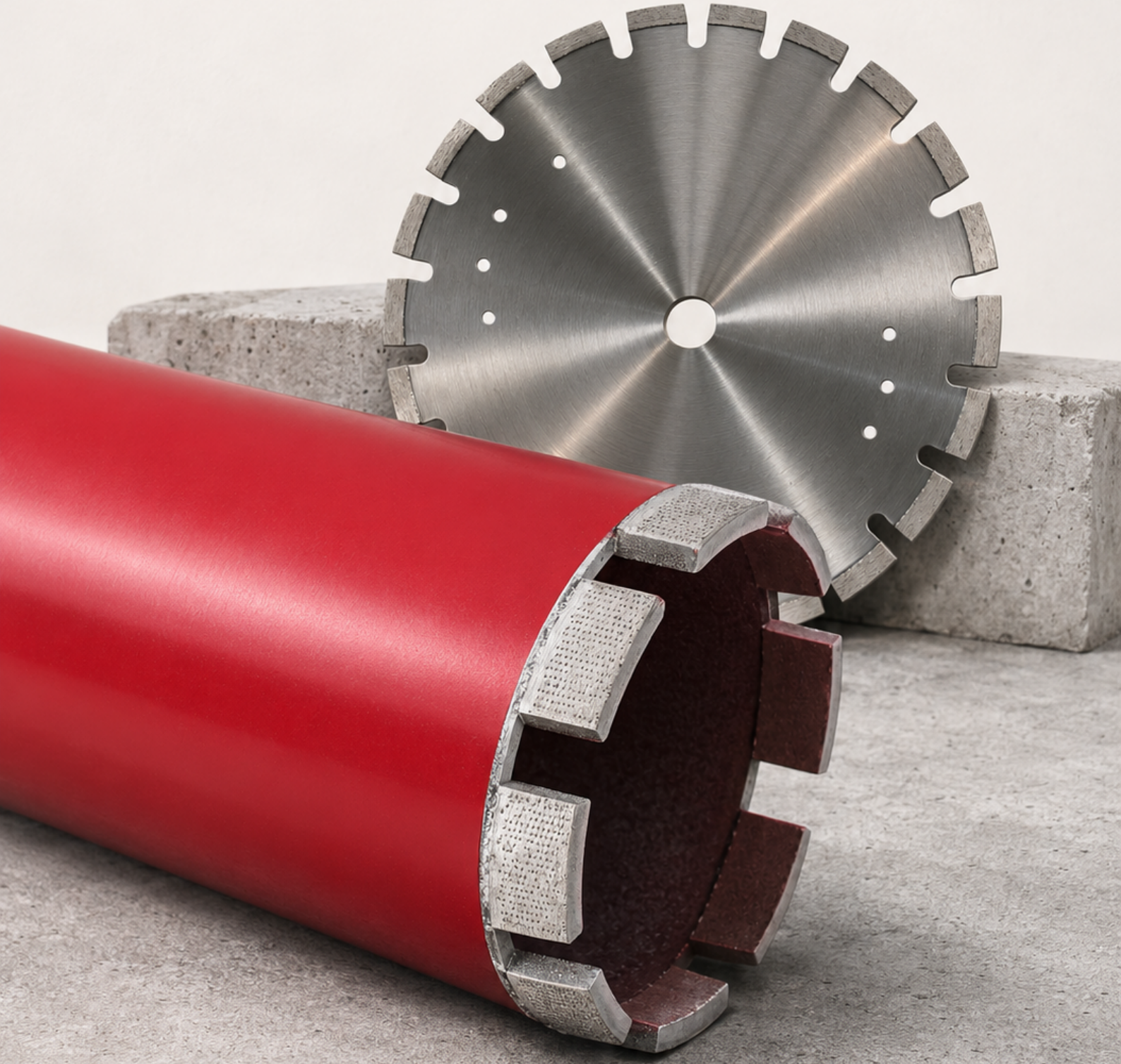
ZHONGHUAN TOOLS

FIELD CATALOGUE

DIAMOND TOOLS

Drilling, cutting and surface preparation



zhonghuantools.com

PRODUCT INDEX

03–13
Core drilling

Laser-welded wet core bits 04
ARIX equidistant core bits 05
ARIX diameter chart 06
Crown bits & core barrels 07
Handheld dry masonry core bits 08
Micro-percussion & socket core bits 09
Core bit segment profiles 10
Segment edges & face patterns 11
Replacement core bit segments 12
Coring adapters & extensions 13

14–24
Saw blades & cutting

Diamond blade quick selector 15
Asphalt & early-entry floor blades 16
Cured & reinforced concrete blades 17
Wall & ring saw blades 18
Handheld asphalt & green concrete blades 19
Emergency-service & cordless blades 20
Precast plant saw blades 21
Silent-core bridge saw blades 22
Tuck-point & crack-chaser blades 23
Diamond wire saws 24

