The drilling industry has enjoyed the benefits of hybrid drill bits for nearly 10 years. Pairing the fixed blades of a polycrystalline diamond compact (PDC) bit with the roller cones of a tricone bit, hybrid bits crush the rock and then shear it away, minimizing downhole vibrations. Operators require faster drilling speeds and better performance, demanding a new offering of hybrid bit technology.

The Kymera™ Mach 4 hybrid drill bit extends drilling lengths from typical curve sections to handle all sections of the well—saving trips and replacing both roller cone and PDC bit runs. Baker Hughes, a GE Company (BHGE), is the expert in hybrid drill bit technology. The Kymera Mach 4 drill bit extends performance, digging beyond the curve.

**Hybrid design optimization package**

With BHGE’s hybrid design history, the hybrid design optimization package features precision balanced blade count and cone optimization resulting in a proven performance step-change.

- Increased blade counts improve lateral stability while making the bit more aggressive to stand up to wear and tear
- Recessed cutters work in tandem with reinforced shoulder improving durability to keep the bit engaged and extend distance drilled
- Sharp and dense cone sets further allow improved rates of penetration (ROP)
- Cutter selection options include Dynamus™ extended life drill bit cutters, StayTrue™ diamond element cutters, and Stabilis™ cutters specifically selected to handle increased loads of challenging drilling environments to improve drilling speed and efficiency.
Kymera bit nomenclature

**K** - Kymera bit

**Seal Type**
- **G** - HAR
- **M** - MFS
- **T** - TRB

**Cutter Size**
- **3** - 7/16 in. (11 mm)
- **4** - 1/2 in. (13 mm)
- **5** - 5/8 in. (16 mm)

**Backup Cutters**

**Blade Count**

**Cone Count**
- **1** - One cone
- **2** - Two cones
- **3** - Three cones

Increased blade count

Sharp and dense cone design

ShadowCut recessed cutters

Volumetric simulations

Optimized fixed cutter layouts

Improved strength

Premium carbide grades

Stabillis cutters

StayTrue diamond element