ZENESIS

What is **ZENESIS™ 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.

ZENESIS™ **Pattern Technology:**

FROM THE COMPANY THAT STARTED A REVOLUTION

Simple patterning is not enough. Patterning technology has been around since 1960's, however the performance gained through even distribution of diamond grit did not justify the added complexity in manufacturing. Through years of intensive research and development, our engineers at ZENESIS™ 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.

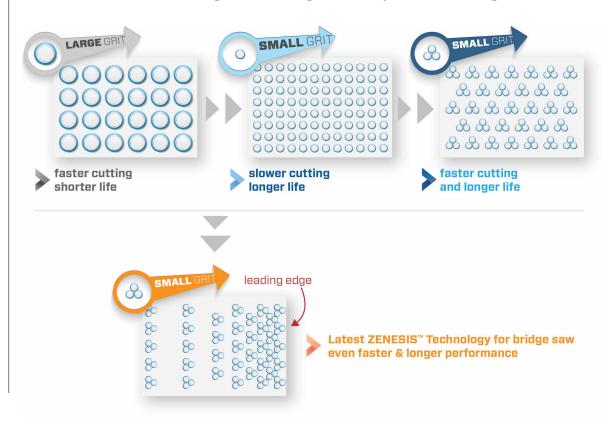
- Speed: Up to 70% faster cutting speed*
- Life: Up to 70% longer tool life*

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 – the leading edge. Greater performance is delivered as this strategic concentration of diamonds on the hardest working areas of the segment virtually removes all cutting inefficiencies.



Conventional Diamond Tools

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

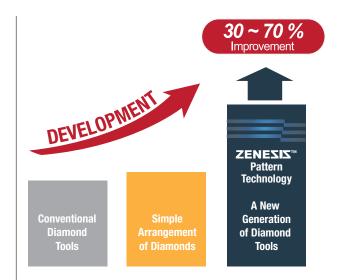
Simple Arrangement of Diamonds

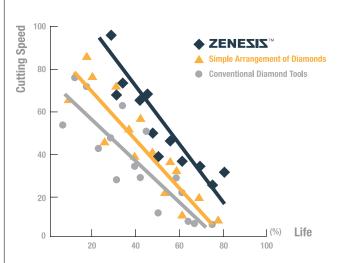
- Elimination of random distribution provides only marginal improvement in performance consistency.
- Does not justify the increase in manufacturing complexity

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





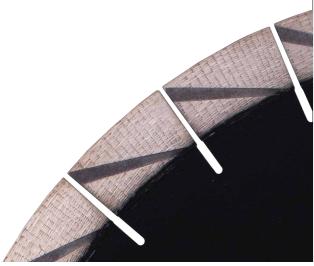
Testing shows **ZENESIS**[™] **tools** consistently **outperform** the competition.

ZENESISTM Black 3

Bridge Saw Blades 25mm ZSG(5) ♦ 🕞

The revolutionary ZENESIS™ technology distributes the diamond grit into patterned columns, gradually increasing and focusing the highest concentration at the leading edge of each segment. Through uncompromising design, ZENESIS™ BLACK 3 brings industry professionals the fastest, longest-lasting blade in the world.

- All-new design for reduced chipping and quieter operation.
- Up to 20% longer blade life*.
- Cutting granite and engineered stone.
- Wet use only.





| Part No. | Diameter | Segment | Arbor Size |
|-----------------|----------|---------|------------|
| ZSG20V25T1212T5 | 12" | 25mm | 50/60mm |
| ZSG20V25T1412T5 | 14" | 25mm | 50/60mm |
| ZSG20V25T1612T5 | 16" | 25mm | 50/60mm |
| ZSG20V25T1814T5 | 18" | 25mm | 50/60mm |
| ZSG20V25T2014T5 | 20" | 25mm | 50/60mm |

^{*}Based on internal testing. Results may vary depending on the material being cut.



