SYNTEC
DIAMOND TOOLS

PRODUCT CATALOG
USA

SYNTEC™
DIAMOND TOOLS

OUR HERITAGE

Each having worked in the diamond tool industry for over 40 years, company owners Paul Freer and Dennis Clift formed Syntec Diamond Tools in 1994.

The business was soon to become Australia's largest diamond tool manufacturer and a leader in developing, manufacturing and supplying the latest designs and innovative products in the diamond tool industry.

Syntec Diamond Tools has a 26,000 square metre manufacturing site and offices in South Australia, a full-service facility and office in California, over 50 employees and exports products around the globe.

AUSTRALIAN MADE

AUSTRALIAN MADE

Paul and Dennis have always been proud of their Australian heritage and pride themselves on not only designing but also manufacturing their goods locally in Berri, South Australia. All products are developed to provide for a diverse range of customers and applications.

By investing in a fleet of the most sophisticated machines available to manufacture diamond tooling, Syntec has simplified the process, ensuring consistent quality at all times and allowing for competitive pricing.

From the superior raw materials used in production and strict quality control standards to the finishing and packaging of the products – no detail is overlooked in the process.

In 2016, Syntec Diamond Tools was certified Australian Made and now

carries the Australian Made® symbol to show authenticity. You can rest assured that our products are made to the highest standards using quality materials.

We are committed to quality workmanship and creating industry-leading products that differentiate us from other diamond tool manufacturers.

OUR FOCUS

Syntec Diamond Tools provides on-site sales and technical expertise. Our products are available for trade distribution and through hire and rental agencies. This provides an added convenience regardless of where the job site is.

With each product, our goal is to add value and performance for our customers. Therefore all our diamond tools are manufactured with job applications in mind. Our product designers and the technical team find out specifically what is required and can custom make products for most applications.

Customer support is provided in two opposing timezones through our support offices in Australia and the USA, both locations providing full servicing facilities for the entire range of Syntec Diamond Tools products.

OUR IDEAS AND INNOVATION

Syntec Diamond Tools has been at the forefront of innovation in the diamond tool industry and continues to strive to meet challenges through ongoing investment in research, development, machinery and product testing.

Examples of this include ground-breaking segment designs and configurations. Syntec is responsible for making the first-ever Arrow Segment which is now popular throughout the surface preparation industry. Instead of copying what is already on the market, we continue to look for ways to make new tooling that is more productive and lasts longer. Both our Rapida and Trojan segments, for example, are innovations that were first created in conjunction with customers to solve their individual grinding issues and later rolled out worldwide.

Syntec has developed a Fast Change System that allows a contractor to use a taper wedge system to quickly change out tooling or slide in a Velcro-backed resin holder. The contractor can then streamline their tooling to one style by replacing their plates with Syntec Fast Change.

Syntec also continues to lead the industry with the most innovative PCD tooling in the market. From ½ " wide PCD cutting blades used in micro trenching for fiberoptic cable to the most durable and productive PCDs available in the surface preparation market – Syntec will have the right PCD designs for your next projects.

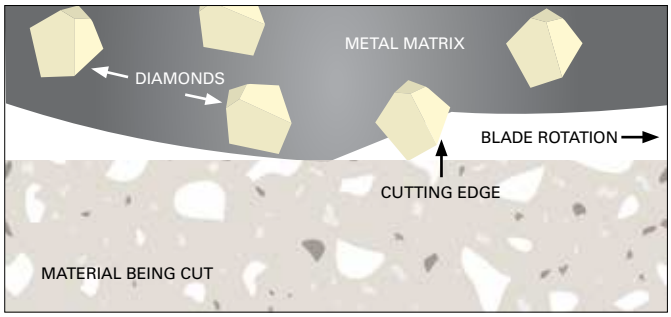
CONTENTS

DIAMONDS

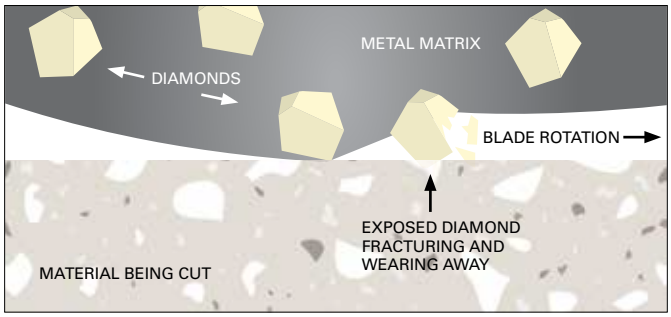
HOW DO DIAMOND TOOLS WORK?

Diamonds don't actually cut. They generate friction and grind the material they come into contact with into a fine powder. As part of the manufacturing process, the diamond segment or rim gets 'broken in', meaning the top layer gets ground away to expose individual diamond crystals that then do the grinding work. These diamonds are locked in place by a metal alloy, the so-called bond, which wears away over time exposing new diamonds to the surface. They are further supported by the comet tail or bond tail which develops behind the diamonds, indicating the direction in which the segment is intended to move.

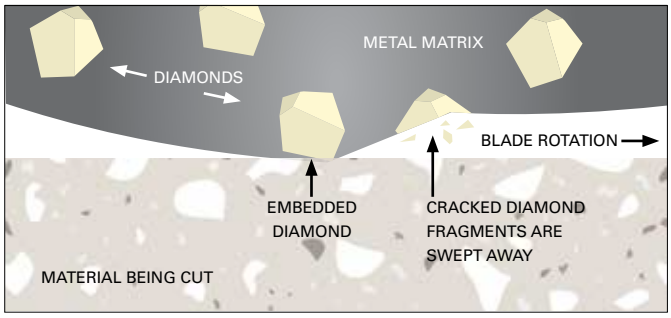
The bond plays a crucial role in a diamond tool's performance as it determines the strength of the material that can be cut or ground. With time the diamonds fracture or are pulled out of the bond. Simultaneously the bond wears away exposing new diamonds. Here it is important to select the right bond for the material being cut. A correctly formulated bond holds the diamonds in place just long enough to get maximum use from the crystals before releasing them and exposing the next layer of diamond.



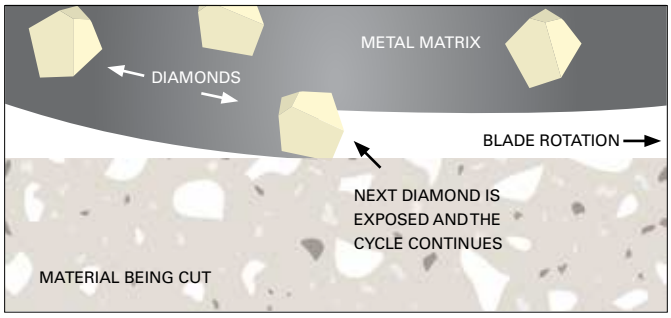
1. The actual grinding work is done by exposed diamond crystals that are held in place by the metal matrix or bond. Each diamond is supported by a bond tail which trails behind the diamond. While the blade rotates through the material, the exposed diamonds on the surface grind the material.



2. The exposed diamonds begin to crack and fracture after passing through the material several thousand times. Simultaneously the bond starts to wear away.



3. Eventually the diamonds fracture completely and are swept away with the material being ground. When wet grinding, this material, together with the water, forms a slurry.



4. Once a diamond has been pulled out, the bond continues to wear away and exposes a further diamond. This cycle repeats itself until the segment is worn to the core.

As a rule of thumb, the harder the material, the softer the bond should be and vice versa – opposites attract! When cutting very abrasive material such as asphalt, the bond needs to be hard otherwise it will wear away too fast, causing the diamonds to fall out too soon. A strong bond, however, will support the diamonds and increase the life of the blade. On the other hand, when cutting a hard material such as hard clay pavers the bond needs to be soft or else it will not wear away fast enough, resulting in the segments glazing over.

The only diamonds Syntec uses are high quality, synthetic diamonds as they are generally stronger, last longer, withstand higher temperatures and are more uniform in their characteristics than natural diamonds, resulting in a tool that will perform more consistently.

MACHINE ICONS

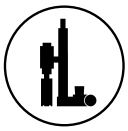
HIGH HP
WALK-BEHIND

ANGLE
GRINDER

LOW HP
WALK-BEHIND

WALL SAW

HAND-HELD SAW



CORE RIG

RING SAW

FLOOR
GRINDER

BRICK /
MASONRY SAW

SAFETY ICONS

HARD HAT

GOGGLES

DUST MASK

HEARING
PROTECTION

SAFETY
GLOVES

STEEL CAP
BOOTS


SYNTEC
DIAMOND TOOLS
SYNTEC
DIAMOND TOOL
syntecdiamond.com
SYNTEC™
DIAMOND TOOLS
syntecdiamond.com
PROFESSIONAL
14.70"
374MM
MAX RPM 4365
PB144MMM
SYNTEC™
DIAMOND TOOLS
syntecdiamond.com
12"
305MM
MAX RPM 6300
SAHR30012
PRODUCT
CURED CONCRETE
MASONRY
PAVERS
STONE
BRICK

BLADES

Diamond blades are available in many variations, each to suit a different application or material. To clarify these differences, let us have a look at the elements of a diamond blade.

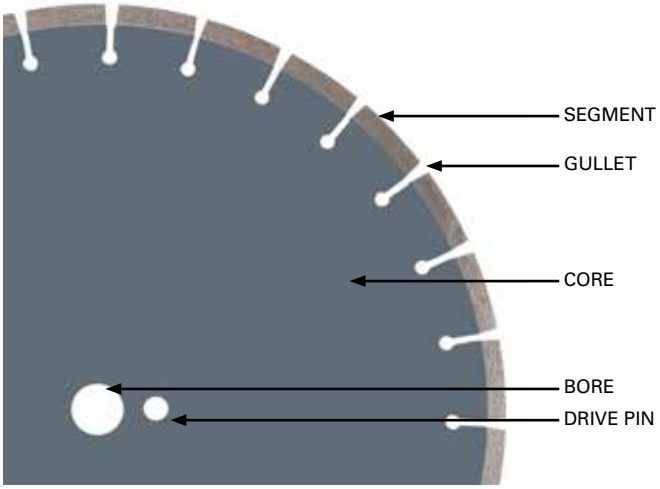
THE CORE

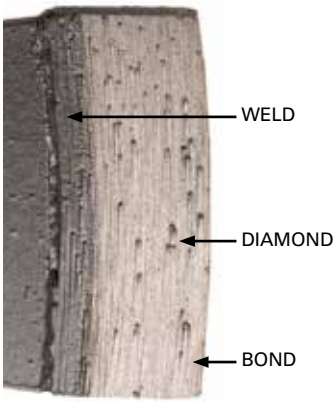
The tensioned core in our high-quality diamond blades is made of high alloy, heat-treated steel as opposed to cheaper blades that are usually made of sheet metal which makes them prone to tension loss. By properly tensioning the core we make sure that the blade runs straight when cutting and at the same time remains flexible enough to bend slightly under cutting pressure and then snap back into position. Depending on the application the blade is suited for, the core may contain different features, for example cooling holes for very hard materials.

THE DIAMONDS AND BOND

The cutting edge of a blade consists of a mixture of diamonds and metal powders, the so-called bond. The more diamonds a segment contains, the more horsepower it needs to cut. This means that blades for high horsepower saws will generally have more diamonds in their segments.

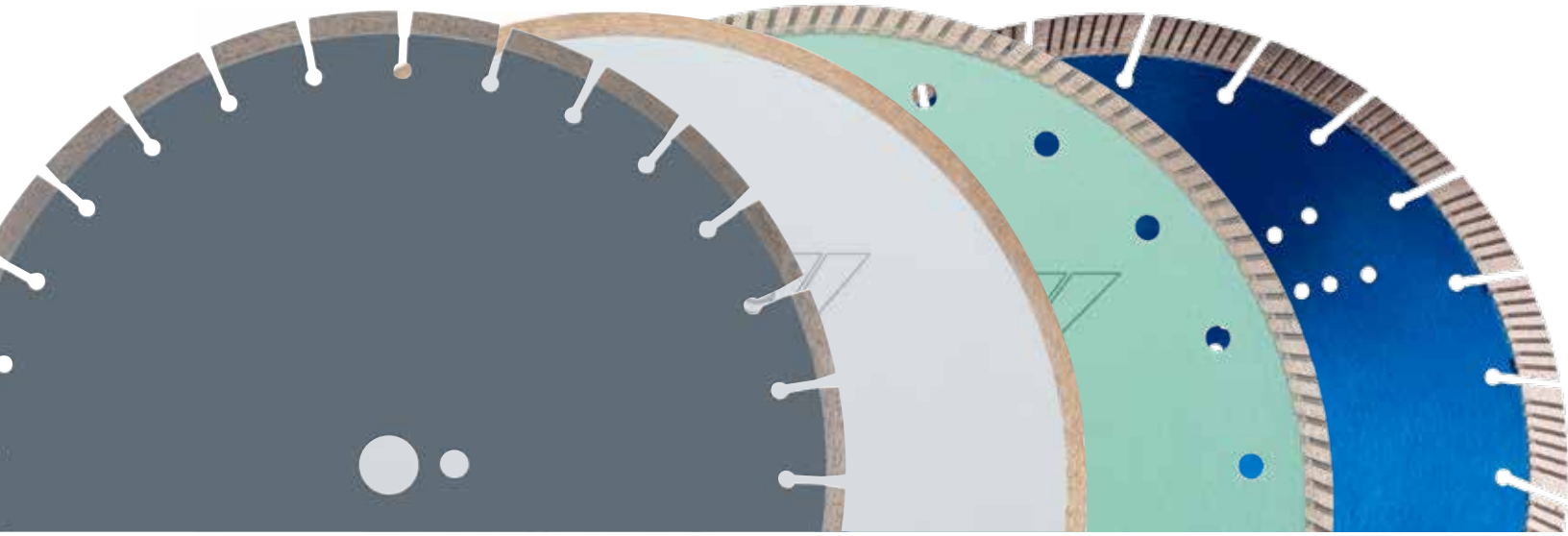
But the diamonds are not the only important criteria, the bond also plays a crucial role in a blade's cutting performance as it determines the strength of the material that can be cut by the blade. With time the diamonds fracture or are pulled out of the bond. Simultaneously the bond wears away exposing new diamonds. Here it is important to select the right bond for the material being cut.





As a rule of thumb, the harder the material, the softer the bond should be and vice versa – opposites attract! When cutting very abrasive material such as asphalt the bond needs to be hard otherwise it will wear away too fast causing the diamonds to fall out too soon. A strong bond however will support the diamonds and increase the life of the blade. When cutting a hard material such as hard clay pavers the bond needs to be soft or else it will not wear away fast enough resulting in the segments glazing over.

Contrary to common belief a hard blade will not cut everything. It will not cut hard product! Therefore, when selecting the right blade specification, consider which material will be cut most often or for which material the performance is most important.



SEGMENTS AND RIMS

The type of cutting edge on a blade determines how it cuts. Generally speaking, there are three types of blades:

- Segmented blades
- Continuous rim blades
- Turbo blades

No matter the type of blade, the segment or rim is always slightly wider than the blade core. This side clearance or lateral tolerance allows the cutting edge to penetrate through the material without the core coming into contact with the material being cut.

SEGMENTED BLADES – SEGMENTS, WELDS AND GULLETS

Segmented diamond blades feature individual segments along the cutting edge. What's important to note is that the depth of the segments is not necessarily an indicator of life as a high-quality 10mm segment can contain a higher concentration of diamonds than a lower quality 15mm segment.

All our segments are laser welded onto the blade's core, creating an incredibly strong bond that can tolerate high temperatures. Laser welding is considered the safest method of fixing segments onto the blank due to the additional safety feature of the weld. Laser welded segments also allow for full use of the segment depth and are said to last around 35% longer than sintered diamond blades.

The gaps between the segments are referred to as gullets. Gullets serve to improve airflow and dissipate the heat, cooling the blade, extract dust and remove slurry from the cut. The quicker slurry is removed from a cut, the longer the blade will last as slurry has a wearing effect on the segments. Gullets also improve the blade's flexibility to prevent cracks in the core when used for demanding applications.

The size and shape of the gullets depend on the material the blade is intended for. The more abrasive the material is, the wider the gullets should be to allow for better heat dissipation. Also, as a guideline, the bigger a gullet, the faster the cutting speed, as it lessens the drag while cutting.

Segmented blades offer the fastest cutting speed, however, also provide the roughest cut with some chipping. This style of blade is ideal for cutting all kinds of building materials, concrete, reinforced concrete, green concrete, and asphalt. Segmented blades are particularly common in larger diameters over 12".

CONTINUOUS RIM BLADES

Instead of individual segments, continuous rim diamond blades have a smooth, solid edge. These blades generally have a softer bond, are typically available in smaller sizes (4" – 14") and are ideal for hard materials that easily chip such as tile, porcelain, granite, ceramic and glass. Although they are the slowest blade to cut, their flat, continuous surface eliminates shocks against the material that could create chips and therefore provides a perfect finish. As continuous rim blades tend to overheat easily, they should only be used when wet cutting which allows for cooling of the blade, flushing out debris and preventing dust.

TURBO BLADES

Turbo blades offer advantages from both segmented as well as continuous rim blades. These diamond blades also bear a continuous rim, however, their edge is serrated, providing a faster, more aggressive cut to extremely hard materials while keeping the cut smooth by giving smaller shocks to the workpiece. Turbo blades typically come in smaller sizes (4"- 14") and with a softer bond to cut materials such as tiles, ceramic, marble, granite, masonry and other hard building materials. They can be used for both wet and dry cutting.

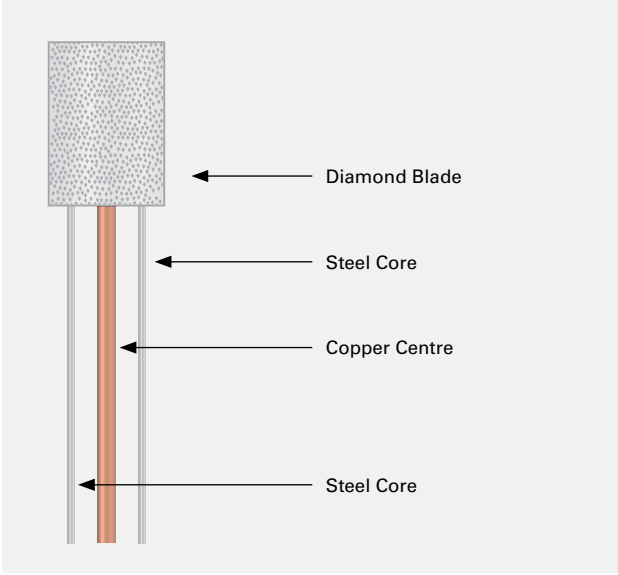
PREMIUM OPTIONS

SILENT CORES

Blades can create a noisy environment that if exposed to constantly can be an annoyance. As a premium option, however, blades can be silenced. On job sites sensitive to noise, Syntec's silent blades are the ideal solution, drastically reducing the cutting noise as well as the high pitch ringing sound made by regular blades. Silent blades have been 'vibration damped' within the blade's core by laminating two steel cores together around a copper centre. This technology is called a sandwich core and provides the best sound reduction, lowering noise levels by up to 15 dB.

A further plus of silencing the blade is the vibration resistance that comes with it and protects the blade's core, increasing blade life, sawing quality and operator safety.

Typically, blades are only available as a silent version, if the machine they are used on does not overpower the noise of the blade itself. Syntec offers bespoke specifications for a range of masonry, core and refractory blades.

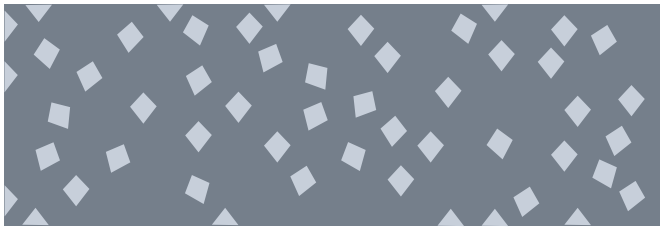


Silent Core Blade

CPP TECHNOLOGY

CPP stands for Controlled Particle Placement and describes a technology with which diamonds are placed into the bond in a specific templated arrangement. This ensures even wear and consistently high cutting performance throughout the life of the segment. Without this technology diamonds are still distributed in even amounts throughout the bond, i.e. you would never find all the particles in only one corner of a segment, however, their exact position cannot be determined.

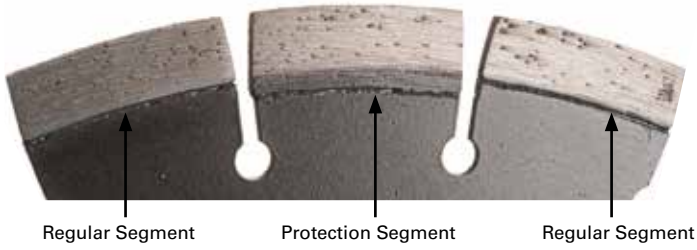
CPP Technology: Diamonds placed in a templated arrangement



Conventional Segment

PROTECTION SEGMENTS

If the core of a blade wears faster than the segments, this leads to a sharpening of the core right below the segments which is called undercutting. Undercutting is a common issue on asphalt and green concrete applications in which an abrasive slurry accumulates when cutting into the road's subbase. Therefore many blades nowadays feature protection segments that prevent the core's erosion and associated issues such as segment loss. Primarily, Syntec uses recessed cores, so-called slugs, as protection segments.



WET VS. DRY CUTTING

There are two different methods when cutting: wet and dry. Wet cutting is by far the preferred option - water is a diamond's best friend! As an unwritten rule, any dry blade can be used wet, however, a wet blade cannot be used dry. Even a few seconds of dry cutting is sometimes enough to damage a wet blade.

Using water helps to increase the lifespan of a diamond blade by reducing some of the heat generated by the friction, especially on abrasive materials, and therefore preventing the blade from overheating. Overheating can cause a blade to crack and lose its segments prematurely. Also, with too little coolant the swarf (fine particles) is not removed from the cut fast enough which can lead to undercutting (see troubleshooting guide for blades).

Dry cutting ideally should only be resorted to if the area needs to be kept dry or electrical power tools are being used, making it unsafe to use water around the power source. The fine dust created when dry cutting on masonry, glass and other hard materials presents a safety hazard to those in the vicinity. The water helps minimise the amount of dust generated. Should you be dry cutting, this is best done outdoors, using a vacuum attachment. It is also important to let the diamond blade cool off periodically by letting it spin freely outside of the cut.

Always wear a dust mask when dry cutting to prevent yourself from inhaling dust which can lead to serious lung disease.

