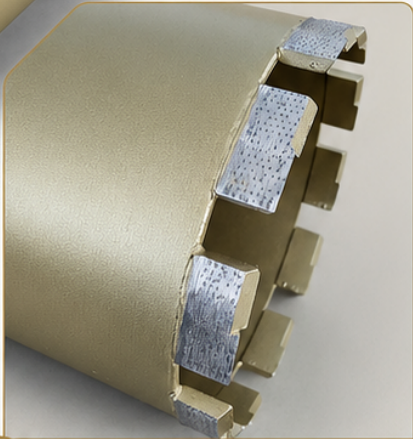


PRODUCT VISUAL / ORDERED-ARRAY WET CORING

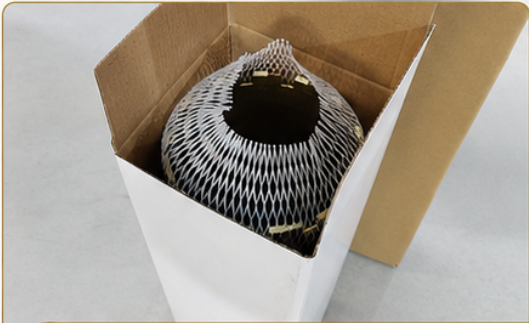
PATTERN POSITIONED DIAMOND CORE BIT

Orderly Diamond Distribution for
Faster Cutting and Longer Life

-  Pattern Positioned Segments
-  Stable, Smooth Drilling
-  Fast Cutting Performance
-  Protective Individual Packaging

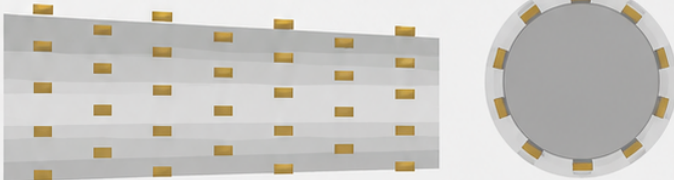


 **ORDERED DIAMOND ARRANGEMENT**
Pattern positioned segments deliver efficient cutting, reduced vibration, and extended tool life.



 **PACKED WITH PROTECTIVE MESH SLEEVE**
Individual packaging for secure protection during storage and shipping.

PATTERN POSITIONED TECHNOLOGY
Diamond segments are placed in a precise, orderly pattern for balanced cutting, better debris evacuation, and superior performance.



-  **PREMIUM DIAMOND**
High-quality diamonds for longer life and consistent performance.
-  **DURABLE & RELIABLE**
High-strength steel body for maximum durability and less wear.
-  **HIGH EFFICIENCY**
Fast cutting with smooth drilling and reduced downtime.
-  **BUILT FOR PROFESSIONALS**
Ideal for concrete, reinforced concrete, and a wide range of applications.

Customer-facing product visual. Final segment count, dimensions, bond, connection and barrel configuration are controlled by the approved SKU specification and production sample.

01 ENGINEERING ARCHITECTURE

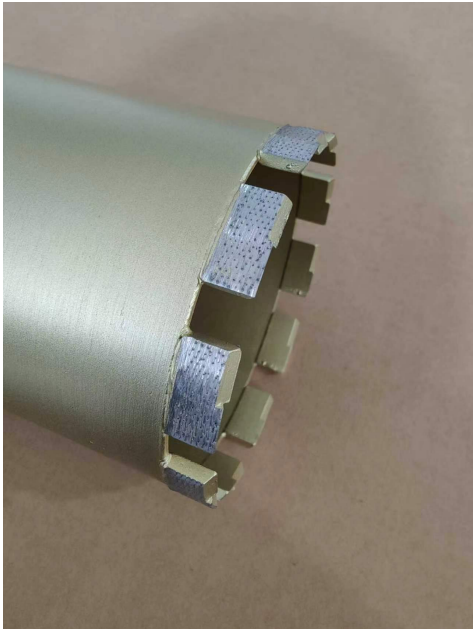
Ordered-Array Segment System

Pattern-positioned and ordered-array describe the same core design intent here: controlled diamond placement through the working layer, combined with a free-cutting bond and laser-welded segmented construction for professional wet coring.



FULL-SERIES BARREL REFERENCE

Representative black-finish barrels showing the same segmented product-family direction across diameter classes.



ORDERED-ARRAY SEGMENT DETAIL

Close-up reference of the segmented working end. The visible patterned points communicate controlled diamond placement through the cutting layer.

