

INDUSTRIAL DIAMOND SPECIALISTS

Your Trusted Supply Partner

Introducing Shannon Abrasives

Optimizing The Industrial Diamond Global Supply Chain

At Shannon Abrasives, we provide tailored diamond solutions to customers across a wide range of industry sectors. Offering a combination of commercial and production expertise, high-quality supermaterials, and a dedicated commitment to service, you can depend on us to meet your operational needs.

Tailored Solutions

With a solid reputation in offering proven expertise to diamond tool manufacturers. All our solutions are customized and designed to meet the operational and application needs of our customers.

Trusted Supplier

As industry veterans with more than 35 years commercial experience, you can be confident that you are working with a

As a trusted global supplier of highreliable partner, focused on delivering a consistent-quality product for your specific quality diamond products, we take pride industry sector. in delivering our products worldwide, ensuring our customers can access the **True Innovation** finest diamond solutions no matter where We are focused on continuous innovation they are located. Shipping your orders and product development. While we have promptly and securely is our top priority, a wide range of products to meet current that's why we have partnered with all needs, we are continuously listening to the major courier companies, including the market and have developed an FedEx, DHL and UPS, to ensure reliable and insightful ability to manufacture and supply efficient global delivery. products to meet the changing demands of our customers.



Greg Carey CEO

Total Customer Focus

By having solid supply chains in place, combined with our committed technical and support teams, we have a genuine customer-first mentality. We also understand the importance of value-formoney and can help you achieve cost efficiencies while maintaining quality in your equipment manufacturing.

Global Supplier



Oil & Gas

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Industrial Diamond Suppliers of Choice

Supplying diamond solutions that deliver unsurpassed quality, durability and performance. Engineered to meet the specific needs of tool manufacturers in the oil and gas industry.



Exceptional Products For Extreme Conditions

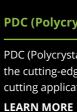
Products deployed in the oil and gas sector are subjected to some of the highest loads and harshest operating conditions. To meet these testing applications, we can supply a range of PDC and TSP to meet your drilling and wear protection requirements.



Reduce Your Oil And Gas Operation's Downtime

We offer a wide range of products for use in the oil and gas sector, enabling you to keep your production lines and workshops running to maximum efficiency. With a focus on quality, compliance and sustainability, we tailor our products to suit your needs.







material. LEARN MORE



PDC (Polycrystalline Diamond Compact)

PDC (Polycrystalline Diamond Compact) cutters are the cutting-edge solution for various drilling and cutting applications.

TSP (Thermally Stable Product)

TSP (Thermally Stable Product), a cutting-edge high-pressure, high-temperature sintered diamond/silicon composite

Aerospace & Automotive



Exceptional Industrial Diamonds That Meet Rigorous Standards

Offering unmatched quality, consistency and durability. Our supermaterials are engineered to meet the specific needs of tool manufacturers in the aerospace & automotive industries.



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Industrial Diamond Solutions For A Dynamic Industry

New technologies and a rapidly developing industry demand new approaches and new thinking.



Aircraft engineering and automotive manufacturing are some of the world's most innovative industries. To help meet the needs of both these challenging environments, we supply only the highest quality industrial diamonds for use in our products.



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ferrous materials. LEARN MORE



PCD (Polycrystalline Diamond Disks)

PCD (Polycrystalline Diamond) disks are high-performance materials designed for precision and durability.

PCBN (Polycrystalline Cubic Boron Nitride)

PCBN (Polycrystalline Cubic Boron Nitride) is the cutting-edge solution for machining high hardness and hard processed

Company Brochure

Mining



Exceptional Performance Under Pressure

Our industrial diamond products are engineered to excel in the most demanding environments, optimising performance and minimising costly downtimes.



Industrial Diamonds For The Harshest Conditions

Mining operations depend on high quality, reliable tools and technologies that perform under pressure. Shannon Abrasives supply only the highestgrade industrial diamond products, engineered to increase life, penetration rate and perform reliably and consistently under the harshest conditions.



Quality Supermaterials You Can Depend On

Our key products have been developed and refined to meet the challenging conditions of tool manufacturers in the mining industry. Our PDC Cutters, TSP & Synthetic Grit are used to make wire saws, drill bits, and tools for grinding and polishing.







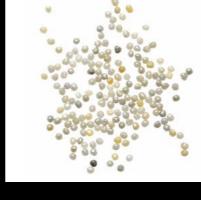






Premium

The best shapes and the lightest colours are selected from original mined diamond to be the starting material for our Premium product. Mechanically and chemically processed to improve the initial shape and remove weak stones, the resulting product exhibits the characteristics of strength and uniformity. LEARN MORE



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TSP (Thermally Stable Product)

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Synthetic Diamond Grit

Shannon Abrasives synthetic grit solutions include a Drilling series, a Sawing series and a Grinding series as well as Lapping and Polishing powders.

