MaxCut Milled Bit Body Reliefs
Maximize ROP with improved drilling efficiency

Baker Hughes MaxCut™ milled bit body reliefs increase drilling speed and reduce inherent inefficiencies, enabling operators to complete challenging intervals in less time. Combined with StayTough™ hardfacing and the Talon™ Force high-velocity PDC drill bit, MaxCut reliefs deliver step change gains in drilling performance.

Boost ROP
Designed to maximize cutter exposure for increased drilling efficiency, MaxCut reliefs significantly improve the rate of penetration (ROP) by removing body material that would ordinarily come into contact with the borehole and induce unnecessary rubbing at high depths of cut. As shown by the images in Fig. 1, the bit with the milled reliefs on the left has less blade contact compared to the standard steel body PDC bit on the right.

Maximize run life
Steel body bits with MaxCut reliefs are equipped with StayTough hardfacing, which combines advanced metallurgy with exacting welding procedures to provide maximum durability. The proprietary hard-facing reduces bit erosion and prevents damage to the bit body from rock formations and debris. It is three times more wear resistant than the traditional tungsten carbide matrix to eliminate any degradation in bit durability.

Saved 230 hours of drilling time
An operator in the Eagle Ford Shale was able to drill the curve/lateral section in record ROP using an 8½-in Talon Force bit with MaxCut reliefs—setting a new benchmark for drilling the curve and outpacing offsets by 35% across multiple counties.

In 20+ runs, the Talon Force bit with MaxCut reliefs saved the operator more than 230 hours of drilling time and successfully completed the curve in 6.5 hours—setting a new ROP record compared to competitive offsets.

Applications
- Vertical and directional applications
  - Rotary or motorized BHA
- Unconventional shale formations

Features and benefits
- Milled reliefs in steel bit body
  - Increases depth of cut
  - Enables faster drilling speeds
- StayTough hardfacing
  - Provides maximum durability
  - Reduces bit erosion
  - Resists wear three times more than standard tungsten carbide matrix