25–30
Tile & natural stone

Porcelain & tile blades 26
Porcelain & tile hole saws 27
Stone blades & segments 28
Stone core bits 29
Stone grinding & polishing 30

31–39
Grinding & coating removal

Handheld PCD cup wheels 32
Redi Lock PCD shoes 33
Bolt-on PCD shoes 34
Metal-bond grinding cups 35
Bond-matched grinding shoes 36
Ultra-hard floor grinding 37
250 mm floor grinding discs 38
Concrete polishing pads 39

Contact 40

03–13

CORE DRILLING



Select by application

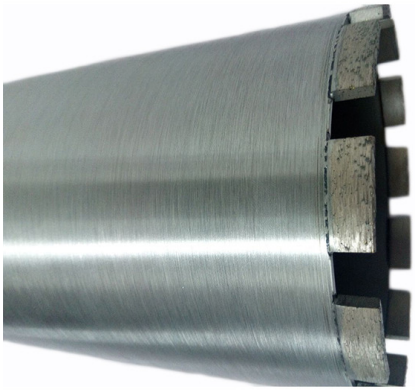
Application	Tool	Page
Reinforced concrete	Wet core bits	04
Dense reinforcement	ARIX wet core bits	05
Brick and block openings	Handheld dry core bits	08
Identify a segment shape	Segment profile guide	10

LASER-WELDED WET CORE BITS

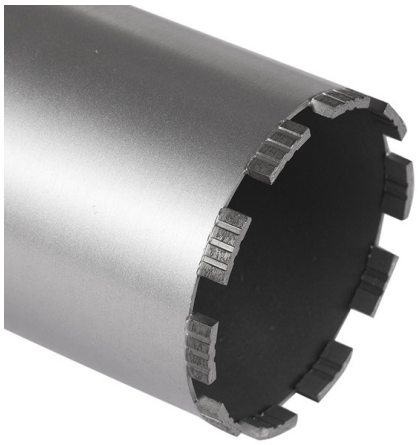
Wet drilling in reinforced concrete and hard stone.



Complete wet core bit



Standard segments



Grooved turbo segments

Specifications

Configuration	Regular specification	Other options
Diameter	Ø16–350 mm	Custom up to Ø600 mm
Working length	300 / 400 / 450 mm	Custom up to 1,000 mm
Connections	1 1/4 in UNC female · 1/2 in BSP female or male · 5/8-11	Match the drill spindle
Segment height / body	10 mm standard · 12 mm turbo	30CrMnSi or 42CrMo steel body

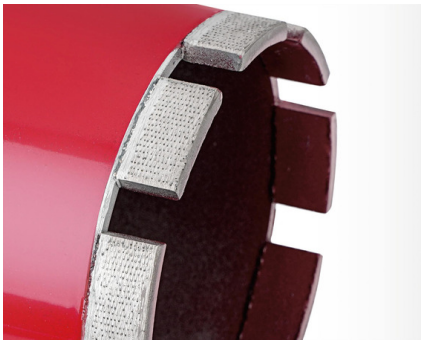
Compare segment shapes on pages 10–11.

ARIX EQUIDISTANT CORE BITS

Wet coring in reinforced concrete. Diamond particles are arranged in a regular pattern within each segment.



ARIX wet core bit



Ordered diamonds on the cutting face



Loose ordered-array segments

Specifications

Feature	ARIX range
Diameter series	25 diameters from Ø18 to Ø162 mm
Working length	450 mm
Connection	1 1/4 in
Cutting rim	Laser-welded, ordered-diamond segments across the diameter series

ARIX DIAMETER CHART

Barrel wall, segment size and segment count for 25 standard wet core bit diameters.

Ø18–162 mm	450 mm	1-1/4 in
Bit diameter	**Working length**	**Connection**

Bit diameter (mm)	Barrel wall (mm)	Segment L × W × H (mm)	Segments per bit
18, 24	2.0	12 × 3.5 × 10	2
25, 28	2.0	16 × 3.5 × 10	2
30, 32, 36, 38	2.0	16 × 3.5 × 10	4
42	2.0	24 × 3.5 × 12	4
52, 57	2.0	24 × 3.5 × 12	5
62, 67	2.0	24 × 3.5 × 12	6
72, 77	2.0	24 × 3.5 × 12	7
82, 92	2.0	24 × 3.5 × 12	8
102, 107	2.0	24 × 3.5 × 12	9
112, 127	2.0	24 × 3.5 × 12	10
132, 142	2.0	24 × 3.5 × 12	11
152, 162	2.5	24 × 4.0 × 12	12

CROWN BITS & CORE BARRELS

Ring crowns, three-piece assemblies and bare steel barrels for core drilling.



