

TARGET[®] HDD



VAREL
MINING AND INDUSTRIAL

Target® HDD Technologies

Target is Varel Mining and Industrial's roller cone answer to horizontal directional drilling (HDD) and trenchless technology applications. Feature filled with Varel technology to extend bit life in these drilling conditions, Target will deliver superior results to keep production up and costs down.

Full Coverage (FC) Provide Sealed Bearings and Compensated Components

- Cutting structures are designed to provide durability for formation transition and react to loading as required while providing the best possible performance.
- All FC cutter products utilize Varel's high performance seal technology including a patented conical seal gland and heavily tested seal components for maximized bearing protection.

Underground Target (UT) Bits Are Suited To Your Needs

- UT bits are available in both sealed and non-sealed designs to provide the right bit for you.
- Sealed bearings include Varel's patented conical seal gland and patented heat shield to extend bearing life and lower your total drilling costs.
- Non-sealed bits feature a proven open bearing package to maintain consistent performance throughout the life of the bit.



Full Feature Bits Deliver Results

All Target bits are equipped with patented High Energy Tumbled (HET™) inserts and patented EdgeGuard® shirrtail protection. HET improves cutting structure life by providing toughened compacts for use in the cutting structure. EdgeGuard directly addresses the critical wear area in HDD applications, the bit shirrtail, significantly increasing bit life and driving down the cost of HDD applications.



Varel's Patented EdgeGuard is the next-generation solution for high performance wear mitigation. Strategic placement of tungsten carbide microshields on critical areas of the bit shirrtail provide a significant advantage over hardfacing and tungsten carbide inserts (TCI). The custom fit, solid tungsten carbide microshields have higher carbide content than welded hardfacing for enhanced wear characteristics. Unlike inserts, EdgeGuard shields can be fit to the leading and lower edges of the shirrtail to protect against wear that can lead to seal and bearing failure. The microshields also conform to the shirrtail contour to provide protection without compromising performance. EdgeGuard is utilized on selected bits based on application requirements.



High Energy Tumbled (HET) is a proprietary process for improving the attributes of tungsten carbide inserts (TCI). It overcomes the traditional trade off between wear resistance and fracture toughness of tungsten carbide components and makes TCI components both harder and tougher.



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