# ZENESIS

#### WHAT IS ZENESISTM PATTERN TECHNOLOGY?

ZENESIS™ is an advanced technology that delivers dramatic improvement in diamond tool performance through the custom designed diamond patterns specific to each application.

#### HYBRID LAYERING PERFORMANCE RUNS DEEP

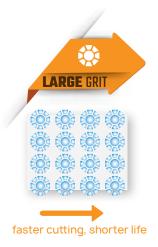
By combining layering techniques with extraordinary degree of precision, we ensure that our high-quality diamonds will always be evenly exposed throughout the segment to allow faster cutting and efficient debris removal. And we've rigorously exacted our manufacturing processes to ensure a perfect pattern – cut after cut.

For our most innovative blade offering, ZENESIS™ takes this process one step further by optimizing the distribution and concentration of diamonds on the segments to deliver raw cutting power where it is needed most. Greater performance is delivered as this strategic placement of diamonds virtually removes all cutting inefficiencies.

#### ZENESIS™ PATTERN TECHNOLOGY: FROM THE COMPANY THAT STARTED A REVOLUTION

Simple patterning is not enough. Patterning technology has been around since the 1960's; however, the performance achieved through the even distribution of the diamond grit did not justify the added complexity in manufacturing. Through years of intensive research and development, our engineers at ZENESIS<sup>TM</sup> have refined our proprietary patterned diamond technology to achieve maximum cutting performance without sacrificing life or quality of the cut. Our pattern exposes the ideal number of the highest quality diamonds throughout the life of the tool, providing consistent performance from start to finish.

- Speed: Up to 70% faster cutting speed\*
- · Life: Up to 70% longer tool life\*







#### **CONVENTIONAL DIAMOND TOOLS**

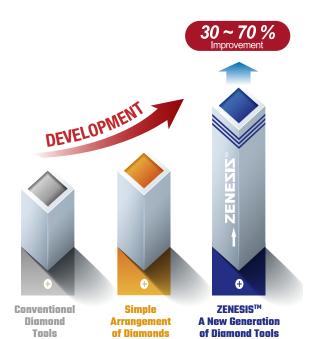
- Diamonds are randomly distributed.
- Random distribution results in inconsistent tool performance.
- Trade-off results between cutting speed and tool life.

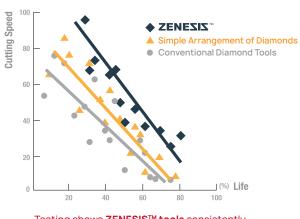
#### SIMPLE ARRANGEMENT OF DIAMONDS

- Elimination of random distribution provides only marginal improvement in performance consistency.
- Does not justify the increase in manufacturing complexity

#### ZENESIS™ TECHNOLOGY: EVOLUTION OF A REVOLUTION

- Delivers optimal patterns of diamonds for specific applications
- Hybrid layering provides maximum diamond exposure for enhanced performance
- Up to 70% faster cutting speed
- Up to 70% longer life
- Cost-effective mass production
- · Proprietary, patented technologies





Testing shows  $\mathbf{ZENESIS^{TM}}$  tools consistently  $\mathbf{outperform}$  the competition.



ZENESIS™ patterned technology delivers consistency in diamond exposure, providing maximum efficiency start to finish. With feed rates exceeding 15 ft/min this blade outperforms random diamond bridge saw blades by 30 – 70%. Hybrid diamond layering guarantees that diamonds will always be evenly exposed on all sides of the segment. This further increases cutting speed and debris/swarf removal. Diamond clusters provide more diamond point exposure, which increases cutting speed with less amp draw and therefore is easier on machinery. ZENESIS™ products are manufactured utilizing the highest standards of manufacturing in ISO certified facilities. This delivers consistent results blade after blade and batch after batch.

The **ZENESIS<sup>TM</sup> BLACK 4** blade is built on high quality, slanted gullet silent cores. Strong cores keep segments cutting true even when mitering, and the slanted gullets draw in more water and push out more swarf/debris resulting in cleaner cuts.