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Construction and Stone

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Unrivalled Consistency and Durabilty

Shannon Abrasives provide fully tailored industrial diamond solutions to tool-manufacturers in the construction and stone sector.

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Exceptional Supermaterials That Perform In All Conditions

We understand the material challenges faced by diamond tool manufacturers in the vast area of construction and stone machining applications. Shannon Abrasives offers a full range of synthetic and natural grit to complement the toolmakers' skills in the sintering of saw segments, wire beads, infiltrated bits and electroplated single layer tools.



Reduce Downtime With Supermaterials You Can Rely On

If you design and make blades, core bits, diamond wires, or polishing pads for use in the construction sector, you need a raw materials supplier you can depend on. We provide synthetic diamond grit and related products, sourced and refined with the unique needs of your sector in mind.

Grinding Grit Series

Our Grinding Series consists of three metal bond product grades in sizes 60/70 US mesh to 325/400 US mesh. These three grades provide a choice of strength from high-strength, high-thermally stable material suitable for the most demanding applications to low-strength friable material for stone and concrete polishing, grinding to surface calibration of stone, precision grinding of ceramics and cutting and lapping of silicon wafers.

Sawing Grit Series

The Shannon Abrasives Sawing Grit Series consists of eight product grades in sizes 25/35 US mesh to 60/80 US mesh, providing a full suite of solutions for a complete range of sawing and coring applications in Stone and Construction. The many uses include cutting and coring of steel reinforced concrete, slabbing of marble and granite blocks to the surface planing and preparation of concrete and stone materials. **LEARN MORE**

Drilling Grit Series

The Drill Grit Series consists of three product grades in coarse sizes designed to survive high sintering temperatures and long sintering cycles and provide high penetration rates in the hardest formations.

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Lapping and Polishing

Synthetic micron diamond grit is available in a full range of sizes from 0-0.05 microns to 30-40 microns. This product is suitable for the surface engineering of the toughest materials in the lapping and polishing of a wide range of materials including ceramics, stone, metals, natural diamond, polycrystalline diamond and composite materials.

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LEARN MORE

Precision Machining



Durable High-Performance Industrial Diamonds

Supplying diamond solutions with unsurpassed efficiency, durability and performance - delivering a new level of quality and expertise to the precision machining industry.



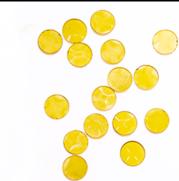
First-Class Components To Drive Precision Machining Solutions

At Shannon Abrasives, we understand that diamond is an essential component of precision tool-making. We supply a full range of polycrystalline diamond materials for the precision machining of nonferrous metals, wood, ceramics, glass, plastics and a range of composite materials.



Reduce Downtime In Precision Machining Environments

From lost productivity and increased costs, to operational inefficiencies, the consequences of downtime can be serious. By investing in high quality raw materials, you deliver higher quality precision tools, in turn minimizing downtime for your clients.







ferrous materials.

Single Crystal Diamond is a cutting-edge solution for achieving unparalleled precision and efficiency in your machining operations.

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PCD (Polycrystalline Diamond Disk)

PCD (Polycrystalline Diamond) disks are high-performance materials designed for precision and durability.

HPHT (High-Pressure High-Temperature)

HPHT (High-Pressure High-Temperature) single crystal diamond is a superior material renowned for its exceptional characteristics and versatility.

LEARN MORE

PCBN (Polycrystalline Cubic Boron Nitride)

PCBN (Polycrystalline Cubic Boron Nitride) is the cutting-edge solution for machining high hardness and hard processed

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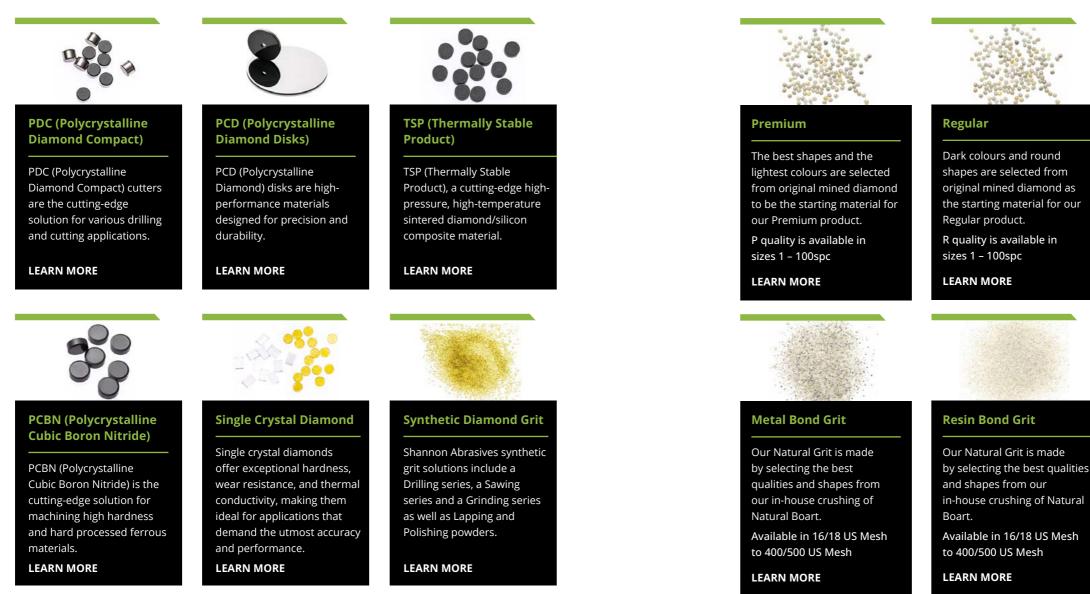
Synthetic Diamonds