HELPFUL TIPS

1. Do not force the blade. Let it do the cutting itself.
2. The higher the horsepower, the more torque a blade has and the harder the bond can be.
3. Rule of thumb: 1 horsepower per inch of blade diameter is required for efficient sawing.
4. The smaller a blade is, the lower the cutting depth, but the higher the power and speed of cutting.
5. Multiple shallow cuts, also known as step cuts, are better than long single cuts.
6. If the slurry changes colour you are most likely cutting into the subbase.
7. If the direction arrow on your blade has worn away, check in which direction the comet tails behind the diamonds are pointing. Using the blade in the opposite direction to what was intended will reduce the blade's lifespan.

SEGMENT AND GULLET TYPES

SEGMENT TYPES

REGULAR

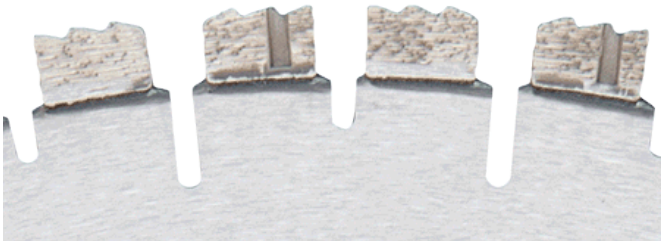
Formulated for high cutting performance and long life. Available for a wide range of materials.

TURBO

Serrated edge for a faster, more aggressive cut. Ideal for extremely hard materials.

N-SHAPED

Turbo segments with a reduced surface area, enabling a faster cut on hard brick.



TWIN

Smaller turbo segments with less surface area and more gullets, allowing for better clearance, enable a faster cut on wall materials.

TOP 3 GULLET TYPES

KEYHOLE

Relieves stress in the blank when cutting. The bigger the hole's radius, the higher the stress the blade can withstand. Blades with keyhole gullets, however, can make a whistling sound.

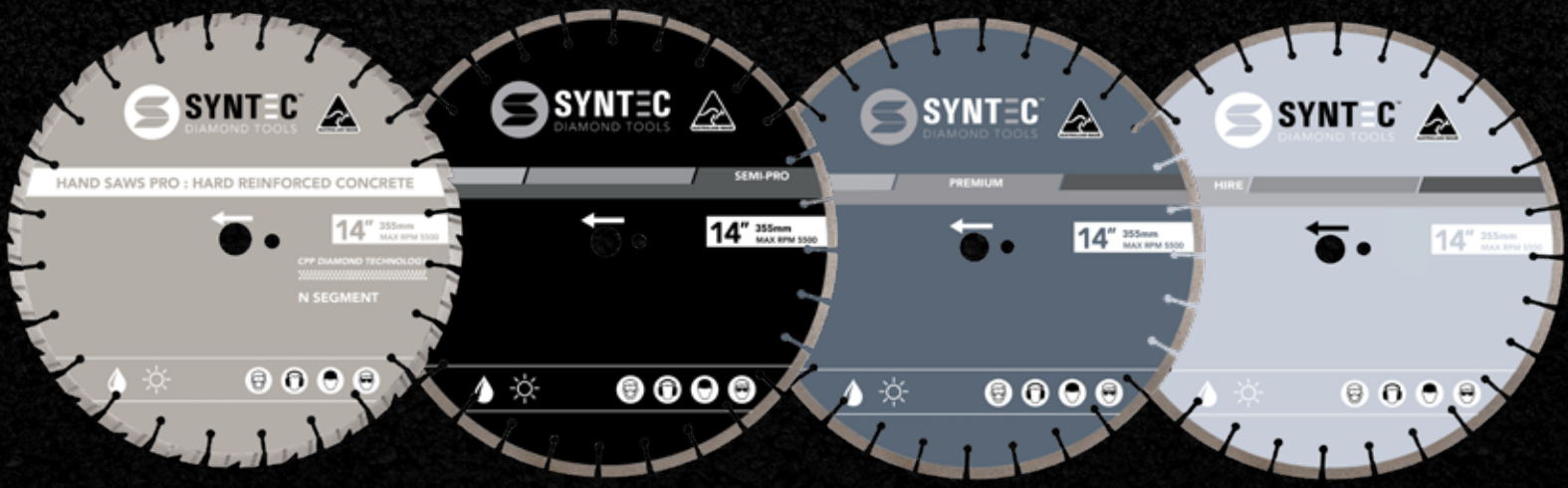
U-SHAPED

The wider the gullet, the stronger the blade. Holds side clearance better and removes slurry more efficiently. Typically used on stone blades.

NARROW SLOT

Like a U-shaped gullet but narrower. Also reduces the whistling sound.

SYNTEC BLADES



PRO

For professionals who make their living using diamond tools for specialist applications on a daily basis. Maximum speed and life.

–

Highest diamond quality, highest diamond concentration.

SEMI PRO

For general contractors who use blades frequently, such as councils, utility companies, rental yards, etc. High speed and long life.

–

High diamond quality, high diamond concentration.

PREMIUM

For tradesman looking for a higher quality blade for common applications. Higher speed and longer life.

–

High diamond quality, medium-high diamond concentration.

HIRE

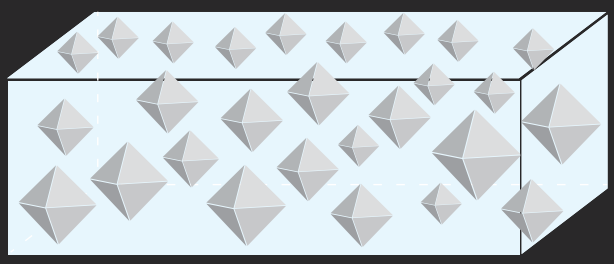
For construction companies who want top notch performance and rental yards where value is important.

–

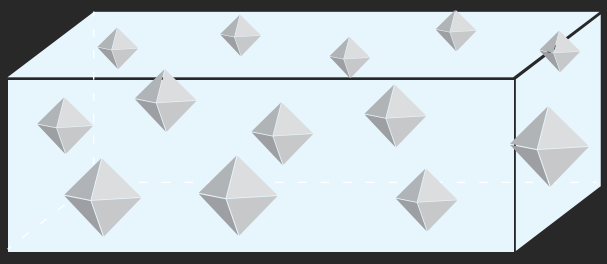
High diamond quality, medium diamond concentration

DIAMOND CONCENTRATION

The diamond concentration refers to the proportion and distribution of abrasive diamond particles within the bond. In general, the higher the diamond concentration, the higher the machine's horsepower needs to be.



High concentration of diamond powder



Low concentration of diamond powder

FLOOR SAW BLADES

PRO RANGE

Each belonging to the PRO range, deliver performance and durability for the professional cutter's application. PRO blades are manufactured with Syntec's formulated bonds combined with the highest quality diamonds and diamond concentration, suited to a range of saws 25hps and higher.

The MMM PRO and CAL MAX comprise blades for high hp self-propelled saws, whereas the other ranges are designed for push saws.

HARD PSI: **3000 PSI concrete**

MEDIUM PSI: **4500 PSI concrete**

SOFT PSI: **6000 PSI concrete**

PRO (HIGH HP)

	C CONCRETE	A ASPHALT
M SERIES	● PB1432MXHC	
	● PB1432MHC	
	○ PB1432MMM	
	● PB1432MSC	
	● PB1432MXSC	
CAL MAX SERIES	● SC14CAL604-3.2	
AB PRO SERIES		● AB143210-3
		● AB2143210-3
		● AB3143210-3
GC PRO SERIES	● GC1432MXHC	
	● GC1432MXMC	
	● GC1432MXSC	
HI TRAFFIC LOOP SERIES	○ RSC11MMM1	
		● RSA11CP612
	○ 14CCPMMM1	
		● SC12CAPMMM1
MT MAX SERIES		● PCD650

PRO RANGE

M SERIES

Containing the highest concentration of diamond combined with Syntec's formulated highest quality bond, Syntec M series pro blades deliver performance and durability in wide range of applications.

Available in a range of bonds suitable for extremely hard, hard, medium, soft and extremely soft concrete. Segment height of .472 delivers maximum life. A full range of widths and diameters meets every application.

PRO CONCRETE BLADES - EXTRA HARD CONCRETE (MXHC)

EXTREMELY HARD CURED CONCRETE

PART NO.	SIZE	BORE	COLOR
PB1432MXHC	14″ x .125	1" + DP	Gold
PB1435MXHC	14″ x .140	1" + DP	Gold
PB144MXHC	14″ x .155	1" + DP	Gold
PB1447MXHC	14″ x .187	1" + DP	Gold
PB146MXHC	14″ x .250	1" + DP	Gold
PB1632MXHC	16″ x .125	1" + DP	Gold
PB1635MXHC	16″ x .140	1" + DP	Gold
PB164MXHC	16″ x .155	1" + DP	Gold
PB1647MXHC	16″ x .187	1" + DP	Gold
PB166XMXHC	16″ x .250	1" + DP	Gold
PB1832MXHC	18″ x .125	1" + DP	Gold
PB1835MXHC	18″ x .140	1" + DP	Gold
PB184MXHC	18″ x .155	1" + DP	Gold
PB1847MXHC	18″ x .187	1" + DP	Gold
PB186MXHC	18″ x .250	1" + DP	Gold
PB2032MXHC	20″ x .125	1" + DP	Gold
PB2035MXHC	20″ x .140	1" + DP	Gold
PB204MXHC	20″ x .155	1" + DP	Gold
PB2047MXHC	20″ x .187	1" + DP	Gold
PB206MXHC	20″ x .250	1" + DP	Gold
PB2432MXHC	24″ x .125	1" + DP	Gold
PB2435MXHC	24″ x .140	1" + DP	Gold
PB244MXHC	24″ x .155	1" + DP	Gold
PB2447MXHC	24″ x .187	1" + DP	Gold
PB246MXHC	24″ x .250	1" + DP	Gold
PB2635MXHC	26″ x .140	1" + DP	Gold
PB264MXHC	26″ x .155	1" + DP	Gold
PB2647MXHC	26″ x .187	1" + DP	Gold
PB3035MXHC	30″ x .140	1" + DP	Gold
PB304MXHC	30″ x .15	1" + DP	Gold
PB3047MXHC	30″ x .187	1" + DP	Gold
PB306MXHC	30″ x .250	1" + DP	Gold
PB3635MXHC	36″ x .140	1" + DP	Gold
PB364MXHC	36″ x .155	1" + DP	Gold

PRO RANGE

M SERIES

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PRO CONCRETE BLADES - EXTRA HARD CONCRETE (MXHC) - CONTINUED

EXTREMELY HARD CURED CONCRETE

PART NO.	SIZE	BORE	COLOR
PB3647MXHC	36″ x .187	1" + DP	Gold
PB3654MXHC	36″ x .220	1" + DP	Gold
PB4247MXHC	42″ x .187	1" + DP	Gold
PB4254MXHC	42″ x .220	1" + DP	Gold
PB4847MXHC	48″ x .187	1" + DP	Gold
PB4854MXHC	48′ x .220	1" + DP	Gold

PRO CONCRETE BLADES - HARD CONCRETE (MHC)

HARD CONCRETE WITH HEAVY REINFORCEMENT

PART NO.	SIZE	BORE	COLOR
PB1432MHC	14″ x .125	1" + DP	Gold
PB1435MHC	14″ x .140	1" + DP	Gold
PB144MHC	14″ x .155	1" + DP	Gold
PB1447MHC	14″ x .187	1" + DP	Gold
PB146MHC	14″ x .250	1" + DP	Gold
PB1632MHC	16″ x .125	1" + DP	Gold
PB1635MHC	16″ x .140	1" + DP	Gold
PB164MHC	16″ x .155	1" + DP	Gold
PB1647MHC	16″ x .187	1" + DP	Gold
PB166MHC	16″ x .250	1" + DP	Gold
PB1832MHC	18″ x .125	1" + DP	Gold
PB1835MHC	18″ x .140	1" + DP	Gold
PB184MHC	18″ x .155	1" + DP	Gold
PB1847MHC	18″ x .187	1" + DP	Gold
PB186MHC	18″ x .250	1" + DP	Gold
PB2032MHC	20″ x .125	1" + DP	Gold
PB2035MHC	20″ x .140	1" + DP	Gold
PB204MHC	20″ x .155	1" + DP	Gold
PB2047MHC	20″ x .187	1" + DP	Gold
PB206MHC	20″ x .250	1" + DP	Gold
PB2432MHC	24″ x .125	1" + DP	Gold
PB2435MHC	24″ x .140	1" + DP	Gold
PB244MHC	24″ x .155	1" + DP	Gold
PB2447MHC	24″ x .187	1" + DP	Gold

PRO RANGE

M SERIES

Containing the highest concentration of diamond combined with Syntec's formulated highest quality bond, Syntec M series pro blades deliver performance and durability in wide range of applications.

Available in a range of bonds suitable for extremely hard, hard, medium, soft and extremely soft concrete. Segment height of .472 delivers maximum life. A full range of widths and diameters meets every application.

PRO CONCRETE BLADES - HARD CONCRETE (MHC) - CONTINUED

HARD CONCRETE WITH HEAVY REINFORCEMENT

PART NO.	SIZE	BORE	COLOR
PB246MHC	24″ x .250	1" + DP	Gold
PB2635MHC	26″ x .140	1" + DP	Gold
PB264MHC	26″ x .155	1" + DP	Gold
PB2647MHC	26″ x .187	1" + DP	Gold
PB3035MHC	30″ x .140	1" + DP	Gold
PB304MHC	30″ x .155	1" + DP	Gold
PB3047MHC	30″ x .187	1" + DP	Gold
PB306MHC	30″ x .250	1" + DP	Gold
PB3635MHC	36″ x .140	1" + DP	Gold
PB364MHC	36″ x .155	1" + DP	Gold
PB3647MHC	36″ x .187	1" + DP	Gold
PB3654MHC	36″ x .220	1" + DP	Gold
PB4247MHC	42″ x .187	1" + DP	Gold
PB4254MHC	42″ x .220	1" + DP	Gold
PB4847MHC	48″ x .187	1" + DP	Gold
PB4854MHC	48″ x .220	1" + DP	Gold

PRO CONCRETE BLADES - MEDIUM CONCRETE (MMM)

MEDIUM TO HARD CONCRETE WITH MEDIUM STEEL REINFORCEMENT

PART NO.	SIZE	BORE	COLOR
PB1432MMM	14″ x .125	1" + DP	White
PB1435MMM	14″ x .140	1" + DP	White
PB144MMM	14″ x .155	1" + DP	White
PB1447MMM	14″ x .187	1" + DP	White
PB146MMM	14″ x .250	1" + DP	White
PB1632MMM	16″ x .125	1" + DP	White
PB1635MMM	16″ x .140	1" + DP	White
PB164MMM	16″ x .155	1" + DP	White
PB1647MMM	16″ x .187	1" + DP	White
PB166MMM	16″ x .250	1" + DP	White
PB1832MMM	18″ x .125	1" + DP	White
PB1835MMM	18″ x .140	1" + DP	White
PB184MMM	18″ x .155	1" + DP	White
PB1847MMM	18″ x .187	1" + DP	White

PRO RANGE

M SERIES

Containing the highest concentration of diamond combined with Syntec's formulated highest quality bond, Syntec M series pro blades deliver performance and durability in wide range of applications.

Available in a range of bonds suitable for extremely hard, hard, medium, soft and extremely soft concrete. Segment height of .472 delivers maximum life. A full range of widths and diameters meets every application.

PRO CONCRETE BLADES - MEDIUM CONCRETE (MMM) - CONTINUED

MEDIUM TO HARD CONCRETE WITH MEDIUM STEEL REINFORCEMENT

PART NO.	SIZE	BORE	COLOR
PB186MMM	18″ x .250	1" + DP	○ White
PB2032MMM	20″ x .125	1" + DP	○ White
PB2035MMM	20″ x .140	1" + DP	○ White
PB204MMM	20″ x .155	1" + DP	○ White
PB2047MMM	20″ x .187	1" + DP	○ White
PB206MMM	20″ x .250	1" + DP	○ White
PB2432MMM	24″ x .125	1" + DP	○ White
PB2435MMM	24″ x .140	1" + DP	○ White
PB244MMM	24″ x .155	1" + DP	○ White
PB2447MMM	24″ x .187	1" + DP	○ White
PB246MMM	24″ x .250	1" + DP	○ White
PB2635MMM	26″ x .140	1" + DP	○ White
PB264MMM	26″ x .155	1" + DP	○ White
PB2647MMM	26″ x .187	1" + DP	○ White
PB3035MMM	30″ x .140	1" + DP	○ White
PB304MMM	30″ x .155	1" + DP	○ White
PB3047MMM	30″ x .187	1" + DP	○ White
PB306MMM	30″ x .250	1" + DP	○ White
PB3635MMM	36″ x .140	1" + DP	○ White
PB364MMM	36″ x .155	1" + DP	○ White
PB3647MMM	36″ x .187	1" + DP	○ White
PB3654MMM	36″ x .220	1" + DP	○ White
PB4247MMM	42″ x .187	1" + DP	○ White
PB4254MMM	42″ x .220	1" + DP	○ White
PB4847MMM	48″ x .187	1" + DP	○ White
PB4854MMM	48″ x .220	1" + DP	○ White

PRO RANGE

M SERIES

Containing the highest concentration of diamond combined with Syntec's formulated highest quality bond, Syntec M series pro blades deliver performance and durability in wide range of applications.

Available in a range of bonds suitable for extremely hard, hard, medium, soft and extremely soft concrete. Segment height of .472 delivers maximum life. A full range of widths and diameters meets every application.

PRO CONCRETE BLADES - SOFT CONCRETE (MSC)

SOFT ABRASIVE CONCRETE

PART NO.	SIZE	BORE	COLOR
PB1432MSC	14″ x .125	1" + DP	Red
PB1435MSC	14″ x .140	1" + DP	Red
PB144MSC	14″ x .155	1" + DP	Red
PB1447MSC	14″ x .187	1" + DP	Red
PB146MSC	14″ x .250	1" + DP	Red
PB1632MSC	16″ x .125	1" + DP	Red
PB1635MSC	16″ x .140	1" + DP	Red
PB164MSC	16″ x .155	1" + DP	Red
PB1647MSC	16″ x .187	1" + DP	Red
PB166MSC	16″ x .250	1" + DP	Red
PB1832MSC	18″ x .125	1" + DP	Red
PB1835MSC	18″ x .140	1" + DP	Red
PB184MSC	18″ x .155	1" + DP	Red
PB1847MSC	18″ x .187	1" + DP	Red
PB1854MSC	18″ x .220	1" + DP	Red
PB2032MSC	20″ x .125	1" + DP	Red
PB2035MSC	20″ x .140	1" + DP	Red
PB204MSC	20″ x .155	1" + DP	Red
PB2047MSC	20″ x .187	1" + DP	Red
PB206MSC	20″ x .250	1" + DP	Red
PB2432MSC	24″ x .125	1" + DP	Red
PB2435MSC	24″ x .140	1" + DP	Red
PB244MSC	24″ x .155	1" + DP	Red
PB2447MSC	24″ x .187	1" + DP	Red
PB246MSC	24″ x .250	1" + DP	Red
PB2635MSC	26″ x .140	1" + DP	Red
PB264MSC	26″ x .155	1" + DP	Red
PB2647MSC	26″ x .187	1" + DP	Red
PB3035MSC	30″ x .140	1" + DP	Red
PB304MSC	30″ x .155	1" + DP	Red
PB3047MSC	30″ x .187	1" + DP	Red
PB306MSC	36″ x .140	1" + DP	Red
PB3635MSC	36″ x .140	1" + DP	Red
PB364MSC	36″ x .155	1" + DP	Red

PRO RANGE

M SERIES

Containing the highest concentration of diamond combined with Syntec's formulated highest quality bond, Syntec M series pro blades deliver performance and durability in wide range of applications.

Available in a range of bonds suitable for extremely hard, hard, medium, soft and extremely soft concrete. Segment height of .472 delivers maximum life. A full range of widths and diameters meets every application.

PB PRO CONCRETE BLADES - SOFT CONCRETE (MSC) - CONTINUED

SOFT ABRASIVE CONCRETE

PART NO.	SIZE	BORE	COLOR
PB3647MSC	36″ x .187	1" + DP	Red
PB3654MSC	36″ x .220	1" + DP	Red
PB4247MSC	42″ x .187	1" + DP	Red
PB4254MSC	42″ x .220	1" + DP	Red
PB4847MSC	48″ x .187	1" + DP	Red
PB4854MSC	48″ x .220	1" + DP	Red

PRO CONCRETE BLADES - EXTRA SOFT CONCRETE (MXSC)

EXTREMELY SOFT ABRASIVE CONCRETE WITH HEAVY REINFORCEMENT

PART NO.	SIZE	BORE	COLOR
PB1432MXSC	14″ x .125	1" + DP	Red
PB1435MXSC	14″ x .140	1" + DP	Red
PB144MXSC	14″ x .155	1" + DP	Red
PB1447MXSC	14″ x .187	1" + DP	Red
PB146MXSC	14″ x .250	1" + DP	Red
PB1632MXSC	16″ x .125	1" + DP	Red
PB1635MXSC	16″ x .140	1" + DP	Red
PB164MXSC	16″ x .155	1" + DP	Red
PB1647MXSC	16″ x .187	1" + DP	Red
PB166MXSC	16″ x .250	1" + DP	Red
PB1832MXSC	18″ x .125	1" + DP	Red
PB1835MXSC	18″ x .140	1" + DP	Red
PB184MXSC	18″ x .155	1" + DP	Red
PB1847MXSC	18″ x .187	1" + DP	Red
PB186MXSC	18″ x .250	1" + DP	Red
PB2032MXSC	20″ x .125	1" + DP	Red
PB2035MXSC	20″ x .140	1" + DP	Red
PB204MXSC	20″ x .155	1" + DP	Red
PB2047MXSC	20″ x .187	1" + DP	Red
PB206MXSC	20″ x .250	1" + DP	Red
PB2432MXSC	24″ x .125	1" + DP	Red
PB2435MXSC	24″ x .140	1" + DP	Red
PB244MXSC	24″ x .155	1" + DP	Red
PB2447MXSC	24″ x .187	1" + DP	Red

PRO RANGE

M SERIES

Containing the highest concentration of diamond combined with Syntec's formulated highest quality bond, Syntec M series pro blades deliver performance and durability in wide range of applications.

Available in a range of bonds suitable for extremely hard, hard, medium, soft and extremely soft concrete. Segment height of .472 delivers maximum life. A full range of widths and diameters meets every application.