| Part No. | Diameter | Segment | Arbor Size |
|---------------|----------|---------|------------|
| ZSG20VY1212T3 | 12" | 25mm | 50/60mm |
| ZSG20VY1412T3 | 14" | 25mm | 50/60mm |
| ZSG20VY1612T3 | 16" | 25mm | 50/60mm |
| ZSG20VY1814T3 | 18" | 25mm | 50/60mm |
| ZSG20VY2014T3 | 20" | 25mm | 50/60mm |

ZENESISTM III

Bridge Saw Blades 25mm

ZSG ♦ 🗐

The ZENESIS™ III continues to revolutionize the stone fabricating industry, offering high performance and great value. Building on the renowned success of prior patterned blade generations, the ZENESIS™ III now offers increased cutting speeds, longer blade life, reduced chipping and an even lower noise level – all at a competitive price. ZENESIS $^{\mathsf{TM}}$ offers stone fabricators products that deliver the quietest and cleanest cuts in the industry, and the ZENESIS™ III blade is now the right choice for customers looking for the best value.

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



ZENESISTM III

Bridge Saw Blades 20mm

ZSG ♦ 🗐

The ZENESIS™ III continues to revolutionize the stone fabricating industry, offering high performance and great value. Building on the renowned success of prior patterned blade generations, the ZENESIS™ III now offers increased cutting speeds, longer blade life, reduced chipping and an even lower noise level – all at a competitive price. ZENESIS™ offers stone fabricators products that deliver the quietest and cleanest cuts in the industry, and the ZENESIS™ III blade is now the right choice for customers looking for the best value.

- 20mm segments height.
- Feed rate 10 to 17 feet per minute.





| Part No. | Diameter | Segment | Arbor Size |
|---------------|----------|---------|------------|
| ZSG20VX1212T3 | 12" | 20mm | 50/60mm |
| ZSG20VX1412T3 | 14" | 20mm | 50/60mm |
| ZSG20VX1612T3 | 16" | 20mm | 50/60mm |
| ZSG20VX1814T3 | 18" | 20mm | 50/60mm |
| ZSG20VX2014T3 | 20" | 20mm | 50/60mm |



| Part No. | Diameter | Segment | Arbor Size |
|----------------|----------|---------|------------|
| ZSG20V25T1212T | 12" | 25mm | 50/60mm |
| ZSG20V25T1412T | 14" | 25mm | 50/60mm |
| ZSG20V25T1612T | 16" | 25mm | 50/60mm |
| ZSG20V25T1814T | 18" | 25mm | 50/60mm |
| ZSG20V25T2014T | 20" | 25mm | 50/60mm |

ZENESISTM II

Bridge Saw Blades 25mm **ZSG** ♦ 🕞

The ZENESIS™ 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.
- Cutting granite and engineered stone.
- Wet use only.

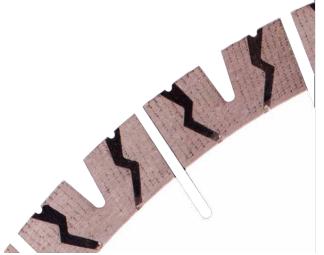


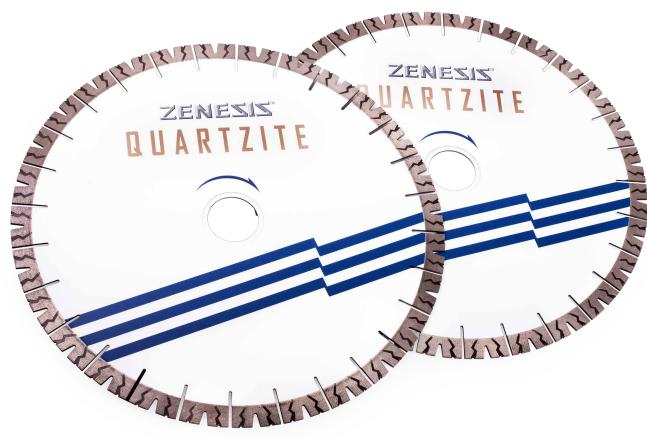
ZENESIS™ Quartzite

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. To quickly and cleanly cut a material of this quality requires a specialized blade. The superior quartzite cutting performance of the ZENESISTM Quartzite blade has been verified through independent testing.