- Designed to outperform all other bridge saw blade on straight or mitered cuts.
- · Cuts granite, engineered stone, and quartzite
- Wet use only

Part No.	Diameter	Segment	Arbor Size
S-1213LWZX4-BLK4	12"	25mm	50/60mm
S-1413LWZX4-BLK4	14"	25mm	50/60mm
S-1613LWZX4-BLK4	16"	25mm	50/60mm
S-1814LWZX4-BLK4	18"	25mm	50/60mm
S-1818LWZX4-BLK4	18"	25mm	50/60mm
S-2014LWZX4-BLK4	20"	25mm	50/60mm
S-2018LWZX4-BLK4	20"	25mm	50/60mm

#### ZENESISTM CARBON

Bridge Saw Blades • 10mm • ZLSGD



ZENESIS<sup>TM</sup> CARBON was originally designed for large format porcelains, but we have later identified an impressive number of additional applications. Not only did this blade outperform the number one recommended blade for Dekton® in an independent side-by-side performance test, but it also worked exceptionally well on difficult semi-precious stones and other challenging materials. It is a highly versatile all-around blade for lower HP (less than 20hp) saws that might otherwise struggle with hard materials. The ultra-thin rim combined with tightly butted segments renders a remarkably clean finish in both straight and miter cuts, and the reinforced core keeps the blade from deflecting while cutting. Combine that with superior manufacturing and highest-grade materials, and you get a blade deserving to be called ZENESIS<sup>TM</sup>!

Part No.	Diameter	Segment	Arbor Size
S-1210LWZX4-CARB	12"	10mm	50/60mm
S-1410LWZX4-CARB	14"	10mm	50/60mm
S-1613LWZX4-CARB	16"	10mm	50/60mm

- 10mm segments height
- Cuts Dekton®, Neolith®, Lapitech®, Petrified Wood, Slabs made with Geodes
- · Wet use only

#### ZENESISTM QUARTZITE

Bridge Saw Blades • 20mm • ZSGQ



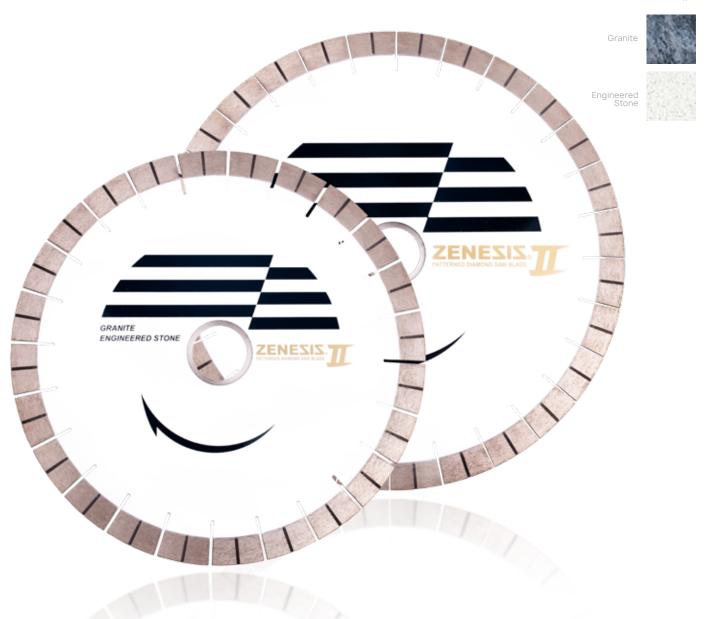
Quartzite is a unique natural rock made up of interlocking quartz crystals resulting in a remarkably dense and hard rock. A specialized blade is required to quickly and cleanly cut a material of this quality. The **ZENESIS<sup>TM</sup> QUARTZITE** blade provides superior cutting performance on quartzite.

- Unique segment design for fast cutting speeds; has cut Taj Mahal at over 6 ft./min. feed rate
- Patterned diamond matrix for straight chip-free cuts
- · Soft bond for continuous use without dressing
- Wet use only

Part No.	Diameter	Segment	Arbor Size
S-1212LWZX4-20Q	12"	20mm	50/60mm
S-1412LWZX4-20Q	14"	20mm	50/60mm
S-1613LWZX4-20Q	16"	20mm	50/60mm
S-1815LWZX4-20Q	18"	20mm	50/60mm
S-2015LWZX4-20Q	20"	20mm	50/60mm

Bridge Saw Blades • 25mm • ZSG





The **ZENESIS<sup>TM</sup> II** bridge saw blade revolutionized the stone fabricating industry by raising the bar for cutting speed and blade life. Straight and efficient cutting increases productivity while reducing stress on the bridge saw.