PRO CONCRETE BLADES - EXTRA SOFT CONCRETE (MXSC) - CONTINUED

EXTREMELY SOFT ABRASIVE CONCRETE WITH HEAVY REINFORCEMENT

PART NO.	SIZE	BORE	COLOR
PB246MXSC	24″ x .250	1" + DP	Red
PB2635MXSC	26″ x .140	1" + DP	Red
PB264MXSC	26″ x .155	1" + DP	Red
PB2647MXSC	26″ x .187	1" + DP	Red
PB3035MXSC	30″ x .140	1" + DP	Red
PB304MXSC	30″ x .155	1" + DP	Red
PB3047MXSC	30″ x .187	1" + DP	Red
PB306MXSC	30″ x .250	1" + DP	Red
PB3635MXSC	36″ x .140	1" + DP	Red
PB364MXSC	36″ x .155	1" + DP	Red
PB3647MXSC	36″ x .187	1" + DP	Red
PB3654MXSC	36″ x .220	1" + DP	Red
PB4247MXSC	42″ x .187	1" + DP	Red
PB4254MXSC	42″ x .220	1" + DP	Red
PB4847MXSC	48″ x .187	1" + DP	Red
PB4854MXSC	48″ x .220	1" + DP	Red

PRO RANGE

CAL MAX SERIES

Containing the highest concentration of diamond combined with Syntec's formulated highest quality bond, Syntec CAL MAX series blades deliver performance and durability in wide range of applications.

Segment height of .590 delivers maximum life and lowers cost of per inch/food cut. A range of widths and diameters through 36" available.

PRO CONCRETE BLADES - EXTRA HARD CONCRETE

PART NO.	SIZE	BORE	COLOR
SC14CAL604-3.2	14" x .125	1" + DP	● Charcoal
SC14CAL604-3.5	14" x .140	1" + DP	● Charcoal
SC14CAL604-4	14" x .155	1" + DP	● Charcoal
SC16CAL604-3.2	16" x .125	1" + DP	● Charcoal
SC16CAL604-3.5	16" x .140	1" + DP	● Charcoal
SC16CAL604-4	16" x .155	1" + DP	● Charcoal
SC18CAL604-3.2	18" x .125	1" + DP	● Charcoal
SC18CAL604-3.5	18" x .140	1" + DP	● Charcoal
SC18CAL604-4	18" x .155	1" + DP	● Charcoal
SC20CAL604-3.2	20" x .125	1" + DP	● Charcoal
SC20CAL604-3.5	20" x .140	1" + DP	● Charcoal
SC20CAL604-4	20" x .155	1" + DP	● Charcoal
SC24CAL604-3.2	24" x .125	1" + DP	● Charcoal
SC24CAL604-3.5	24" x .140	1" + DP	● Charcoal
SC24CAL604-4	24" x .155	1" + DP	● Charcoal
SC26CAL604-3.5	26" x .140	1" + DP	● Charcoal
SC26CAL604-4	26" x .155	1" + DP	● Charcoal
SC30CAL604-3.5	30" x .140	1" + DP	● Charcoal
SC30CAL604-4	30" x .155	1" + DP	● Charcoal
SC36CAL604-3.5	36" x .140	1" + DP	● Charcoal
SC36CAL604-4	36" x .155	1" + DP	● Charcoal

PRO RANGE

AB SERIES

Designed with Syntec's 3 step undercut protection combined with the highest quality bond, Syntec AB series delivers performance in the most abrasive and hardest asphalt applications.

The 3 step system minimizes and in most case eliminates undercutting of the core resulting in maximizing diamond segment. Available in a full range of bond hardness and diameter to suit all applications.

PRO ASPHALT BLADES - SERIES 1 SOFT BOND
NON-ABRASIVE SAND WITH LARGE AGGREGATE

PART NO.	SIZE	BORE	COLOR
AB143210-3	14″ x .125	1" + DP	● Black
AB143510-3	14″ x .145	1" + DP	● Black
AB14410-3	14″ x .155	1" + DP	● Black
AB144710-3	14″ x .187	1" + DP	● Black
AB14610-3	14″ x .250	1" + DP	● Black
AB163210-3	16″ x .125	1" + DP	● Black
AB163510-3	16″ x .145	1" + DP	● Black
AB16410-3	16″ x .155	1" + DP	● Black
AB16610-3	16″ x .250	1" + DP	● Black
AB183210-3	18″ x .125	1" + DP	● Black
AB183510-3	18″ x .145	1" + DP	● Black
AB18410-3	18″ x .155	1" + DP	● Black
AB184710-3	18″ x .187	1" + DP	● Black
AB203210-3	20″ x .125	1" + DP	● Black
AB203510-3	20″ x .145	1" + DP	● Black
AB20410-3	20″ x .155	1" + DP	● Black
AB204710-3	20″ x .187	1" + DP	● Black
AB243210-3	24″ x .125	1" + DP	● Black
AB243510-3	24″ x .145	1" + DP	● Black
AB24410-3	24″ x .155	1" + DP	● Black
AB244710-3	24″ x .187	1" + DP	● Black
AB263510-3	26″ x .145	1" + DP	● Black
AB26410-3	26″ x .155	1" + DP	● Black
AB264710-3	26″ x .187	1" + DP	● Black
AB30410-3	30″ x .155	1" + DP	● Black
AB304710-3	30″ x .187	1" + DP	● Black
AB36410-3	36″ x .155	1" + DP	● Black
AB364710-3	36″ x .187	1" + DP	● Black
AB424710-3	42″ x .187	1" + DP	● Black
AB484710-3	48″ x .187	1" + DP	● Black

PRO RANGE

AB SERIES

Designed with Syntec's 3 step undercut protection combined with the highest quality bond, Syntec AB series delivers performance in the most abrasive and hardest asphalt applications.

The 3 step system minimizes and in most case eliminates undercutting of the core resulting in maximizing diamond segment. Available in a full range of bond hardness and diameter to suit all applications.

PRO ASPHALT BLADES - SERIES 2 MEDIUM BOND

MEDIUM ABRASIVE SAND WITH MEDIUM TO LARGE AGGREGATE

PART NO.	SIZE	BORE	COLOR
AB2243210-3	24″ x .125	1" + DP	● Black
AB2243510-3	24″ x .145	1" + DP	● Black
AB224410-3	24″ x .155	1" + DP	● Black
AB2244710-3	24″ x .187	1" + DP	● Black
AB2263510-3	26″ x .145	1" + DP	● Black
AB226410-3	26″ x .155	1" + DP	● Black
AB2264710-3	26″ x .187	1" + DP	● Black
AB230410-3	30″ x .155	1" + DP	● Black
AB2304710-3	30″ x .187	1" + DP	● Black
AB236410-3	36″ x .155	1" + DP	● Black
AB2364710-3	36″ x .187	1" + DP	● Black
AB2424710-3	42″ x .187	1" + DP	● Black
AB2484710-3	48″ x .187	1" + DP	● Black

PRO ASPHALT BLADES - SERIES 3 HARD BOND

CUTTING HIGHLY ABRASIVE SAND WITH SOFT AGGREGATE

PART NO.	SIZE	BORE	COLOR
AB3143210-3	14″ x .125	1" + DP	● Black
AB3143510-3	14″ x .145	1" + DP	● Black
AB314410-3	14″ x .155	1" + DP	● Black
AB144710-3	14″ x .187	1" + DP	● Black
AB314610-3	14″ x .250	1" + DP	● Black
AB3163210-3	16″ x .125	1" + DP	● Black
AB3163510-3	16″ x .145	1" + DP	● Black
AB316410-3	16″ x .155	1" + DP	● Black
AB316610-3	16″ x .250	1" + DP	● Black
AB3183210-3	18″ x .125	1" + DP	● Black
AB3183510-3	18″ x .145	1" + DP	● Black
AB318410-3	18″ x .155	1" + DP	● Black
AB3184710-3	18″ x .187	1" + DP	● Black
AB3203210-3	20″ x .125	1" + DP	● Black
AB3203510-3	20″ x .145	1" + DP	● Black
AB320410-3	20″ x .155	1" + DP	● Black
AB3204710-3	20″ x .187	1" + DP	● Black

PRO RANGE

AB PRO SERIES

Designed with Syntec's 3 step undercut protection combined with the highest quality bond, Syntec AB PRO series delivers performance in the most abrasive and hardest asphalt applications.

The 3 step system minimizes and in most case eliminates undercutting of the core resulting in maximizing diamond segment. Available in a full range of bond hardness and diameter to suit all applications.

PRO ASPHALT BLADES - SERIES 3 HARD BOND - CONTINUED

CUTTING HIGHLY ABRASIVE SAND WITH SOFT AGGREGATE

PART NO.	SIZE	BORE	COLOR
AB3243210-3	24″ x .125	1" + DP	● Black
AB3243510-3	24″ x .145	1" + DP	● Black
AB324410-3	24″ x .155	1" + DP	● Black
AB3244710-3	24″ x .187	1" + DP	● Black
AB3263510-3	26″ x .145	1" + DP	● Black
AB326410-3	26″ x .155	1" + DP	● Black
AB3264710-3	26″ x .187	1" + DP	● Black
AB330410-3	30″ x .155	1" + DP	● Black
AB3304710-3	30″ x .187	1" + DP	● Black
AB336410-3	36″ x .155	1" + DP	● Black
AB3364710-3	36″ x .187	1" + DP	● Black
AB3424710-3	42″ x .187	1" + DP	● Black
AB3484710-3	48″ x .187	1" + DP	● Black

PRO RANGE

GC PRO SERIES

Designed with the highest quality diamond, the Syntec GC PRO series delivers performance in freshly poured concrete. The result is cutting of stress joints, it can begin sooner minimizing spalling and cracking.

Available in range of sizes and widths through 16". Also available for grooving and grinding applications.

PRO GREEN CONCRETE BLADES - HARD CONCRETE (MXHC)

RECOMMENDED FOR HARD GREEN CONCRETE WITH FLINT OR GUARTZ AGGREGATE

PART NO.	SIZE	BORE	COLOR
GC1432MXHC	14" x .125	1" + DP	Green
GC1435MXHC	14" x .140	1" + DP	Green
GC144MXHC	14" x .155	1" + DP	Green
GC146MXHC	14" x .250	1" + DP	Green
GC1632MXHC	16" x .125	1" + DP	Green
GC1635MXHC	16" x .140	1" + DP	Green
GC164MXHC	16" x .155	1" + DP	Green
GC166MXHC	16" x .250	1" + DP	Green

PRO GREEN CONCRETE BLADES - MEDIUM CONCRETE (MXMC)

RECOMMENDED FOR MEDIUM TO HARD GREEN CONCRETE WITH QUARTZ, BASALT OR RIVER ROCK

PART NO.	SIZE	BORE	COLOR
GC1432MXMC	14" x .125	1" + DP	Green
GC1435MXMC	14" x .140	1" + DP	Green
GC144MXMC	14" x .155	1" + DP	Green
GC146MXMC	14" x .250	1" + DP	Green
GC1632MXMC	16" x .125	1" + DP	Green
GC1632MXMC	16" x .140	1" + DP	Green
GC1632MXMC	16" x .155	1" + DP	Green
GC166MXMC	16" x .250	1" + DP	Green

PRO GREEN CONCRETE BLADES - SOFT CONCRETE (MXSC)

RECOMMENDED FOR SOFT ABRASIVE GREEN CONCRETE WITH LIMESTONE OR OTHER ABRASIVE AGGREGATES

PART NO.	SIZE	BORE	COLOR
GC1432MXSC	14" x .125	1" + DP	Green
GC1435MXSC	14" x .140	1" + DP	Green
GC144MXSC	14" x .155	1" + DP	Green
GC146MXSC	14" x .250	1" + DP	Green
GC1632MXSC	16" x .125	1" + DP	Green
GC1635MXSC	16" x .140	1" + DP	Green
GC164MXSC	16" x .155	1" + DP	Green
GC166MXSC	16" x .250	1" + DP	Green

PRO RANGE

HI TRAFFIC LOOP SERIES

Syntec offers full range widths that suit for both straight circular cuts in both asphalt and concrete. Blade is designed to maintain width throughout the life of the blade.

Designed for maximum performance while cutting traffic loops, joint widening and micro trenching.

TRAFFIC LOOP - CONCRETE BLADES

PART NO.	SIZE	BORE	COLOR
RSC11MMM1	12″ x .250	1" + DP	○ White
RSC11MMM2	12″ x .312	1" + DP	○ White
RSC11MMM5	12″ x .500	1" + DP	○ White
RSC11MMM6	12″ x .750	1" + DP	○ White
RSC11MMM7	14″ x .187	1" + DP	○ White
RSC11MMM8	14″ x .250	1" + DP	○ White
RSC11MMM2	14″ x .310	1" + DP	○ White
RSCMMM375	14″ x .375	1" + DP	○ White
RSCMMM500	14″ x .500	1" + DP	○ White
RSCMMM750	14″ x .750	1" + DP	○ White
RSC11MMM9	16″ x .250	1" + DP	○ White
SC260003	26″ x .500	1" + DP	○ White

TRAFFIC LOOP - ASPHALT BLADES

PART NO.	SIZE	BORE	COLOR
RSA11CP612	12″ x .250	1" + DP	● Black
RSA11CP812	12″ x .310	1" + DP	● Black
RSA11CP613	14″ x .187	1" + DP	● Black
RSA11CP614	14″ x .250	1" + DP	● Black
RSA11CP814	14″ x .310	1" + DP	● Black
RSA11CP375	14″ x .375	1" + DP	● Black
RSA11CP500	14″ x .500	1" + DP	● Black
RSA11CP750	14″ x .750	1" + DP	● Black

TRAFFIC LOOP CONCAVE - CONCRETE BLADES

PART NO.	SIZE	BORE	COLOR
14CCPMMM1	14″ x .250	1" + DP	○ White
14CCPMMM2	14″ x .310	1" + DP	○ White
14CCPMMM3	14″ x .375	1" + DP	○ White

PRO RANGE

HI TRAFFIC LOOP SERIES

Syntec offers full range widths that suit for both straight circular cuts in both asphalt and concrete. Blade is designed to maintain width throughout the life of the blade.

Designed for maximum performance while cutting traffic loops, joint widening and micro trenching.

TRAFFIC LOOP CONCAVE - ASPHALT BLADES

PART NO.	SIZE	BORE	COLOR
SC12CAPMMM1	12″ x .250	1" + DP	● Black
SC12CAPMMM2	12″ x .310	1" + DP	● Black
SC14CAPMMM1	14″ x .250	1" + DP	● Black
SC14CAPMMM2	14″ x .310	1" + DP	● Black

MT MAX SERIES

Syntec MT Max series was developed specifically to efficiently make a noninvasive trench in concrete or asphalt to insert micro fiber underground. This application is known as Micro trenching. The advantages of Micro trenching include minimal cutting width and jobsite appearance during and after completion.

MT Max series delivers trenches .500 through to .750 inch in width. Syntec's patented design enable contractors to achieve:

- desired width of trench without damage to the top surface
- sturdy side walls for easy installation of wire
- dry, clean trenches for speedy turnaround, minimizing liability for open trench
- blade can be run on traditional high hp saw or larger tractor style micro trenching machine like Ditch Witch MT26

ASPHALT MICRO TRENCHING BLADES

PART NO.	SIZE	BORE	COLOR
PDC650	26″ x .500	1" + DP	● Black
PDC650-19	26″ x .750	1" + DP	● Black
PDC860	32″ x .500	1" + DP	● Black
PDC860-19	32″ x .750	1" + DP	● Black

PREMIUM RANGE

LOW HP SERIES

LOW HP Saw blades (5-25hp) are an excellent choice for construction companies who want top notch performance and rental yards where value is important. The series is best suited for low horsepower, walk behind saws offering performance while the 12mm segment provides longer life. Available in sizes ranging from 12" to 24"

LASER WELDED SUPREME C1SPX BLADE - WET CONCRETE

PART NO.	SIZE	BORE	COLOR
SC12C1P	12" x .125	1" + DP	○ White
SC14C1P	14" x .125	1" + DP	○ White
SC16C1P	16" x .125	1" + DP	○ White
SC18C1P	18" x .140	1" + DP	○ White
SC20C1P	20" x .140	1" + DP	○ White

LASER WELDED PREMIUM 01P BLADE - WET ASPHALT / GREEN CONCRETE

PART NO.	SIZE	BORE	COLOR
SC1201P	12" x .125	1" + DP	● Black
SC1401P	14" x .125	1" + DP	● Black
SC1601P	16" x .125	1" + DP	● Black
SC1801P	18" x .140	1" + DP	● Black
SC2001P	20" x .140	1" + DP	● Black

LASER WELDED SUPREME C1SPX BLADE - CONCRETE

PART NO.	SIZE	BORE	COLOR
SC12C1SPX	12" x .125	1" + DP	○ White
SC14C1SPX	14" x .125	1" + DP	○ White
SC16C1SPX	16" x .125	1" + DP	○ White
SC18C1SPX	18" x .140	1" + DP	○ White
SC20C1SPX	20" x .140	1" + DP	○ White
SC24C1SPX	24" x .140	1" + DP	○ White

LASER WELDED SUPREME C1SPX BLADE - CONCRETE

PART NO.	SIZE	BORE	COLOR
SC1401SPX	14" x .125	1" + DP	● Black
SC1601SPX	16" x .125	1" + DP	● Black
SC1801SPX	18" x .140	1" + DP	● Black
SC2001SPX	20" x .140	1" + DP	● Black
SC2401SPX	24" x .140	1" + DP	● Black

HIRE RANGE

LOW HP SERIES

LOW HP Saw blades (5-25hp) are an excellent choice for construction companies who want top notch performance and rental yards where value is important. The series is best suited for low horsepower, walk behind saws offering performance while the 12mm segment provides longer life. Available in sizes ranging from 12" to 24"

HIRE BLADE COMBINATION - CONCRETE/ASPHALT

PART NO.	SIZE	BORE	COLOR
SAHR30012	12" x .125	1" + DP	Grey
SAHR35012	14" x .125	1" + DP	Grey
SAHR40012	16" x .125	1" + DP	Grey
SAHR45012	18" x .140	1" + DP	Grey
SAHR50012	20" x .140	1" + DP	Grey
SAHR60012	24" x .140	1" + DP	Grey

HIRE BLADE - GREEN CONCRETE / ASPHALT

PART NO.	SIZE	BORE	COLOR
SAHRGC30012	12" x .125	1" + DP	Black
SAHRGC35012	14" x .125	1" + DP	Black
SAHRGC40012	16" x .125	1" + DP	Black
SAHRGC45012	18" x .140	1" + DP	Black
SAHRGC50012	20" x .140	1" + DP	Black
SAHRGC60012	24" x .140	1" + DP	Black

HIRE BLADE - CONCRETE

PART NO.	SIZE	BORE	COLOR
SAHRCON30012	12" x .125	1" + DP	White
SAHRCON35012	14" x .125	1" + DP	White
SAHRCON40012	16" x .125	1" + DP	White
SAHRCON45012	18" x .140	1" + DP	White
SAHRCON50012	20" x .140	1" + DP	White
SAHRCON60012	24" x .140	1" + DP	White

EARLY ENTRY BLADES

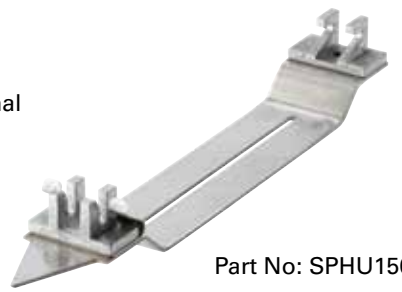
After the concrete is poured it hydrates and sets. During this process, the material shrinks and develops internal stresses that are visible as random cracks in the surface. To prevent these random cracks from occurring, controlled, shallow cuts can be made with Syntec's Early Entry Blades, reducing the tension in the material.

The gold blade is for same-day cutting, the red blade is for next day cutting and the purple blade is for cutting after 2-3 days.

PART NO.	DIAMETER	BORE	SEGMENT SIZE	CONCRETE TYPE	COLOR
SA-EE6-H	6" (154mm)	Triangular	30x2.6x10mm	Soft	Gold
SA-EE6-M	6" (154mm)	Triangular	30x2.6x10mm	Medium	Red
SA-EE6-S	6" (154mm)	Triangular	30x2.6x10mm	Hard	Purple

SKID PLATES

Syntec's Skid Plates are made of stainless steel, providing a longer life than conventional steel, and designed to be used on Husqvarna machines in conjunction with our Early Entry Blades. As opposed to most other blades, Early Entry Blades cut on the up. For this application, Skid Plates are required to maintain the ideal pressure on the concrete, preventing it from ravelling, chipping or spalling and therefore enabling cutting on the same day the concrete was poured.



Part No: SPHU150

MACHINES

M35 SUBARU ALL - PURPOSE SAW

The compact M35 features the big block air-cooled EH99 V-Twin Subaru engine; the compact all-purpose saw is 34-inches tall, 26.5-inches wide, 37-inches long and weighs 690-lbs. Offers the best amenities package and price of any saw its size on the market.

FEATURES

- 35.4-horsepower (at 3000rpm), 4-stroke air-cooled EH99 Subaru engine. Tops-out at 40hp at 3600rpm.
- Lifts up to a 24-inch blade out of the cut. Comes standard with a 16-inch blade guard.
- Hydrostatic forward and reverse.
- Positive 4-belt blade drive.
- Hydraulic raise/lower
- Easily transported in lighter-weight trucks, making it ideal for concrete, asphalt, electrical and plumbing contractors; city, county and state
- Departments of Public Works; water districts; school districts; and the likes.

OPTIONS

- Electric water pump
- Night light
- 18-, 20- and 24-inch bladeguards

M44D KUBOTA FLEET SAW

The M44D fleet saw features a compliant 44-horsepower turbocharged Kubota diesel. It is a cost-effective, efficient, easy-to-maintain alternative to anything comparable on the market. Now available with an optional 3-speed gearbox.

FEATURES

- 44-horsepower turbocharged Kubota V1505-TE diesel engine.
- Up to 36-inch blade capacity out of the cut.
- Independent drive-wheel motors with innovative 4-bolt hubs for quick easy wheel changes.
- Positive 6-belt drive to spindleshaft with easy-to-change blade mount studs. A variety of stud lengths allow ganging blades.
- Should a problem arise, just change the stud while the shaft stays in place. A real time and money saver!
- Oil pressure, water temperature and volt-use monitored by direct-display and indicator lights. Instrumentation and safety features also includes tach/hour-meter and emergency shutoff switch.
- CARB compliant. Easy to service and maintain

OPTIONS

- The M44D comes with a 20-inch blade guard, with 26-inch, 30-inch and 36-inch guards available as options.
- 3-Speed Gearbox
- Electric water pump
- Night light

MACHINES

M48 HYUNDAI FLEET SAW

The M48 fleet saw features a compliant 48-horsepower Hyundai engine and is a cost-effective, innovative alternative to anything comparable on the market. Available with 3-speed gearbox.