Wet crown core bit



Three-piece core assembly



Bare steel core barrels

Specifications

Product	Reference size	Connection
Wet crown bit	Ø16 / 18 mm × 300 / 350 mm working length	1/2 in BSP
Wet crown bit	Ø22 / 32 mm × 350 / 400 / 450 mm working length	1/2 in BSP
Bare core barrel	Ø32 / 65 / 100 mm × 450 mm working length · 2.0 mm wall	1 1/4 in UNC
Bare core barrel	Ø150 / 200 mm × 450 mm working length · 2.5 mm wall	1 1/4 in UNC

HANDHELD DRY MASONRY CORE BITS

Handheld dry drilling in brick, block and soft masonry.



Slotted dry core bit



Compact dry core bits



Dry core bit set

Specifications

Feature	Specification
Diameter range	Ø25–162 mm
Connection options	M14 or 1/2 in BSP
Method	Handheld dry drilling
Material	Soft brick, block and masonry

MICRO-PERCUSSION & SOCKET CORE BITS

Helical dry bits for compatible micro-percussion drills. Short socket bits make electrical box openings.



Helical dry core bit



Socket bit, pilot drill and holder

Specifications

Product	Reference diameters	Working length	Connection
Micro-percussion dry bit	Ø51 / 82 / 102 mm	450 mm	1 1/4 in UNC
Socket core bit	Ø68 / 72 / 82 mm	62 mm	M16

CORE BIT SEGMENT PROFILES

Reference shapes for diamond core bit segments.



Single U-groove

One deep, round-bottomed slot in the centre.



Drum top

Five raised peaks across the top of this segment.



Flat

A level cutting face.



Roof-top

Two sloping faces meet in a ridge.



Grooved turbo

Parallel ribs run across the face.



Castellated (Great Wall)

Raised blocks alternate with deep notches.

SEGMENT EDGES & FACE PATTERNS

Compare the grooves, recesses and raised details on the cutting surface.



Dimpled

Round depressions in the working face.



Raised-dot

Rows of points stand above the face.



Cross-hatched

Diagonal grooves form a diamond pattern.



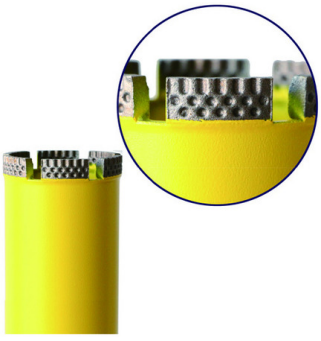
Twin-groove

Two grooves cross the segment.



Zigzag

An angled ridge runs across the face.



Cellular

Closely spaced openings cover the face.

ARIX describes the arrangement of diamonds inside the segment.

REPLACEMENT CORE BIT SEGMENTS

Replacement segments and one-piece crowns for diamond core barrels.



Shark-tooth segments



Mesh roof segments



One-piece ring crowns

Specifications

Barrel diameter	Reference segment L × W × H
Ø42–135 mm	24 × 3.5 × 10 mm
Ø140–200 mm	24 × 4 × 10 mm
Ø220–280 mm	24 × 4.5 × 10 mm

CORING ADAPTERS & EXTENSIONS

Thread adapters, extensions and water-feed fittings for core drills.



Thread and quick-connect adapters



Extension rods



Dust extraction adapters

Specifications

Product	Reference options	Confirm before ordering
Thread or quick-connect adapter	1 1/4 in UNC · 1/2 in BSP · M22 · 5/8-11	Thread sex, pitch and machine fitting
Extension rod	150 / 250 / 350 / 500 mm · 1 1/4 in UNC male to female	Length and both connections
Water-feed adapter	Valve fittings for wet drilling	Machine, fittings and water connection
Dust extraction adapter	Vacuum connection fittings for dry drilling	Thread or spindle, plus hose fitting

14–24

SAW BLADES & CUTTING

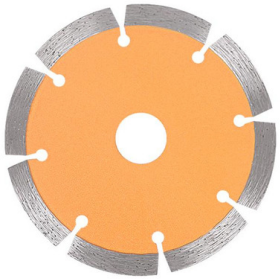


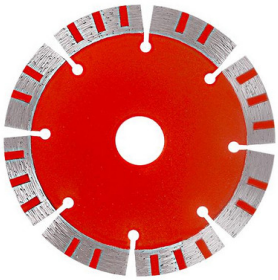
Select by application

Application	Tool	Page
General cutting	Four blade rims compared	15
Asphalt and fresh concrete	Floor saw blades	16
Structural wall openings	Wall and ring saw blades	18
Precast concrete	Plant saw blades	21

DIAMOND BLADE QUICK SELECTOR

Match the rim to the material, then read down its column for blade diameter and arbor bore.