- Unique segment design for fast cutting speeds
- Patterned diamond matrix for straight chip-free cuts
- Soft bond for continuous use without dressing
- Wet use only





| Part No. | Diameter | Segment | Arbor Size |
|-----------------|----------|---------|------------|
| ZSGQ20V20T1212T | 12" | 20mm | 50/60mm |
| ZSGQ20V20T1412T | 14" | 20mm | 50/60mm |
| ZSGQ20V20T1613T | 16" | 20mm | 50/60mm |
| ZSGQ20V20T1815T | 18" | 20mm | 50/60mm |
| ZSGQ20V20T2015T | 20" | 20mm | 50/60mm |



| Part No. | Diameter | Segment | Arbor Size |
|--------------|----------|---------|------------|
| ZSMM10R1212T | 12" | 10mm | 50/60mm |
| ZSMM10R1412T | 14" | 10mm | 50/60mm |
| ZSMM10R1612T | 16" | 10mm | 50/60mm |
| ZSMM10R1814T | 18" | 10mm | 50/60mm |
| ZSMM10R2014T | 20" | 10mm | 50/60mm |

ZENESIS™ **Marble**

Saw Blades 10mm

ZSMM ♦ 🗐

ZENESIS™ 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™ 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.

- All-new ZENESIS™ blade designed specifically to cut marble
- Exceptionally smooth, fast, chip-free cutting
- Silent core
- Wet use only



^{*}Based on internal testing. Results may vary depending on the material being cut.

ZENESIS™ **Miter**

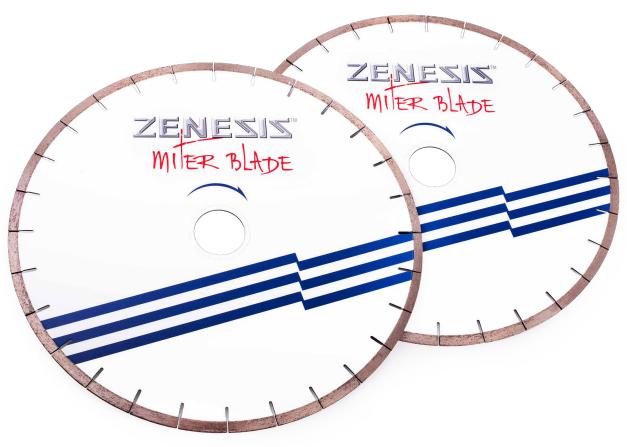
Bridge Saw Blades 10mm

ZMI ♦ ਦ

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 but minimize segment loss
- Engineered bond for chip free cuts to leave an invisible seam
- Wet use only





| Part No. | Diameter | Segment | Arbor Size |
|----------------|----------|---------|------------|
| ZMI20V10T1412T | 14" | 10mm | 50/60mm |
| ZMI20V10T1612T | 16" | 10mm | 50/60mm |



| Part No. | Diameter | Segment | Arbor Size |
|--------------|---------------|---------|---|
| ZRG10S4510CR | 4.5" | 8mm | 7/8-20mm-5/8, w/thunder hole, 4 flush cut, V2, Thunder |
| ZRG10S0510CR | 5" | 8mm | 7/8-20mm-5/8, w/thunder hole, 4 flush cut, V2, Thunder |
| ZRG10S0610CR | D610CR 6" 8mm | 8mm | 7/8-20mm-5/8, w/thunder hole, 4 flush cut, V2, Thunder |
| ZRG10S0710UR | 7" | 8mm | UA-5/8, w/thunder hole, 4 flush cut, V2, Thunder |

ZENESIS™ **Turbo**

Saw Blades
ZRG 🎉 🌢 🗪 👰

ZENESIS™ announces the third generation wet/dry granite turbo blades. Advancing on the technology that has made ZENESIS™ the best performing bridge saw blades, the new ZENESIS™ 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.



