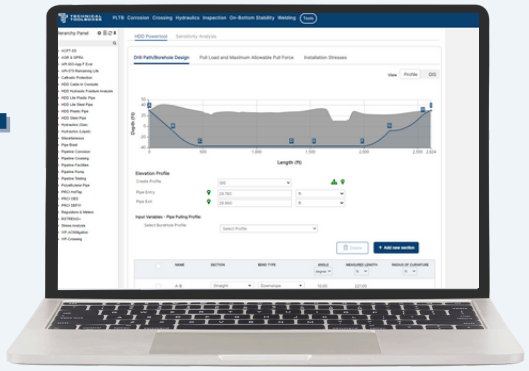
TECHNICAL TOOLBOXES

HDD POWERTOOL

Provides a comprehensive solution to guide in the design validation, engineering, and installation phases of horizontal drilling.



With Technical Toolboxes' Horizontal Directional Drilling PowerTool (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, compound bends, 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.

- Polyethylene Pipe – Includes 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. Also includes calculations for the Allowable Tensile Load For Pull-In Installation PE Pipe and Post Installation & Deflection.
- Steel Pipe - Pull Force & Installation Stresses and Operational Stress, used to ensure that the material and borehole profile are suitable for the proposed application, the installation, operational, and combined loads and stresses are analyzed. The stresses imposed on steel pipe during both the HDD installation process and subsequent operation should be carefully evaluated.
- Drilling Fluids/Mud Management – Enables proper characterization of drilling fluids, soils, and hydraulic pressures to ensure borehole stability and eliminate hydro-fracturing during drilling operations.
- Cables in Conduits – Determine jam ratio, clearance, tension by location, and sidewall pressure, given cable configurations and elevation profiles.

ADVANCED FUNCTIONALITY

Sensitivity Analysis

Allows for the examination of various drilling conditions, enabling engineers to understand how changes in project variables like soil type, drill path curvature, and pipe material affect the drilling operation.

Complex Borehole Analysis

Ensure proper characterization of drilling fluids, soils, and hydraulic pressures. Assess multi-section horizontal and vertical bends and variable entrance/exit points for added accuracy and confidence

Multiple Drilling Scenarios

Analyze various drilling conditions and parameters at once, assessing different paths and environmental impacts. Enables quick comparisons of different drilling plans to choose the most efficient and cost-effective option.

Seamless Data Entry

Integrates directly with AutoCAD, allowing engineers to transfer borehole designs and drilling plans from AutoCAD to HDDPT effortlessly, ensuring that all geometrical data is accurately represented.

FIND OUT MORE

Learn more about Pipeline HUB's **HDD PowerTool** capabilities and **schedule a demo** to see it in action.

ABOUT TECHNICAL TOOLBOXES

Technical Toolboxes is the global leader of integrity analytics for pipelines to help solve the growing, complex challenges they face across crossings, corrosion, welding, and more. Our modern software platform provides a simple way to get the most accurate pipeline engineering calculations so that you can increase team productivity and improve compliance while decreasing risk. We enable energy companies to move away from rudimentary calculations and processes to a world of fast, secure, scalable pipeline insights you can trust.

To learn more about Technical Toolboxes and the Pipeline HUB, go to **www.technicaltoolboxes.com**.