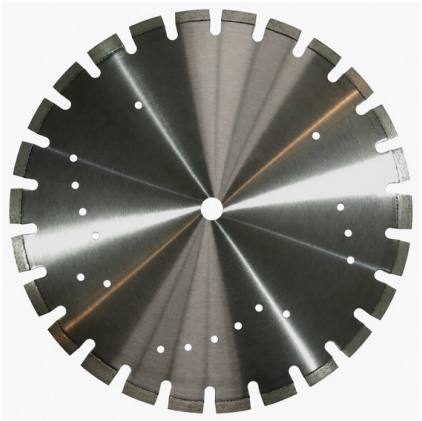
	Segmented	Continuous rim	Turbo	Segmented turbo
Material	Concrete, granite and marble.	Ceramic tile and marble. Wet cutting.	Brick, paving blocks, masonry and stone.	Brickwork, cement walls and stone.

Blade diameters (mm) by arbor bore

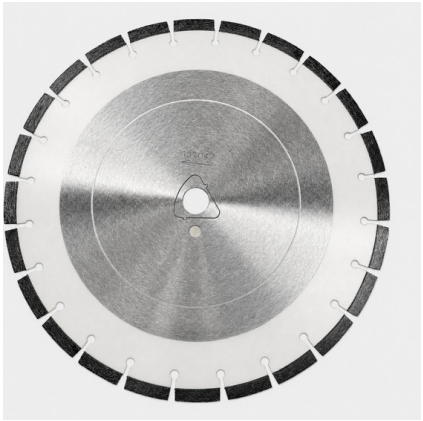
20 mm bore	80, 108, 110, 115	110, 115	105, 110, 115	115
22.23 mm bore	125	125	125, 150, 180, 230	125, 156, 168, 193
25.4 mm bore	150, 180, 190, 230, 250	—	300, 350	230, 250

ASPHALT & EARLY-ENTRY FLOOR BLADES

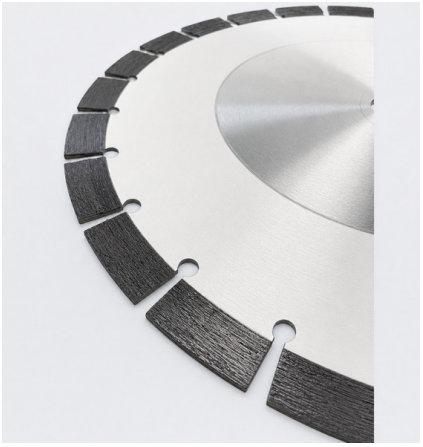
Floor saw blades for abrasive asphalt and early contraction joints in fresh concrete.



Wide U-slot asphalt blade



Early-entry blade



Early-entry segment detail

Specifications

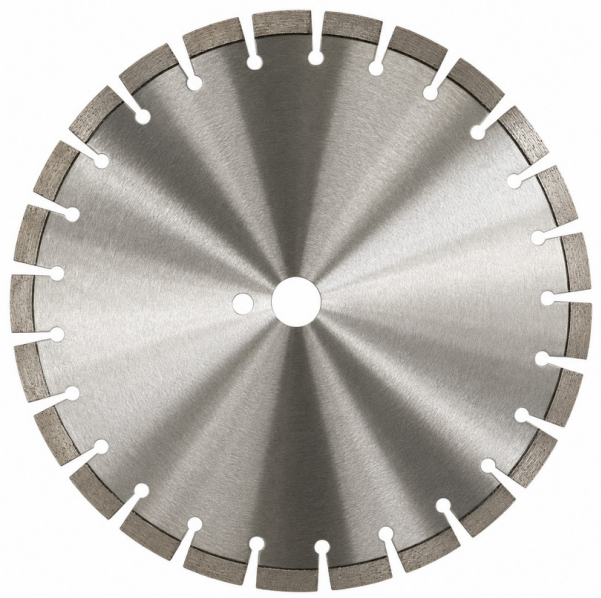
Program	Reference diameter	Arbor / rim
Asphalt floor saw	Ø350 / 450 / 600 mm	25.4 mm example · wide U slots
Early-entry floor saw	6–14 in	Triangular · confirm saw fit

CURED & REINFORCED CONCRETE BLADES

Floor saw blades for cured slabs and steel-reinforced concrete.



