



HDD FIXED-CUTTER PILOT TOOLING

PDC Pilot Bit Inspection Checklist

Printable receiving, pre-use, post-run and disposition record for the drawing-controlled PDC pilot bit family.

Document scope

Inspection checklist 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.



A. Identification and traceability

Customer / project	_____ _____
Inspection date / location	_____ _____
Inspector	_____ _____
Product / nominal size	_____ _____
Drawing number / revision	_____ _____
Serial or batch identification	_____ _____
Rig / steering assembly	_____ _____
Run hours or bore interval	_____ _____

Select the drawing-controlled configuration

- ☐ 4-3/4 in PDC Pilot Bit | D260410B | 2-3/8 REG pin
- ☐ 5-1/2 in PDC Pilot Bit - 2-3/8 Connection | D260511B-1 | 2-3/8 API REG
- ☐ 5-1/2 in HDD PDC Pilot Bit - 2-7/8 Connection | D20260608B-1 | 2-7/8 API REG
- ☐ 8-1/2 in HDD PDC Pilot Bit | D20260724B-1 | 4-1/2 REG
- ☐ 10 in PDC Pilot Bit | D260508B-1 | 6-5/8 API REG pin

Inspection status key

Mark each item PASS, REPAIR / REVIEW, N/A or NOT VERIFIED. Record measurements and evidence where applicable.



B. Receiving and pre-use inspection

Identification

- ☐ Product identification matches the purchase order and approved drawing. Status: _____ Notes: _____
- ☐ Drawing number and revision are current and legible. Status: _____ Notes: _____
- ☐ Shipping damage review completed and photographs retained. Status: _____ Notes: _____

Body and blades

- ☐ No visible crack, impact deformation or unauthorized weld/repair. Status: _____ Notes: _____
- ☐ Blade surfaces and hardfacing, where specified, are intact and acceptable. Status: _____ Notes: _____
- ☐ Fluid passages are clean and unobstructed. Status: _____ Notes: _____

Cutting structure

- ☐ All specified PDC cutters are present. Status: _____ Notes: _____
- ☐ Gauge cutters and backcutters are present where shown on the drawing. Status: _____ Notes: _____
- ☐ No cutter is visibly cracked, chipped, loose, displaced or heat-damaged. Status: _____ Notes: _____
- ☐ Cutter exposure and orientation appear consistent with the approved configuration. Status: _____ Notes: _____

Nozzles

- ☐ Nozzle count and diameter match the approved drawing or hydraulic plan. Status: _____ Notes: _____
- ☐ Nozzles are secure, unobstructed and visibly undamaged. Status: _____ Notes: _____

Connection

- ☐ Connection type matches the approved mating component. Status: _____ Notes: _____
- ☐ Threads show no visible galling, impact, corrosion, cross-threading or contamination. Status: _____ Notes: _____
- ☐ Shoulder and sealing/contact surfaces are clean and undamaged. Status: _____ Notes: _____
- ☐ Connection protection is available for transport and storage. Status: _____ Notes: _____



C. Post-run inspection

- [] Operating data and abnormal events have been attached or referenced. Status: _____
- [] Bit cleaned sufficiently for inspection without damaging cutters or threads. Status: _____
- [] All cutters inspected around the full circumference. Status: _____
- [] Cutter wear is even / uneven (circle one) and documented with photographs. Status: _____
- [] No missing, rotated, loose, cracked or severely chipped cutter observed. Status: _____
- [] Gauge condition measured and compared with the approved acceptance criteria. Status: _____
- [] Blade, body and hardfacing condition inspected for erosion, washout, cracking and impact. Status: _____
- [] Backcutters inspected where shown on the drawing. Status: _____
- [] Nozzles inspected for blockage, erosion, damage and retention. Status: _____
- [] Fluid passages inspected for erosion or restriction. Status: _____
- [] Connection threads and shoulders inspected after disassembly. Status: _____
- [] Cleaning, preservation and connection protection completed after inspection. Status: _____

Measured and observed condition

Inspection point	Requirement / reference	Measured / observed	Status
Outside diameter / gauge			
Overall length if required			
Nozzle count and size			
Cutter condition / count			
Connection			
Hardfacing / body			
Other			



D. Disposition and release

- ☐ ACCEPTED FOR SERVICE - all applicable acceptance criteria met.
- ☐ CONDITIONAL RELEASE - restrictions documented and engineering approval attached.
- ☐ REPAIR / REVIEW REQUIRED - quarantined pending approved instruction.
- ☐ REJECTED - not approved for service; disposition record required.

Required attachments

- ☐ Product identification photograph
- ☐ Cutting face and gauge photographs
- ☐ Connection photographs
- ☐ Measurement record
- ☐ Operating record / incident description where applicable
- ☐ Engineering or repair authorization where applicable

Inspector name / signature / date	
Reviewer name / signature / date	
Final disposition reference	
Comments	

Acceptance control

This checklist records visible and measured condition. Acceptance limits must come from the approved drawing, inspection procedure, customer requirement or engineering disposition.