

Spin-Drift Roller Reamer

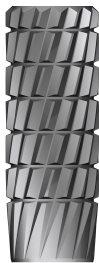
Cutter Selections



Used for low torque stabilization in both vertical and directional drilling, this "frictionless reamer" cartridge is hardened and carburized for long service life.



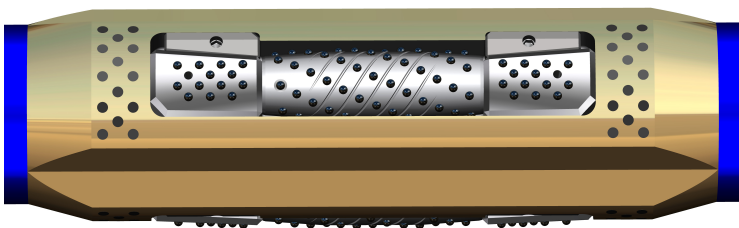
Standard cutting structure design for medium to medium hard formations with optimum tungsten carbide insert quantity and placement, with a tapered profile for bi-direction reaming.



For soft clay, limestone and shale applications a steel tooth cartridge with plasma hardface cutting edges is an economical yet effect solution for many applications.



Applicable for extremely hard and abrasive formations, such as hard sands, chert or granite, these cutters are fitted with an increased quantity of premium tungsten carbide inserts.