Cured-concrete blade



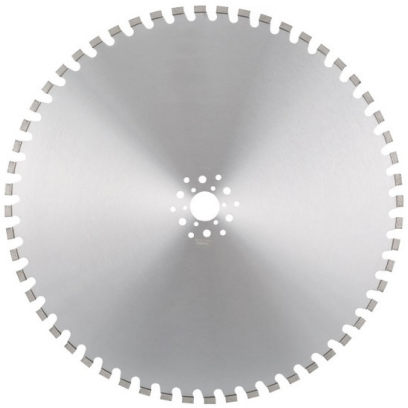
Reinforced-concrete blade

Specifications

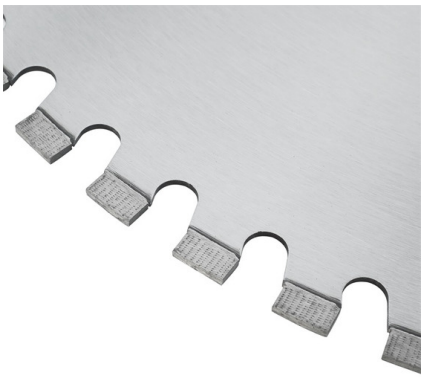
Program	Reference diameter	Configuration
Cured concrete	Ø350 / 450 / 600 mm	Keyhole slots · verify arbor
Reinforced concrete	Ø350 / 500 / 800 mm	Keyhole slots · verify drive pins

WALL & RING SAW BLADES

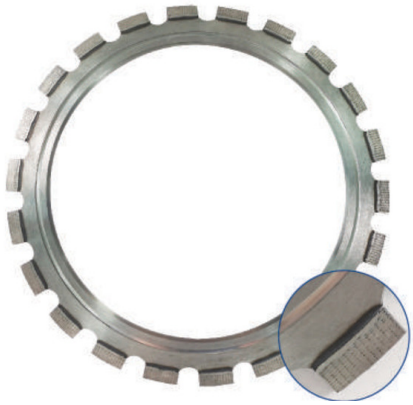
Wall saw blades for structural concrete and ring blades for compatible handheld saws.



Multi-pin wall saw blade



Wall blade segment detail



Diamond ring saw blade

Specifications

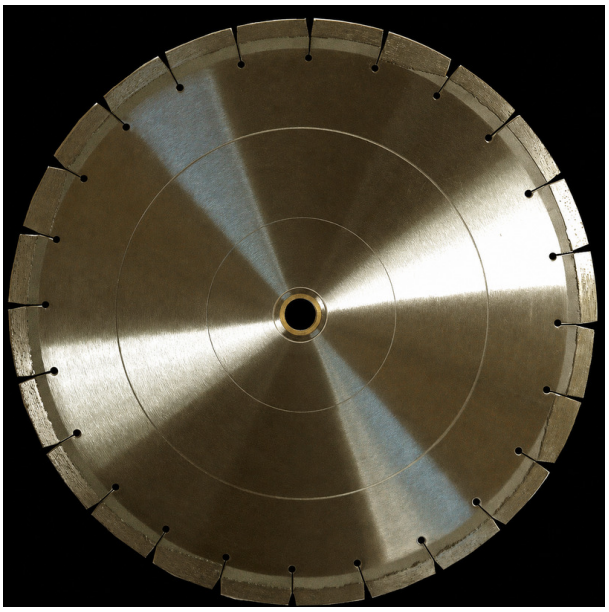
Program	Reference diameter	Mounting
Array wall saw	Ø600 / 800 / 1,200 mm	60 mm bore example · multi-pin
Laser-welded ring saw	Ø370 / 420 mm	Machine-specific ring drive

HANDHELD ASPHALT & GREEN CONCRETE BLADES

Handheld blades for asphalt repairs and next-day cuts in green concrete.



Asphalt repair blade



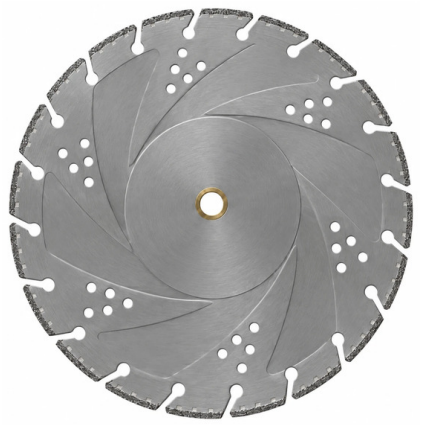
Next-day green concrete blade

Specifications

Program	Design	Request details
Handheld asphalt	Drop segment / J slot	Diameter and arbor
Next-day green concrete	Narrow key slots / keyholes	14 in reference

EMERGENCY-SERVICE & CORDLESS BLADES

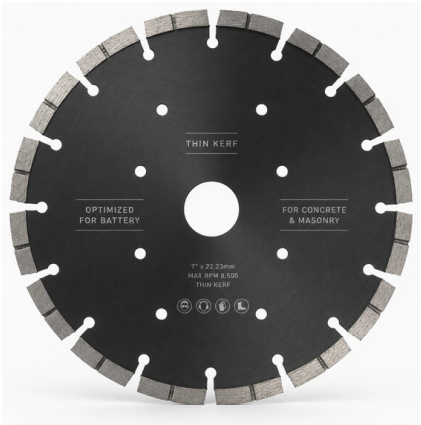
Vacuum-brazed blades for multi-material cutting and thin-kerf blades for battery-powered saws.