ZENESIS™ Continuous Rim ZLPS ===== ♣

Unique slot and rim design give 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.

- Smooth cutting of porcelain, 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 |
|---|--------------|----------|---------|----------------|
| | ZLPS10P0406C | 4" | 6.5mm | 7/8"-5/8"+20mm |
| | ZLPS10P4506C | 4.5" | 6.5mm | 7/8"-5/8"+20mm |
| | ZLPS10P0506C | 5" | 6.5mm | 7/8"-5/8"+20mm |
| | ZLPS10P0606C | 6" | 6.5mm | 7/8"-5/8"+20mm |
| ۵ | ZLPS10P0706U | 7" | 9mm | U/A (DM -5/8") |
| | ZLPS10P0806E | 8" | 9mm | 1"-5/8" |
| | ZLPS10P0806U | 8" | 9mm | U/A (DM -5/8") |
| | ZLPS10P1008E | 10" | 9mm | 1"-5/8" |
| | ZLPS10P1208E | 12" | 9.5mm | 1"-5/8" |
| | ZLPS10P1208T | 12" | 9.5mm | 50/60mm |
| | ZLPS10P1408E | 14" | 9.5mm | 1"-5/8" |
| | ZLPS10P1408T | 14" | 9.5mm | 50/60mm |



| Part No. | Diameter | Segment | Arbor Size |
|---------------|----------|---------|----------------|
| ZLW10UT0406C2 | 4" | 10mm | 7/8"-5/8"+20mm |
| ZLW10UT4506C2 | 4.5" | 10mm | 7/8"-5/8"+20mm |
| ZLW10UT0706A2 | 7" | 10mm | 5/8" |
| ZLW10UT1006A2 | 10" | 10mm | 5/8" |

ZENESIS™ **Porcelain**

ZLW 🗫 峰 🍇

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.



ZENESISTM Glass

ZLGW 🗪 🚅 🍇

The new ZENESIS™ Glass Tile Blades provide chipfree performance significantly beyond anything currently available on the market. Independent testing has shown this blade to provide superior performance 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 |
|--------------|----------|---------|----------------|
| ZLGW20U0406C | 4" | 7.5mm | 7/8"-5/8"+20mm |
| ZLGW20U4506C | 4.5" | 7.5mm | 7/8"-5/8"+20mm |
| ZLGW20U0706A | 7" | 7.5mm | 5/8" |
| ZLGW20U1006A | 10" | 7.5mm | 5/8" |

Products - **Drilling**



| Part No. | Diameter | Segment | Arbor Size |
|------------|----------|---------|------------------|
| ZDGUL032B3 | 1-1/4" | 8mm | 5/8"-11 Threaded |
| ZDGUL035B3 | 1-3/8" | 8mm | 5/8"-11 Threaded |
| ZDGUL038B3 | 1-1/2" | 8mm | 5/8"-11 Threaded |
| ZDGUL051B3 | 2" | 8mm | 5/8"-11 Threaded |
| ZDGUL057B3 | 2-1/4" | 8mm | 5/8"-11 Threaded |
| ZDGUL062B3 | 2-1/2" | 8mm | 5/8"-11 Threaded |
| ZDGUL075B3 | 3" | 8mm | 5/8"-11 Threaded |

ZENESISTM Dry Core Bits ZDGUL *** • ****

Our 3rd generation ZENESIS™ Dry Core Bit is 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 cleaner cuts without even breaking a sweat. The new ZENESIS™ 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



Products - CNC

ZENESIS™ Finger Bits ZFBS ♦

The all-new ZENESIS™ 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 mediumhard 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 so that the finger bits will last even longer.

