



HDD FIXED-CUTTER PILOT TOOLING

PDC Pilot Bit Product Data Sheet

Verified dimensions, connections, cutter references and nozzle arrangements for five drawing-controlled configurations.

Document scope

Product data sheet for the DRILLNOVA PDC pilot bit family represented by drawings D260410B, D260511B-1, D20260608B-1, D20260724B-1 and D260508B-1.

Model	Drawing OD	Overall length	Connection	Nozzles
4-3/4 in PDC Pilot Bit	120.65 mm	249.4 mm	2-3/8 REG pin	5 x 6 mm
5-1/2 in PDC Pilot Bit - 2-3/8 Connection	139.7 mm	253 mm	2-3/8 API REG	5 x 6 mm
5-1/2 in HDD PDC Pilot Bit - 2-7/8 Connection	139.7 mm	262.3 mm	2-7/8 API REG	6 x 4 mm
8-1/2 in HDD PDC Pilot Bit	215.9 mm	325.7 mm	4-1/2 REG	5 x 6 mm
10 in PDC Pilot Bit	250.8 mm drawing OD	410.7 mm	6-5/8 API REG pin	7 x 6 mm

Important: The supplied drawings define geometry, cutter references, nozzle arrangements and connections. They do not define universal operating torque, rotary speed, thrust, pullback, flow or pressure limits. Those values must be approved for the exact bit, rig, formation and bore plan.



Product family overview

Quick answer: DRILLNOVA PDC pilot bits are fixed-cutter pilot-hole tools for horizontal directional drilling. The supplied family spans nominal 4-3/4 in, 5-1/2 in, 8-1/2 in and 10 in configurations. Selection starts with the required pilot diameter, verified connection, formation data, cutter layout and hydraulic plan.

What the drawings confirm

- Drawing outside diameter and overall length for each configuration.
- Connection type and body reference dimensions.
- PDC cutter references, with quantities where explicitly stated.
- Nozzle count and nozzle diameter.
- Hardfacing, backcutter and gauge-cutter features where explicitly identified.

What requires project confirmation

- Formation suitability, including compressive strength, abrasiveness, interbedding and inclusions.
- Operating window: rotary speed, applied load, torque, flow and pressure.
- Connection compatibility, makeup procedure and approved makeup torque.
- Nozzle selection for the actual pump, fluid system and cuttings-return requirement.
- Final cutter grade, delivery configuration and revision status.

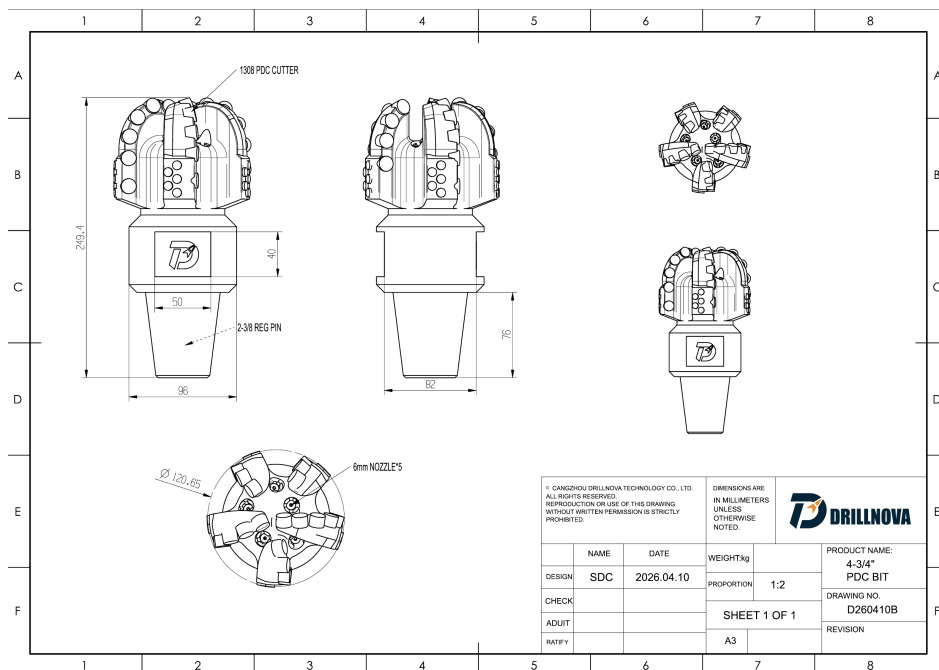
Selection rule

Do not select by nominal diameter alone. Confirm drawing number, connection, cutter configuration, nozzle arrangement and approved revision.



