SMITH BITS
A Schlumberger Company

XCDR casing running reamer

13⅜-in × 15½-in XCDR 513 reamer

Where it is used

The XCDR* casing running reamer aids the running of casing in difficult wellbore conditions.

How it improves wells

The XCDR reamer helps navigate past ledges, low-side cuttings beds, and faults where casing can hang up. The reamer's cutting structure includes tungsten carbide cutters set at a nonaggressive rake angle to avoid overtorquing the casing string.

Large waterways between the blades maximize the junk-slot area. Engineered ports are drilled into the blades to strategically direct drilling fluid and optimize cleaning and cooling of the cutting structure. The reamer's alloy body can be easily drilled out with a standard PDC bit, eliminating a dedicated drillout run or use of a special drillout bit.

Features

- Tungsten carbide cutters on each blade enhance drilling performance
- Spiral gauge pads maximize stabilization and reduce vibration
- Optional lateral ports provide a secondary means of cementation

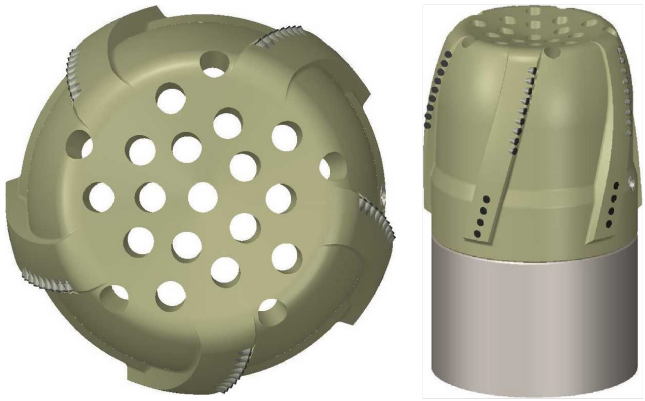
Nomenclature

13⅜×15½ XCDR _R 5 13 B H

- H — Hydraulics
- B — Connection type
- 13 — Cutter size
- 5 — Blade count
- R — Unique cutting element technology, when applicable (No letter means premium PDC cutter)
- _ — Reamer type
- XCDR — OD
- 13⅜×15½ — Casing size

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

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



13⅜-in × 15½-in XCDR 513 reamer.

Specifications	
Casing diameter, in [mm]	13.375 [339.73]
OD, in [mm]	15.5 [393.7]
Connection type	Blank
Drillout bit size, in [mm]	12.5 [317.5]
Body material	Copper-based alloy
Number of blades	5
Tungsten carbide face cutter size, in [mm]	0.512 [13]
Face cutter count	39
Tungsten carbide gauge cutter size, in [mm]	0.512 [13]
Gauge cutter count	5
Junk-slot area, in² [mm²]	20.22 [13,045.14]
Gauge protection type	TCI
Gauge length, in [mm]	4 [101.6]
Nozzles	Open ports
Nozzle total flow area, in² [mm²]	49.874 [32,176.71]
Nozzle count	21
Bit sub material	Steel
Bit sub material grade yield, kPa	861,845

*Mark of Schlumberger