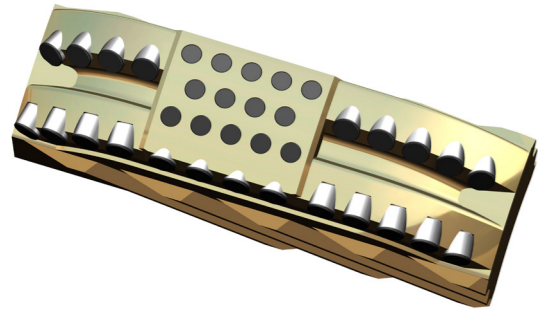
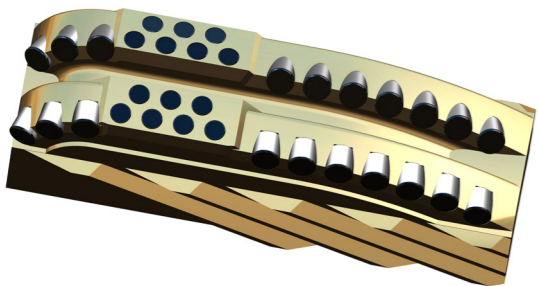


Stiletto Under Reamer

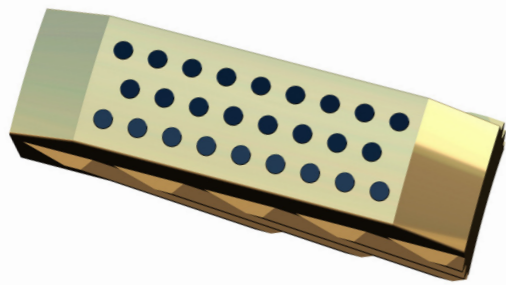
Application specific cutter blocks



Block 1 - for harder higher compressive strength and/or highly abrasive formation



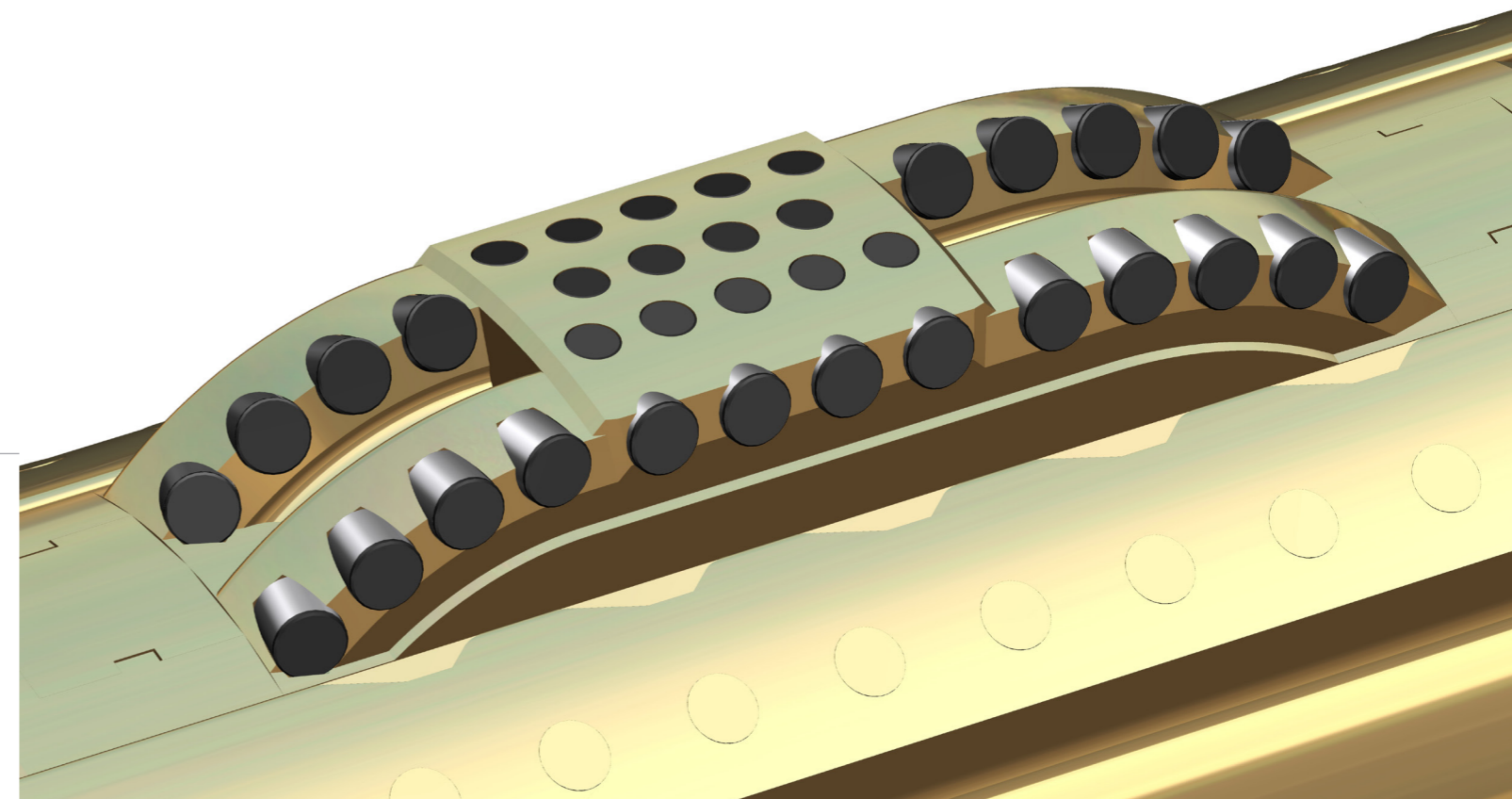
Block 2 - for softer lower compressive strength formations



