

## ONE-PASS TRENCHING



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### Where We Started

Founded in 1988 by Rod Mersino, coming from an extensive background in specialized drilling and construction site dewatering, Mersino Inc. has evolved into a multi-faceted corporation able to engineer and deploy a full-service approach to groundwater control and pumping solutions. Mersino considers its people, the Mersino Team, as our most valuable asset and strives to maintain a culture that inspires dedication to customer service. Whether a planned project or an emergency response, Mersino, available globally, is positioned to meet client challenges with expertise, equipment, and service anytime, anywhere. Mersino's array of services is reflected in its slogan, "The Only Full-Service Solution."



## **One-Pass Trenching**

MERSINO has invested in highly precise equipment to perform one-pass trenching services. We utilize laser guides and GPS systems for accurate installation along irregular grades for maximum efficiency. The GPS system allows for the precise installation of cable and utility lines for accurate mapping of underground locations in the future.

### Highly effective in installing many environmentally sesitive services including:

- Trench sock tile drainage/dewatering
- Slurry cut-off walls to divert or contain groundwater
- Deep horizontal collection trenches for contaminated groundwater removal
- Permeable reactive walls to meet your remediation goals
- HDPE barrier walls

Our trenching fleet includes the M-1 and M-2 Trenchers, capable of working to depths over 75' BGS. It also includes six Inter-Drain One-Pass trenching units that excel at installing sock drains and other groundwater control features up to 25' in depth.









# Slurry Cut-Off Walls

Soil-Bentonite Slurry Cut-Off Walls utilizing our One-Pass trencher technology are installed in less time and provide the lowest cost when compared to other construction methods.

If you are working in an area with high water tables and trying to contain or cut-off groundwater near landfills, tunnels, open cut excavations, or to lay foundations, our slurry cut-off walls may be what you need. Our trenchers and slurry pumps combine to install low permeability underground cut-off walls with depths over 75'.

Dehydrated dentonite clay powder is combined with water utilizing a hopper, jet pump, venturi, and a mixing tank or pond on site. Upon reaching the appropriate hydration levels, confirmed by viscosity tests using a Marsh funnel, the bentonite slurry is ready to be added to the cut-off wall.

A MERSINO One-Pass trencher is used to create a trench where the bentonite slurry is pumped and injected into the digging chain allowing the bentonite slurry to be injected into the mixing zone. The rotating cutting chain homogenizes the bentonite slurry and native soils in-situ.

## Sock Tile Installation

Horizontal drains/sock tile can be installed with filter material via our rock boxes that allows efficient One-Pass installation. These tile drainage systems are a fast and productive method for dewatering.

For quick and effective dewatering to depths of up to 25', MERSINO can:

- Design and install your complete horizontal dewatering system
- Design and install your trenched tile dewatering system
- Provide minimal jobsite distruption in a space virtually within the width of the trenching unit

#### MERSINO Horizontal Dewatering or Trenched Sock Dewatering Systems Provide Advantages Including:

- Quick installation with no need for site dewatering prior to trenching
- Suitability for many soil conditions
- Minimal disruption to job site both during and after installation
- Cost efficient trenched sock applications solve many dewatering challenges



## **Specialty Methods**

For unique projects, MERSINO offers specialty groundwater control methods.

Our team will evaluate and provide the best solutions for the project.

#### **Bio Walls**

A permeable reactive barrier (PRB), also referred to as a permeable reactive treatment zone (PRTZ), has been recognized as being a cost effective technology for in-situ (at the site) groundwater remediation.

Depending on your groundwater flow control needs, our One-Pass trencher can install both slurry wall and permeable reactive barriers consisting of:

- A mulch and compost blend
- A mixture of granular iron and sand that work to remediate groundwater contaminants such as chlorinated solvents, other organics, metals and more

Because bio walls are passive systems and require no maintenance or energy to operate, they are a sustainable remediation technology. As it passes through the permeable bio wall, the contaminated water is transformed to a less harmful or non-toxic form.







## Specialty Methods Cont.



#### **Collection Systems**

MERSINO's One-Pass trencher can be fitted with attachments to install a permanent groundwater collection system.

By utilizing a trench box and hopper, pipe can be installed to specified depths and covered with appropriate backfill material. This provides a more permanent solution when temporary dewatering methods will not meet overall project requirements.



#### **HDPE Barrier Walls**

For more permanent solutions to environmental concerns, our experienced project managers use our One-Pass trencher to install a vertical HDPE barrier wall in the subsurface behind the trenching chain.





### LOCATIONS

**Atlanta**, Georgia 2377 Rockaway Industrial Blvd. Conyers, GA 30012 770.679.5555

> **Baltimore**, Maryland 5817 Allender Rd. White Marsh, MD 21162 410.335.6500

> > **Burton**, Michigan 2475 E. Judd Rd. Burton, MI 48529 810.658.3472

**Columbia**, South Carolina 4650 Leesburg Rd. Hopkins, SC 29061 843.735.2790

> **Daytona**, Florida 411 Timaquan Trail Edgewater, FL 32132 386.426.2411

**Fort McMurray**, Alberta, Canada 181 Robertson Rd Bay 1 Fort McMurray, AB T9H 0E1, Canada 587.624.0828 **Grand Rapids**, Michigan 4665 Division Ave S. Wayland, MI 49548 616.877.5224

**Havelock**, North Carolina 577 US-70 Havelock, NC 28532 252.248.3443

**Houston**, Texas 1960 N. Starpoint Dr. Houston, TX 77032 281.860.0808

Jacksonville, Florida 11749 New Kings Rd. Jacksonville, FL 32219 904.423.1159

Mansfield, Ohio 3955 Industrial Pkwy Shelby, OH 44875 567.275.3960

**Miami**, Florida 6900 NW 12th Ave Fort Lauderdale, FL 33309 754.296.2020

**Michigan City**, Indiana 600 Lumber Center Rd. Michigan City, IN 46360 219.210.3477 **Midland**, Texas 8711 W. County Rd. 127 Midland, TX 79706 432.219.8410

Mobile, Alabama 3400 Hurricane Bay Dr. Mobile, AL 36532 251.873.0840

> Omaha, Nebraska 6950 Q Street Omaha, NE 68117 402.932.0801

**Pittsburgh**, Pennsylvania 1446 Smith Township State Rd. Burgettstown, PA 15021 724.701.6002

> Putnam, Connecticut 33 Industrial Park Rd. Putnam, CT 06260 860.315.9165

**Tampa**, Florida 8235 State Rd. 33 N. Lakeland, FL 33809 863.984.0439