FEATURES

- 48-horsepower DOHC 16-valve Hyundai fuel-injected gas-powered engine with catalytic converter.
- Up to 36-inch blade capacity out of the cut.
- Independent drive-wheel motors with innovative 4-bolt hubs for quick easy wheel changes.
- Ultra-positive 7-belt drive to spindle shaft with easy-to-change blade mount studs. A variety of stud lengths allow ganging blades.
- Should a problem arise, just change the stud while the shaft stays in place. A real time and money saver!
- Computer oil pressure, water temperature and volt-meter digital readouts. Plus independent engine service light indicator and emergency shutoff switch.
- Totally CARB compliant. Easy service and maintenance.

OPTIONS

- The M48-FS comes with a 20-inch blade guard, with 26-inch, 30-inch and 36-inch guards available as options.
- 3-Speed Gearbox
- Electric water pump
- Night light

M62D PERKINS DIESEL SAW

The M62D with a compliant 62-horsepower water-cooled Perkins diesel engine, is the perfect combination of size and power for any job. Only slightly larger than the M44s and M48s, it resets the bar when it comes to operator-friendly saws

FEATURES

- 62-horsepower, Perkins 404D-22T water-cooled diesel engine.
- Single-speed lifts a 36-inch blade out of the cut; w/3-Speed Gearbox, lifts a 42-inch blade out of the cut.
- Independent drive-wheel motors with innovative 4-bolt hubs for quick easy wheel changes.
- Positive 8-belt drive to spindleshaft with easy-to-change blade mount studs.
- A variety of stud lengths allow ganging blades. Should a problem arise, just change the stud while the shaft stays in place.
- A real time and money saver!
- Oil pressure and volt-meter indicator lights, tach and water temperature gauges, and emergency shutoff switch.
- Positraction switch for cutting where traction can present a problem.
- Easy service and maintenance.

OPTIONS

- The M62D comes with a 20-inch bladeguard: 30-, 36- and 42-inch bladeguards are available as options.
- 3-Speed Gearbox
- Electric water pump
- Night light

WALL SAW BLADES

PRO RANGE

Syntec offers a full range of Wall Saw Blades, tensioned for the various kinds of wall saws - hydraulic, high-cycle and pneumatic. Our 13mm twin segments and configured blades perform in all types of applications including concrete, reinforced concrete and brick & block, featuring a bond developed especially for free-cutting. All blades have a 9-hole pattern that matches both the 3- and 6-hole fittings offered by most other major brands flush mounts.

Generally, different sized wall saws are used to cut into walls. Starting with a smaller, thicker blade, precuts are made and step by step bigger, thinner blades are then used to deepen the cut, providing a smooth, even finish.

WALL SAW BLADES - SPLIT SEGMENT - 10MM

PART NO.	SIZE	BORE	COLOR
WSS500187	20.” x .187	1"	Silver
WSS500220	20” x .220	1"	Silver
WSS500250	20” x .250	1"	Silver
WSS600187	24” x .187	1"	Silver
WSS600220	24” x .220	1"	Silver
WSS600250	24” x .250	1"	Silver
WSS650187	26” x .187	1"	Silver
WSS650220	26” x .220	1"	Silver
WSS650250	26. x .250	1"	Silver
WSS760187	30” x .187	1"	Silver
WSS760220	30” x .220	1"	Silver
WSS760250	30” x .250	1"	Silver
WSS810187	32” x .187	1"	Silver
WSS810220	32” x .220	1"	Silver
WSS810250	32” x .250	1"	Silver

PRO RANGE

WALL SAW BLADES

Syntec offers a full range of Wall Saw Blades for use of hydraluic, hy-cycle and air wall saws. Our split segment and configured blades perform in all types of applications including concrete, reinforced concrete and brick & block.

All blades have a 9-hole pattern that matches both the 3 and 6-hole fittings offered by most other major brands flush mounts.

WALL SAW BLADES - SPLIT SEGMENT - 10MM - CONTINUED

PART NO.	SIZE	BORE	COLOR
WSS914187	36″ x .187	1"	Silver
WSS914220	36″ x .220	1"	Silver
WSS914250	36″ x .250	1"	Silver

WALL SAW BLADES - CONFIGURED SEGMENT - 10MM

PART NO.	SIZE	BORE	COLOR
WSN600187	24″ x .187	1"	Silver
WSN600220	24″ x .220	1"	Silver
WSN600250	24″ x .250	1"	Silver
WSN650187	26″ x .187	1"	Silver
WSN650220	26″ x .220	1"	Silver
WSN650250	26. x .250	1"	Silver
WSN760187	30″ x .187	1"	Silver
WSN760220	30″ x .220	1"	Silver
WSN760250	30″ x .250	1"	Silver
WSN810187	32″ x .187	1"	Silver
WSN810220	32″ x .220	1"	Silver
WSN810250	32″ x .250	1"	Silver
WSN914187	36″ x .187	1"	Silver
WSN914220	36″ x .220	1"	Silver
WSN914250	36″ x .250	1"	Silver
WSN1067187	42″ x .187	1"	Silver
WSN107220	42″ x .220	1"	Silver
WSN1067250	42″ x .250	1"	Silver
WSN1219187	48″ x .187	1"	Silver
WSN1219220	48″ x .220	1"	Silver
WSN11219250	48″ x .250	1"	Silver
WSN1371220	54″ x .220	1"	Silver
WSN1371250	54″ x .250	1"	Silver

PRO RANGE

HANDSAW BLADES

Our full range of PRO handsaw blades are designed for the professional who requires high performance. Syntec's proprietary segment designs and bonds are matched up to be used on hydraulic, hy-cycle gas and pneumatic saw and applications.

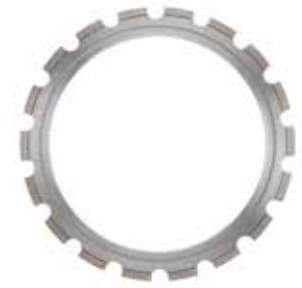
Also included in our PRO range are ring and precut cut blade for reinforced concrete.

PRO HYDRAULIC HANDSAW BLADES - CONCRETE

PART NO.	SIZE	BORE	COLOR
HSPC350125-2	14″ x .1.25	1" + DP	Red
HSPC400125-2	16″ x .125	1" + DP	Red
HSPC400140-2	16″ x .140	1" + DP	Red
HSPC500125-2	20″ x .125	1" + DP	Red
HSPC500140-2	20″ x .140	1" + DP	Red
HSPC600125-2	24″ x .125	1" + DP	Red
HSPC600140-2	24″ x .140	1" + DP	Red

PRO HYDRAULIC HANDSAW BLADES - MEDIUM/HARD CONCRETE WITH REBAR

PART NO.	SIZE	BORE	COLOR
HSPCR350125-2	14″ x .1.25	1" + DP	Dark Blue
HSPCR400125-2	16″ x .125	1" + DP	Dark Blue
HSPCR400140-2	16″ x .140	1" + DP	Dark Blue
HSPCR500125-2	20″ x .125	1" + DP	Dark Blue
HSPCR500140-2	20″ x .140	1" + DP	Dark Blue
HSPCR600125-2	24″ x .125	1" + DP	Dark Blue
HSPCR600140-2	24″ x .140	1" + DP	Dark Blue



PRO FAST CUT RINGSAW BLADE

PART NO.	SIZE	BORE	COLOR
ADS14L01S14	14″ x .160	1" + DP	Silver
ADS14L02M14	14″ x .160	1″ + DP	Silver
SCRBHC10-22014	14″ x .220	1″ + DP	Silver
ADS14L01S	14″ x .160	1″ + DP	Silver
SCRBHC10-220	14″ x .220	1″ + DP	Silver

PRO FAST CUT PRECUT BLADE

PART NO.	SIZE	BORE	COLOR
SC140012	14″ x .187	1" + DP	Red
SC160016	16″ x .187	1" + DP	Red
PC400-250	14″ x .250	1″ + DP	Red

PREMIUM RANGE

HANDSAW BLADES

Our full range of premium handsaw blades are designed for the contractor looking for a blade for common applications that fits their budget. Syntec's propriety segment designs and bonds are mated up to be used on hydraulic, hy cycle, pneumatic and gas powered saw applications.

GP-X BLADES - PREMIUM GENERAL PURPOSE HANDSAW BLADE - MEDIUM/ HARD CONCRETE BRICK & BLOCK

PART NO.	SIZE	BORE	COLOR
SC12GP-X	12″ x .160	1" + DP	Silver
SC14GP-X	14″ x .160	1″ + DP	Silver
SC16GP-X	16″ x .160	1″ + DP	Silver

PREMIUM RINGSAW BLADE - MEDIUM/HARD CONCRETE WITH REBAR

PART NO.	SIZE	BORE	COLOR
RSHM350160	14″ x .160	1" + DP	Silver
RSHM350220	14″ x .220	1" + DP	Silver

PREMIUM HYDRAULIC HANDSAW BLADE - MEDIUM/HARD CONCRETE WITH REBAR

PART NO.	SIZE	BORE	COLOR
HSA350125-2	14″ x .1.25	1" + DP	Light Blue
HSA400125-2	16″ x .125	1" + DP	Light Blue
HSA400140-2	16″ x .140	1" + DP	Light Blue
HSA500125-2	20″ x .125	1" + DP	Light Blue
HSA500140-2	20″ x .140	1" + DP	Light Blue
HSA600125-2	24″ x .125	1" + DP	Light Blue
HSA600140-2	24″ x .140	1" + DP	Light Blue


SYNTEC
DIAMOND TOOLS
Leaders in Diamond Tool Technology
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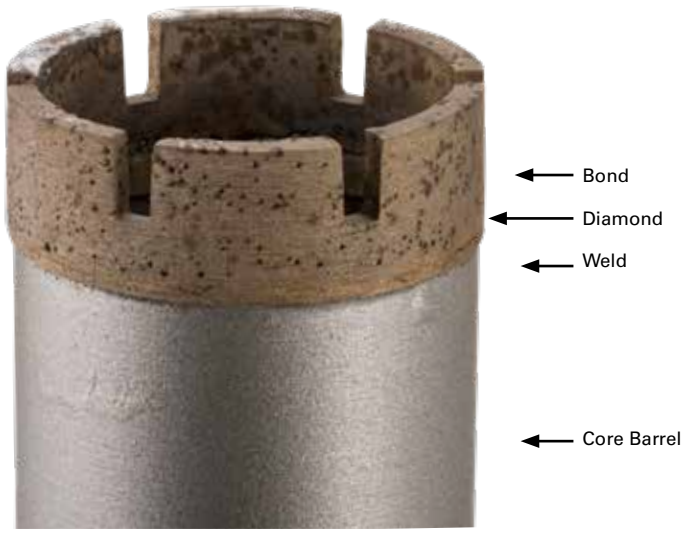
CORE BITS

Like diamond blades, core bits are also available in several variations to suit different applications or materials.

A core bit consists of the following parts:



Core bits are designed to remove a cylinder-shaped piece of material, referred to as a core, and are often used when taking material samples. They are typically used on materials such as concrete, masonry, stone and asphalt. Core bits can be used in both hand-held drills as well as core drill rigs. In saying that, Syntec recommends using a drill rig with any sized core bit to hold it in place and prevent vibration.

During core drilling, a flushing medium is constantly supplied to the space between the outer and the inner tube. Water is pumped into the barrel and passes through the drill bit, removing the debris and cooling the bit.

THE DIAMONDS AND BOND

The segments or crowns on a core bit consist of a mixture of diamonds and metal powders, the so-called bond. Diamonds are not the only important criteria, the bond also plays a crucial role in a bit's cutting performance as it determines the strength of the material that can be cut. With time the diamonds fracture or are pulled out of the bond. Simultaneously the bond wears away exposing new diamonds. Here it is important to select the right bond for the material being cut.

As a rule of thumb, the harder the material, the softer the bond should be and vice versa – opposites attract! When cutting very abrasive material such as asphalt the bond needs to be hard otherwise it will wear away too fast causing the diamonds to fall out too soon. A strong bond however will support the diamonds and increase the life of the core bit. When cutting a hard material such as granite, the bond needs to be soft or else it will not wear away fast enough, resulting in the segments glazing over. Core bits with a smaller diameter up to 44mm have crowns as their tip, for larger core bits segments are used.

THE WELD

The majority of our segments are laser welded onto the core bits, creating an incredibly strong bond that can tolerate high temperatures. Laser welding is considered the safest method of fixing segments onto the tube due to the additional safety feature of the weld. Laser welded segments also allow for full use of the segment depth and are said to last around 35% longer than sintered core bits.

RE-TIPPING

Often the core bit's barrel outlasts the segments or crown. In this case, the core barrel does not necessarily need to be replaced, often it can simply be re-tipped with new segments or a new crown. If the following applies, core bits can be re-tipped:

- The barrel wall is not too thin
- The outside diameter of the barrel is still round
- The drive thread is not damaged

Smaller core bits will only require 1 crown in the correct diameter. When it comes to segments, as a general guideline, you will require 2 segments per inch of diameter plus 1. For example, if you have a 127mm/5" core bit you will need (5x2+1=) 11 segments to re-tip it. For exact numbers please refer to the Segments and Crowns section at the end of this chapter.

WET VS. DRY CORING

There are two different methods when coring: wet and dry. Wet coring is by far the preferred option - water is a diamond's best friend! Using water helps to increase the lifespan of a diamond core bit by reducing some of the heat generated by the friction, especially on abrasive materials, and therefore preventing the core bit from overheating. The abrasive slurry created when wet coring increases the production rate and the water flushes out the hole, preventing the core bit from jamming in it. The water also helps minimise the amount of dust generated, which presents a safety hazard to those in the vicinity.

If a job application does require dry coring, e.g. when working close to power lines or in furnished spaces, always wear a dust mask to prevent yourself from inhaling dust which can lead to serious lung disease. We recommend only using dry core bits on brick and block, not concrete, and using a dust extraction system.

HELPFUL TIPS:

- Do not force the bit. Let the drill do the work.
- Use consistent pressure when drilling.
- The core bit must be turning before it contacts the surface. Only start drilling once water starts to flow from the core bit.
- The adequate amount of water flow is crucial – ideally, the slurry should resemble heavily creamed coffee. If too much water is used, abrasive water which is necessary to wear away the bond and expose new diamonds is flushed out, too little water, however, leads to overheating.
- Leave the motor running with a low supply of water until the core bit has been fully removed from the hole.
- The smaller the diameter, the greater the speed allowance.
- Smaller diameters increase the tendency of core bits to deviate from the true centre as there is no pilot drill to lock the barrel into place.
- Never stand on a rig to hold it down.

CORE BIT COLOR GUIDE

SEGMENT TYPE / MATERIAL	WCB	GCBBK PRO	SHARK TOOTH
RC Reinforced Concrete			●
HRC Hard Reinforced Concrete	○		
MRC Medium-Hard Reinforced Concrete		●	

Syntec has been manufacturing core bits for the construction industry for over two decades. Designed for both light- and heavy-duty drilling, our premium-quality laser welded diamond segments provide the best drilling speeds and maximum performance at the lowest possible costs. Syntec offers coring tools for a broad spectrum of applications, ranging from reinforced concrete to abrasive materials such as masonry, with a standard drill depth of 430mm and 1 ¼" UNC fitting across diameters from 12mm - 610mm. Should you require different depths or diameters, these can be custom made upon request.

Our Highspeed Core Bits come in diameters of 12 - 45mm, feature a highspeed fitting (1/2" BSP) and are ideal for hand drilling with a shorter drill depth of 350mm.

SEGMENTS AND CROWNS

SHARK TOOTH SEGMENTS

- For reinforced concrete, exposed aggregate and precast concrete
- Developed with a softer bond for a fast, aggressive cut and long life
- Serrated design grips straight into the substrate reducing deviation from point of contact

TURBO SEGMENTS

- Excellent for cutting through concrete with heavy / large steel
- Quality diamond in combination with Pro BK bond deliver performance in the toughest applications

CONCRETE ROOFTOP SEGMENTS

- For reinforced concrete, exposed aggregate and precast concrete
- Developed for a long life
- Enable a fast starting of cut

ABRASIVE ROOFTOP SEGMENTS

- For abrasive materials
- Developed with a hard bond for a long life

REGULAR CROWNS

- For reinforced concrete, exposed aggregate and precast concrete
- Featured on core bits < 50mm in diameter

HIGHSPEED CROWNS

- For heavily reinforced / high MPa concrete
- Featured on core bits < 45mm in diameter
- Developed with a softer bond and larger diamonds to make faster cutting easier
  and reduce the likelihood of the bit grabbing when hitting reinforced parts

CORE BITS

SHARK TOOTH PREMIUM

Best performance in reinforced concrete, exposed aggregate and precast concrete

Standard Drill Depth: 14 1/2″ **Segment Type:** Shark Tooth

Fitting: 1 1/4″ - 7 Female Thread **Color:** Metallic Silver

PART NO	SIZE
SKCD50	2″
SKCD64	2 1/2″
SKCD76	3″
SKCD89	3 1/2″
SKCD100	4″
SKCD115	4 1/2″
SKCD125	5″
SKCD140	5 1/2″
SKCD152	6″
SKCD178	7″
SKCD230	9″
SKCD200	8″
SKCD254	10″
SKCD279	11″
SKCD300	12″

***Custom lengths and diameters are available. Please contact us for further details.**

WCB PRO

Best peformance in hard to extremely hard concrete with heavy steel.

Standard Drill Depth: 14 1/2″ **Segment Type:** White Seg 20 x 10

Fitting: 1 1/4″ - 7 Female Thread **Color:** White

PART NO	SIZE
WCB50	2″
WCB64	2 1/2″
WCB76	3″
WCB89	3 1/2″
WCB100	4″
WCB107	4 1/4″
WCB115	4 1/2″
WCB125	5″
WCB139	5 1/2″
WCB150	6″
WCB152	6 1/4″
WCB165	6 1/2″
WCB175	7″

PART NO	SIZE
WCB200	8″
WCB228	9″
WCB250	10″
WCB264	10 1/2″
WCB280	11″
WCB300	12″
WCB350	14″
WCB400	16″
WCB450	18″
WCB500	20″
WCB600	24″

***Custom lengths and diameters are available. Please contact us for further details.**

GCBBK PRO

Best peformance in medium to hard concrete wih medium steel

Standard Drill Depth: 14 1/2″ **Segment Type:** Turbo

Fitting: 1 1/4″ - 7 Female Thread **Color:** Green

PART NO	SIZE
GCB10BK	3/8″
GCB12BK	1/2″
GCB16BK	5/8″
GCB19BK	3/8″
GCB22BK	7/8″
GCB25BK	1″
GCB29BK	1 1/8″
GCB32BK	1 1/4″
GCB35BK	1 3/8″
GCB38BK	1 1/2″
GCB42BK	1 5/8″
GCB45BK	1 3/4″
GCB47BK	1 7/8″
GCB50BK	2″
GCB64BK	2 1/2″
GCB76BK	3″
GCB89BK	3 1/2″
GCB100BK	4″
GCB107BK	4 1/4″
GCB115BK	4 1/2″

PART NO	SIZE
GCB125BK	5″
GCB139BK	5 1/2″
GCB150BK	6″
GCB152BK	6 1/4″
GCB165BK	6 1/2″
GCB175BK	7″
GCB200BK	8″
GCB228BK	9″
GCB250BK	10″
GCB264BK	10 1/2″
GCB280BK	11″
GCB300BK	12″
GCB350BK	14″
GCB400BK	16″
GCB450BK	18″
GCB500BK	20″
GCB600BK	24″

***Custom lengths and diameters are available. Please contact us for further details.**

ACCESSORIES

CORE BIT EXTENSION RODS & ADAPTORS

Syntec offers extension rods for custom drilling application and adaptors for different diameters and drill motors.

PART NO	DESCRIPTION
49-062511120	Drill Extension 5/8-11 x 12"
49-062511160	Drill Extension 5/8-11 x 6"
49-125007120	Drill Extension 1-1/4-7 x 12"
49-125007060	Drill Extension 1-1/4-7 x 6"
49-125762511	Adaptor 1-1/4-7 x 5/8-11

SURFACE PREPARATION

Syntec manufactures a wide variety of high-quality diamond tools for the surface preparation industry to suit applications such as aggressive coating removal, concrete preparation and concrete polishing. Comprising a multitude of segment configurations and options, you will
find a tool to fit just about every machine on the market:

- Grinding Plates
- Cup Wheels
- Pucks and Plugs
- Metal Bond Tooling:
  - Fast Change
  - Trapezoid Bolt-On
  - SM Tooling
  - Uni-Lock
  - Slim Fit
  - TC Tooling
  - ITS Tooling
  - HTB Tooling
- Resins
- Crack Chasing /Tuck Point
- General Purpose Blade

Surface preparation tools are designed to grind and polish concrete surfaces and remove previous coatings such as epoxy or glue. Depending on the application, different machine
types are more suitable.

When it comes to polishing concrete floors and removing scratches, planetary grinders are the best option as they enable a high gloss finish that does not require coatings
or sealers. They get their name due to their configuration with one large disc that does not
touch the floor but instead acts as a central point around which three to six smaller discs or plugs rotate.

If, however, the aim is to aggressively grind concrete and remove coatings from concrete floors that will then be coated or sealed, concrete mowers with one large disc are the preferred option as they provide fast, direct grinding action that removes material quickly.

When selecting the right grinding tool for a surface preparation job, the following factors need to be considered:

- Bond hardness
- Size of the diamonds (grit)
- Diamond concentration
- Shape of the segment
- Pressure on each segment (number of segments under the machine and the machine's weight)
- Material being ground (soft, hard or abrasive)
- Desired end result

BOND AND GRIT

The segments on a surface prep tool consist of a mixture of diamonds and metal powders, the so-called bond. The bond plays a key role in a tool's performance as it determines the strength of the material that can be ground. With time the diamonds fracture or are pulled out of the bond. Simultaneously the bond wears away exposing new diamonds. Here it is important to select the right bond for the material being ground.

As a rule of thumb, the harder the material, the softer the bond should be and vice versa – opposites attract! When grinding very abrasive material such as rain-damaged concrete or asphalt the bond needs to be hard otherwise it will wear away too fast, causing the diamonds to fall out too soon. A strong bond however will support the diamonds and increase the life of the tool. When grinding hard material, for example, cured, high psi or hard-trowelled concrete, the bond needs to be soft or else it will not wear away fast enough resulting in the segments glazing over.