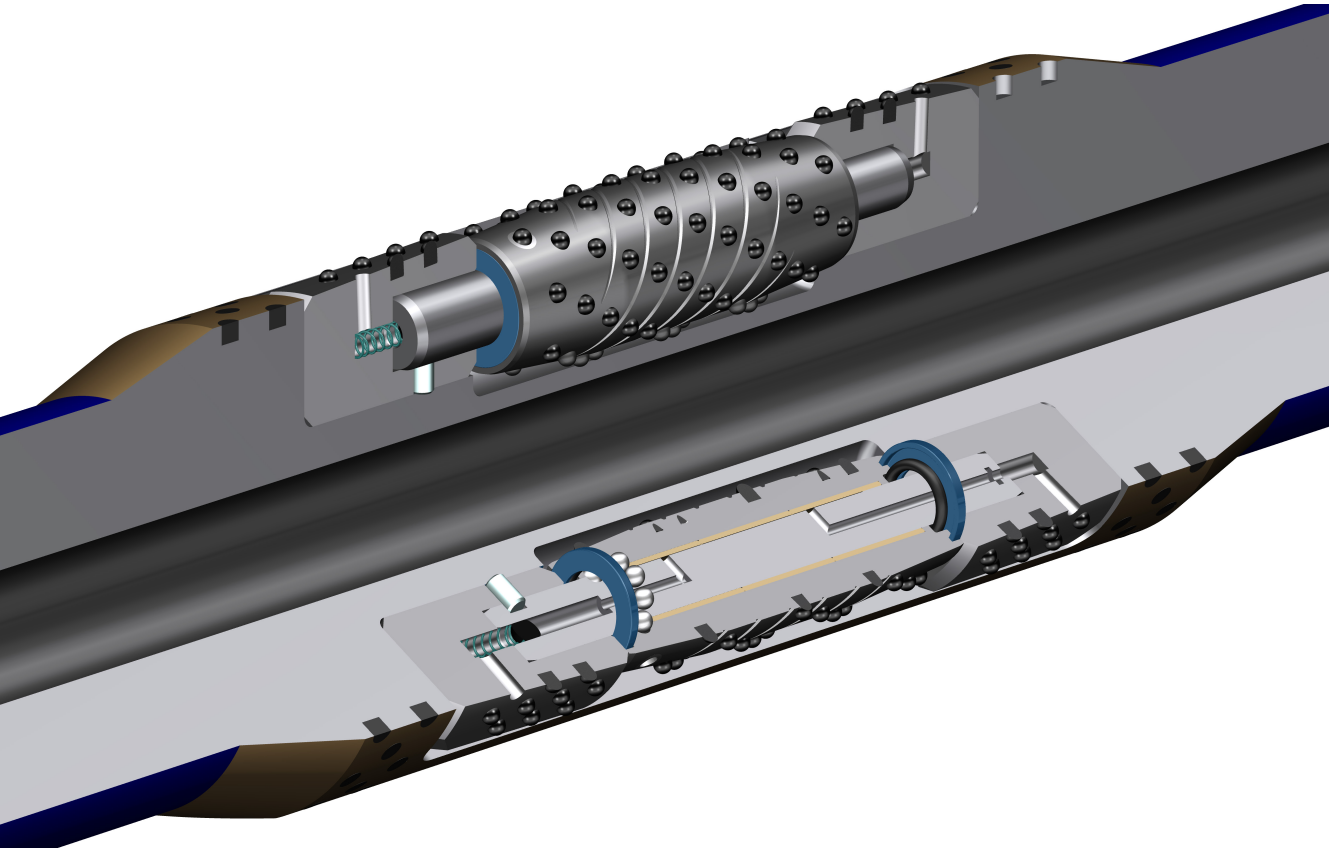
Tools Specifications

Hole Size (in)	Body OD (in)	Body ID (in)	Fishing Neck Length (in)	Fishing Neck Diameter (in)	Overall Length (in)	Dressed Body Weight (lbs)*
5 7/8 - 6 1/2	4 3/4	1 1/4 - 1 3/4	40	4 3/4	80	225 to 250
7 7/8 - 8 3/4	6 1/2	2 1/4	45	6 1/2	95	450 - 575
9 7/8	6 1/2 - 8	2 13/16	50	6 1/2 - 8	110	775
11	8	2 13/16	55	8	125	1000
12 1/8 - 12 1/4	8 or 9 1/2	2 13/16	60	8 - 9 1/2	130	1250
14 3/4 to 26	9 1/2	2 13/16	70	9 1/2	150	1800 - 4000

* Approximate

Spin-Drift Roller Reamer

The low torque solution to a smoother wellbore



To learn more about how the Spin-Drift Roller Reamer can improve your well bore quality and lower your overall costs, contact your nearest BesteBit representative.



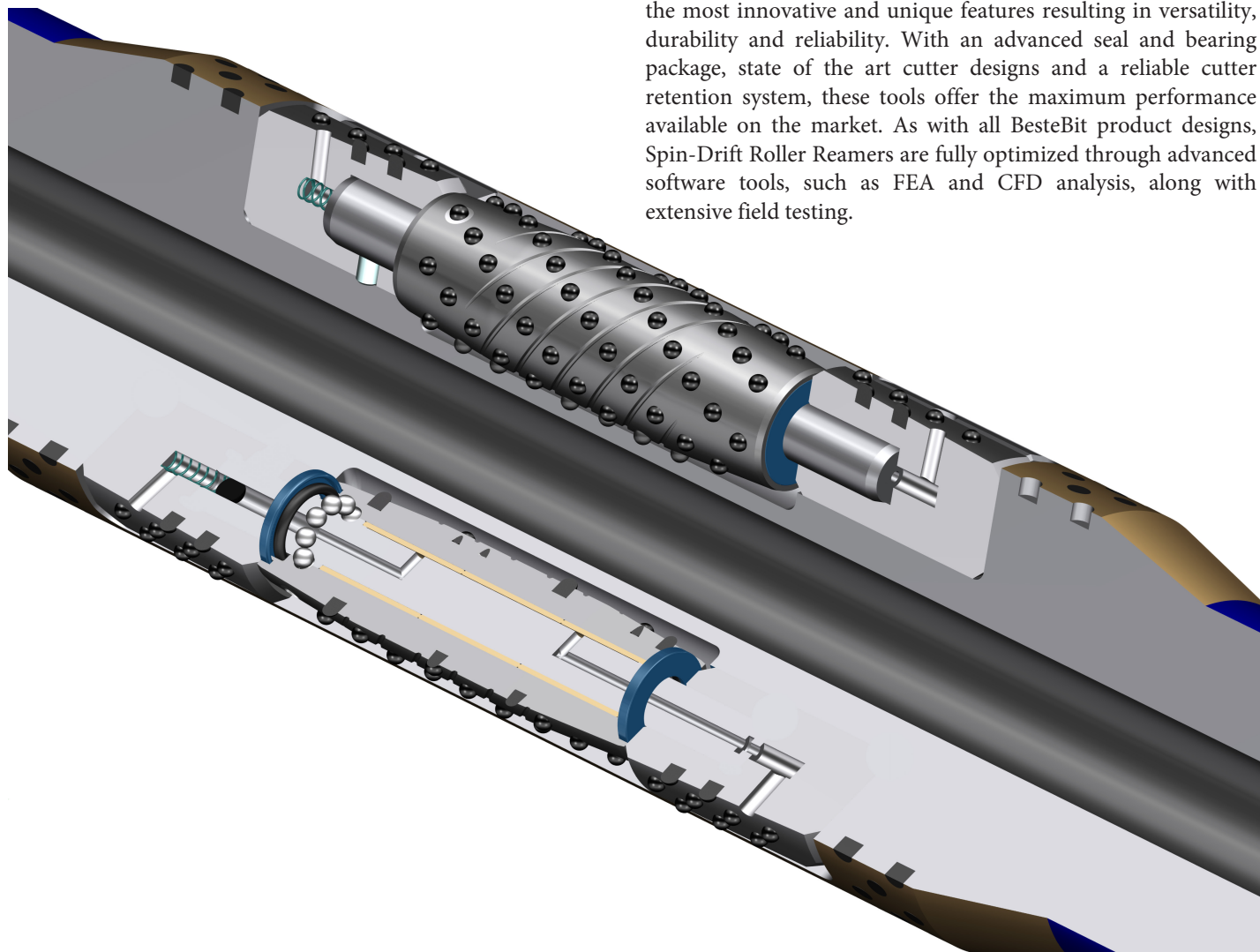
Spin-Drift Roller Reamer

The low torque solution to a smoother wellbore

The Spin-Drift family of premium quality Roller Reamers offer a low torque solution to borehole gauge maintenance, overall BHA stability and better wellbore quality. By lowering torque and drag, stick slip and BHA vibration, drilling efficiencies can be greatly improved with less NPT and greater MTB, resulting in significantly lower cost per foot drilling. Improved weight transfer and lower vibration results in both higher ROP's and extended life of the bit, motor and MLWD tools. With a rolling element cutting action there is less wear on the tool, less damage to the hole wall formation and lower torque as compared to traditional fixed blade reamers and stabilizers.