Block 3 - for stabilization only

Stiletto Under Reamer

Simple and reliable hole enlargement while drilling



To learn more about how the Stiletto Under Reamer can reduce your hole enlargement costs and risks, contact your nearest BesteBit representative.

Chengdu Best Diamond Bit Co., Ltd.

No.789, Keyuan South 2nd Road, Hi-Tech District | Chengdu, Sichuan, China 610041

Telephone: 86-28-85311882 | www.bestebit.com



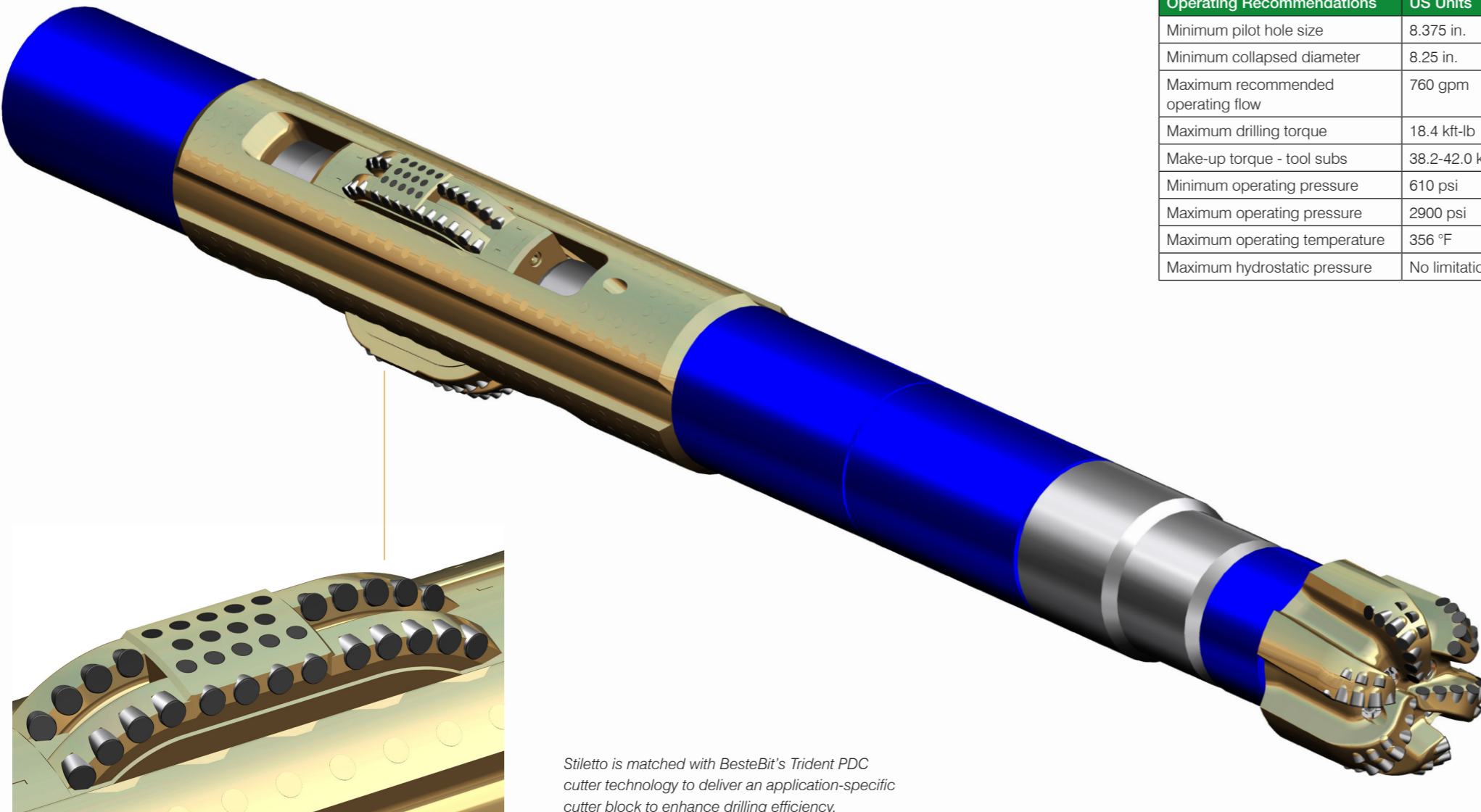
Stiletto Under Reamer

Simple and reliable hole enlargement while drilling

The Stiletto under reamer provides a simple and reliable solution to the drilling inefficiencies and out-of-gauge wellbores that can increase hole enlargement costs exponentially. Whether enlarging an existing wellbore or reaming-while-drilling new hole, the Stiletto delivers the utmost in durability regardless of the formation or operating parameters. This versatile tool comprises a single-piece body engineered with Finite Element Analysis (FEA) modeling to ensure a robust low-mass design. This concentric symmetric mass-balanced design provides optimum hole opening ratios up to 25%, with increased flows around the tool for enhanced hole cleaning and reduced downhole vibration. Designed with an exceptional mechanical force advantage,

the Stiletto under reamer is opened and closed by one of two hydraulic activation methods: Ball drop or by way of pre-set jet nozzles where a fully controlled pressure drop activates the tool. Either way, Stiletto opens completely and consistently, delivering simple, dependable and cost-effective hole enlargement in a single run.

Above all, a Stiletto under reamer is matched with BesteBit's pacesetter Trident PDC cutter technology, delivering an application-specific cutter block that enhances drilling efficiency and consistently produces a full-gauge hole, from soft to hard and abrasive formations and under the most aggressive drilling parameters. We even configure cutter blocks specifically to clean out cement in the casing and non-active versions that allows the tool to function as a stabilizer. The Stiletto under reamer is available in a wide range of hole diameters and is compatible with all rotary steerable systems (RSS).