The grit is the particle size of the diamond held in the bond and determines the finish. The lower the number, the larger the piece of diamond (coarser grit). The higher the number, the smaller the piece of diamond (finer grit). Often several steps with different grits are required to achieve the desired results. Generally speaking, the higher the grit, the finer the finish. First, a low grit is used for aggressive removal of coatings, then higher grits are used to remove scratches from lower grits, polish the concrete and lastly achieve a shiny surface.

If the concrete is in really good shape and you are after more of a salt and pepper finish, it is best not to start with 30/40 grit and move straight to 60/80 grit. This way you will not expose as much aggregate, but you will end up with a smoother floor after just one step, rather than having to remove 30/40 grit scratches if there is no need to.

Coarse grit (16/20 – 30/40)

Medium grit (50/60 – 70-80)

Fine grit (100-120 – 140/150)

SEGMENT TYPES

Depending on the material and finish you are looking to achieve, different segment types and shapes are best used.

As a general rule of thumb, a) the more segments a tool has, the smoother the finish and the less aggressive it is, due to more surface area and less weight on each segment and b) the smaller the segment, the more downforce and the more pressure you'll get out of the machine and also the more aggressive the segment will be, meaning it will wear out sooner.

PCDS

Suited for: Removal of coating thicker than 3mm: glue, epoxy, mastic, urethane, black bitumen paint, paint, adhesives.

Manufactured with premium grade polycrystalline diamonds, PCDs are unmatched in the coating removal industry. They are ideal for removing thicker pressure-sensitive coatings over 3mm thick such as glue, epoxy, mastic, black bitumen paint, paint and adhesives. PCDs are more aggressive and longer-lasting than standard diamond cup wheels as metal bonds can glaze up easily on thicker coatings. This tool's scraping action eliminates gumming up of the segments and maximises production.

PCDs will leave a rougher finish but are the ideal first step for removing approximately 50% of the coating before using a metal bond segment to remove the rest. Even though this involves 2 steps, the coating is removed a lot quicker. As PCDs can badly gouge the floor, especially if the operator is inexperienced, Syntec offers parts with stabilising buffer segments that reduce the depth of the cut and prevent the PCD from digging in too much.

PCDs with a Mini Jet, Jet or Full Jet are designed to offer a very well protected and more durable PCD for light-, medium- and heavy-duty machines. The jet stabilises the PCD when hitting control joints and prevents it from falling out. The ramp in front of the PCD lifts it back out of the cut and helps it glide into the material.

While PCDs are very wear-resistant, they are not very impact-resistant. Therefore it is important to watch out for joints, bolts and particularly steel. It is also important to ensure they are facing in the correct direction or else they will scrape over the material rather than push/cut into it. When determining whether a left- or right-hand rotating shoe/plate is needed, view the machine from the operator's perspective (from above) and check if the disc holding the shoe/plate spins anti-clockwise or clockwise. Keep in mind that on cretemowers the disc usually spins in the same direction as the motor, however, on a planetary grinder it usually spins in the opposite direction. When using PCD plugs, place them into the disc so that the PCD is in a straight line with the centre of the machine.

ANTI-CLOCKWISE = LH

CLOCKWISE = RH

SEGMENT TYPES

SUPA SPIKE

Suited for: Removal of light glue and paint.

Leaving a rougher surface profile on concrete for epoxy keying purposes, Supa Spikes were designed for those who don't own a shot blaster. They represent the happy medium between a PCD and a metal bond and are perfect for the removal of light glue and paint (<2mm), however, are not suitable for the general grinding of concrete.

ARROW

Suited for: Removal of thin vinyl glue, carpet glues, light coatings and mortars. Aggressive grinding of bare concrete.

Prep concrete and remove the coating, all in one step. With a sharp leading edge and a 10-degree positive rake, arrow segments pierce light coatings. Similar to a ship's bow, they are designed to tear and pull away

MINI ARROW

Suited for: Removal of coatings, epoxy and mastic.

The smaller the arrow, the more aggressive it is. Mini arrow segments tear through coatings and eliminate gumming up of segments.

DOUBLE ROW

Suited for: Grinding of concrete with bumps and imperfections.

Featuring segments that are lined up end-to-end to create a circle, these cups are ideal for aggressive removal of imperfections and concrete bumps. They do, however, tend to leave aggressive circle/horseshoe marks in the concrete.

T

Suited for: Removal of light coatings and high spots. General concrete prep for coating.

T-Cups are used for the aggressive removal of light coatings and provide a smooth finish. They mechanically prep and leave an absorbent concrete surface free of contaminants that will help create a strong lasting bond with whatever coating is to be applied afterwards.

Specifically designed for prepping edges, the T-shaped segments hang over the edge of the cup wheel, ensuring proper preparation right up to the wall and reducing gouge marks. Before T-segments were available, operators often used to tilt spiral cups to get to low areas leading to heavily worn edges. T-segments eliminate this uneven wear.

TORNADO

Suited for: Aggressive grinding of concrete.

Tornado cups feature a flat core, allowing for more surface area to place longer segments that reduce gouging even more than spiral cups by not digging in as much. Tornado cups provide aggressive grinding with less ring marks, the 3 and 6 segment models being the most aggressive.

TURBO

Suited for: Aggressive grinding and shaping of natural stone, concrete, granite, marble.

The best of both worlds - designed for aggressive stock removal and shaping of concrete or stone surfaces before smoothing these out with resins. With their segments sintered closely together, Turbo cups don't leave horseshoe marks.

SEGMENT TYPES

TWISTER BEVELED SEG

Suited for: General concrete grinding.

The Twister beveled segment is is a new style bevel with a bit more surface area than the traditional bevel. The bevel shape enables machines to ride smoothly up and over controlled edges, cracks and expansion joints while minimizing chipping and reducing stress to machine gears, couplers and belts. Beveled edge segments are also ideal when grinding uneven floors while reducing scratch marks.

TEAR DROP

Suited for: Aggresive concrete grinding, light coating removal.

Tear Drop segments are lined up end to end to create a gouging effect that will aggressively prep or remove concrete. Popular applications are taking down high spots on concrete floors and light coating removal.

RAPIDA CUP SEG

Suited for: Extremely hard troweled, smooth concrete that has been strengthened with curing agents.

During the curing process, the curing agents form a membrane over the top of the concrete slab which stops the water near the surface from evaporating too quickly and strengthens the concrete cap. These extremely hard surfaces require a specific bond that prevents the diamonds from glazing over. Syntec has developed a revolutionary bond for exactly this type of grinding application, allowing for powerful grinding on even the hardest concrete.

TWISTER SEG

Suited for: General concrete grinding, early polishing steps.

The long segments help keep the tool flatter on the ground and reduce gouging. Available in a variety of grits these versatile segments are used for general preparation of concrete to finer grit grinding for polishing or thin mil coatings.

BEVEL

Suited for: General concrete grinding.

Grinding at a slower rate and tapering, rather than cutting, the bevel shape enables machines to ride smoothly up and over controlled edges, cracks and expansion joints while minimising chipping and reducing stress to machine gears, couplers and belts. Bevelled edge segments are also ideal when grinding uneven floors while reducing scratch marks.

NON-BEVEL

Suited for: Light coating removal. General concrete grinding.

Non-bevelled segments add more surface area and are excellent for grinding concrete under heavier machines without leaving scratch marks.

SOLID

Suited for: General concrete grinding.

Ideal for straight out concrete grinding, solid plugs offer excellent results on level smooth surfaces as they leave fewer marks than any segments with a corner.

SEGMENT TYPES

BAR

Suited for: General concrete prep.

Ideal for removing concrete with a long leading edge. Single bar segments are designed to maximise performance when operating smaller machines. Double bar segments offer longer life and typically perform better under heavier machines. Bar segments are best used up to 80 grit, followed by round D26 segments if you are wanting to move on to less of a scratch profile.

RAPIDA

Suited for: Extremely hard trowelled, smooth concrete that has been strengthened with curing agents.

During the curing process, the curing agents form a membrane over the top of the concrete slab which stops the water near the surface from evaporating too quickly and strengthens the concrete cap. These extremely hard surfaces require a specific bond that prevents the diamonds from glazing over. Syntec has developed a revolutionary bond for exactly this type of grinding application, allowing for powerful grinding on even the hardest concrete.

ROUND

Suited for: General concrete prep.

Ideal for finer grits with less of a leading straight edge, a large surface area and no specific corner.

This design helps minimise deep scratching and excessive gouging, especially on uneven floors.

S SEG

Suited for: General concrete prep.

S Segment design is a great general purpose segment. Slots in the top of the segment help keep things cool while the long "S" Segment offers significant surface area, allowing smooth grinding without gouging. It fits in the middle of the segment designs offering good production rates with long life.

X SEG

Suited for: Aggressive concrete prep, light coating removal.

This segment was designed with sharp edges/corners. Similar to the Arrow segment it can quickly remove light/failing coatings and prep the concrete all with one tool. The smaller segment sizes offers maximum production. Unlike the Arrow segment the X Segment is not directional and can be run clockwise or counterclockwise.

DIAMOND SEG

Suited for: General concrete prep.

Diamond segments were developed to be a versatile segment depending on the configuration. When they are situated with the diamond point as the leading edge they can grind more aggressively (typically this is with #16/20 grit diamond). When situated with the segments turned, so the side of the segment is the leading edge they leave a smoother finish more acceptable for thin coatings or early polishing steps (typically #30/40 grit and finer).

PEAK

Suited for: Coating removal, general concrete prep.

Peak segments are especially aggressive when brand new as the peak comes to a sharp point with not a lot of surface area. They are designed to grind/remove aggressively while leaving minimal damage to the floor.

ALTERNATIVE BONDS

Once the metal bond grinding process has been completed, it is time to polish the surface, for which finer diamonds are required. This is where alternative bonds come in as metal bonds can scratch the surface or provide a rougher finish once the diamond grit exceeds 100-150.


Ceramic


Metal Resin


Burnishing


Sponge Resin

CERAMIC BOND

Ceramic bonds are the happy medium between metal bonds and metal resin bonds in terms of aggressiveness and can only be used wet. They provide exceptionally long life on hard and medium concrete, and a beautiful finish.

Ceramic cups are used for edging, in many cases eliminating the need for a metal bond cup by prepping and polishing simultaneously. Ceramic pads on the other hand are designed for polishing under walk-behind grinders, working a little slower but therefore lasting longer than resin pads.

Baked at 400°C, ceramic pads have a very delicate, porcelain-like structure and are only recommended for professional use. Similar to dropping a plastic plate vs. a porcelain plate, ceramic tools can easily shatter when used incorrectly.

METAL RESIN / HYBRID BOND

As the name indicates metal resin bonds consist of a mix of metal powders and resins. Offering double the lifespan to regular resins, hybrids are harder wearing, however, are only available up to 400 grit. If a higher grit is required, resins are the ideal solution. Unlike ceramics, metal resins can be used wet and dry.

RESIN BOND

As with metal bonds, there are varying levels of hardness for different applications to ensure the bond wears away at the optimal rate. Holding diamonds up to 3000 grit, resin pads quickly remove scratches caused by metal bonds and are best suited for applications on hard materials as the resin wears fast on abrasive floors.

RESIN BOND CONTINUED

If too much weight is applied or the machine is operating too fast, the resin can burn. Therefore, the down pressure on each resin should never exceed 45kg. What is important to note here is that the weight of the machine does not equal the down pressure as the weight on each resin depends on various factors such as the number of resin pads, the way the machine is balanced and whether it is a planetary or oscillating grinder.

BURNISHING PADS

Burnishing pads are made of real or synthetic hog hair that is then sprayed with a fine-grit diamond mixed with a resin. They are used as the final steps in a polishing process to give an even higher level of shine than what can be achieved by normal polishing with resin diamonds. Often, burnishing pads are used in conjunction with sealers that protect the floor, for example against stains from red wine or vinegar spills in supermarkets. The heat generated by the burnishing pads while polishing the floor activates the sealer, forming a protective layer. Burnishing pads are available in a wide selection of diamond grits to cover all applications from floor maintenance under auto scrubbers to terrazzo and concrete applications under high-speed burnishing machines.

SPONGE RESIN BOND

Sponge resin pads were initially designed to restore or maintain already polished concrete and terrazzo floors that had lost their shine due to heavy foot traffic, providing the benefit of simultaneously cleaning and polishing the floor thanks to their nylon texture. They can, however, also be used for polishing cementitious overlays and concrete, when wanting to achieve a so-called 'cream polish' that doesn't expose the aggregate. With their flexible backers, sponge resin pads contour to the floor, allowing them to reach minor low spots and take out resin swirl marks.

ALTERNATIVE BONDS

CONCRETE HARDNESS

When determining the hardness of the concrete surface you are wanting to grind down, several factors need to be considered. In an ideal world, you can just go by the specifications the concrete manufacturer has supplied. These, however, are not always accurate as several variables can influence the curing process and leave you with different results - weather, concrete mix, placement and finishing techniques.

The initial setting phase that allows the concrete to be tread upon takes 24 to 48 hours. After 7 days concrete is about 50% stronger and after 28 days it is fully cured. In this period the concrete hydrates, forming crystals from a reaction between the cement and water that increase the material's compressive strength and make it durable. How the concrete is treated during the curing process, especially during the first week, has a high impact on the final result in terms of hardness. The amount of moisture, temperature and weight fresh concrete is exposed to, influences the way it cures. Not to forget, if curing compounds were used, this also has an effect.

Therefore, our recommendation is to always test the concrete to determine how hard it is. This can be done by either using a Mohs scratch test kit, verifying the concrete floor's resistance to abrasion or with a rebound hammer (also known as Schmidt hammer or sclerometer), supplying approximate values of the concrete's compressive strength in psi (pounds per square inch). It is important to note that slabs usually show different strengths in different areas, so sampling different areas can help.

WET VS. DRY GRINDING

Surface prep tools can be used in two different ways: wet and dry. As opposed to cutting and coring tools, the preferred option for grinding tools is the dry method. This is due to the cost of the disposal of dust vs. slurry as well as reducing the overall time to complete a job.

The fine dust created when dry grinding hard materials presents a safety hazard to those in the vicinity. This dust, however, can be contained within the rubber lips underneath a floor grinder and simultaneously removed with the help of a vacuum extractor that is equipped with a HEPA filter. The most common kind of collecting the dust, which is by using sausage-shaped Longo bags that can be sealed with two cable ties at either end, reduces any contact with the dust to a minimum.

When wet grinding, water helps minimise the amount of dust generated. Due to health and safety regulations throughout many countries, the disposal of slurry, however, has become less cost-effective, providing a further reason to resort to dry cutting. Situations that do call for wet cutting include outdoor work without a sufficient power supply. Either way, we always recommend wearing a dust mask to prevent yourself from inhaling dust which can lead to serious lung disease.

HELPFUL TIPS:

- The finer the grit, the slower the speed of the grinder should be.
- If you are producing dust, you are grinding. If not, the machine is drifting over the surface and you should change the tool.
- Always clean up! Keeping the surface clean not only ensures no foreign objects are causing scratches, but it is also easier to see the results you are achieving with the tool.
- Do not polish green concrete that hasn't cured yet.

GRINDING PLATES

Syntec Grinding Plates are designed to give optimum performance in concrete preparation, levelling concrete surfaces and removal of various thin coatings.

Hard bond is perfect for soft abrasive material

Medium Bond is ideal for most medium to hard concrete applications

10 Segment is best when an aggressive removal rate is required

20 Segment offers slightly less aggressie results with longer life

Arrow Segments tend to be more aggressive when removing light coatings

10" GRINDING PLATES - 10 SEGMENT - HARD BOND

PART NO.	SIZE	SEG	COLOR
BT250AB10-10	10"	10	● Black

10" GRINDING PLATES - 20 SEGMENT - HARD BOND

PART NO.	SIZE	SEG	COLOR
BT250AB10-20	10"	20	● Black

10" GRINDING PLATES - 10 SEGMENT - MEDIUM BOND

PART NO.	SIZE	SEG	COLOR
BT250GP10-10	10"	10	○ White

10" GRINDING PLATES - 20 SEGMENT - MEDIUM BOND

PART NO.	SIZE	SEG	COLOR
BT250GP10-20	10"	20	○ White

10" GRINDING PLATES - 10 ARROW SEGMENTS - HARD BOND

PART NO.	SIZE	SEG	COLOR
BT250ABA10-10	10"	10	● Black

10" GRINDING PLATES - 20 ARROW SEGMENTS - HARD BOND

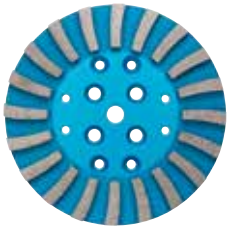
PART NO.	SIZE	SEG	COLOR
BT250ABA10-20	10"	20	● Black

10" GRINDING PLATES - 10 ARROW SEGMENTS - MEDIUM BOND

PART NO.	SIZE	SEG	COLOR
BT250GPA10-10	10"	10	○ White

10" GRINDING PLATES - 20 ARROW SEGMENTS - MEDIUM BOND

PART NO.	SIZE	SEG	COLOR
BT250GPA10-20	10"	20	○ White



10"TORNADO GRINDING PLATES - 20 SEGMENTS - MEDIUM BOND

PART NO.	SIZE	SEG	COLOR
TP25018P20	10"	20	● Blue

FAST CHANGE PLATES

Syntec Fast Change Plates convert your walk behind grinder into a more versatile machine. Easy taper wedge fit diamonds attach quickly and safely, allowing the operator to run PCDs for coating removal or finer grit diamonds for a smoother finish.

PART NO.	DESCRIPTION
FCPLATE86	10" Low Profile Crete Mower Fast Change Plate

PART NO.	DESCRIPTION
FCHUSQ682	9" Fast Change Plate to suit Husqvarna

PART NO.	DESCRIPTION
FCLAV2115	8" Fast Change Plate to suit Lavina L21 Grinder

PART NO.	DESCRIPTION
LWQRINN200	8" Fast Change Plate to suit Innovatec/SPE

SWING BUFFER PLATE

PART NO.	DESCRIPTION
MALSF17- 17"	Malish Universal Clutch Plate complete with 5 SF Holders, Riser & Block
MALSF20- 20"	Malish Universal Clutch Plate complete with 6 SF Holders, Riser & Block
MALFC17- 17"	Malish Universal Clutch Plate complete with 6 FC Holders, Riser & Block

***Additional plates are available, suited to a extensive range of grinders. Please contact us for further details.**

CUP WHEELS

Syntec manufactures a wide variety of diamond cup wheels to assist in all applications. These applications range from concrete trip hazard removal, general concrete prep, coating / glue removal and concrete polishing.

SPIRAL CUP WHEELS - SILVER SERIES

PART NO.	DIAMETER	SEG	ARBOR	COLOR
SCSCT1S178-6	7″	6	5/8-7/8	Silver
SCSCT1S178-6T	7″	6	Threaded	Silver
SCSCT1S178-12	7″	12	5/8-7/8	Silver
SCSCT1S178-12T	7″	12	Threaded	Silver
SCSCT1S178-24	7″	24	5/8-7/8	Silver
SCSCT1S178-24T	7″	24	Threaded	Silver

SPIRAL CUP WHEELS - YELLOW SERIES

PART NO.	DIAMETER	SEG	ARBOR	COLOR
SCSCT1100-8	4″	8	5/8-7/8	Yellow
SCSCT1100-16	4″	16	5/8-7/8	Yellow
SCSCT1115-9	4.5″	9	5/8-7/8	Yellow
SCSCT1115-9T	4.5″	9	Threaded	Yellow
SCSCT1115-18	4.5″	18	5/8-7/8	Yellow
SCSCT1115-18T	4.5″	18	Threaded	Yellow
SCSCT1178-12	7″	12	5/8-7/8	Yellow
SCSCT1178-12T	7″	12	Threaded	Yellow
SCSCT1178-24	7″	24	5/8-7/8	Yellow
SCSCT1178-24T	7″	24	Threaded	Yellow

CUP WHEELS - CONTINUED

SPIRAL CUP WHEELS - GREEN SERIES

PART NO.	DIAMETER	SEG	ARBOR	COLOR
SCSCT3115-9	4.5″	9	5/8-7/8	Green
SCSCT3115-9T	4.5″	9	Threaded	Green
SCSCT3115-18	4.5″	18	5/8-7/8	Green
SCSCT3115-18T	4.5″	18	Threaded	Green
SCSCT3178-12	7″	12	5/8-7/8	Green
SCSCT3178-12T	7″	12	Threaded	Green
SCSCT3178-12ST	7"	12	Short Thread	Green
SCSCT3178-24	7″	24	5/8-7/8	Green
SCSCT3178-24T	7″	24	Threaded	Green
SCSCT2178-12	7″	12	5/8-7/8	Dark Green
SCSCT2178-12T	7″	12	Threaded	Dark Green

JUMBO SPIRAL CUP WHEELS

PART NO.	DIAMETER	SEG	ARBOR	COLOR
JUMBOT1178-12	7″	12	5/8-7/8	Blue
JUMBOT1178-12T	7″	12	Threaded	Blue

TURBO CUP WHEELS

PART NO.	DIAMETER	GRIT	ARBOR	COLOR
SC0473GC	4″	25/30	Threaded	Gold
SC0473GM	4″	50/60	Threaded	Red
SC0473GF	4″	120/140	Threaded	Yellow
SC0773GC	7″	25/30	Threaded	Gold
SC0773GM	7″	50/60	Threaded	Red
SC0773GF	7″	120/140	Threaded	Yellow

T SEG CUP WHEELS

PART NO.	DIAMETER	SEG	ARBOR	COLOR
SCMBT125	5″	10	5/8-7/8	● Black
SCMBT125T	5″	10	Threaded	● Black
SCMBT178	7″	14	5/8-7/8	● Black
SCMBT178T	7″	14	Threaded	● Black

TEAR DROP CUP WHEELS

PART NO.	DIAMETER	GRIT	ARBOR	COLOR
SC125TD18	5″	16/20	5/8-7/8	● Red
SC125TD18-T	5″	16/20	Threaded	● Red
SC125TD30	5″	30/40	5/8-7/8	● Red
SC125TD30-T	5″	30/40	Threaded	● Red
SC125TD60	5″	60/80	5/8-7/8	● Red
SC125TD60-T	5″	60/80	Threaded	● Red
SC178TD18	7"	16/20	5/8-7/8	● Red
SC178TD18-T	7"	16/20	Threaded	● Red
SC178TD30	7"	30/40	5/8-7/8	● Red
SC178TD30-T	7"	30/40	Threaded	● Red
SC178TD60	7"	60/80	5/8-7/8	● Red
SC178TD60-T	7"	60/80	Threaded	● Red

