A Century of Experience

Vacuum & Keyhole Excavation Perspectives

March 21 2019 GTI
Founded in 1908

One of the top 20 largest, privately held electrical, utility and pipeline contractors in the country

Divisions: Utility, Industrial, Commercial, Pipeline, and Infrastructure

Self performance capabilities in all project aspects - electrical, natural gas, civil, mechanical and underground installations.

Complete electrical and communication engineering and design coordination

Excellent safety performance

National presence: we operate wherever our customers need us
Infrastructure:
Traffic signals and street lights, surveillance camera systems, atomic water pumping stations, electrical construction and maintenance, refinery systems, intelligent transportation systems and more.

Industrial:
Power distribution to 12,000 volts, diesel, natural gas and gas turbine generator installations, chemical process construction, electrical construction and maintenance, pipe line stations and terminals, power instrumentation, electrical and pneumatic installations, calibration and testing, and more.

Utilities:
Electric, natural gas, petroleum and telecom planning, design, construction, maintenance & rehabilitation, overhead & underground electrical line installation & maintenance, pipe and conduit installation, replacement & rehabilitation, transmission, telecommunications, ornamental & directional lighting, gas transmission & distribution pipeline projects, mercury/lead systems, electric substation construction, gas compression and storage, petroleum pipeline and pump construction and maintenance.

Commercial:
Power distribution, data centers, universities, generator and cell tower installations, electrical construction maintenance, life safety, voice/data systems, electrical system installations, maintenance for health care facilities, hotels, hospitals, government facilities, commercial office buildings and many other commercial and public spaces.

Engineering:
Electrical engineering designs for design, build projects, electrical code interpretations, ensuring regulations are met, overseeing subcontractors, reviewing design documentation, professional engineering and construction, and technical help in unusual challenges.
• MEADE began its vacuum excavation program due to a customer requirement(s) in work methodology in Electrical Stations and Substations

• Dry Vacuum (air only) truck mounted along with a portable wheel barrow hopper (approximately 1980)

• MEADE presently has 24 Large WET/DRY Vacuum Trucks and 2 medium sized units (2019). Most work performed in wet mode. Additionally MEADE rents additional equipment as required or hires subcontractors to perform limited scope of work
Scope of Vacuum Excavation & Keyhole Work

- Potholing or locating of utilities
- Anode, Test Wires/Stations
- Pipeline Integrity Checks
- Bbox Maintenance
- Anaerobic Cast Iron Joint Repair
- Encapsulation of Cast Iron Bell Joints & Mechanical Joints
- Station Work (Refineries, Regulator Stations)
- Excavating around Control lines
Vac & Keyhole Strengths

• Pavement & Restoration Costs Reduced
• Immediate Restoration (No Need to Maintain Openings until a permanent repair can be made)
• Open Cut Excavation for same tasks would in most cases require more earth movement, sheeting- labor intensive
• Tasks can usually be performed in a shorter time period
Vac Equipment
KEYHOLE Coring & Reinstatement
• Hard Hat
• Safety Glasses with Side Shields (ANSI Z87)
• Face Shields
• Long Pants & Shirts
• Ear Plugs / Hearing Protection
• Impact Resistant Safety Gloves
• Steel / Composite Toe Safety Boots
• ANSI Class III Retro-reflective Safety Vest
Operator Qualification

Workers need to be qualified for vacuum excavation and keyhole reinstatement – Should be identified as a covered task in OQ Program

Operators – ALWAYS ACCOUNTABLE

Veriforce, B31Q, NCCER, CCT, Operator Specific Task

Contractors, Subcontractors, Operators
• Qualified Personnel at a minimum
  – Comprehensive training program containing manufacturer’s operating procedures
  – Set up a safety perimeter – protect those in immediate area
  – Use of splash guard when starting a hole
  – Know what action and precautions to take when hoses it clogged
  – Know how to read flows and pressures
  – Know how to shut unit down in emergency
  – Proper use of tips and nozzles
Not everyone is qualified to do gas work.