- 1/2" gas thread.
- Cutting granite and engineered stone.
- Wet use only.
- Recommended RPM ranges from 4,200 in hard material to 5,500 in softer material with a feed rate of 12"~16" per minute





| Part No. | Description |
|-------------|---|
| ZFBS02040A4 | 20mm x 1-5/8" x 1/2" Gas, 4 seg (40L-7W-3.5T) |
| ZFBS02250A4 | 22mm x 2" x 1/2" Gas, 4 seg (50L-7W-3.5T) |
| ZFBS02040A7 | 20mm x 1-5/8" x 1/2" Gas, 7 seg (40L-3W-4.0T) |
| ZFBS02250A7 | 22mm x 2" x 1/2" Gas, 7 seg (50L-3W-4.0T) |

Products - Milling





| Part No. | Description | Arbor Size |
|--------------|-------------|------------------|
| ZGDSC02158AF | 2" x 1-5/8" | 5/8"-11 Threaded |
| ZGDSC03158AF | 3" x 1-5/8" | 5/8"-11 Threaded |

ZENESIS™ **Zero Tolerance Wheel 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.
- Grinding granite and engineered stone.
- Can be used wet or dry.



Products - Polishing

ZENESIS™ **Polishing Pads ZASHP** •

ZENESIS™ introduces an unmatched premium 7-step wet polishing pad. Independent testing has shown these new pads to 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 |
|---------------|---|
| ZASHPO40050A2 | 4" X 2.8mm X 5/8, 50 grit, Blue Backing |
| ZASHPO40100A2 | 4" X 2.8mm X 5/8, 100 grit, Yellow Backing |
| ZASHPO4O2OOA2 | 4" X 2.8mm X 5/8, 200 grit, Orange Backing |
| ZASHPO4O4OOA2 | 4" X 2.8mm X 5/8, 400 grit, Red Backing |
| ZASHPO40800A2 | 4" X 2.8mm X 5/8, 800 grit, Green Backing |
| ZASHPO41500A2 | 4" X 2.8mm X 5/8, 1500 grit, Light Blue Backing |
| ZASHPO43000A2 | 4" X 2.8mm X 5/8, 3000 grit, Brown Backing |

ZENESISTM LINE

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 |
|----------------|-----------------|-----------------|-----------------|-----------------|
| 12" | 2100 - 2400 RPM | 1900 - 2100 RPM | 1900 - 2100 RPM | 2700 - 3100 RPM |
| 14" | 1700 - 2000 RPM | 1650 - 1800 RPM | 1650 - 1800 RPM | 2400 - 2800 RPM |
| 16" | 1500 - 1800 RPM | 1450 - 1600 RPM | 1450 - 1600 RPM | 2000 - 2400 RPM |
| 18" | 1300 - 1600 RPM | 1300 - 1400 RPM | 1300 - 1400 RPM | 1750 - 2150 RPM |
| 20" | 1200 - 1450 RPM | 1200 - 1300 RPM | 1200-1300 RPM | 1500 - 1900 RPM |

FEED RATES

| BLADE | MED. GRANITE | HARD GRANITE | QUARTZITE | MARBLE |
|-------------------|-----------------|-----------------|-----------------|-----------------|
| ZENESIS II | 5-10 ft/min. | 5-10 ft/min. | Not Recommended | Not Recommended |
| ZENESIS III | 5-12 ft/min. | 5-12 ft/min. | Not Recommended | Not Recommended |
| ZENESIS BLACK 3 | 5-17 ft/min. | 5-17 ft/min. | Not Recommended | Not Recommended |
| ZENESIS MARBLE | Not Recommended | Not Recommended | Not Recommended | 5-9 ft/min. |
| ZENESIS QUARTZITE | Not Recommended | Not Recommended | 1-3 ft/min. | 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 increase 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 - 30%.