CUP WHEELS - CONTINUED

S SEG CUP WHEELS

PART NO.	DIAMETER	GRIT	ARBOR	COLOR
SC125TS20	5″	16/20	5/8-7/8	Red
SC125TS20-T	5″	16/20	Threaded	Red
SC125TS30	5″	30/40	5/8-7/8	Red
SC125TS30-T	5″	30/40	Threaded	Red
SC125TS60	5″	60/80	5/8-7/8	Red
SC125TS60-T	5″	60/80	Threaded	Red
SC178TS18	7″	16/20	5/8-7/8	Red
SC178TS18-T	7″	16/20	Threaded	Red
SC178TS30	7″	30/40	5/8-7/8	Red
SC178TS30-T	7″	30/40	Threaded	Red
SC178TS60	7″	60/80	5/8-7/8	Red
SC178TS60-T	7″	60/80	Threaded	Red
SC178TS80	7″	80/100	5/8-7/8	Red
SC178TS80-T	7″	80/100	Threaded	Red
SC178TS120	7″	120/140	5/8-7/8	Red
SC178TS120-T	7″	120/140	Threaded	Red

DOUBLE ROW CUP WHEELS

PART NO.	DIAMETER	GRIT	ARBOR	COLOR
DRT115	4.5″	25/30	5/8-7/8	Yellow
DRT115-T	4.5″	25/30	Threaded	Yellow
DRT125	5″	25/30	5/8-7/8	Yellow
DRT125-T	5″	25/30	Threaded	Yellow
DRT1178	7″	25/30	5/8-7/8	Yellow
DRT1178-T	7″	25/30	Threaded	Yellow

ARROW SEGMENT CUP WHEELS - PREMIUM ARROW

PART NO.	DIAMETER	SEG	ARBOR	COLOR
SCARSTD125	5″	6	5/8-7/8	● Black
SCARSTD125T	5″	6	Threaded	● Black
SCARSTD180	7″	10	5/8-7/8	● Black
SCARSTD180T	7″	10	Threaded	● Black

ARROW SEGMENT CUP WHEELS - MID ARROW

PART NO.	DIAMETER	SEG	ARBOR	COLOR
SCARSTDT1178	7″	10	5/8-7/8	● Black
SCARSTDT1178T	7″	10	Threaded	● Black

ARROW SEGMENT CUP WHEELS - MINI ARROW

PART NO.	DIAMETER	SEG	ARBOR	COLOR
SASC125-30	5″	12	5/8-7/8	● Black
SASC150-30	6″	15	5/8-7/8	● Black
SASC178-30	7″	18	5/8-7/8	● Black

RAPIDA CAP CUTTER CUP WHEELS

PART NO.	DIAMETER	SEG	ARBOR	COLOR
SC5RAPIDA9	5″	9	5/8-7/8	● Gold
SC5RAPIDA9T	5″	9	Threaded	● Gold
SC7RAPIDA12	7″	12	5/8-7/8	● Gold
SC7RAPIDA12T	7″	12	Threaded	● Gold

CUP WHEELS - CONTINUED

TRANSITIONAL / CERAMIC CUP WHEELS

PART NO.	DIAMETER	GRIT	ARBOR
5CERSH-30	5″	30	Threaded
5CERSH-50	5″	50	Threaded
5CERSH-100	5″	100	Threaded
5CERSH-200	5″	200	Threaded
5CERSH-400	5″	400	Threaded
5CERSH-800	5″	800	Threaded
5CERSH-1500	5″	1500	Threaded
5CERSH-3000	5″	3000	Threaded
7CERSH-30	7″	30	Threaded
7CERSH-50	7″	50	Threaded
7CERSH-100	7″	100	Threaded
7CERSH-200	7″	200	Threaded
7CERSH-400	7″	400	Threaded
7CERSH-800	7″	800	Threaded
7CERSH-1500	7″	1500	Threaded
7CERSH-3000	7″	3000	Threaded

TWISTER CUP WHEELS - PREMIUM FLAT TWISTER CUP - 18 SEGMENT

PART NO.	DIAMETER	GRIT	ARBOR	COLOR
CGF-5BTD	5″	16/20	5/8-7/8	● Red
CGF-5BTD5060	5″	50/60	5/8-7/8	● Red
CGF-5BTD120140	5″	120/140	5/8-7/8	● Red
CGF-7BTD	7″	16/20	5/8-7/8	● Red
CGF-7BTD5060	7″	50/60	5/8-7/8	● Red
CGF-7BTD120140	7″	120/140	5/8-7/8	● Red

TORNADO CUP WHEELS - TORNADO FLAT CUP - PREMIUM SOFT - 7" DIAMETER

PART NO.	SEGMENT	GRIT	ARBOR	COLOR
TC1783P18	3	16/20	5/8-7/8	Gold
TC1786P18	6	16/20	5/8-7/8	Gold
TC1786P18T	6	16/20	Threaded	Gold
TC1789P18	9	16/20	5/8-7/8	Gold
TC17818P18	18	16/20	5/8-7/8	Gold
TC17818P50	18	50/60	5/8-7/8	Gold
TC17818P120	18	120/140	5/8-7/8	Gold

PCD CUP WHEELS - 1/4 ROUND

PART NO.	DIAMETER	SEG	ARBOR	COLOR
BKPCD1274	5"	4	5/8-7/8	Metallic Blue
BKPCD1786	7"	6	5/8-7/8	Metallic Blue
BKPCD1786-T	7"	6	Threaded	Metallic Blue
BKPCD1788	7"	8	5/8-7/8	Metallic Blue
BKPCD1788-INV	7"	8	5/8-7/8 Inverted Segs	Metallic Blue

PCD CUP WHEELS - MINI JET

PART NO.	DIAMETER	SEG	ARBOR	COLOR
MJPCD1786	7"	6	5/8-7/8	Metallic Blue

PCD CUP WHEELS - HALF ROUND

PART NO.	DIAMETER	SEG	ARBOR	COLOR
BKPCD1786-S10	7"	6	5/8-7/8	Metallic Blue
BKPCD1788-S10	7"	8	5/8-7/8	Metallic Blue

PCD CUP WHEELS - FLAT TOP HALF ROUND

PART NO.	DIAMETER	SEG	ARBOR	COLOR
BKPCD1786-S10U	7"	6	5/8-7/8	Metallic Blue
BKPCD1788-S10U	7"	8	5/8-7/8	Metallic Blue

CUP WHEELS - CONTINUED

COATING REMOVAL ABRASIVE WHEELS - TEC ABRASIVE DISK

PART NO.	DIAMETER	SEG	ARBOR
ACZ4508S	4.5″	8	5/8-7/8
ACZ4516S	4.5″	16	5/8-7/8
ACZ4524S	4.5″	24	5/8-7/8
ACZ4536S	4.5″	36	5/8-7/8
ACZ0708S	7″	8	5/8-7/8
ACZ0716S	7″	16	5/8-7/8
ACZ0724S	7″	24	5/8-7/8
ACZ0736S	7″	36	5/8-7/8

ADAPTOR NUTS - ANTI VIBRATION MOUNT - FOR TEC DISKS

PART NO.	DESCRIPTION
CFL001	Threaded Washer
CFL002	Adaptor

ADAPTOR NUTS

PART NO.	DESCRIPTION
CFL034	Short Adaptor Nut Set for cup wheels
RSNUT	Tall Adaptor Nut Set for cup whels & tec disks

DUST SHROUDS

PART NO.	DESCRIPTION
172366-SYN	5" Full
166037	7″ IXL Full
166964	7″ IXL Hinged

PREMIUM DUST SHROUDS

PART NO.	DESCRIPTION
SX65809U	7″ Full Shroud
SX65807U	7" Convertible Shroud

METABO ANGLE GRINDERS

PART NO.	DESCRIPTION
WEV1525-HT	5" Metabo Variable Speed
W24-180 - MVT	7″ Metabo W24-180 8500 rpm 15 amp
W24-230 - MVT	7″ Metabo W24-230 6600 rpm 15 amp

PUCKS AND PLUGS

Syntec offers a wide range of pucks and plugs for all equipment with puck or plug tooling plates.
We have an extensive range of options in 3" bolt on pucks that can also be attached to plug boodies if needed.

METAL BOND PUCKS - 3" BEVELED SEGMENT - MEDIUM BOND

PART NO.	GRIT	SEG	COLOR
PUCK10-18-6	16/20	10	Red
PUCK10-30-6	30/40	10	Red
PUCK10-60-6	60/80	10	Red
PUCK10-120-6	120/140	10	Red

METAL BOND PUCKS - 3" MEDIUM BOND - 10 SEGMENT

PART NO.	GRIT	SEG	COLOR
SBPR1016	16/20	10	Red
SBPR1030	30/40	10	Red
SBPR1060	60/80	10	Red
SBPR1080	80/100	10	Red
SBPR1120	120/150	10	Red

PUCKS AND PLUGS - CONTINUED

METAL BOND PUCKS - 3" MEDIUM BOND - 5 SEGMENT

PART NO.	GRIT	SEG	COLOR
SBPR516	16/20	5	Red
SBPR530	30/40	5	Red
SBPR560	60/80	5	Red
SBPR580	80/100	5	Red
SBPR5120	120/150	5	Red

METAL BOND PUCKS - 3" HARD BOND - 10 SEGMENT

PART NO.	GRIT	SEG	COLOR
SBPB1016	16/20	10	Black
SBPB1030	30/40	10	Black
SBPB1060	60/80	10	Black
SBPB10120	120/150	10	Red

METAL BOND PUCKS - 3" HARD BOND - 5 SEGMENT

PART NO.	GRIT	SEG	COLOR
SBPB516	16/20	5	Black
SBPB530	30/40	5	Black
SBPB560	60/80	5	Black
SPBP5120	120/150	5	Black

METAL BOND PUCKS - 3" SOFT BOND

PART NO.	GRIT	SEG	COLOR
SPB76625GO	25	6	Gold
SPB76630GO	30/40	6	Gold
SPB76650GO	50/60	6	Gold
SPB76660GO	60/80	6	Gold
SPB76680GO	80/100	6	Gold
SPB768100GO	100/120	8	Gold

METAL BOND PUCKS - 3" NON BEVELED PUCKS - EXTREMELY SOFT BOND

PART NO.	GRIT	SEG	COLOR
SCARNGO18-5	16/20	5	Gold
SCARNGO30-8	30/40	8	Gold
SCARNGO60-8	60/80	8	Gold
SCARNGO80-10	80/100	10	Gold
SCARNGO150-10	120/150	10	Gold

METAL BOND PUCKS - 3" NON BEVELED PUCKS - EXTREMELY HARD BOND

PART NO.	GRIT	SEG	COLOR
SCARNB18	16/20	8	Black
SCARNB30	30/40	8	Black
SCARNB60	60/80	8	Black
SCARNB80	80/100	8	Black

PCD COATED REMOVAL PUCKS - HALF ROUND WITH 2 #18 GRIT SEGMENT

PART NO.	GRIT	HAND	COLOR
BKPCDPH2-RH	16/20	RH	Metallic Blue
BKPCDPH2-LH	16/20	LH	Metallic Blue

SOLID PLUGS - 2" GRIND PLUGS

PART NO.	SIZE	GRIT
BKGB50R18	2"	#16/20
BKGB50R30	2"	#30/40
BKGB50R60	2"	#60/80
BKGB50R80	2"	#80/100

SOLID PLUGS - 2" X PREMIUM

PART NO.	SIZE
SC502PL25-M"	2"

PLUG PUCKS

PART NO.	DESCRIPTION
PLG-PUCK"	50mm Plug w/ Hole & Bolt

METAL BONDING

Syntec offers a wide range of metal bond and PCD shoes to fit a variety of grinding machines, providing optimal productivity at great costs. With an array of segment configurations, bonds and grits you'll be sure to find the right tool for your application.

FAST CHANGE

Syntec FAST CHANGE, the alternative tooling for most machines. The fast change system is quick and easy to use without the use of unnecessary hardware or expensive magnets. Using the FAST CHANGE will help with reduce downtime, save money and increase production.

FAST CHANGE - 2X 1/4 ROUND PCDS

PART NO.	SEG	HAND	COLOR
FCBKPCDH2RH	2	RH	Metallic Blue
FCBKPCDH2LH	2	LH	Metallic Blue

FAST CHANGE - 2X 1/4 ROUND PCDS WITH STABILIZER SEGMENT

PART NO.	SEG	HAND	COLOR
FCPC2SCARNRH	2	RH	Metallic Blue
FCPC2SCARNLH	2	LH	Metallic Blue

FAST CHANGE - 2 HALF ROUND PCDS WITH 20X10 SEGMENTS

PART NO.	SEG	HAND	COLOR
FCHR2PCD-LH	2	LH	Metallic Blue
FCHR2PCD-RH	2	RH	Metallic Blue

FAST CHANGE - 2 MINI JET PCDS

PART NO.	SEG	HAND	COLOR
MJPCDFC2RH	2	RH	Metallic Blue

FAST CHANGE - 2 HALF ROUND PCDS WITH 20X10 SEGMENTS - LONG

PART NO.	SEG	HAND	COLOR
FCLHR2PCD-LH	2	LH	Metallic Blue
FCLHR2PCD-RH	2	RH	Metallic Blue
FCLHR4PCD-LH	4	LH	Metallic Blue
FCLHR4PCD-RH	4	RH	Metallic Blue

FAST CHANGE - 2 INVERTED HALF ROUND PCDS - LONG

PART NO.	SEG	HAND	COLOR
FCLHR2PCD-LHU	2	LH	Metallic Blue
FCLHR2PCD-RHU	2	RH	Metallic Blue

FAST CHANGE - CONTINUED

FAST CHANGE - SINGLE BAR SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
FCHT1PGO18	1	16/20	Extremely Soft	Gold
FCHT1PGO30	1	30/40	Extremely Soft	Gold
FCHT1PGO60	1	60/80	Extremely Soft	Gold
FCHT1PGO120	1	120/140	Extremely Soft	Gold
FCBKP1G6	1	6	Soft	Gold
FCBKP1G18	1	16/20	Soft	Gold
FCBKP1G30	1	30/40	Soft	Gold
FCBKP1G60	1	60/80	Soft	Gold
FCBKP1G120	1	120/140	Soft	Gold
FCBKP1R6	1	6	Medium	Red
FCBKP1R18	1	16/20	Medium	Red
FCBKP1R30	1	30/40	Medium	Red
FCBKP1R60	1	60/80	Medium	Red
FCBKP1R120	1	120/140	Medium	Red
FCBKP1BK6	1	6	Hard	Black
FCBKP1BK18	1	16/20	Hard	Black
FCBKP1BK30	1	30/40	Hard	Black
FCBKP1BK60	1	60/80	Hard	Black
FCBKP1BK120	1	120/140	Hard	Black

FAST CHANGE - DOUBLE BAR SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
FCHT2PGO18	2	16/20	Extremely Soft	Gold
FCHT2PGO30	2	30/40	Extremely Soft	Gold
FCHT2PGO60	2	60/80	Extremely Soft	Gold
FCHT2PGO120	2	120/140	Extremely Soft	Gold
FCBKP2G6	2	6	Soft	Gold
FCBKP2G18	2	16/20	Soft	Gold
FCBKP2G30	2	30/40	Soft	Gold
FCBKP2G60	2	60/80	Soft	Gold
FCBKP2G120	2	120/140	Soft	Gold

FAST CHANGE - DOUBLE BAR SEGMENTS - CONTINUED

PART NO.	SEG	GRIT	BOND	COLOR
FCBKP2R6	2	6	Medium	Red
FCBKP2R18	2	16/20	Medium	Red
FCBKP2R30	2	30/40	Medium	Red
FCBKP2R60	2	60/80	Medium	Red
FCBKP2R120	2	120/140	Medium	Red
FCBKP2BK6	2	6	Hard	Black
FCBKP2BK18	2	16/20	Hard	Black
FCBKP2BK30	2	30/40	Hard	Black
FCBKP2BK60	2	60/80	Hard	Black
FCBKP2BK120	2	120/140	Hard	Black
FCHTSCARN26	2	6	Extremely Hard	Black
FCHTSCARN218	2	16/20	Extremely Hard	Black
FCHTSCARN230	2	30/40	Extremely Hard	Black
FCHTSCARN260	2	60/80	Extremely Hard	Black

FAST CHANGE - DOUBLE ROUND SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
FC2268GO18	2	16/20	Extremely Soft	Gold
FC2268GO30	2	30/40	Extremely Soft	Gold
FC2268GO50	2	50/60	Extremely Soft	Gold
FC2268GO80	2	60/80	Extremely Soft	Gold
FC2268GO120	2	120/140	Extremely Soft	Gold
FC22610G30	2	30/40	Soft	Gold
FC22610G70	2	60/80	Soft	Gold
FC22610R30	2	30/40	Medium	Red
FC22610R70	2	60/80	Medium	Red

FAST CHANGE - SINGLE RAPIDA CAP CUTTER SEGMENTS - EXTREMELY SOFT BOND

PART NO.	SEG	GRIT	COLOR
FCRAPIDA1-30	1	30/40	Gold

FAST CHANGE - CONTINUED

FAST CHANGE - DOUBLE RAPIDA CAP CUTTER SEGMENTS - EXTREMELY SOFT BOND

PART NO.	SEG	GRIT	COLOR
FCRAPIDA2-30	2	30/40	Gold
FCRAPIDA2-50	2	50/60	Gold
FCRAPIDA2-60	2	60/80	Gold
FCRAPIDA2-120	2	120/140	Gold

FAST CHANGE - DOUBLE PEAK SEGMENTS - MEDIUM BOND

PART NO.	SEG	COLOR
FC-PEAK-2	2	Gold

FAST CHANGE - SINGLE X SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
FCXP1G030	1	30/40	Extremely Soft	Gold
FCXP1G050	1	50/60	Extremely Soft	Gold
FCXP1R30	1	30/40	Medium	Red
FCXP1R50	1	50/60	Medium	Red

FAST CHANGE - DOUBLE X SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
FCXP2G030	2	30/40	Extremely Soft	Gold
FCXP2G050	2	50/60	Extremely Soft	Gold
FCXP2R30	2	30/40	Medium	Red
FCXP2R50	2	50/60	Medium	Red

FAST CHANGE - DOUBLE S SEGMENTS - MEDIUM BOND

PART NO.	SEG	GRIT	COLOR
FCTS2R18	2	16/20	Red

FAST CHANGE - DOUBLE ARROW SEGMENTS - EXTREMELY HARD BOND

PART NO.	SEG	GRIT	COLOR
FCABPVVHR-18	2	16/20	● Black
FCABPVVHR-30	2	30/40	● Black
FCABPVVHR-60	2	60/80	● Black

FAST CHANGE - SHOES

PART NO.	DESCRIPTION
FCSTHREADED	Fast Change Shoe -Threaded, Electroplated

FAST CHANGE - HOLDERS

PART NO.	DESCRIPTION
FCHOLDER-M	Fast Change Holder - Fully Machined

FAST CHANGE - RESIN HOLDERS

PART NO.	DESCRIPTION
FCRH80L	3″ Fast Change Resin Holder w/ Lip

TRAPEZOID BOLT ON

Traditional 3-hole bolt-on trapezoid tooling now with additional holes for Diamatic style magnetic plates. These will fit a variety of grinding machines and wih a wide range of segment configurations, bonds and grits. We have a tool for any application.

TRAPEZOID BOLT ON - 2X 1/4 ROUND PCDS

PART NO.	SEG	HAND	COLOR
BKPCDHT2RH	2	RH	Metallic Blue
BKPCDHT2LH	2	LH	Metallic Blue

TRAPEZOID BOLT ON - 2X 1/4 ROUND PCDS WITH STABLIZER SEGMENT

PART NO.	SEG	HAND	COLOR
BKPC2SCARNLH	2	LH	Metallic Blue
BKPC2SCARNRH	2	RH	Metallic Blue

TRAPEZOID BOLT ON - 2 HALF ROUND PCDS WITH 20X10 SEGMENTS

PART NO.	SEG	HAND	COLOR
BOLHR2PCD-RH	2	RH	Metallic Blue
BOLHR2PCD-LH	2	LH	Metallic Blue

TRAPEZOID BOLT ON - 2 HALF ROUND MINI JET PCDS

PART NO.	SEG	HAND	COLOR
MJPCDBO2RH	2	RH	Metallic Blue

TRAPEZOID BOLT ON - SINGLE BAR SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
BKP1GO18	1	16/20	Extremely Soft	Gold
BKP1GO30	1	30/40	Extremely Soft	Gold
BKP1GO60	1	60/80	Extremely Soft	Gold
BKP1GO80	1	80/100	Extremely Soft	Gold
BKP1GO120	1	120/140	Extremely Soft	Gold
BKP1G6	1	6	Soft	Gold
BKP1G18	1	16/20	Soft	Gold
BKP1G30	1	30/40	Soft	Gold
BKP1G60	1	60/80	Soft	Gold
BKP1G80	1	80/100	Soft	Gold
BKP1G120	1	120/140	Soft	Gold
BKP1R6	1	6	Medium	Red
BKP1R18	1	16/20	Medium	Red
BKP1R30	1	30/40	Medium	Red
BKP1R60	1	60/80	Medium	Red
BKP1R80	1	80/100	Medium	Red
BKP1R120	1	120/140	Medium	Red
BKP1BK6	1	6	Hard	Black
BKP1BK18	1	16/20	Hard	Black
BKP1BK30	1	30/40	Hard	Black
BKP1BK60	1	60/80	Hard	Black
BKP1BK80	1	80/100	Hard	Black

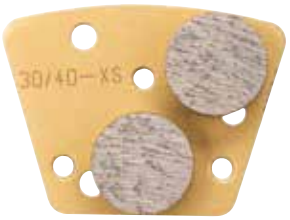
TRAPEZOID BOLT ON - DOUBLE BAR SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
BKP2GO18	2	16/20	Extremely Soft	Gold
BKP2GO30	2	30/40	Extremely Soft	Gold
BKP2GO60	2	60/80	Extremely Soft	Gold
BKP2GO80	2	80/100	Extremely Soft	Gold
BKP2GO120	2	120/140	Extremely Soft	Gold

TRAPEZOID BOLT ON - CONTINUED

TRAPEZOID BOLT ON - DOUBLE BAR SEGMENTS - CONTINUED

PART NO.	SEG	GRIT	BOND	COLOR
BKP2G6	2	6	Soft	Gold
BKP2G18	2	16/20	Soft	Gold
BKP2G30	2	30/40	Soft	Gold
BKP2G60	2	60/80	Soft	Gold
BKP2G80	2	80/100	Soft	Gold
BKP2G120	2	120/140	Soft	Gold
BKP2R6	2	6	Medium	Red
BKP2R18	2	16/20	Medium	Red
BKP2R30	2	30/40	Medium	Red
BKP2R60	2	60/80	Medium	Red
BKP2R80	2	80/100	Medium	Red
BKP2R120	2	120/140	Medium	Red
BKP2BK6	2	6	Hard	Black
BKP2BK18	2	16/20	Hard	Black
BKP2BK30	2	30/40	Hard	Black
BKP2BK60	2	60/80	Hard	Black
BKP2BK80	2	80/100	Hard	Black
HTSCARN26	2	6	Extremely Hard	Black
HTSCARN218	2	16/20	Extremely Hard	Black
HTSCARN230	2	30/40	Extremely Hard	Black
HTSCARN260	2	60/80	Extremely Hard	Black



TRAPEZOID BOLT ON - DOUBLE ROUND SEGMENTS - EXTREMELY SOFT BOND

PART NO.	SEG	GRIT	COLOR
BK2268GO18	2	16/20	Gold
BK2268GO30	2	30/40	Gold
BK2268GO60	2	60/80	Gold
BK2268GO80	2	80/100	Gold
BK2268GO120	2	120/140	Gold

TRAPEZOID BOLT ON - DOUBLE RAPIDA CAP CUTTER SEGMENTS - EXTREMELY SOFT BOND

PART NO.	SEG	GRIT	COLOR
BORAPIDA2-30	2	30/40	Gold
BORAPIDA2-60	2	60/80	Gold

TRAPEZOID BOLT ON - DOUBLE PEAK SEGMENTS - MEDIUM BOND

PART NO.	SEG	COLOR
BO-PEAK-2	2	Gold

TRAPEZOID BOLT ON - SINGLE X SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
XP1G030	1	30/40	Extremely Soft	Gold
XP1G050	1	50/60	Extremely Soft	Gold
XP1R30	1	30/40	Medium	Red
XP1R50	1	50/60	Medium	Red

TRAPEZOID BOLT ON - DOUBLE X SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
XP2G030	2	30/40	Extremely Soft	Gold
XP2G050	2	50/60	Extremely Soft	Gold
XP2R30	2	30/40	Medium	Red
XP2R50	2	50/60	Medium	Red

TRAPEZOID BOLT ON - CONTINUED

TRAPEZOID MAG - SINGLE S SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
IH-BOTRS1R18	1	16/20	Medium	● Red
IH-BOTRS1BK18	1	16/20	Hard	● Black

TRAPEZOID BOLT ON - DOUBLE S SEGMENTS - MEDIUM BOND

PART NO.	SEG	GRIT	COLOR
BOTS2R18	2	16/20	● Red

TRAPEZOID BOLT ON - DOULBE ARROW SEGMENTS

PART NO.	GRIT	HAND	BOND	COLOR
BKA2PR30-LH	30/40	LH	Medium	● Red
BKA2PR30-RH	30/40	RH	Medium	● Red
BKA2PBK30-LH	30/40	LH	Hard	● Black
BKA2PBK30-RH	30/40	RH	Hard	● Black

SM TOOLING

Syntec manufacture premium quality diamond tooling suitable for SCANMASKIN plates. Make your machine more productive with our range of metal bond and PCD options.