4-3/4 in PDC Pilot Bit

Drawing reference	D260410B 2026-04-10
Drawing outside diameter	120.65 mm
Overall length	249.4 mm
Body reference	96 mm shoulder width
Connection	2-3/8 REG pin
Cutter arrangement	1308 PDC cutters; quantity not stated on drawing
Nozzle arrangement	5 x 6 mm
Drawing features	Five-blade fixed-cutter profile

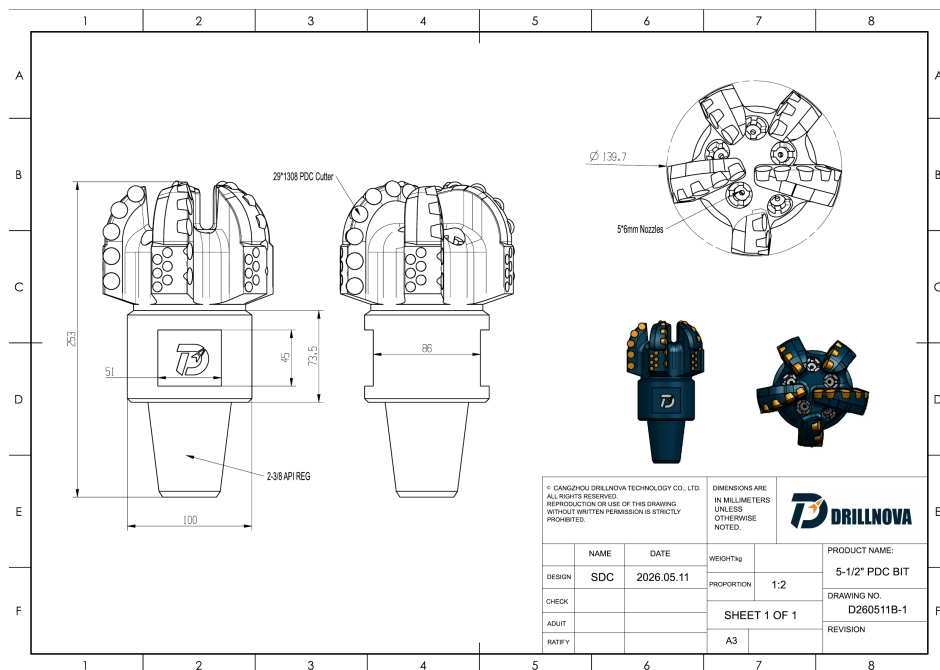


Engineering drawing shown for configuration identification. Use the controlled source drawing for manufacturing or acceptance.



5-1/2 in PDC Pilot Bit - 2-3/8 Connection

Drawing reference	D260511B-1 2026-05-11
Drawing outside diameter	139.7 mm
Overall length	253 mm
Body reference	100 mm body width
Connection	2-3/8 API REG
Cutter arrangement	29 x 1308 PDC cutters
Nozzle arrangement	5 x 6 mm
Drawing features	Five-blade fixed-cutter profile

