

EZCase casing bit system

Optimize casing and liner operations

The Baker Hughes **EZCase™ casing bit system** enables casing or liner systems to be successfully drilled down to total depth. By combining drilling and casing in one run, the system reduces flat time and provides additional options for problematic wells that cannot be completed through traditional drilling techniques. This nonretrievable casing bit system incorporates numerous exclusive features to enable drilling and reaming over longer intervals, in the most demanding applications, and in a full range of formations.

The bit is constructed from a specialized steel alloy with PDC and tungsten carbide cutters brazed directly into a one-piece bit body. The robust crown and cutting structure enables the EZCase casing bit to match the durability, integrity, and rate of penetration (ROP) of standard PDC bits. The bit is welded to a custom steel casing sub to maintain integrity during drilling and drillout operations.

The combination of a drillable steel body and patented internal profile reduces drillout time and costs by enabling roller cone and PDC bits to drill out the EZCase casing bit with no damage to the bottomhole assembly and continue drilling the next hole section.

Hydraulic efficiency is optimized through proprietary computational fluid dynamics software, which improves ROP while reducing the risk of balling and erosion. Nozzle sizes can be easily changed in the field to match application requirements and improve flexibility. A patented secondary bypass port on the bit crown allows circulation or cementing to continue if the nozzles become plugged.

The EZCase casing bit system is fully compatible with all Baker Hughes drill-down and ream-down liner systems. Tools are available for 4 ½ to 22-in. casing sizes and in light, standard, or heavy-duty configurations.

Applications

- Casing and liner drilling or reaming operations
- Drilling and completing problematic wells, including rubble zones, lost-circulation zones, depleted reservoirs, and underground blowouts

Benefits

- Steel alloy construction maximizes integrity, durability and efficiency
- Drillable body with patented internal profile reduces drillout time and costs by enabling drillout of the shoe track, casing bit, and next section in a single trip
- Optimized hydraulic efficiency
- Patented secondary bypass port to mitigate plugged nozzles