SM - 2X 1/4 ROUND PCDS

PART NO.	SEG	HAND	COLOR
SMKCPCDH2LH	2	LH	Titanium
SMKCPCDH2RH	2	RH	Titanium

SM - 2X 1/4 ROUND PCDS WITH STABILIZER SEGMENT

PART NO.	SEG	HAND	COLOR
SMKCPCD2SEGLH	2	LH	Titanium
SMKCPCD2SEGRH	2	RH	Titanium

SM - HALF ROUND PCDS WITH 20X10 SEGMENTS

PART NO.	SEG	HAND	COLOR
SMHR2PCD-RH	2	RH	Metallic Blue
SMHR2PCD-LH	2	LH	Metallic Blue

SM - 2 X MINI JET PCDS

PART NO.	SEG	HAND	COLOR
MJPCDSM2RH	2	RH	Metallic Blue
MJPCDSM2LH	2	LH	Metallic Blue

SM - 2 X FULL ROUND PCDS ON BEVELED PLATE

PART NO.	SEG	HAND	COLOR
SMBP2FRPCD-RH	2	RH	Orange
SMBP2FRPCD-LH	2	LH	Orange

SM TOOLING - CONTINUED

SM - DOUBLE RAPIDA CAP CUTTER SEGMENTS - EXTREMELY SOFT BOND

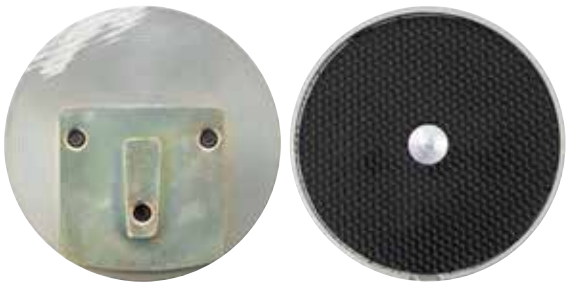
PART NO.	SEG	GRIT	COLOR
SMRAPIDA2-30	2	30/40	Gold
SMRAPIDA2-50	2	50/60	Gold
SMRAPIDA2-60	2	60/80	Gold
SMRAPIDA2-120	2	120/140	Gold

SM - DOUBLE DIAMOND SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
SMVBKSGO16-15	2	16/20	Extremely Soft	Gold
SMVBKSGO30-15	2	30/40	Extremely Soft	Gold
SMVBKSGO60-15	2	60/80	Extremely Soft	Gold
SMVBKSG0120-15	2	120/140	Extremely Soft	Gold
SMVBKSR16-15	2	16/20	Medium	Red
SMVBKSR30-15	2	30/40	Medium	Red
SMVBKSR60-15	2	60/80	Medium	Red
SMVBKSR120-15	2	120/140	Medium	Red
SMVBKSBK16-15	2	16/20	Hard	Black
SMVBKSBK30-15	2	30/40	Hard	Black
SMVBKSBK60-15	2	60/80	Hard	Black

SM - SHOES

PART NO.	DESCRIPTION
SMSTHREADED	SM Shoe with 3 threaded holes



SM - RESIN HOLDERS

PART NO.	DESCRIPTION
SMRH80-L	3" Resin Holder w/ Lip

UNI LOCK

Syntec manufacture premium quality diamond tooling suitable for HUSQVARNA plates. Make your machine more productive with our range of metal bond and PCD options.

UNI LOCK - 2 X 1/4 ROUND PCDS WITH STABILIZER SEGMENT

PART NO.	SEG	HAND	COLOR
RLKCPC2SEGLH	2	LH	Titanium
RLKCPC2SEGRH	2	RH	Titanium

UNI LOCK - 2 X HALF ROUND PCDS WITH 20 X 10 SEGMENTS

PART NO.	SEG	HAND	COLOR
RLHR2PCD-RH	2	RH	Metallic Blue
RLHR2PCD-LH	2	LH	Metallic Blue

UNI LOCK - 2 X MINI JET PCDS

PART NO.	SEG	HAND	COLOR
MJPCDRL2LH	2	LH	Metallic Blue
MJPCDRL2RH	2	RH	Metallic Blue

UNI LOCK - DOUBLE RAPIDA CAP CUTTER SEGMENTS - EXTREMELY SOFT BOND

PART NO.	SEG	GRIT	COLOR
RLRAPIDA2-30	2	30/40	Gold
RLRAPIDA2-50	2	50/60	Gold
RLRAPIDA2-60	2	60/80	Gold
RLRAPIDA2-120	2	120/140	Gold

UNI LOCK - CONTINUED

UNI LOCK - DOUBLE BAR SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
RLBKP2G18	2	16/20	Extremely Soft	Gold
RLBKP2G30	2	30/40	Extremely Soft	Gold
RLBKP2G60	2	60/80	Extremely Soft	Gold
RLBKP2G80	2	80/100	Extremely Soft	Gold
RLBKP2R18	2	16/20	Medium	Red
RLBKP2R30	2	30/40	Medium	Red
RLBKP2R60	2	60/80	Medium	Red
RLBKP2R80	2	80/100	Medium	Red
RLBKP2R120	2	120/140	Medium	Red
RLBKP2BK18	2	16/20	Hard	Black
RLBKP2BK30	2	30/40	Hard	Black
RLBKP2BK60	2	60/80	Hard	Black

UNI LOCK - TRIPLE PEAK SEGMENTS - MEDIUM BOND

PART NO.	SEG	COLOR
PEAK3RL	3	Gold

UNI LOCK - SHOES

PART NO.	DESCRIPTION
RLSTHREADED	Uni Lock Shoe - Threaded, Electroplated

UNI LOCK - RESIN HOLDERS

PART NO.	DESCRIPTION
RLRH80L	3" Resin Holder w/Lip

SLIM FIT

Syntec manufacture premium quality diamond tooling suitable for LAVINA grinding machines. Make your machine more productive with our range of metal bond and PCD options.

SLIM FIT - 2 X 1/4 ROUND PCDS

PART NO.	SEG	HAND	COLOR
SFKCPCD2RH	2	RH	Titanium
SFKCPCD2LH	2	LH	Titanium

SLIM FIT - 2 X 1/4 ROUND PCDS WITH STABILIZER SEGMENT

PART NO.	SEG	HAND	COLOR
SFKCPCD2SEGRH	2	RH	Titanium
SFKCPCD2SEGLH	2	LH	Titanium

SLIM FIT - 2 X HALF ROUND PCDS WITH 20X10 SEGMENTS

PART NO.	SEG	HAND	COLOR
SFHR2PCD-RH	2	RH	Metallic Blue
SFHR2PCD-LH	2	LH	Metallic Blue

SLIM FIT - CONTINUED

SLIM FIT - DOUBLE BAR SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
SFVBKP2G16	2	16/20	Soft	Gold
SFVBKP2G30	2	30/40	Soft	Gold
SFVBKP2G60	2	60/80	Soft	Gold
SFVBKP2G80	2	80/100	Soft	Gold
SFVBKP2G120	2	120/140	Soft	Gold
SFVBKP2R16	2	16/20	Medium	Red
SFVBKP2R30	2	30/40	Medium	Red
SFVBKP2R60	2	60/80	Medium	Red
SFVBKP2R80	2	80/100	Medium	Red
SFVBKP2R120	2	120/140	Medium	Red
SFVBKP2BK16	2	16/20	Hard	Black
SFVBKP2BK30	2	30/40	Hard	Black
SFVBKP2BK60	2	60/80	Hard	Black
SFVBKP2BK80	2	80/100	Hard	Black
SFSCARN218	2	16/20	Extremely Hard	Black
SFSCARN230	2	30/40	Extremely Hard	Black

SLIM FIT - SINGLE ROUND SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
SF12610G18	1	16/20	Soft	Red
SF12610G30	1	30/40	Soft	Red
SF12610G70	1	60/80	Soft	Red
SF12610G120	1	120/140	Soft	Red
SF12610R18	1	16/20	Medium	Grey
SF12610R30	1	30/40	Medium	Grey
SF12610R70	1	60/80	Medium	Grey
SF12610R120	1	120/140	Medium	Grey
SF12610BK30	1	30/40	Hard	Yellow
SF12610BK70	1	60/80	Hard	Yellow
SF12610BK120	1	120/140	Hard	Yellow

SLIM FIT - DOUBLE ROUND SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
SF22610G30	2	30/40	Soft	Red
SF22610G70	2	60/80	Soft	Red
SF22610G120	2	120/140	Soft	Red
SF22610R30	2	30/40	Medium	Grey
SF22610R70	2	60/80	Medium	Grey
SF22610R120	2	120/140	Medium	Grey
SF22610BK30	2	30/40	Hard	Yellow
SF22610BK70	2	60/80	Hard	Yellow
SF22610BK120	2	120/140	Hard	Yellow
SF22610VH30	2	30/40	White	White

SLIM FIT - SINGLE RAPIDA CAP CUTTER SEGMENTS - EXTREMELY SOFT BOND

PART NO.	SEG	GRIT	COLOR
SFRAPIDA1-30	1	30/40	Gold
SFRAPIDA1-50	1	50/60	Gold

SLIM FIT - DOUBLE RAPIDA CAP CUTTER SEGMENTS - EXTREMELY SOFT BOND

PART NO.	SEG	GRIT	COLOR
SFRAPIDA2-30	2	30/40	Gold
SFRAPIDA2-50	2	50/60	Gold
SFRAPIDA2-60	2	60/80	Gold
SFRAPIDA2-120	2	120/140	Gold

SLIM FIT - DOUBLE PEAK SEGMENTS - MEDIUM BOND

PART NO.	SEG	GRIT	COLOR
SF-PEAK-2	2	16/20	Gold

SLIM FIT - CONTINUED

SLIM FIT - SINGLE X SEGMENTS - MEDIUM BOND

PART NO.	SEG	GRIT	COLOR
SFXP1R30	1	30/40	Grey
SFXP1R50	1	50/60	Grey

SLIM FIT - DOUBLE X SEGMENTS - MEDIUM BOND

PART NO.	SEG	GRIT	COLOR
SFXP2R30	2	30/40	Grey
SFXP2R50	2	50/60	Grey

SLIM FIT - SHOES

PART NO.	DESCRIPTION
SFSTHREADED	Slim Fit Shoe -Threaded, Electroplated

SLIM FIT - HOLDERS

PART NO.	DESCRIPTION
SFHOLDER-M	Slim Fit Holder

SLIM FIT - RESIN HOLDERS

PART NO.	DESCRIPTION
SFRH80L	3” w/ Lip & Lavina fitting

TC TOOLING

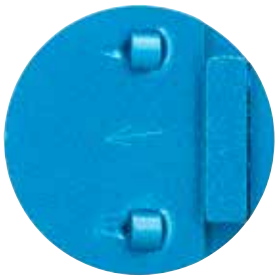
Syntec manufacture premium quality diamond tooling suitable for TERRCO grinders. Make your machine more productive with our range of metal bond and PCD options.

TC - HALF ROUND PCDS

PART NO.	SEG	HAND	COLOR
TCHR2PCD- LH	2	LH	Metallic Blue
TCHR2PCD- RH	2	RH	Metallic Blue
TCHR2PCD- LHU	2	LH	Metallic Blue
TCHR2PCD- RHU	2	RH	Metallic Blue

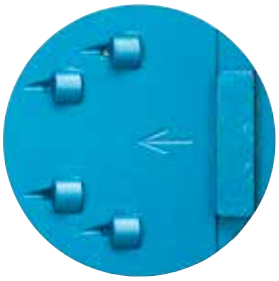
TC - LARGE 2 JET PCDS

PART NO.	SEG	HAND	COLOR
LJPCDTC2LH	2	LH	Metallic Blue
LJPCDTC2RH	2	RH	Metallic Blue



TC - 2.5" 2X 1/4 ROUND PCDS WITH STABILIZER SEGMENT

PART NO.	SEG	HAND	COLOR
BKPCDTCLH	2	LH	Metallic Blue
BKPCDTCRH	2	RH	Metallic Blue



TC - 3" 4X 1/4 ROUND PCDS WITH STABILIZER SEGMENT

PART NO.	SEG	HAND	COLOR
BKPCDTCLH	2	LH	Metallic Blue
BKPCDTCRH	2	RH	Metallic Blue

TC TOOLING - CONTINUED

TC - GREAT BITE PCDS

PART NO.	SEG	HAND	COLOR
GB76TCL	4	LH	Titanium
GB76TCR	4	RH	Titanium

TC - DOUBLE RAPIDA CAP CUTTER SEGMENTS - EXTREMELY SOFT BOND

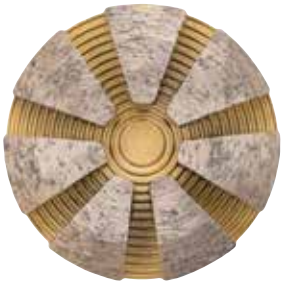
PART NO.	SEG	GRIT	COLOR
TCRAPIDA2-30	2	30/40	Gold
TCRAPIDA2-50	2	50/60	Gold
TCRAPIDA2-60	2	60/80	Gold
TCRAPIDA2-120	2	120/140	Gold

TC - SINGLE S SEGMENTS - MEDIUM BOND

PART NO.	SEG	GRIT	COLOR
TCTR1R18	1	16/20	Red

TC - DOUBLE S SEGMENTS - MEDIUM BOND

PART NO.	SEG	GRIT	COLOR
TCTR2R18	2	16/20	Red



TC - 2.5" BEVELED PUCKS

PART NO.	SEG	GRIT	BOND	COLOR
SCARNGO7-18TC	7	16/20	Extremely Soft	Gold
SCARNGO7-30TC	7	30/40	Extremely Soft	Gold
SCARNG07-60TC	7	60/80	Extremely Soft	Gold
SBPR718-TC	7	16/20	Medium	Red
SBPR730-TC	7	30/40	Medium	Red
SBPR760-TC	7	60/80	Medium	Red
SBPR780-TC	7	80/100	Medium	Red
SBPR7120-TC	7	120/140	Medium	Red
SBPB718-TC	7	16/20	Hard	Black
SBPB730-TC	7	30/40	Hard	Black
SBPB760-TC	7	60/80	Hard	Black
SBPB780-TC	7	80/100	Hard	Black

TC - 2.5" NON BEVELED PUCKS - EXTREMELY HARD BOND

PART NO.	SEG	GRIT	COLOR
SCARNB7-18TC	7	16/20	Black
SCARNB7-30TC	7	30/40	Black
SCARNB7-60TC	7	60/80	Black

TC - SHOES

PART NO.	DESCRIPTION
TCSTHREADED	TC Shoe - Threaded, Electroplated

TC - RESIN HOLDERS

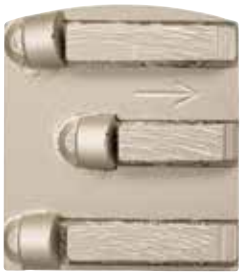
PART NO.	DESCRIPTION
TCRH80-L	3" Resin Holder for Terrco w/Lip

ITS TOOLING

Syntec manufacture premium quality diamond tooling suitable for STI grinders. Make your machine more productive with our range of metal bond and PCD options.

ITS - 2X 1/2 ROUND PCD PUCKS WITH STABILIZER SEGMENTS

PART NO.	SIZE	HAND	COLOR
ITSBKPCDPH2-LH	3″	LH	Metallic Blue
ITSBKPCDPH2-RH	3″	RH	Metallic Blue

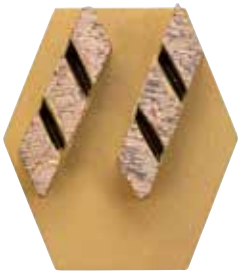


ITS - 3 SEGMENTS WITH 13.44 HALF PCDS

PART NO.	SEG	HAND	COLOR
ITS3PCDSEG-LH	3	LH	Titanium
ITS3PCDSEG-RH	3	RH	Titanium

ITS - DOUBLE RAPIDA SEGMENTS

PART NO.	SEG	GRIT	COLOR
ITS2RAPIDA-30LH	2	30/40	Gold
ITS2RAPIDA-30RH	2	30/40	Gold
ITS2RAPIDA-50LH	2	50/60	Gold
ITS2RAPIDA-50RH	2	50/60	Gold



ITS - DOULBE RAPIDA SEGMENTS - EXTRA SOFT

PART NO.	SEG	GRIT	COLOR
ITS2RAPIDAXL-30LH	2	30/40	Gold
ITS2RAPIDAXL-30RH	2	30/40	Gold

ITS - SINGLE S SEGMENTS - MEDIUM BOND

PART NO.	SEG	GRIT	COLOR
ITSTR1R18	1	16/20	● Red

ITS - DOUBLE S SEGMENTS - MEDIUM BOND

PART NO.	SEG	GRIT	COLOR
ITSTR2R18	2	30/40	● Red

ITS - 4 SEGMENT BEVELED TWISTER PUCKS - MEDIUM BOND

PART NO.	SIZE	GRIT	COLOR
ITSBTPR430	3″	30/40	● Red
ITSBTPR460	3″	60/80	● Red
ITSBTPR4120	3″	120/140	● Red

ITS - 8 SEGMENT BEVELED PUCKS - MEDIUM BOND

PART NO.	SIZE	GRIT	COLOR
ITSBPR818	3″	16/20	● Red
ITSBPR830	3″	30/40	● Red
ITSBPR850	3″	50/60	● Red
ITSBPR860	3″	60/80	● Red
ITSBPR880	3″	120/140	● Red

ITS - 10 SEGMENT BEVELED PUCKS - MEDIUM BOND

PART NO.	SIZE	GRIT	COLOR
ITSPUCK10-18-6	3″	16/20	● Red
ITSPUCK10-30-6	3″	30/40	● Red
ITSPUCK10-70-6	3″	60/80	● Red
ITSPUCK10-120-6	3″	120/140	● Red

ITS TOOLING - CONTINUED

ITS - 5 & 6 SEGMENT NON BEVELED PUCKS - EXTREMELY SOFT BOND

PART NO.	SIZE	GRIT	COLOR
ITSPNB76518GO	3″	16/20	Gold
ITSPNB76630GO	3″	30/40	Gold

ITS - 8 & 10 SEGMENT NON BEVELED PUCKS - EXTREMELY SOFT BOND

PART NO.	SIZE	GRIT	COLOR
ITSPNB76830GO	3″	30/40	Gold
ITSPNB76880GO	3″	80/100	Gold
ITSPNB761080GO	3″	80/100	Gold

ITS - 5 SEGMENT NON BEVELED PUCKS - EXTREMELY HARD BOND

PART NO.	SIZE	GRIT	COLOR
SCARITSNB18	3″	16/20	Black

ITS - 8 SEGMENT NON BEVELED PUCKS - EXTREMELY HARD BOND

PART NO.	SIZE	GRIT	COLOR
SCARITSNB30	3″	30/40	Black
SCARITSNB60	3″	60/80	Black
SCARITSNB80	3″	80/100	Black

ITS - SINGLE ARROW SEGMENTS - MEDIUM BOND

PART NO.	GRIT	HAND	COLOR
ITSBKAP1R30-L	30/40	LH	Red
ITSBKAP1R30-R	30/40	RH	Red

ITS - DOUBLE ARROW SEGMENTS - MEDIUM BOND

PART NO.	GRIT	HAND	COLOR
ITSBKA2R30-L	30/40	LH	Red
ITSBKAP2R30-R	30/40	RH	Red

ITS - DOUBLE ARROW SEGMENTS - MEDIUM BOND

PART NO.	GRIT	HAND	COLOR
ITSAP2ABP30-L	30/40	LH	Grey
ITSAP2ABP30-R	30/40	RH	Grey

ITS - SHOES

PART NO.	DESCRIPTION
ITSSTHREADED	ITS Shoe - Threaded, Electroplated

ITS - RESIN HOLDERS

PART NO.	DESCRIPTION
ITSRH80-L	ITS 3" Velcro Resin Holder w/ Lip

HTB TOOLING

Syntec manufacture premium quality diamond tooling suitable for HTC machines. Make your machine more productive with our range of metal bond and PCD options.