By mechanically conditioning the wellbore, removing tight spots, formations ledges, micro doglegs and spiraling, a smoother wellbore wall profile will aid in the drilling, logging, coring and casing processes of well construction. By allowing longer runs in complex ERD well, lowering the incidents of stuck pipe, significantly reducing trip times, improved bit and coring performance, easier wire line logging, and faster running of casing or liner strings, Spin-Drift roller reamers offer the features and benefits suitable for even the most demanding applications with the reliability and durability of any premium drilling tool.

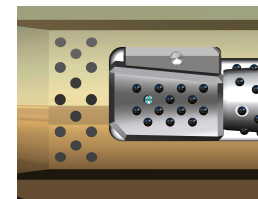
Spin-Drift roller reamers are the some of the most advanced designed tools in the industry. These tools are engineered with the most innovative and unique features resulting in versatility, durability and reliability. With an advanced seal and bearing package, state of the art cutter designs and a reliable cutter retention system, these tools offer the maximum performance available on the market. As with all BesteBit product designs, Spin-Drift Roller Reamers are fully optimized through advanced software tools, such as FEA and CFD analysis, along with extensive field testing.



Features:

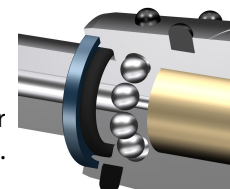
• Secure Cutter Retention

Two methods of retention are required for reliably holding the rolling cutters in place. Static retention of the cutters into the tool body with an innovative dual wedge block system, locking the cutters securely into the body in both the axial and radial directions. Dynamic retention of the rolling cutters onto the bearing shaft with oversize anti-friction ball bearing system, which is fully internal to the bearing package. No load bearing elements outside of the seal system generating heat and shortening the life of the seal.



Dual tapered wedge locking mechanism.

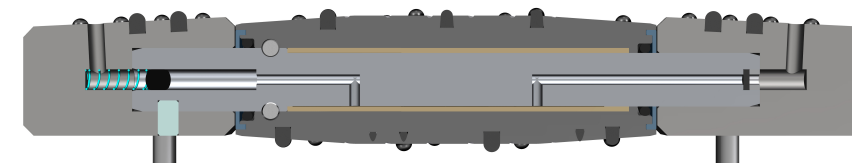
Large diameter roller bearing cutter retention.



• Pressure Compensated – Pressure Relieved Lubrication System

The comprehensive lubrication system features an integral pressure compensation system, a large volume grease reservoir and an internal pressure relief valve. With strategically placed lubrication passageways, this system ensures adequate bearing lubrication over an extended run time, even in highest downhole pressure environments, without seal damage or leakage from differential pressures.

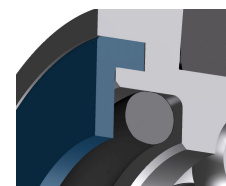
Large reservoir pressure compensation system.



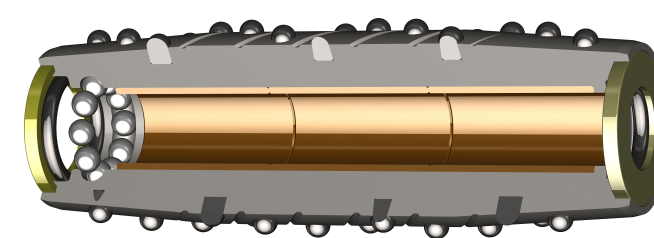
Innovative internal pressure relief valve.

• Advanced Technology Seal and Bearing Package

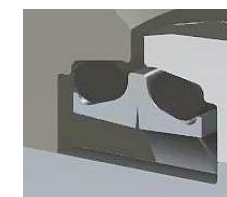
Large diameter O-ring seals, labyrinth seal protector, floating silver plated high strength alloy bushings and specially formulated synthetic grease. Optional mechanical face seal where high rpm and high bottom hole temperatures.



Special compound large cross section HBNR O-ring seals with labyrinth seal protector.



Silver plated high strength copper-nickel-tin alloy floating bearing bushings.



Optional mechanical face seal for high RPM, HPHT or extended duration runs.

* Patent Pending

Benefits:

- Reduces BHA torque and stick slip compared to conventional stabilizers
- Efficiently eliminates ledges, hole tortuosity and micro doglegs
- Improves WOB for higher ROP and longer bit life
- Compacts mud filter cake versus scraping
- Back reams more efficiently than stabilizers or drill bits
- Replaces conventional fixed blade stabilizers and reamers