



PLANNING BETTER TRENCHLESS

Vermeer BoreAid® Design Tool

Performing a bore operation efficiently takes consistent horizontal directional drill (HDD) planning and design methods. Vermeer BoreAid design tool streamlines your planning and design time by considering key aspects of a drill project such as topography and soil for bore path planning, product pipe selection, load calculation and drilling fluid estimation.

Information Pipe Installation Parameters Operational Installation Evaluate Summary				
In-service Loads				
	Calculated	Allowable	Factor of Safety	Check
Internal Hoop Stress [psi]	0.0	30240.0	Infinity	OK
Longitudinal Stress [psi]	6414.7	37800.0	5.9	OK
Shear Stress [psi]	3123.7	18900.0	6.1	OK

The Vermeer BoreAid design tool provides a full suite of tools to complete HDD designs following the ASTM F1962 standard for plastic (PE or PVC) pipe and PRCI methodology for steel or fiberglass pipe. It permits complex bore geometrics – multiple compound curves/tangent segments, inadvertent return analysis, and offers the capabilities to perform advanced drill planning and design.



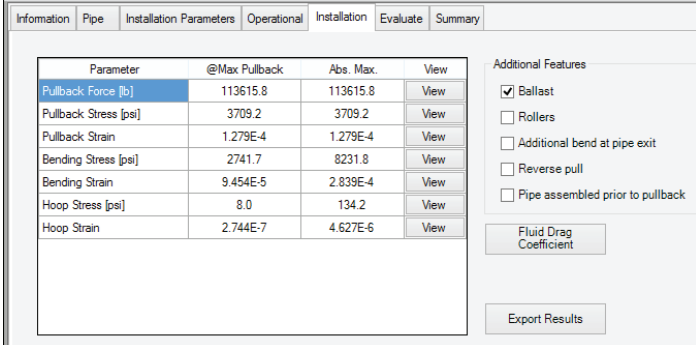
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EQUIPPED TO
DO MORE.®

KEY BENEFITS:

- **Helps** plan and design your project in less time.
- **Produces** project design or construction submission documents efficiently.
- **Alerts** the user to potential issues by using the built-in database of typical, or suggested properties (based on current standards and good practice guidelines).
- **Constructs** a detailed design dealing with many aspects of the project, from bore path planning and load calculations, to pipe selection and drilling fluid requirements.
- **Provides** the engineering estimates for required pullback forces to install the product pipe following industry standards.
- **Identifies** the bend radius of the drill rod and product pipe to alert user if rod or pipe is outside of specifications.



The screenshot displays the BoreAid software interface. At the top, there are tabs for Information, Pipe, Installation Parameters, Operational, Installation, Evaluate, and Summary. The main content area is divided into a table and a sidebar.

Parameter	@Max Pullback	Abs. Max.	View
Pullback Force [lb]	113615.8	113615.8	View
Pullback Stress [psi]	3709.2	3709.2	View
Pullback Strain	1.279E-4	1.279E-4	View
Bending Stress [psi]	2741.7	8231.8	View
Bending Strain	9.454E-5	2.839E-4	View
Hoop Stress [psi]	8.0	134.2	View
Hoop Strain	2.744E-7	4.627E-6	View

Additional Features:

- Ballast
- Rollers
- Additional bend at pipe exit
- Reverse pull
- Pipe assembled prior to pullback

Buttons: Fluid Drag Coefficient, Export Results