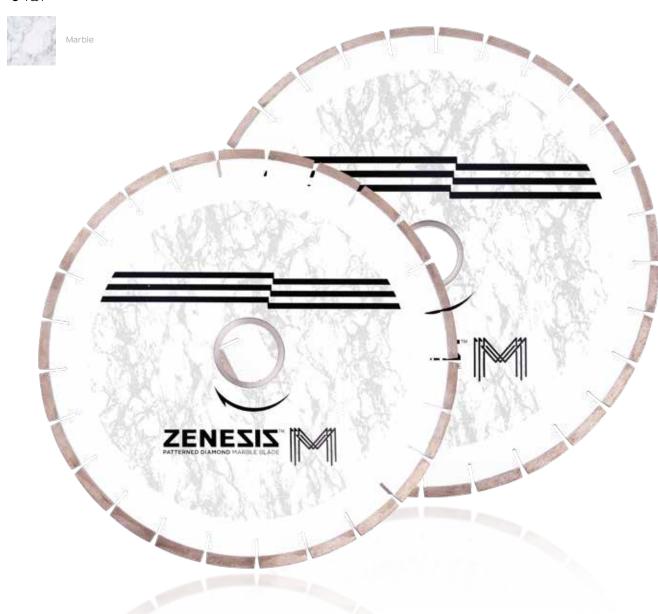
- 25mm segments height
- Feed rate 10 to 17 feet per minute
- Cuts granite and engineered stone
- Wet use only

Part No.	Diameter	Segment	Arbor Size
S-1212LWZX4-25C	12"	25mm	50/60mm
S-1412LWZX4-25C	14"	25mm	50/60mm
S-1612LWZX4-25C	16"	25mm	50/60mm
S-1814LWZX4-25C	18"	25mm	50/60mm
S-2014LWZX4-25C	20"	25mm	50/60mm

#### ZENESISTM MARBLE

Bridge Saw Blades • 10mm • ZSMM





ZENESIS<sup>TM</sup> now offers its exclusive patterned technology in a bridge saw blade designed specifically to cut marble and other soft stone products. As expected, this latest **ZENESIS<sup>TM</sup> MARBLE** blade offers exceptionally smooth, fast and chip-free cutting on all types of marble. This blade is available in diameters of 12" to 20" and is guaranteed to set the standard of performance and meet the demands of marble fabricators everywhere.

- Designed specifically to cut marble
- Exceptionally smooth, fast, chip-free cutting
- Silent core
- Wet use only

Part No.	Diameter	Segment	Arbor Size
S-1212LWMSZX4	12"	10mm	50/60mm
S-1412LWMSZX4	14"	10mm	50/60mm
S-1612LWMSZX4	16"	10mm	50/60mm
S-1814LWMSZX4	18"	10mm	50/60mm
S-2014LWMSZX4	20"	10mm	50/60mm

### ZENESISTM MITER

Bridge Saw Blades • 10mm • ZMI





Miter cuts on granite and engineered stone pose particular challenges and require a specialized blade to get the desired results. The **ZENESIS™ MITER** blade provides sharp, smooth and chip free miter cuts.

- Strong core to minimize flexing
- 10mm segment to maximize life and minimize segment loss
- Engineered bond for chip free cuts to leave an invisible seam
- Wet use only

Part No.	Diameter	Segment	Arbor Size
S-1412LWZX4-10MI	14"	10mm	50/60mm
S-1612LWZX4-10MI	16"	10mm	50/60mm