Vacuum-brazed rescue blade



Vacuum-brazed rim detail



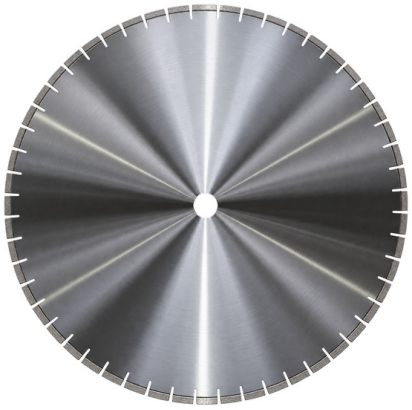
Thin-kerf cordless blade

Specifications

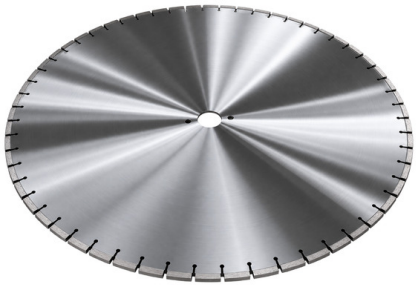
Program	Blade design	Selection
Emergency-service	Vacuum-brazed · steel core	Match saw and material
Cordless	Reduced-width segment	Match saw and duty cycle

PRECAST PLANT SAW BLADES

Large-diameter blades for hollow-core slabs, concrete piles and T-beams.



Single-bore precast blade



Two-drive-hole precast blade



Keyhole-slot rim detail

Specifications

Feature	Specification
Application	Hollow-core slabs, prestressed piles and T-beams
Rim	Segmented with keyslots or keyhole slots
Mounting	Single centre bore or machine-specific drive-hole pattern

SILENT-CORE BRIDGE SAW BLADES

Segmented, silent-core blades for wet bridge sawing in granite and quartzite.



Silent-core bridge saw blade



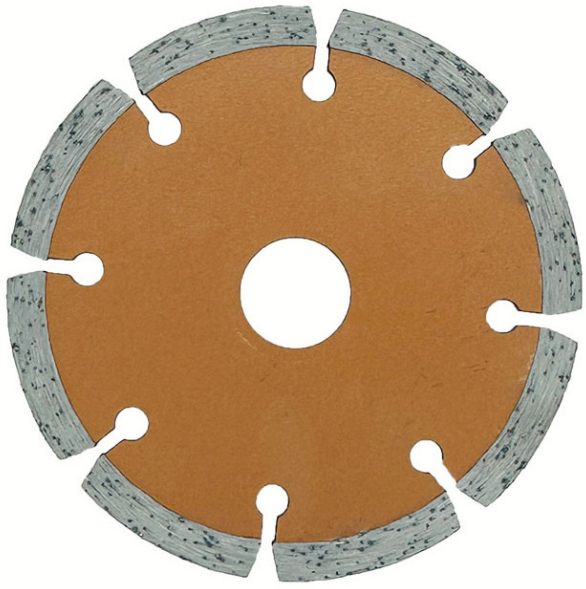
Stone-cutting segment detail

Specifications

Feature	Specification
Material	Granite and quartzite slabs
Steel core	Sandwich silent core
Cutting mode	Wet bridge sawing

TUCK-POINT & CRACK-CHASER BLADES

Wide blades for mortar joints and profiled blades for concrete crack repair.



Tuck-point blade



Crack-chaser blade

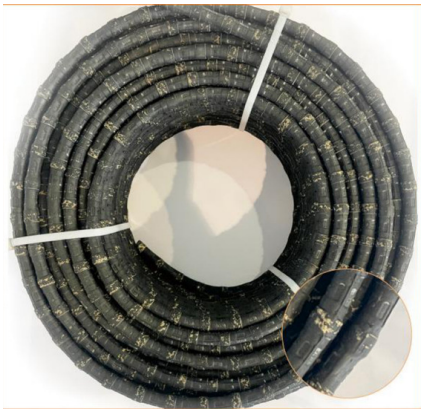
Specifications

Blade	Reference diameter	Reference width	Bore example
Tuck point	Ø115 / 125 / 180 mm	6.4 / 9.6 mm	22.23 mm
Crack chaser	Ø115 / 125 / 180 mm	6.4 / 9.5 mm	22.23 mm

DIAMOND WIRE SAWS

Diamond wire for large sections of concrete and reinforced concrete.