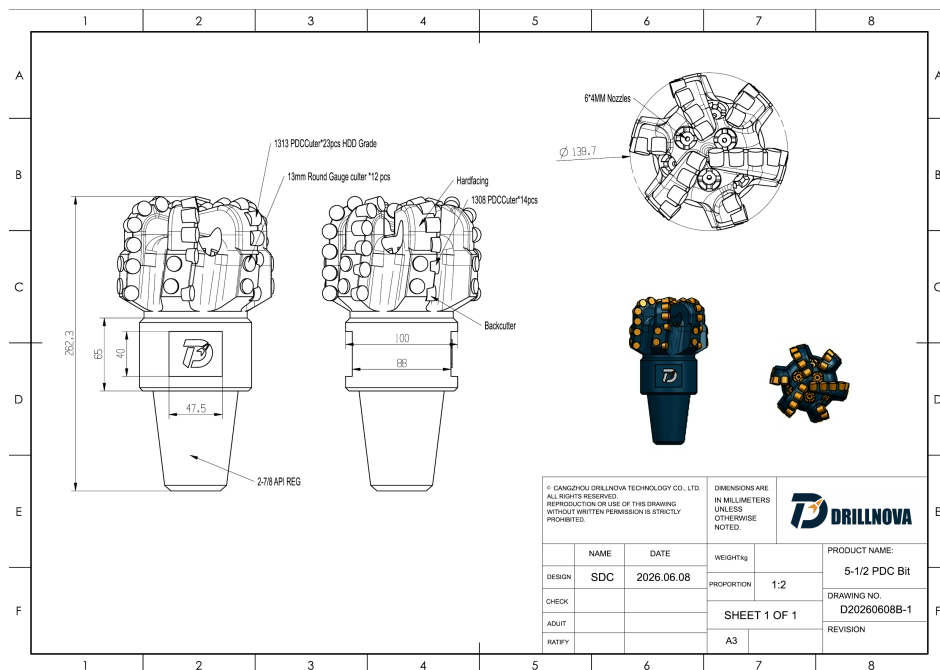


Engineering drawing shown for configuration identification. Use the controlled source drawing for manufacturing or acceptance.



5-1/2 in HDD PDC Pilot Bit - 2-7/8 Connection

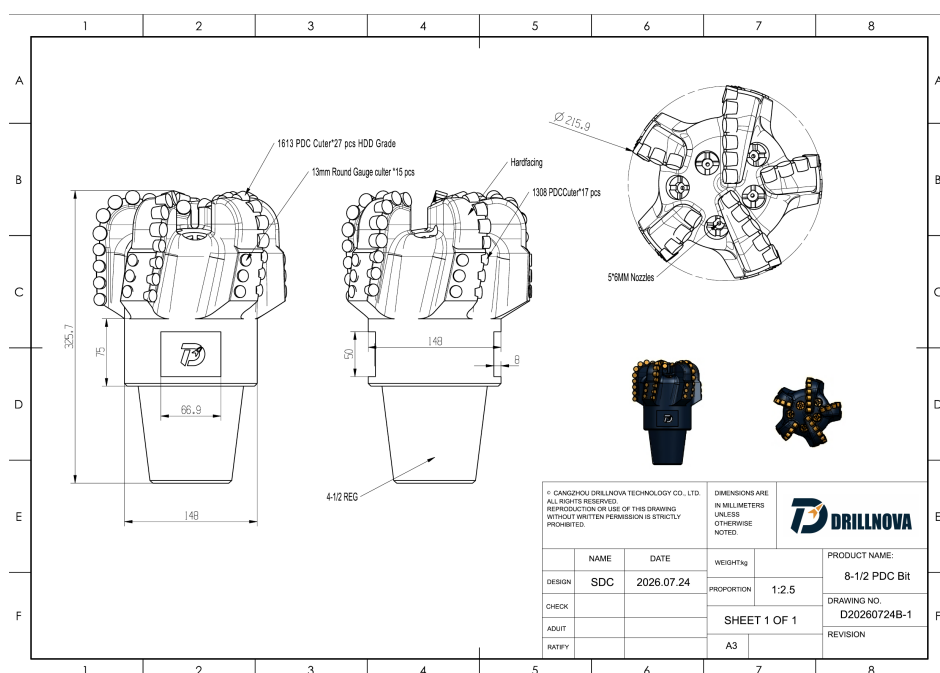
Drawing reference	D20260608B-1 2026-06-08
Drawing outside diameter	139.7 mm
Overall length	262.3 mm
Body reference	100 mm body width
Connection	2-7/8 API REG
Cutter arrangement	23 x 1313 HDD-grade PDC; 14 x 1308 PDC; 12 x 13 mm round gauge cutters
Nozzle arrangement	6 x 4 mm
Drawing features	Six-blade profile, backcutters and hardfacing indicated



Engineering drawing shown for configuration identification. Use the controlled source drawing for manufacturing or acceptance.