### ZENESIS™ TURBO

Saw Blades • 8mm • ZRG





Granite



Engineered Stone



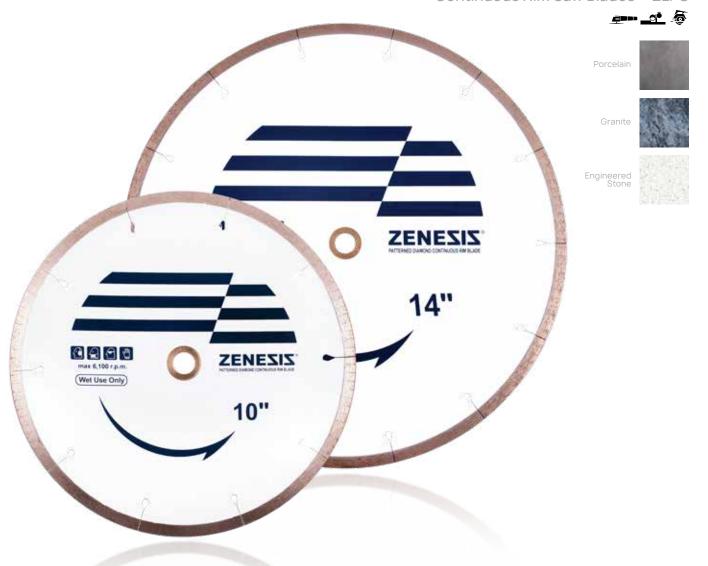
ZENESIS<sup>TM</sup> announces the third generation wet/dry granite turbo blades. Advancing on the technology that has made ZENESIS<sup>TM</sup> the best performing bridge saw blades, the new **ZENESIS<sup>TM</sup> TURBO** blades outperform all other blades on the market. The unique turbo design provides fast and clean cuts that are virtually chip free, reducing the clean-up time and therefore not only saving you time when cutting but also afterward.

- New turbo design for fast clean cuts
- · Cooling holes limit overheating
- Quad holes for flush cut adapters

Part No.	Diameter	Segment	Arbor Size
S-4510CDZTB3	4.5"	8mm	7/8-20mm-5/8, w/thunder hole, 4 flush cut, V2, Thunder
S-0510CDZTB3	5"	8mm	7/8-20mm-5/8, w/thunder hole, 4 flush cut, V2, Thunder
S-0610CDZTB3	6"	8mm	7/8-20mm-5/8, w/thunder hole, 4 flush cut, V2, Thunder
S-0710UDZTB3	7"	8mm	UA-5/8, w/thunder hole, 4 flush cut, V2, Thunder

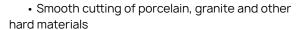
### ZENESISTM CR

Continuous Rim Saw Blades • ZLPS



Unique slot and rim design gives the **ZENESIS™** 

**CONTINUOUS RIM** blade unparalleled and effortless cutting precision and performance. Since the blade incorporates ZENESIS™ pattern technology, fabricators can count on exceptionally smooth and chip-free cutting of porcelain tile, granite and other hard materials.



• Use 4", 4.5", 5" and 6" wet or dry; all other sizes must be used wet

	Part No.	Diameter	Segment	Arbor Size
Г	S-0406CTZ	4"	6.5mm	7/8"-5/8"+20mm
	S-4506CTZ	4.5"	6.5mm	7/8"-5/8"+20mm
≥₩€ ♦	S-0506CTZ	5"	6.5mm	7/8"-5/8"+20mm
	S-0606CTZ	6"	6.5mm	7/8"-5/8"+20mm
Ĺ	S-0706UTZ	7"	9mm	U/A (DM -5/8")
	S-0806ETZ	8"	9mm	1"-5/8"
	S-0806UTZ	8"	9mm	U/A (DM -5/8")
	S-1008ETZ	10"	9mm	1"-5/8"
	S-1208ETZ	12"	9.5mm	1"-5/8"
	S-1208LTZ	12"	9.5mm	50/60mm
	S-1408ETZ	14"	9.5mm	1"-5/8"
	S-1408LTZ	14"	9.5mm	50/60mm

### ZENESISTM PORCELAIN

Tile Blades • 10mm • ZLW





**ZENESIS™ PORCELAIN** tile blade is designed for professionals looking for fast, smooth and chip free cuts on ceramic and all types of porcelain, including large porcelain sheets and porcelain pavers. The continuous rim minimizes chipping and reduces the risk of blade flexing and segment loss.

- 10mm segment height for long life
- Wet use only

Part No.	Diameter	Segment	Arbor Size
S-0406CWPZ	4"	10mm	7/8"-5/8"+20mm
S-4506CWPZ	4.5"	10mm	7/8"-5/8"+20mm
S-0709AWPZ	7"	10mm	5/8"
S-1006AWPZ	10"	10mm	5/8"

### ZENESISTM GLASS

Tile Blades • 7.5mm • ZLGW





The new **ZENESIS™ GLASS** tile blades provide ship-free performance significantly beyond anything currently available on the market on all types and thicknesses of glass.