Stiletto is matched with BesteBit's Trident PDC cutter technology to deliver an application-specific cutter block to enhance drilling efficiency.

General Tool Specifications	US Units	SI Units
Hole enlargement size	9.00-10.50 in.	228.6-266.7 mm
Pass-through size diameter	8.375 in.	212.7 mm
Body size diameter	8.25 in.	209.6 mm
Fishing neck diameter	7.50 in.	190.5 mm
Standard Cutter size	0.529 in.	13.44 mm
Internal bore diameter	1.57 in.	40 mm
Drop ball size (diameter)	2.0/1.75 in.	50.8/44.5 mm
Ball seat diameter	18.1/1.57 in.	46/40 mm
Overall length (shoulder-to-shoulder)	69.69 in.	1,770
Weight 1,400 lb 635 kg	719 lb	326 kg
Connections	UP 6-5/8" Reg Box	DOWN 6-5/8" Reg Pin
Body nozzle	3 Variable	
Number of cutter blades	3	
Expandable stabilizer available	yes	

Operating Recommendations	US Units	SI Units
Minimum pilot hole size	8.375 in.	212.7 mm
Minimum collapsed diameter	8.25 in.	209.6 mm
Maximum recommended operating flow	760 gpm	2880 lpm
Maximum drilling torque	18.4 kft-lb	25 kNm
Make-up torque - tool subs	38.2-42.0 kft-lb	51.7-56.9 kNm
Minimum operating pressure	610 psi	4.2 Mpa
Maximum operating pressure	2900 psi	20 Mpa
Maximum operating temperature	356 °F	180°C
Maximum hydrostatic pressure	No limitation	

Features

- Suitable for all formations and RSS
- Straightforward single-body FEA-modeled tool design
- Application-specific Trident PDC cutter blocks
- Superior mechanical force advantage
- Adjustable jet nozzles with integrated flow paths
- Hydraulic activation through ball drop or controlled pressure drop
- Concentric symmetric mass-balanced design
- Track feed design for securing and deploying cutters
- Bi-directional capability
- Cutter deployment independent of BHA weight, formation strength and operating parameters

Benefits

- Enlarges hole while drilling in single run
- Ensures smooth engagement for consistent full-gauge wellbore
- Provides high stress tolerance and maximum durability
- Reduces drill string vibration
- Improves drilling efficiency, BHA stabilization
- Promotes full or low flow through BHA
- Enhances hole cleaning
- Optimizes hole opening ratios of up to 25%
- Promotes operational simplicity, reliability
- Reduces non-productive time (NPT) and costs