8-1/2 in HDD PDC Pilot Bit

Drawing reference	D20260724B-1 2026-07-24
Drawing outside diameter	215.9 mm
Overall length	325.7 mm
Body reference	148 mm body width
Connection	4-1/2 REG
Cutter arrangement	27 x 1613 HDD-grade PDC; 17 x 1308 PDC; 15 x 13 mm round gauge cutters
Nozzle arrangement	5 x 6 mm
Drawing features	Five-blade profile and hardfacing indicated

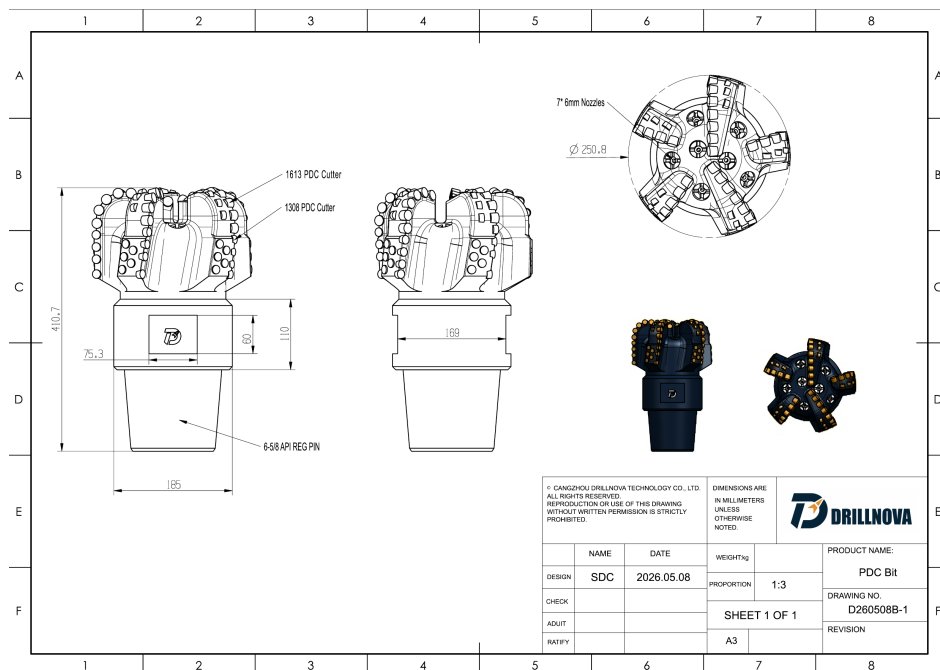


Engineering drawing shown for configuration identification. Use the controlled source drawing for manufacturing or acceptance.



10 in PDC Pilot Bit

Drawing reference	D260508B-1 2026-05-08
Drawing outside diameter	250.8 mm drawing OD
Overall length	410.7 mm
Body reference	185 mm body width
Connection	6-5/8 API REG pin
Cutter arrangement	1613 and 1308 PDC cutters; quantities not stated on drawing
Nozzle arrangement	7 x 6 mm
Drawing features	Five-blade fixed-cutter profile



Engineering drawing shown for configuration identification. Use the controlled source drawing for manufacturing or acceptance.



Application and selection information

Information to provide for an engineering review

- Geotechnical profile, formation strength range, abrasiveness and expected transitions.
- Pilot-hole diameter, bore length, entry and exit geometry, and planned steering requirements.
- Rig make and model, connection, torque and thrust/pullback capability.
- Pump capacity, drilling-fluid program, nozzle plan and expected returns.
- Existing drawing number or tool serial identification when requesting a replacement.

Product FAQ

Are the two 5-1/2 in bits the same?

No. D260511B-1 uses a 2-3/8 API REG connection and 5 x 6 mm nozzles. D20260608B-1 uses a 2-7/8 API REG connection and 6 x 4 mm nozzles, with additional gauge-cutter, backcutter and hardfacing callouts.

Does the 10 in name mean the drawing OD is exactly 254 mm?

No. Drawing D260508B-1 identifies the product as a PDC bit and shows a drawing outside diameter of 250.8 mm. Use the drawing dimension for fit and acceptance.

Can operating limits be taken from this data sheet?

No. The drawings do not provide an approved operating envelope. Obtain project-specific limits before drilling.

Technical review

Send the drawing number, formation information, rig data and bore plan to DRILLNOVA before final selection or substitution.