- Also provides smooth clean cuts on hard porcelain
- 7.5mm segment height for long life
- Wet use only

Part No.	Diameter	Segment	Arbor Size
S-0406CWGZ	4"	7.5mm	7/8"-5/8"+20mm
S-4506CWGZ	4.5"	7.5mm	7/8"-5/8"+20mm
S-0706AWGZ	7"	7.5mm	5/8"
S-1006AWGZ	10"	7.5mm	5/8"



### ZENESISTM **DRY CORE BITS**

Core Bits • 8mm • ZDGUL





Granite



Engineered Stone



Our 3rd generation **ZENESIS<sup>TM</sup> DRY CORE BITS** are thoroughly engineered to achieve superior wet and dry coring of granite and engineered stone. Laser-welded segments, enlarged cooling holes, and generous side coating result in faster and cleaner cuts without even breaking a sweat. The new ZENESIS<sup>TM</sup> Dry Core Bit is manufactured with our most advanced pattern diamond technology to date, and is designed to outperform and outlast its competition.

- All-new design for enhanced performance
- Laser-welded segments for safer coring
- Larger cooling holes on the barrel
- Abrasive side coating to reduce friction
- Designed for granite and engineered stone
- Can be used wet or dry

Part No.	Diameter	Segment	Arbor Size
S-01212HDZX4	1-1/4"	8mm	5/8"-11 Threaded
S-01312HDZX4	1-3/8"	8mm	5/8"-11 Threaded
S-01512HDZX4	1-1/2"	8mm	5/8"-11 Threaded
S-02012HDZX4	2"	8mm	5/8"-11 Threaded
S-02212HDZX4	2-1/4"	8mm	5/8"-11 Threaded
S-02512HDZX4	2-1/2"	8mm	5/8"-11 Threaded
S-03012HDZX4	3"	8mm	5/8"-11 Threaded

### ZENESISTM **FINGER BITS**

Finger Bits • ZFBS





The all-new **ZENESIS<sup>TM</sup> 4 AND 7 SEGMENT FINGER BITS** provide top CNC performance on all stone materials. They deliver precise, quiet and chip-free cutting at faster speeds and can be used on soft to medium-hard materials (4 segments) or medium to hard materials (7 segments). The enhanced design utilizes our most advanced diamond pattern to date, which increases durability and prevents premature wear to ensure long tool life.

- 1/2" gas thread
- Cuts granite and engineered stone (without the full stop)
- Recommended RPM ranges from 4,200 in hard material to 5,500 in softer material with a feed rate of 12" ~16" per minute
- · Wet use only

Part No.		Description
	S-02040FBZX4-4	20mm x 1-5/8" x 1/2" Gas, 4 seg (40L-7W-3.5T)
	S-02250FBZX4-4	22mm x 2" x 1/2" Gas, 4 seg (50L-7W-3.5T)
	S-02040FBZX4-7	20mm x 1-5/8" x 1/2" Gas, 7 seg (40L-3W-4.0T)
	S-02250FBZX4-7	22mm x 2" x 1/2" Gas, 7 seg (50L-7W-4.0T)



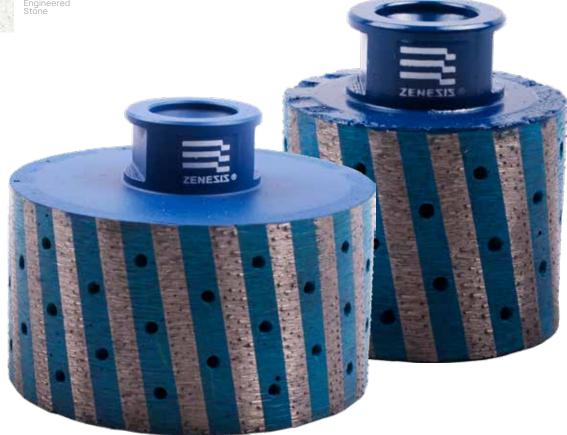
### ZENESISTM ZERO TOLERANCE WHEELS

Zero Tolerance Wheels • ZGDSC









The ZENESIS™ ZERO TOLERANCE WHEELS feature resin-filled metal segments for fast grinding with reduced vibration. Since they use ZENESIS™ pattern technology, the tool life is long and the finish exceptionally smooth.

