

Thermal-resistant diamond element bit

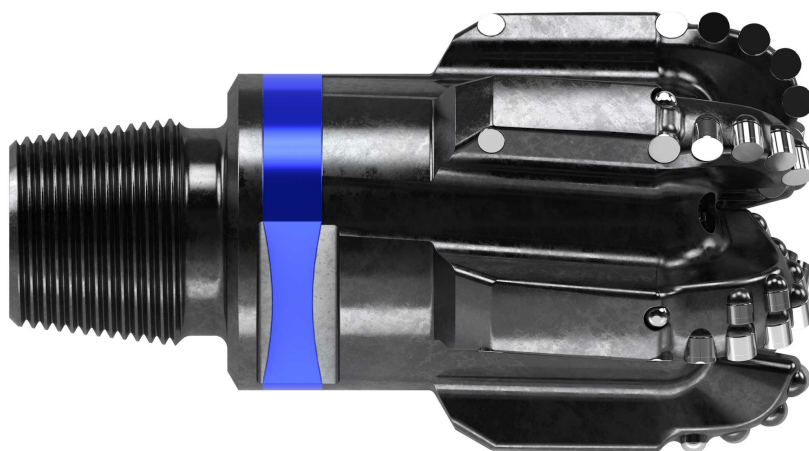
Extend bit performance to save drilling time and costly bit trips

Applications

- Conventional and unconventional land in Canada, Middle East, and US
- Offshore—Gulf of Mexico
- Hard and abrasive formations

Features

- Thicker diamond table
- Proprietary diamond table interface
- Improved thermal stability
- Increased durability



ThermoBlade thermal-resistant diamond element bit extends bit performance to save drilling time and costly bit trips.

How it improves performance

ThermoBlade™ thermal-resistant diamond element bit saves customers drilling time and reduces the need for costly bit trips. ThermoBlade bits use thermal-resistant diamond cutting elements that effectively mitigate the effects of thermal degradation—cracking and chipping of the cutter surface—increasing durability, extending bit life, and improving overall bit performance.

How it works

SLB developed the new ThermoBlade bit using a proprietary cutting element with a thicker diamond table and engineered diamond table interface. The interface provides this cutting element with mechanical strength and durability. The cutting element also has a novel thermal stability against the tremendous heat that can approach 1,000 degC [1,832 degF] and shearing forces concentrated on the tip. This combination gives ThermoBlade bit better resistance to thermal degradation that causes cutter damage on other drill bits. These features improve drillbit rate of penetration (ROP) and its ability to drill to interval total depth (TD) in fewer or single bit runs.

What it replaces

Conventional flat surface cutters

What else I should know

The SLB family of Smith Bits drill bits is continually recognized for advancing bit technology and has a 20-year record for achieving more world records than any other line of drill bits. In a recent review, SLB drill bits set 53% of the global records in the drillbit industry, more than all other bit companies, combined with 595 of the 1,123 world records.