Miller Pipeline

Keyhole Technology

Great People Delivering
Customer-Focused, Quality-Driven Utility Solutions
Miller Pipeline Corporation is recognized as a world leader in the development and installation of specialty pipeline products and services as well as the leader in confined-space safety. Founded in 1953 as a gas distribution pipeline construction contractor covering the state of Ohio, the company branched out to Indiana in 1961. Over the years, Miller has expanded to other locations across the country.
The Miller VAC-HOE® vacuum excavator has been in use since 1978 performing a wide range of underground procedures such as gas main cast iron bell joint and fitting repair, anode installation, test wires, service terminations and replacements, and utility designation (Spot holes)
Early Version of Vacuum Excavator
Early Version of Extension Tools
With a fleet of over 115 vacuum excavators, Miller Pipeline performs more vacuum excavation work in the USA than any other contractor.

- 30 offices in 24 states
- Over 2,000 Employees
- Over 400 work crews in U.S.
- Assisted Mexico through Miller Pipeline de Mexico
Services Provided with Vacuum Excavation

- Cast Iron Bell Joint Repair
- Service Terminations
- Cathodic Protection—Anode Installation
- Exposing utilities and sewers in advance of directional drilling
- Service Renewals
- Main insertion/replacement
Bell Joint Encapsulation
Cast Iron Bell Joint Repair

Leaking Bell Joint is Pin-Pointed
Cast Iron Bell Joint Repair

Pavement is removed, and bell joint is vacuum excavated. This is also done using coring technology.
Bell Joint is Sand-blasted using Miller Extension Sand-Blasting Wand
Cast Iron Bell Joint Repair

Sand-Blasted Bell Joint
Cast Iron Bell Joint Repair

Primer is Applied using Miller’s Extension Brush Holder
Miller Slot Kit is Installed using Specialty Extension Tools
Cast Iron Bell Joint Repair

Installed Miller Slot Kit Ready for Encapsulate
Cast Iron Bell Joint Repair

Miller Encapseal is Installed in Slot Kit
Cast Iron Bell Joint Repair

Cap is Installed on Slot Kit Using Extension tool and is Ready for Backfill Immediately
Service Terminations
Service Terminations

Bare Steel Service in Cast Iron Main to be Terminated

Service Tap has been Cored and Vacuum Excavated
Service Terminations

Plug Removed from Tee and Expansion Plug Installed to Stop Flow of Gas
Service Terminations

Section of Service Line has Been Cut out Using Miller’s Extension Air Saw
Tee Has Been Extracted from Main Using Miller’s Tee Extraction Tool. Plug in Main and Ready to Backfill
Service Terminations

Excavation has been backfilled and Core Restored Ready for Traffic within 30 Minutes
Anode Installation
Anode Installation

Asphalt is Removed over Gas Main
Anode Installation

Relatively Small Excavation
Excavation is Completed Using Vac-Hoe in Tight Alley
Anode Installation

Anode is Installed in Excavation
Anode Installation

Coating is Removed from Main
Anode Installation

Anode is Installed Using Miller Anode Installation Tool
Wire is Attached to Main using Thermo-Weld or Cad-Weld System
Anode Installation

Main is Re-Coated and ready to Backfill Within Minutes
Excavation is Restored With Cold Patch Asphalt and Ready for Traffic Immediately
Utility Verification/Directional Drilling

Directional Drilling is the Installation choice of many—Miller Pipeline operates over 70 directional drilling machines.
Utility Verification/Directional Drilling

Water Service Exposed by Vacuum Excavation 40” deep
Utility Verification/Pre-Design Engineering

Spotting Utilities in Advance of Public Improvement
Utility Verification/Pre-Design Engineering

Looking for Fiber Optic Line in Route of Proposed Storm Sewer
Utility Verification/Plant Work

Many Plants Will Not Allow Destructive Excavation—Only Vacuum Excavation
Utility Verification/Plant Work

Vacuum Excavation Used to Clear First 8’ Before Drilling for Deep Well Anode Bed
Service Renewal/Cast Iron Main Replacement

Coring and Vacuum Excavation Used in Conjunction With Conventional Replacement Methods
Service Renewal/Cast Iron Main Replacement

Two Service Taps Cored, Vacuum Excavated, and Ready to be Inserted
Service Renewal/Cast Iron Main Replacement

Cored Service to be Renewed
Service Renewal/Cast Iron Main Replacement

Section of Main Being Removed With Miller Extension Saw
Main Inserted and Service Ready to be Tied-in
Service Renewal/Cast Iron Main Replacement

Preparing to Install Electrofusion Tee with Extension Tool
Service Renewal/Cast Iron Main Replacement

Service Line to be Air Tested
Service Renewal/Cast Iron Main Replacement

Extension Tool to Install Cap
Other Tasks for Vacuum Excavation

• Valve box Cleaning—replacement
• Plastic Cap on punch tee replacement—over 4,000 replaced in Austin, TX
• Regulator pit/vault cleaning
• Assist conventional excavation equipment in utility congested areas
Coring is a specialized pavement-removal process allowing Miller Pipeline crews to cut and remove a clean, intact section of asphalt and/or concrete covering a utility. Cored Section is set aside during excavation and re-instated after task in hole is complete. Coring is minimally disruptive; it allows access to underground pipelines without damaging integrity of the road base in close proximity to the excavation. Coring virtually eliminates plates, barricades and the need for another contractor to return to site to restore paving.
Coring Can Eliminate Barricades and Plates as well as lower Cost of Restoration
Many U.S. Cities require/accept Coring Process

- Los Angeles, CA
- Chicago, IL
- Baltimore, MD
- Kansas City, MO
- St. Louis, MO
- New York, NY
- Dayton, OH
- Allentown, PA

- Harrisburg, PA
- Lancaster, PA
- Reading, PA
- Austin, TX
- Dallas, TX
- Fort Worth, TX
- San Antonio, TX
- Washington DC
- Many others
In addition to building our own fleet of vacuum excavators, many of our customers have been so impressed by our equipment that they have purchased some for themselves.
Some Customers Who Have Purchased our Equipment and Tools

- City of Dallas
- Philadelphia Gas Works
- Indianapolis Water Co.
- Boston Gas
- Peoples Gas (Chicago)
- Rochester Gas and Electric
- Public Service Electric & Gas (New Jersey)
- Hallen Construction (New York City)
- Pacific Gas & Electric (Los Angeles)
Vacuum Excavator Built for Customer
Vacuum Excavator Built for Customer
Vacuum Excavator Built for Customer
• Miller Pipeline has designed and used extension tools since the 1970’s
• Tools are designed and improved by those who use them
• Tools are available for all processes shown
• We are constantly looking at new ideas for tooling for additional processes to perform through a keyhole
• While Miller Pipeline is a contractor first; we will continue to be at the cutting edge of tool development in the industry as we have been for the last 30 years
• We are not a tool manufacturer—we are a contractor who has chosen to make extension tools to keep up with our customer’s needs—Most companies either build tools or perform services—we do both