- 5/8"-11 thread
- Grinds granite and engineered stone
- Can be used wet or dry

Part No.	Description	Arbor Size	
S-2158ZTWZX4	2" x 1-5/8"	5/8"-11 Threaded	
S-3158ZTWZX4	3" × 1-5/8"	5/8"-11 Threaded	

#### ZENESISTM **POLISHING PADS**

Polishing Pads • ZASHP







Engineered Stone





**ZENESIS™** introduces an unmatched premium **7-STEP WET POLISHING PAD**. These new pads achieve the highest gloss readings after the 3000 grit level when polishing both white and black granite. Our unique design provides these pads with an exceptional lifespan.

- Removes dull spots, etches, and uneven surfaces quickly
- Shorter polishing times on the most difficult stone surfaces
- Better shine (higher gloss reading)

Part No.	Description		
S-4WPPZ-50	4" X 2.8mm X 5/8, 50 grit, Blue Backing		
S-4WPPZ-100	4" X 2.8mm X 5/8, 100 grit, Yellow Backing		
S-4WPPZ-200	4" X 2.8mm X 5/8, 200 grit, Orange Backing		
S-4WPPZ-400	4" X 2.8mm X 5/8, 400 grit, Red Backing		
S-4WPPZ-800	4" X 2.8mm X 5/8, 800 grit, Green Backing		
S-4WPPZ-1500	4" X 2.8mm X 5/8, 1500 grit, Light Blue Backing		
S-4WPPZ-3000	4" X 2.8mm X 5/8, 3000 grit, Brown Backing		

## ZENESIS™ BRIDGE SAW BLADES RPM & Feed Rate Charts

We recommend bridge saw blade to run between 6000 – 7700 surface feet per minute depending on the application material. Please refer below to corresponding RPM speeds:

#### **RPM**

BLADE DIAMETER	MED. GRANITE	HARD GRANITE	QUARTZITE	MARBLE	Dekton®, Semi-Precious & Other Similar Materials
12"	2000 - 2300 RPM	1900 - 2100 RPM	1900 - 2100 RPM	3100 RPM	1900 - 2100 RPM
14"	1700 - 2000 RPM	1650 - 1800 RPM	1650 - 1800 RPM	2800 RPM	1650 - 1800 RPM
16"	1500 - 1800 RPM	1450 - 1600 RPM	1450 - 1600 RPM	2400 RPM	1450 - 1600 RPM
18"	1300 - 1600 RPM	1300 - 1400 RPM	1300 - 1400 RPM	2150 RPM	1300 - 1400 RPM
20"	1200 - 1450 RPM	1200 - 1300 RPM	1200- 1300 RPM	1900 RPM	1200 - 1300 RPM

#### **FEED RATES**

BLADE	MED. GRANITE	HARD GRANITE	QUARTZITE	MARBLE	Dekton®, Semi-Precious & Other Similar Materials
ZENESIS™ BLACK 4	5-17 ft/min.	5-17 ft/min.	1-5 ft/min.	Not Recommended	Not Recommended
ZENESIS™ Carbon	5-17 ft/min.	5-17 ft/min.	5-17 ft/min.	Not Recommended	3-8 ft/min.
ZENESIS™ II	5-10 ft/min.	5-10 ft/min.	Not Recommended	Not Recommended	Not Recommended
ZENESIS™ MARBLE	Not Recommended	Not Recommended	Not Recommended	5-9 ft/min.	Not Recommended
ZENESIS™ QUARTZITE	5-17 ft/min.	5-17 ft/min.	4-10 ft/min.	Not Recommended	Not Recommended

Optimal feed rates will vary depending on the saw being used.

We recommend starting at the lower rpm and feed rates provided above, and gradually increasing until the finish is no longer ideal and/or the amp draw exceeds the manufacturer's recommendation.

For miter cuts recommended feed rates should be reduced by 20 - 50%.

### ZENESISTM **LINE**