CONTROLLED DIAMOND PLACEMENT	3D patterned distribution supports more uniform diamond exposure, stable cutting behavior and improved utilization through the segment height.
FREE-CUTTING / ANTI-GLAZING BOND	Bond selection is matched to hard and abrasive aggregates so fresh cutting points open predictably instead of polishing over during deep wet drilling.
LASER-WELDED SEGMENT JOINT	Each segment is laser welded to the barrel to provide a high-integrity joint under feed pressure, vibration, thermal cycling and incidental reinforcement contact.
CONCENTRICITY & DRILLING STABILITY	Barrel forming, thread machining and assembly control are managed to reduce runout and vibration on professional drill rigs.

ONE SEGMENTED ORDERED-ARRAY ARCHITECTURE ACROSS Ø18-162 MM

Small diameters are not specified as crown bits in this program. Segment size and count scale with diameter while the working-end concept remains the same across the full series.

02 STANDARD PRODUCTION PROGRAM

Technical Specifications & SKU Matrix

Current standard production configuration for the unified segmented ordered-array program. The table below is locked to the supplied factory specification: 450 mm effective length, 1-1/4 in connection, diameter-matched barrel wall, segment size and segment count.

Diameter	Effective length	Connection	Barrel wall	Segment size (L × W × H)	Seg. qty
Ø18	450 mm	1-1/4 in	2.0 mm	12 × 3.5 × 10 mm	2
Ø24	450 mm	1-1/4 in	2.0 mm	12 × 3.5 × 10 mm	2
Ø25	450 mm	1-1/4 in	2.0 mm	16 × 3.5 × 10 mm	2
Ø28	450 mm	1-1/4 in	2.0 mm	16 × 3.5 × 10 mm	2
Ø30	450 mm	1-1/4 in	2.0 mm	16 × 3.5 × 10 mm	4
Ø32	450 mm	1-1/4 in	2.0 mm	16 × 3.5 × 10 mm	4
Ø36	450 mm	1-1/4 in	2.0 mm	16 × 3.5 × 10 mm	4
Ø38	450 mm	1-1/4 in	2.0 mm	16 × 3.5 × 10 mm	4
Ø42	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	4
Ø52	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	5
Ø57	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	5
Ø62	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	6
Ø67	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	6
Ø72	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	7
Ø77	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	7
Ø82	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	8
Ø92	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	8
Ø102	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	9
Ø107	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	9
Ø112	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	10
Ø127	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	10
Ø132	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	11
Ø142	450 mm	1-1/4 in	2.0 mm	24 × 3.5 × 12 mm	11
Ø152	450 mm	1-1/4 in	2.5 mm	24 × 4.0 × 12 mm	12
Ø162	450 mm	1-1/4 in	2.5 mm	24 × 4.0 × 12 mm	12

FULL-SERIES ARCHITECTURE

All listed diameters use segmented ordered-array cutting segments. Ø18-28 mm remain segmented - not crown-type. The small diameters use fewer, shorter segments; segment count increases progressively with diameter.

Standard-program note: dimensions above reproduce the supplied production / quotation sheet. Price data is intentionally excluded from this customer-facing TDS. Any non-standard diameter, length, interface or segment configuration requires separate engineering confirmation.

03 APPLICATION PARAMETERS

Recommended Operating Window

Diameter range	Recommended RPM	Motor power	Method	Cooling
Ø18-45	1,800-3,000 rpm	1.8-2.5 kW	Rig-mounted / selected handheld	Wet; stable water supply
Ø51-92	900-1,800 rpm	2.2-3.3 kW	Rig-mounted	Wet; continuous slurry evacuation
Ø102-162	450-900 rpm	2.5-3.5 kW+	Rig-mounted	Wet

Target Materials & Machines

- Primary application: reinforced concrete, including dense reinforcement conditions and demanding contractor work.
- Suitable aggregates: flint, basalt, hard granite and river-gravel concrete systems.
- Typical rigs: Hilti DD series, Milwaukee, Weka, Husqvarna and other professional wet coring machines with matched spindle interfaces.

Field Use & Test Protocol

Break-in / initial exposure	For the first 20-30 mm, use moderate feed pressure and stable water flow so the first working layer opens uniformly.
Glazing recovery	If cutting speed falls in very hard, low-abrasion concrete, briefly dress the segment in a soft abrasive material and reduce water only within safe operating limits.
Benchmark test	Compare penetration time, segment wear and holes-per-mm of segment against the customer reference bit under the same rig, operator, water flow and concrete / rebar condition.

Engineering Disclaimer

RPM, motor power, application guidance and performance statements in this sheet are engineering reference values rather than universal guarantees. The diameter, 450 mm effective length, 1-1/4 in connection, barrel wall, segment dimensions and segment quantities listed in the standard SKU matrix reflect the supplied current production program and should be reconfirmed on the final purchase order.

CONFIGURATION INPUT REQUIRED FOR FINAL QUOTATION

Diameter range • effective length • connection • rig model / power • concrete & aggregate • rebar condition • target speed vs. lifetime balance