Armstrong Tunnel modernization highlights the role of durable materials, reliable availability, and coordinated supply chain support in transportation infrastructure projects. Through collaboration between Thoroughbred Construction Group, The Hite Company, Lightspec, and Gibson Stainless, the project team delivered an electrical system designed to perform reliably in a demanding tunnel environment.



ABOUT GIBSON STAINLESS

For over 30 years, Gibson Stainless has been a leader in manufacturing stainless steel electrical conduit and fittings, offering durable and reliable solutions across a range of industries. Headquartered in Greensburg, PA, Gibson proudly operates with a dedication to American manufacturing, quality, innovation, and customer satisfaction.