Sintered diamond wire

Vacuum-brazed diamond wire

Sintered wire beads

Specifications

Wire type	Example bead diameter	Beads per metre
Sintered	Ø10.5 / 11.5 mm	40
Vacuum-brazed	Ø10.5 / 11.5 mm	40 example

25–30

TILE & NATURAL STONE



Select by application

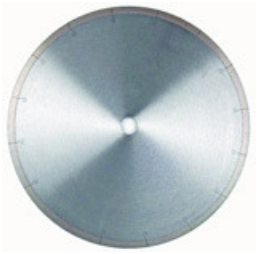
Application	Tool	Page
Straight cuts and chamfers	Porcelain and tile blades	26
Holes in finished tile	Vacuum-brazed hole saws	27
Openings in stone slabs	Stone core bits	29
Edges and polished faces	Grinding and polishing tools	30

PORCELAIN & TILE BLADES

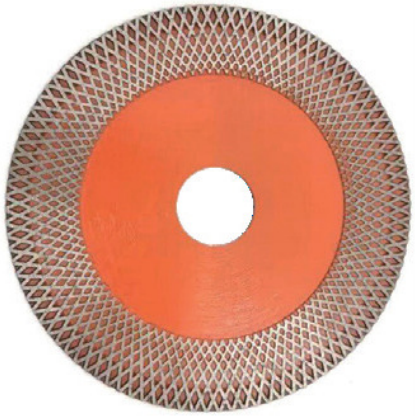
Diamond rims for straight cuts and chamfered edges in porcelain and ceramic tile.



Thin turbo rim



Slotted continuous rim



High-rim chamfer blade

Specifications

Rim profile	Blade Ø	Bore Ø	Rim thickness
Thin turbo	115 mm	22.23 mm	1.2 mm
J-slot continuous	125 mm	22.23 mm	1.7 mm
J-slot continuous	300 mm	25.4, 50 or 60 mm	2.2 mm
High rim	115 mm	22.23 mm	1.6 mm

PORCELAIN & TILE HOLE SAWS

Vacuum-brazed hole saws for fixing holes and pipe openings in tile, porcelain and stone.



Small-diameter bits



Diamond hole saws



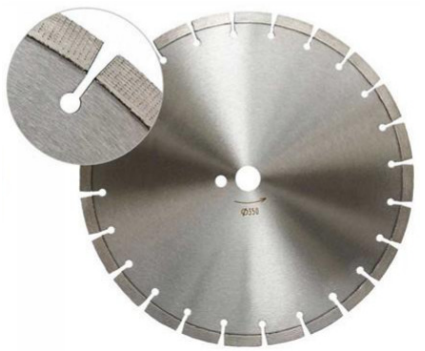
Mixed-size set

Specifications

Product	Diameter examples	Connection or kit detail
Small threaded bit	Ø6, 8, 10, 12 mm	M14 or 5/8-11
Medium hole saw	Ø20, 25, 32, 35, 50, 65 mm	M14 or 5/8-11
Large hole saw	Ø75, 100 mm	M14 or 5/8-11
Mixed-size kit	Selected diameters	Specify drive, sizes and piece count

STONE BLADES & SEGMENTS

Complete segmented blades and replacement segments for granite, marble and other natural stone.







Laser-welded stone blade

Granite cutting segments

Marble cutting segments

Specifications

Product family	Blade Ø	Segment L × W × H	Segments
Laser-welded stone blade	350 mm	40 × 3.2 × 12 or 15 mm	24
Laser-welded stone blade	400 mm	40 × 3.4 × 12 or 15 mm	28
Granite segments	350 mm	40 × 3.2 × 10 or 15 mm	24
Marble segments	350 mm	40 × 3.4 × 8 or 10 mm	25

STONE CORE BITS

Segmented core bits for drilling granite, marble and hard natural stone.



Segmented stone core bit



Diamond segment detail

Specifications

Bit Ø	Segment width	Segment height	Segments
20 mm	3.0 mm	9 mm	3
35 mm	3.0 mm	9 mm	5
50 mm	3.2 mm	9 mm	6
80 mm	3.2 mm	9 mm	9

Connection examples M14 / 1/2 in GAS / 5/8-11

STONE GRINDING & POLISHING

Tools for slab calibration, rough grinding and edge polishing.



Metal-bond Fickert



Satellite calibrating wheel



Resin stone polishing pads

Specifications

Tool	Example size	Grit examples
Metal-bond Fickert	140 × 58 × 15 mm	60, 120, 180
Satellite wheel	Ø150 mm, M45 mount	36, 60, 120
Resin polishing pad	Ø100 mm	50, 200, 800, 3000, buff

31–39

GRINDING & COATING REMOVAL



Select by application

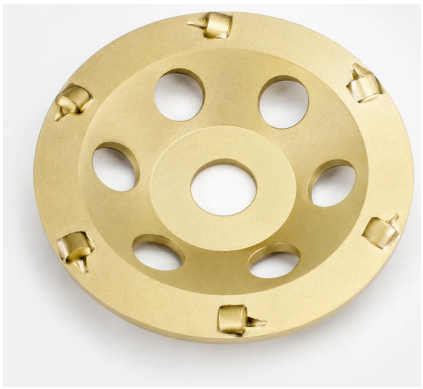
Application	Tool	Page
Coatings at edges and stairs	Handheld PCD cups	32
Coatings on open floors	Redi Lock PCD shoes	33
Levelling bare concrete	Metal-bond shoes	36
Polishing concrete floors	Resin polishing pads	39

HANDHELD PCD CUP WHEELS

Handheld polycrystalline diamond tooling for coatings and adhesive on concrete.



