EZReam casing and liner reaming shoe

Reduce drilling cost with fewer trips

The Baker Hughes **EZReam™ casing and liner reaming shoe** reduces drilling costs by reaming faster through long, challenging intervals while ensuring casing and liner systems successfully reach total depth on the first attempt. This robust steel-body reaming shoe incorporates a unique design for efficient reaming and faster drillout. It is the industry's only steel reaming shoe that is drillable with a standard PDC bit.

An optimized, tapered profile and heavy-duty cutting structure engage and eliminate obstructions, improving borehole quality and allowing completion equipment to pass through. PDC cutters in the gauge area provide a side-cutting action to aggressively open up tight spots and wipe away low-side cuttings beds. Tungsten carbide elements in the nose and shoulder work to clear ledges and bridges.

Thick layers of crushed tungsten carbide hardfacing are overexposed from the cutting structure to provide an active cutting action with or without rotation, preventing sidetracking and enhancing wear resistance. The spiral blade design maintains 360° hole coverage for stabilization and improved reaming efficiency.

The one-piece steel alloy body is optimized for fast, low-risk drillout using any standard bit. The patented concave profile drills out from the center to the shoulder, which effectively eliminates the risk of leaving junk or an undrilled portion downhole. A patented secondary bypass port enables circulation or cementing to continue if the nozzles become plugged.

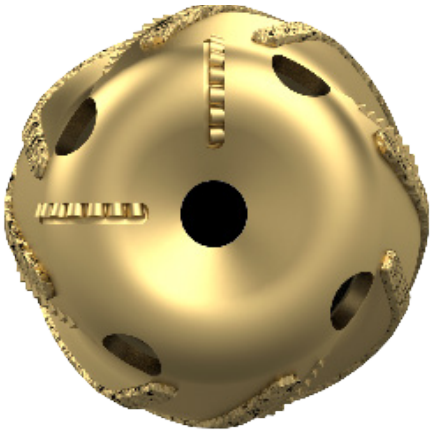
The EZReam casing and liner reaming shoe is fully compatible with all BHGE ream-down liner systems. It is available for 4½- to 22-in. casing sizes with blank or premium connections, and in light or heavy-duty configurations. The optional integral single- or double-float valve has been certified to meet or exceed API RP 10F Category IIIC specifications.

Applications

- Casing reaming operations
- Liner reaming operations

Benefits

- Tungsten carbide hardfacing for an active cutting structure for reaming and backreaming
- Steel alloy construction increases ROP and maximizes durability
- Patented concave profile reduces total drillout time and costs
- 360° spiral gauge increases stability when rotating and improves reaming efficiency
- Patented secondary bypass port mitigates plugged nozzles



Greater stability

The 360° gauge coverage adds stability and improves reaming efficiency.

Profile optimized for faster drillout

This illustration shows the mechanics of the EZReam shoe drillout with a standard PDC bit. The unique concave profile ensures EZReam shoes are drilled out from the center to the shoulder, eliminating the risk of undrilled junk left in the hole bottom.

Hardfacing

Thick layers of crushed tungsten carbide hardfacing enhance durability while reaming, with or without rotation.

Heavy-duty reaming cutting structure

The PDC and tungsten carbide cutting structure engages and eliminates obstructions.

Secondary bypass port

Allows normal circulation or cementing to continue in the event of nozzle plugging.

Baker Hughes

bakerhughes.com