



HDD PowerTool

ENABLE SAFE AND EFFICIENT DRILLING, REAMING, AND INSTALLATION OF PIPES AT ROAD CROSSINGS, WATER BODIES, AND RAILROAD RIGHT-OF-WAYS

The Technical Toolboxes Horizontal Directional Drilling PowerTool (HDDPT) provides a comprehensive solution to guide in the design validation, engineering, and installation phases of horizontal drilling. With HDDPT, the drilling efficiency and borehole stability can be maximized by identifying fluid characteristics and mud requirements, minimizing unnecessary costs and risks. Pipeline engineering teams can use HDDPT for oversight to validate third-party designs and plans. Using advanced industry knowledge, HDDPT allows for complex borehole design, multi section horizontal and vertical bends, and variable entrance/exit points while also performing pull force and installation stress analyses for both polyethylene and steel pipes. HDDPT is not only designed to support both gas and liquid pipelines; it can also support the calculations for installing cables and conduits as well.

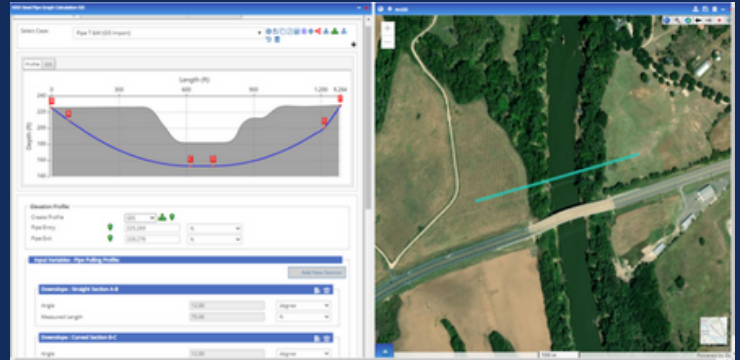
WHY USE THE HDDPT

- Reduce risk of drilling inaccuracies, frac-outs, and fines
- Accelerate project schedules through intuitive HDD analyses
- Shared platform that aligns team activities for higher productivity while increasing engineering performance
- Validate in-house and third-party HDD designs to lower OpEx and CapEx of construction
- Calculate pull force and installation stress for both polyethylene and steel pipes
- Perform multiple drilling fluid and mud management calculations
- Perform analysis for complex borehole profile designs



HDDPT APPLICATIONS

- **PE Pipe – Pull Force & Installation Stresses (Specific Radius of Curvature)** – Analyze the maximum stresses the selected polyethylene pipe can endure within borehole configuration and eliminate failure during installation using the radius of curvature calculations
- **Cables in Conduits** – Determine jam ratio, clearance, tension by location, and sidewall pressure, given cable configurations and elevation profiles
- **Hydraulic Fracture Analysis** – Enables proper characterization of drilling fluids, soils, and hydraulic pressures to ensure borehole stability and eliminate hydro-fracturing during drilling operations.



PE Pipe – Pull Force & Installation Stresses (Specific Radius of Curvature) with GIS Mapping

TYING IT ALL TOGETHER WITH THE PIPELINE HUB



- A centralized data repository for all HDDPT applications and reports, shareable across teams
- All tools are GIS integrated to provide visual representations of pipeline assets and automated elevation import
- Automated report generation with a click of a button to fulfill TVC (traceable, verifiable, complete) documentation.

**PLEASE VISIT OUR WEBSITE FOR MORE
INFORMATION OR TO REQUEST A DEMO**



**TECHNICAL
TOOLBOXES**

www.technicaltoolboxes.com

