

XCD casing-while-drilling alloy casing bit

Drills wells to TD in one run and eliminates dedicated drillout runs

Where it is used

Vertical or tangent wells

How it increases drilling efficiency

The XCD* casing-while-drilling alloy casing bit drills on standard casing that is rotated at the surface. The sub of the PDC bit comprises durable oilfield-grade steel, and its body is a copper-based alloy. After the XCD casing bit has drilled to TD and the casing has been cemented, the bit's unique composition enables it to be drilled out by any standard PDC bit. The drillout PDC bit can then continue drilling the next interval, eliminating the need for a dedicated drillout run.



Bit cutting structure can be fitted with 13-, 16-, or 19-mm premium grade PDC cutters on each blade.

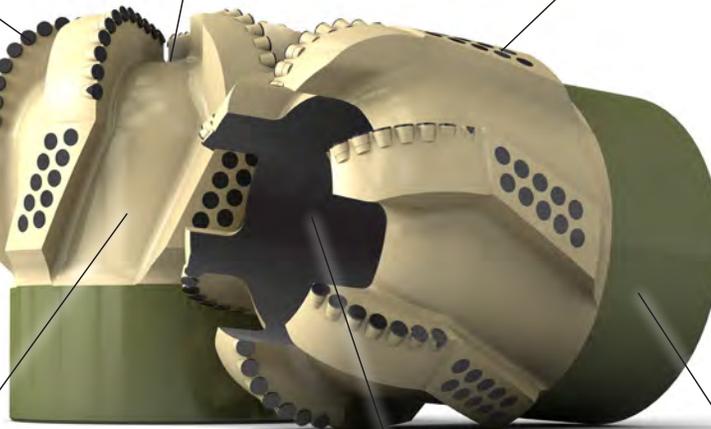


Optimized erosion-resistant nozzles direct flow and hydraulic force to maximize ROP.



Spiral-gauge pads maximize bit stability and reduce vibration.

Optional tungsten carbide coating applied to bit body and blades resists erosion in aggressive applications.



Large junk-slot areas maximize cuttings removal.

Bit body design enables drillout by any PDC bit.

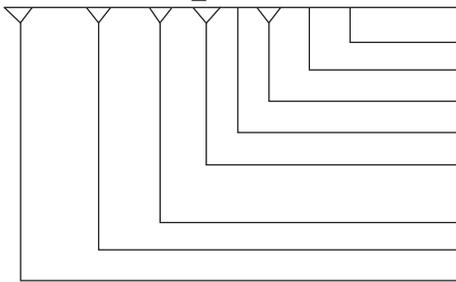
Bit sub made from steel grade to suit casing.

Available Bit Sizes

Application	Bit	Casing Size, in × Bit Size, in			
Soft formations <8,000 psi unconfined compressive strength (UCS)	XCD 319 bit	13 ³ / ₈ × 17 ¹ / ₂			
	XCD 413 bit	10 ³ / ₄ × 13 ¹ / ₂			
	XCD 416 bit	9 ⁵ / ₈ × 12 ¹ / ₄			
	XCD 419 bit	9 ⁵ / ₈ × 12 ¹ / ₄	13 ³ / ₈ × 17 ¹ / ₂	18 ⁵ / ₈ × 23	20 × 23 20 × 24
Medium formations 8,000–14,000 psi UCS	XCD 316 bit	12 ³ / ₄ × 15 ¹ / ₂			
	XCD 416 bit	9 ⁵ / ₈ × 12 ¹ / ₄			
	XCD 419 bit	9 ⁵ / ₈ × 12 ¹ / ₄	13 ³ / ₈ × 17 ¹ / ₂		
	XCD 516 bit	7 × 8 ¹ / ₂	10 ³ / ₄ × 13 ¹ / ₂		
	XCD 519 bit				16 × 18 ¹ / ₄
	XCD 616 bit	13 ³ / ₈ × 16	13 ³ / ₈ × 17 ¹ / ₂		
Hard formations >14,000 psi UCS	XCD 516 bit	9 ⁵ / ₈ × 11 ⁵ / ₈	9 ⁵ / ₈ × 12 ¹ / ₄		
	XCD 613 bit	9 ⁵ / ₈ × 12 ¹ / ₄			

Nomenclature

9⁵/₈ × 12¹/₄ XCD_R 5 16 B H



- Hydraulic feature
- Connection feature
- Cutter size
- Blade count
- Unique cutting element technology, when applicable
(no letter means premium PDC cutter)
- Bit type
- Bit size
- Casing size

Unique Cutting Elements

Y	Hyper* hyperbolic diamond cutting element
X	Axe* ridged diamond element
S	Stinger* conical diamond element
R	Enduro 360* rolling diamond cutting element

Connection Features

B	Blank thread form
WP	Weld preparation
BTC	API buttress-threaded connection
C	Premium threaded per request

Hydraulic Features (Internal)

H	Higher number of nozzles than standard
L	Lower number of nozzles than standard
E	Erosion-resistant nozzles