12-tooth PCD cup wheel



Six-point directional PCD cup



Crushed PCD flange cup

Specifications

Layout	Cutter arrangement	Fitting to confirm
12-tooth PCD	12 quarter-round PCD teeth	Integral threaded flange
6-point directional PCD	6 cutting points on a vented body	Rotation and mounting
Crushed PCD flange	Crushed PCD for thin, tacky coatings	Flange and spindle fit

REDI LOCK PCD SHOES

Quick-change tools for removing coatings with Redi Lock floor grinders.



Multi-PCD shoe



Split-PCD shoe



Quarter PCD with protection segment

Specifications

Layout	Cutter arrangement	Direction
Multi-PCD	Multiple PCD cutters	LH or RH
Split PCD	Split PCD cutters	LH or RH
Supported 1/4 PCD	Quarter-round PCD + stabilising segment	LH or RH

BOLT-ON PCD SHOES

Trapezoid coating-removal shoes with three M6 mounting positions.





Bolt-on PCD with protection bar

Hybrid PCD with twin buttons

Specifications

Layout	Cutter arrangement	Mount
3-M6 PCD	PCD cutters	Three M6 mount positions
3-M6 hybrid twin-button	PCD cutters + two metal-bond control buttons	Three M6 mount positions

METAL-BOND GRINDING CUPS

Handheld metal-bond wheels for concrete edges, surface grinding and levelling.



Turbo cup wheel



Double-row cup wheel



Single-row cup wheel

Specifications

Profile	Task	Diameter examples
Premium turbo	Fine finishing and edges	Ø115 / 125 / 150 mm
Double row	General grinding and levelling	Ø115 / 125 / 180 mm
Single row	Concrete and masonry grinding	Ø105 / 115 / 125 mm

Mounting options M14 / 5/8-11 / Ø22.23 mm bore

BOND-MATCHED GRINDING SHOES

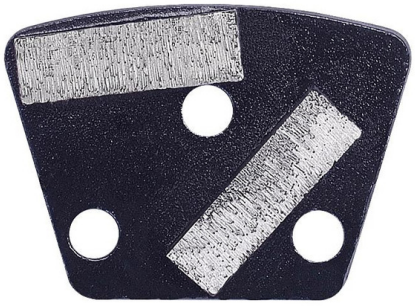
Metal-bond shoes for bare concrete. Harder floors generally call for a softer bond.



Twin-segment quick-change shoe



Wedge-mount shoe



Bolt-on trapezoid shoe

Specifications

Holder family	Fit information
Redi Lock	Match shoe profile and LH or RH direction
HTC / EZ Change	Send a holder drawing or sample
Lavina QuickChange	Send machine generation and holder profile
3-M6 bolt-on trapezoid	Send three M6 positions and hole centres

Bond grades XS / S / M / MH / H / XH

ULTRA-HARD FLOOR GRINDING

Extra-soft to super-soft bonds for concrete with very hard aggregate (Mohs 7–9+).



Ultra-hard concrete grinding shoe



Metal-bond segment face

Specifications

Selection	What to confirm
6 or 16 grit	Coarse levelling and aggregate exposure
30 or 60 grit	General grinding and scratch refinement
120 or 150 grit	Transition to resin or hybrid polishing pads
Bond and load	Match concrete hardness, segment count and tools per head

250 MM FLOOR GRINDING DISCS

Direct-fit floor discs for bare concrete or coating removal, depending on the working face.



250 mm nine-segment grinding disc



250 mm PCD removal disc

Specifications

Configuration	Working face	Machine fit
250 mm direct-fit disc	9 segments, 30/40 grit	Confirm single-disc grinder model
250 mm PCD disc	PCD for coating removal	Confirm hole pattern and drive

CONCRETE POLISHING PADS

Resin-bond pads and holders for progressive concrete floor polishing.







Resin pad series

Polishing face and backing

3-M6 backing adapter for portable polishers

Specifications

Pad diameter	Thickness examples	Grit range
3 / 4 / 5 in	8 / 10 / 12 mm	50–3000 + buff
7 / 10 in	10 / 12 mm	50–3000 + buff

CONTACT



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