

A VAREL INNOVATION

DuraTechTM SERIES



Durability That Goes the Distance



ADVANCED STEEL
TOOTH BITS
FOR ABRASIVE
APPLICATIONS

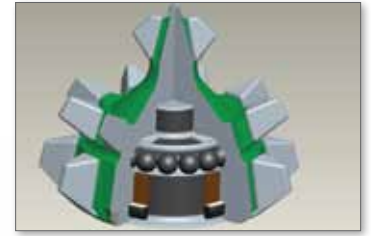


VAREL
INTERNATIONAL



› **Enhanced Hardmetal**

A newly enhanced hardmetal material is welded to DuraTech bits for added durability and long life.



› **Patented Conical Seal Gland**

The newly designed seal gland is constructed to resist cuttings packing into the seal area.

› **Patented Heat Shield**

The heat shield ring is deployed between the seal and inner bearing and acts as a thermal insulator to the seal from heat generated in the bearing.



› **Improved Shirrtail Hardfacing**

Using DuraClad Hardmetal Technology, both the composition and application of hardmetal to the shirrtail area of the bit are enhanced.



› **Back Row Inserts**

Durable tungsten carbide inserts assist in maintaining gage while drilling.

› **Increased Wear Resistance**

Tungsten carbide inserts provide additional wear resistance and shirrtail protection when needed.

› **Improved Bearing Grease**

DuraTech bits have incorporated a high temperature, high lubricity bearing grease that assists in the reduced generation of internal bearing heat, allowing bearings to last longer.



Varel International, a leading manufacturer of drill bits and global supplier to the drilling industry, is proud to introduce the next generation of steel tooth bits – the Varel DuraTech™ Series.

This steel-tooth series of products, available from 3-3/4" to 13-3/4", delivers rapid rate of penetration (ROP) and new hardmetal protection that provides life-enhancing durability in the most demanding environments.

DuraTech bits can withstand the added stress that operators place on bits when additional weight and greater RPMs are necessary.

The series is designed to provide:

- Added durability in abrasive environments
- Increased ROP
- Directional responsiveness
- A solution for sticky shale drilling

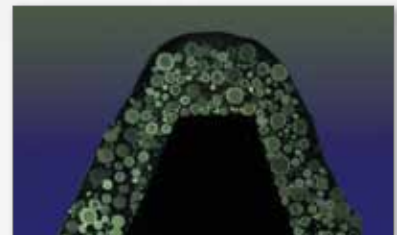
Designed for Durability

Varel used a systematic approach when developing the DuraTech series, delivering a product that can reliably withstand high-energy inputs while maintaining expectations of high ROP and increased footage.

DuraTech bits combine innovative manufacturing processes, quality materials and highly trained personnel, and have repeatedly been proven in field tests to provide reliable, lasting performance. Additionally, Varel's extensive technology platform delivers patented advancements in DuraTech's seal and bearing package.

DuraClad™ Hardmetal Technology

During development of DuraTech bits, welding specifications for hardmetal application were investigated, reviewed and adjusted to produce accurate, repeatable outcomes. The DuraClad Hardmetal Technology specifications now allow for a 20 percent increase in hardmetal application to the critical areas of the bit. This produces a bit with a more durable, long-lasting cutting structure. Skilled welders are provided with extensive application training and are regularly audited as part of Varel's commitment to quality.



- DuraTech™ bits have continually delivered reliable performance in drilling applications ranging from sticky shale to abrasive sands, proving that DuraTech roller cone bits are designed with durability that goes the distance.

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DuraTech[™]

SERIES

Durability That Goes the Distance



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