Engineered To Meet Your Needs

Products

While retaining the durability and strength of natural diamonds, synthetic diamonds offer superior consistency and a cost-effective alternative to natural diamonds for industrial tool manufacturers. From PCD and TSP, through to single crystal diamond products, we can offer you a synthetic diamond solution engineered to meet your specific needs. By taking the time to understand your precise operational needs, we work with you to supply a tailored solution, offering fast turn-around times and a team dedicated to building long-term working relationships.

Our Range Of Synthetic Diamond Solutions



Natural Diamonds

Natural Industrial Diamond Manufacturing

Shannon Abrasives if one of the last natural industrial diamond product manufacturers, controlling the production process from start to finish. Sourcing boart direct from producers we bring it in-house where we crush, shape sort, sieve size and chemically clean and polish the material we have the ability to tailor make products to our customers exact requirements.

Our Range Of Industrial Diamond Solutions



Dark colours and round shapes are selected from original mined diamond as the starting material for our Regular product.

R quality is available in sizes 1 – 100spc



Gauge Stones

Blocky angular Boart provides the base for this gauge material.

Gauge quality is available in sizes 1 – 100spc

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Micron

Natural Micron powder is processed into sizes through specialised crushing & milling techniques that produce sharpedge, fast-cutting particles.

Sizes range from 0 – ¼ microns to 50/70 microns

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Company Brochure

Our Promise

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With a focus on tailored solutions and serving client needs through a customer-first philosophy, Shannon Abrasives has carved out a reputation as an industrial diamond supplier that tool manufacturers can depend on.

Client-First Model

Prioritising Partnership

At Shannon Abrasives we recognise that investing our efforts in thoroughly understanding our clients' requirements and gaining deeper insights into their product usage helps us to craft tailored solutions for their precise operational needs. Since 1987, our customer-centric approach has helped us foster greater trust and solidify working relationships with all our clients, from smaller businesses to larger enterprises.

Professionalism, Honesty And Reliability

Nearly 40 years on and Shannon Abrasives has established a global presence, supplying industrial diamond products to industrial tool manufacturers worldwide. While the industrial diamond world has radically changed with the arrival of digitization and the rise of labgrown synthetic diamonds, the same core qualities remain important to our success – professionalism, honesty, and reliability.



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Our Quality Control Commitment

Quality testing procedures for Synthetic and Natural industrial diamonds are vital to ensure their reliability and performance in industrial applications. These procedures focus on assessing the physical and chemical properties of the diamonds to meet specific application requirements. At Shannon Abrasives all orders are checked by a qualified quality control engineer prior to shipping and an appropriate certificate of quality will accompany each shipment.

Adhering to **FEPA standard** sizing, the diamonds are scrutinized for size, shape, and surface integrity, as these factors directly impact their effectiveness in cutting, grinding, or drilling applications. Advanced techniques like SEM and Ultrasonic Detection are employed are employed to ensure the morphology of sintered products such as PCD is uniform with no particle aggregation or impurities. Ultrasonic detection is also employed to measure the diamond layer thickness across the full scope of the disk or segment and ensure that it is within required tolerances.

Additionally, thermal conductivity measurements, abrasion resistance and Vickers hardness tests are conducted to evaluate the diamonds' suitability for use in high-heat and abrasive environments. Eye tests are employed by quality assurance under 10x microscope to look for defects or contaminants.

Through these **rigorous quality testing procedures**, we deliver industrial diamond products that deliver consistent and superior performance, meeting the demands of a wide range of industrial processes.

Global Suppliers

Shannon Abrasives are global full-line suppliers of supermaterials. We partner with each of our customers to develop industrial diamonds solutions for their specific requirements. Producing tailored product solutions for a variety of technical applications and industries, our customers range from large multinationals and SME's, to artisan tool manufacturers.







Visit us Unit 10b, Knockbeg Point, Shannon, Co. Clare, Rep. of Ireland.



Call us Discuss your specific requirements with our expert team. +353 61 475066



Message us Get in touch, we're here to help. <u>enquiries@</u> shannonabrasives.com