HTB - DOUBLE BAR SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
HTBP2G18	2	16/20	Soft	Gold
HTBP2G30	2	30/40	Soft	Gold
HTBP2R18	2	16/20	Medium	Red
HTBP2R30	2	30/40	Medium	Red
HTBP2B18	2	16/20	Hard	Black
HTBP2B30	2	30/40	Hard	Black

HTB - DOUBLE RAPIDA CAP CUTTER SEGMENTS - EXTREMELY SOFT BOND

PART NO.	SIZE	GRIT	COLOR
HTBRAPIDA2-30	2	30/40	Gold
HTBRAPIDA2-50	2	50/60	Gold

HTB - SINGLE S SEGMENTS

PART NO.	SEG	GRIT	BOND	COLOR
HTBRS1G18	2	16/20	Soft	Gold
HTBRS1R18	1	16/20	Medium	Red
HTBRS1BK18	1	16/20	Hard	Black

HTB - SHOES

PART NO.	DESCRIPTION
HTCSTHREADED	HTC Shoe - Threaded, Electroplate

HTB - RESIN HOLDERS

PART NO.	DESCRIPTION
HTCRH80-L	3" HTC Resin Holder w/Lip

RESINS

Syntec's polishing pads are designed to cover the full range of equipment and applications in the industry. Various configurations are available to get the best performance. Our line of resin hybrids and transitional style bonds each have their own characteristics whilst maintaining efficiency, removing scratches and creating a high shine.

RESIN PUCKS	
3" RESIN PUCKS	
PART NO.	**GRIT**
PTD7630	30
PTD7650	50
PTD76100	100
PTD76200	200
PTD76400	400
PTD76760	800
PTD761500	1500
PTD763000	3000

RESIN PUCKS	
3" SEMI METAL RESIN PUCKS	
PART NO.	**GRIT**
MRPTD7630	30
MRPTD7650	50
MRPTD76100	100
MRPTD76200	200
MRPTD76400	400

RESIN PUCKS	
3" HURRICANE RESIN PUCKS	
PART NO.	**GRIT**
DTW8030	30
DTW8050	50
DTW80100	100
DTW80200	200
DTW80400	400
DTW80800	800
DTW801500	1500
DTW803000	3000

RESINS - CONTINUED

RESIN PUCKS

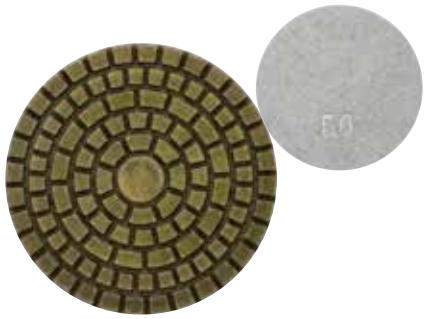
3" SHINER RESIN PUCKS

PART NO.	GRIT
SRP760030	30
SRP760050	50
SRP760100	100
SRP760200	200
SRP760400	400
SRP760800	800
SRP761500	1500
SRP763000	3000

RESIN PUCKS

3" RESIN / METAL HYBRID PUCKS

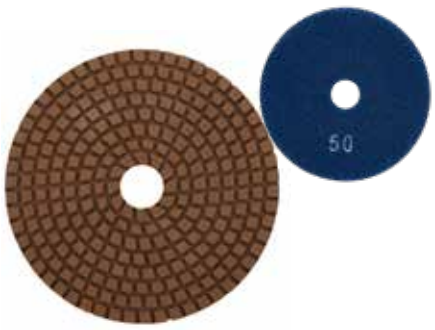
PART NO.	GRIT
MRSP760030	30
MRSP760050	50
MRSP760100	100
MRSP760200	200
MRSP760400	400



RESIN PUCKS

3" HIGH GLOSS RESIN PUCKS

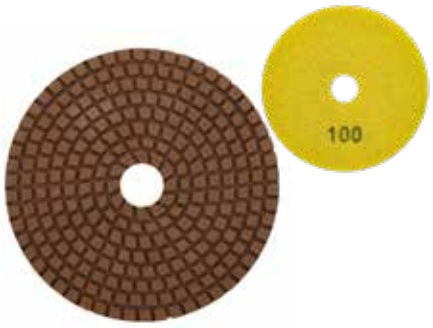
PART NO.	GRIT
ITS7550	50
ITS75100	100
ITS75200	200
ITS75400	400
ITS75800	800
ITS751500	1500
ITS753000	3000



NATURAL COLOR HAND HELD POLISHING PADS WET / DRY

3" POLISHING PADS

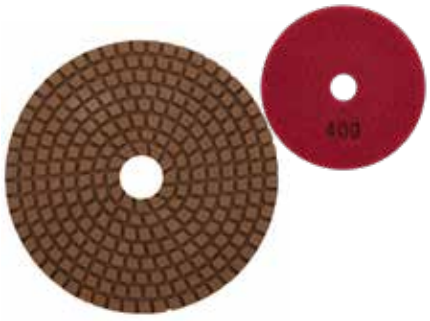
PART NO.	GRIT
SC9P30050	50
SC9P30100	100
SC9P30200	200
SC9P30400	400
SC9P30800	800
SC9P31500	1500
SC9P33000	3000



NATURAL COLOR HAND HELD POLISHING PADS WET / DRY

4" POLISHING PADS

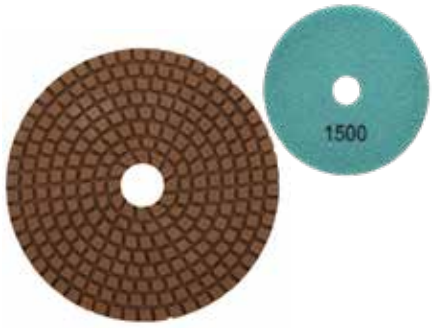
PART NO.	GRIT
SC9P40050	50
SC9P40100	100
SC9P40200	200
SC9P40400	400
SC9P40800	800
SC9P41500	1500
SC9P43000	3000



NATURAL COLOR HAND HELD POLISHING PADS WET / DRY

5" POLISHING PADS

PART NO.	GRIT
SC9P50050	50
SC9P50100	100
SC9P50200	200
SC9P50400	400
SC9P50800	800
SC9P51500	1500
SC9P53000	3000



NATURAL COLOR HAND HELD POLISHING PADS WET / DRY

7" POLISHING PADS

PART NO.	GRIT
SC9P7050	50
SC9P7010	100
SC9P7020	200
SC9P7040	400
SC9P7080	800
SC9P7150	1500
SC9P7300	3000

WHITE HAND HELD RESIN PADS WET / DRY

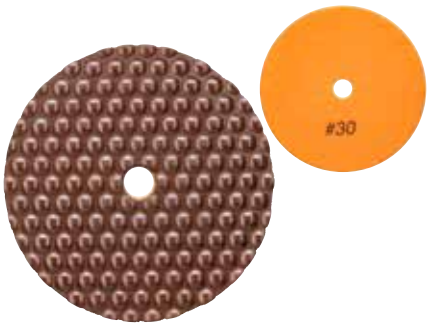
5" RESIN PADS (ELIMINATE COLOR TRANSFER)

PART NO.	GRIT
SC9P50050W	50
SC9P50100W	100
SC9P50200W	200
SC9P50400W	400
SC9P50800W	800
SC9P51500W	1500
SC9P53000W	3000

WHITE HAND HELD RESIN PADS WET / DRY

7" RESIN PADS (ELIMINATE COLOR TRANSFER)

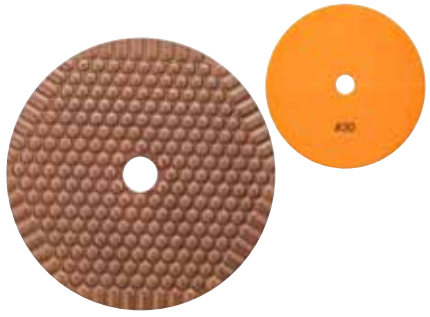
PART NO.	GRIT
SC9P7050W	50
SC9P7010W	100
SC9P7020W	200
SC9P7040W	400
SC9P7080W	800
SC9P7150W	1500
SC9P7300W	3000



HONEYCOMB HAND HELD RESIN PADS WET / DRY

5" RESIN PADS

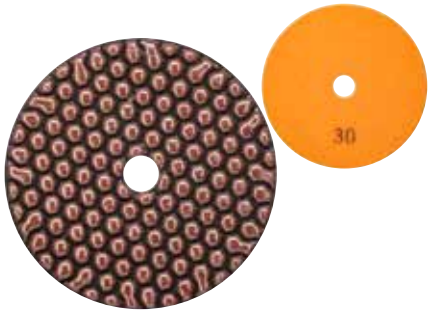
PART NO.	GRIT
HC1250030-S	30
HC1250050-S	50
HC1250100-S	100
HC1250200-S	200
HC1250400-S	400
HC1250800-S	800
HC1251500-S	1500
HC1253000-S	3000



HONEYCOMB HAND HELD RESIN PADS WET / DRY

7" RESIN PADS

PART NO.	GRIT
HC1780030-S	30
HC1780050-S	50
HC1780100-S	100
HC1780200-S	200
HC1780400-S	400
HC1780800-S	800
HC1781500-S	1500
HC1783000-S	3000



HONEYCOMB HAND HELD RESIN PADS WET / DRY

5" PREMIUM RESIN PADS

PART NO.	GRIT
HC1250030-P	30
HC1250050-P	50
HC1250100-P	100
HC1250200-P	200
HC1250400-P	400
HC1250800-P	800
HC1251500-P	1500
HC1253000-P	3000

RESINS - CONTINUED

TRANSITIONAL DIAMOND PADS

3" TRANSITIONAL

PART NO.	DESCRIPTION
CP766018	18 Grit - 6 pie
CP766030	30 Grit - 6 pie
CP766050	50 Grit - 6 pie
CP766100	100 Grit - 6 pie
CP765200	200 Grit - 5 pie
CP766400	400 Grit - 6 pie

RECTANGULAR POLISHING PADS

HAND HELD

PART NO.	GRIT
HPPZ60	60
HPPZ120	120
HPPZ200	200
HPPZ400	400
HPPZ800	800
HPPZ1500	1500
HPPZ3000	3000

ACCESSORIES

3" RESIN PUCK / PAD

PART NO.	DESCRIPTION
80HVELCRO	Sticky Back Replacement Velcro
FRISER80	Foam Riser

VELCRO BACKING PADS

5/8-11 THREAD VELCRO BACKING PADS

PART NO.	DIAM	DESCRIPTION
SC9P0003	3"	Flexible - Black
SC9P0004	4"	Flexible - Black
SC9P0004R	4"	Rigid - Black
SC9P0005	5"	Flexible - Black
SC9P0005P	5"	Flexible - Prem. Green
SC9P0005R	5"	Rigid - Black
ALUM125	5"	Aluminium
SC9P0007	7"	Flexible - Black
SC9P0007R	7"	Rigid - Black
ALUM178	7"	Aluminium

BURNISHING PADS

Designed for the final steps of polishing, achieving an even higher level of shine than resins.

PART NO	DIAM	GRIT
SPSP228-400	9"	400
SPSP228-800	9"	800
SPSP228-1500	9"	1500
SPSP228-3000	9"	3000
SPSP228-BUFF	9"	BUFF
SPSP300-400	12"	400
SPSP300-800	12"	800
SPSP300-1500	12"	1500
SPSP300-3000	12"	3000
SPSP300-BUFF	12"	BUFF
SPSP350-400	14"	400
SPSP350-800	14"	800
SPSP350-1500	14"	1500
SPSP350-3000	14"	3000
SPSP350-BUFF	14"	BUFF
SPSP406-400	16"	400
SPSP406-800	16"	800
SPSP406-1500	16"	1500
SPSP406-3000	16"	3000
SPSP406-BUFF	16"	BUFF
SPSP508-400	20"	400
SPSP508-800	20"	800
SPSP508-1500	20"	1500
SPSP508-3000	20"	3000
SPSP508-BUFF	20"	BUFF

PART NO	DIAM	GRIT
SPSP533-400	21"	400
SPSP533-800	21"	800
SPSP533-1500	21"	1500
SPSP533-3000	21"	3000
SPSP533-BUFF	21"	BUFF
SPSP610-400	24"	400
SPSP610-800	24"	800
SPSP610-1500	24"	1500
SPSP610-3000	24"	3000
SPSP610-BUFF	24"	BUFF
SPSP686-400	27"	400
SPSP686-800	27"	800
SPSP686-1500	27"	1500
SPSP686-3000	27"	3000
SPSP686-BUFF	27"	BUFF

CRACK CHASING / TUCK POINT

CRACK CHASING Diamond Blades feature wedge shaped segments for incredible cutting speed and exceptional blade life and are designed for cleaning out and repairing / widening cracks or imperfections on a wide range of masonry surfaces.

TUCK POINT Diamond Blades are used for fast removal of mortar joints and preparation of any abrasive surfaces like sandstone, lime, render etc. Perfect for routing decorative joints into stone work where cutting the stone proves too time consuming or too difficult

Wet or dry use with angle grinders, circular saws and tuck pointers

CRACK CHASING BLADES

PART NO.	ARBOR	DPH	COLOR
SCC0499L	4″ x .250 x 5/8-7/8	-	● Black
SCC0499WL	4″ x .375 x 5/8-7/8	-	● Black
SCC04599L	4.5″ x .250 x 5/8-7/8	-	● Black
SCC04599WL	4.5″ x .375 x 5/8-7/8	-	● Black
SCC0599L	5″ x .250 x 5/8-7/8	-	● Black
SCC0599WL	5″ x .375 x 5/8-7/8	-	● Black
SCC0699WL	6″ x .375 x 5/8-7/8	DPH	● Black
SCC0799L	7″ x .250 x 5/8-7/8	-	● Black
SCC0799WL	7″ x .375 x 5/8-7/8	-	● Black

JOINT CLEAN-OUT / TUCK POINT BLADES

PART NO.	ARBOR	DPH	COLOR
SB4JB22	4″ x .090 x 5/8-7/8	-	● Black
SB4JB31	4″ x .125 x 5/8-7/8	-	● Black
SB4JB6P	4″ x .250 x 5/8-7/8	-	● Black
SB4JB95	4″ x .375 x 5/8-7/8	-	● Black
SB45JB22	4.5″ x .090 x 5/8-7/8	-	● Black
SB45JB31	4.5″ x.125 x 5/8-7/8	-	● Black
SB45JB6	4.5″ x .250 x 5/8-7/8	-	● Black
SB45JB95	4.5″ x .375 x 5/8-7/8	-	● Black
SB5JB22	5″ x .090 x 5/8-7/8	-	● Black
SB5JB6P	5″ x .250 x 5/8-7/8	-	● Black
SB5JB95	5″ x .375 x 5/8-7/8	-	● Black
SB7JB22	7″ x 090 x 5/8-7/8 UA	-	● Black
SB7JB31	7″ x .125 x 5/8-7/8 UA	-	● Black
SB7JB6	7″ x .250 x 5/8-7/8 UA	-	● Black
SB7JB95	7″ x .375 x 5/8-7/8 UA	-	● Black
SB8JB22	8″ x .090 x 5/8-7/8	DPH	● Black
SB8JB31	8″ x .125 x 5/8-7/8	DPH	● Black
SB8JB47	8″ x .187 x 5/8-7/8	DPH	● Black
SB8JB6P	8″ x .250 x 5/8-7/8	DPH	● Black
SB8JB95P	8″ x .375 x 5/8-7/8	DPH	● Black
SB10JB22P	10″ x .090 x 5/8-7/8	DPH	● Black
SB10JB31P	10″ x .125 x 5/8-7/8	DPH	● Black
SB10JB47	10″ x .187 x 5/8-7/8	DPH	● Black
SB10JB6P	10″ x .250 x 5/8-7/8	DPH	● Black

GENERAL PURPOSE BLADES

Syntec's GENERAL PURPOSE BLADES are used for a wide range of applications, from cutting cured concrete to stone and masonry.

Wet or dry use with angle grinders, circular saws and tuck pointers.

GENERAL PURPOSE BLADES WITH AND WITHOUT DPH

PART NO.	DESCRIPTION	COLOR
SB4GP95	4″ x .375 x 10mm general purpose LW 7/8-5/8	Silver
SB4GP6	4″ x .250 x 10mm general purpose LW 7/8-5/8	Silver
SB4GP31	4″ x .125 x 10mm general purpose LW 7/8-5/8	Silver
SB4GP22	4″ x .090 x 10mm general purpose LW 7/8-5/8	Silver
SB45GP95	4.5″ x .375 x 10mm general purpose LW 7/8-5/8	Silver
SB45GP6	4.5″ x .250 x 10mm general purpose LW 7/8-5/8	Silver
SB45GP31	4.5″ x .125 x 10mm general purpose LW 7/8-5/8	Silver
SB45GP22	4.5″ x .090 x 10mm general purpose LW 7/8-5/8	Silver
SB5GP95	5″ x .375 x 10mm general purpose LW 7/8-5/8	Silver
SB5GP6	5″ x .250 x 10mm general purpose LW 7/8-5/8	Silver
SB5GP31	5″ x .125 x 10mm general purpose LW 7/8-5/8	Silver
SB5GP22	5″ x .090 x 10mm general purpose LW 7/8-5/8	Silver
SB6GP6	6″ x .250 x 10mm general purpose LW 7/8-5/8	Silver
SB6GP31	6″ x .125 x 10mm general purpose LW 7/8-5/8	Silver
SB6GP22	6″ x .090 x 10mm general purpose LW 7/8-5/8	Silver
SB7GP95	7″ x .375 x 10mm general purpose LW 7/8-5/8	Silver
SB7GP6	7″ x .250 x 10mm general purpose LW 7/8-5/8	Silver
SB7GP47	7″ x .187 x 10mm general purpose LW 7/8-5/8	Silver
SB7GP31	7″ x .125 x 10mm general purpose LW 7/8-5/8	Silver
SB7GP22	7″ x .090 x 10mm general purpose LW 7/8-5/8 universal	Silver
SB8GP31	8″ x .125 x 10mm general purpose LW 1″-7/8 with drive pin	Silver
SB8GP22	8″ x .090 x 10mm general purpose LW 1″-7/8 with drive pin	Silver
SB10GP6	10″ x .250 x 10mm general purpose LW 1″-7/8 with drive pin	Silver
SB10GP47	10″ x .187 x 10mm general purpose LW 1″-7/8 with drive pin	Silver
SB10GP31	10″ x .125 x 10mm general purpose LW 1″-7/8 with drive pin	Silver
SB10GP22	10″ x .090 x 10mm general purpose LW 1″-7/8 with drive pin	Silver

TROUBLESHOOTING - BLADES

The majority of issues with diamond tools come up for one of the following reasons:

- The tool wasn’t matched to the job
- The tool wasn’t used correctly
- The machine is faulty

Learn more about potential causes and how to solve issues.

BLADES - TROUBLE SHOOTING

PROBLEM	DESCRIPTION	CAUSE	SOLUTION
Short blade life	There are a number of reasons the life of a blade can be shortened. Generally speaking, you should pay attention to the following:	The bond is too soft, especially when cutting more abrasive materials such as asphalt, green concrete and sandstone.	Make sure to select the right blade for your application, i. e. one with a harder bond.
		Dry cutting. This usually leads to a shorter life than wet cutting.	Cut with the addition of water and ensure sufficient amounts are reaching the cutting area on both sides of the blade.
		Excessive cutting into the subbase. This usually differs from the material the blade is intended for and can damage it.	Keep an eye on the cutting depth and avoid cutting into the subbase.
		Applying too much pressure when cutting.	Keep the machine steady and allow the blade to do the cutting.
		Too low operating speeds.	Check the blade's ideal RPM.
Burning / discolouration	If your blade has turned black or blueish, this is an indication that it has overheated. Burning is one of the most common issues and can lead to several others such as loss of tension or cracks in the core. Overheating typically occurs when cutting harder materials.	Insufficient water supply to cutting surface of a wet cut blade.	Increase water flow, check the direction of the water stream and make sure there are no blockages. Allow the blade to cool by letting it run at full speed outside of the cut.
		Excessive pressure on dry cut blades.	Reduce the pressure on the blade and avoid cutting too deep.
Glazing (blade won't cut)	Over time a blade's bond wears away, exposing diamonds to continue cutting. If however, the bond doesn't wear away as intended, diamonds no longer get exposed, resulting in the blade slowing down until eventually, it stops cutting. This smoothing of the blade's cutting edge is referred to as glazing or polishing.	Blade bond too hard for material - bond doesn't wear away appropriately to expose diamonds.	Choose a blade with a softer bond.
		Material too hard.	Dress or sharpen the blade with a soft concrete block or abrasive wheel to expose diamonds. If reoccurring, switch to a blade with a softer bond.
		Too much coolant.	Reduce the amount of coolant.
		Blade speed too high.	Reduce operating speed.
		Machine not powerful enough for specification.	Switch to a machine with higher horsepower, check and tighten belts.
		Loose drive belt.	Check tension on the drive belt.
		Blade mounted in the wrong direction.	Check the direction of the arrow on the blade. If the arrow is no longer visible check which way the bond tail behind a diamond is facing. Mount so that the diamond sits ahead of the bond tail when turning.

BLADES - TROUBLE SHOOTING - CONTINUED

PROBLEM	DESCRIPTION	CAUSE	SOLUTION
Segment loss	In the unlikely event of segments falling off a blade, these can be the causes:	On stone or masonry, the material is not being held firmly enough which can lead to the blade twisting or jamming.	The material must be held in place and not forced.
		If the saw isn't properly aligned the operator may "overcorrect" the cutting line, causing the blade to jam and twist.	Check the blade's alignment.
		Overheating due to insufficient water supply - burning.	Increase water supply.
		Continuous dry cutting.	Let the blade run freely every few minutes.
		Undercutting – the core is worn away resulting in the weld between the segment and the core being weakened.	Replace blade and increase water supply. If the material is very abrasive opt for a harder bond. Inspect blade periodically.
		The blade is cutting out of round, resulting in a pounding motion.	Replace blade as well as bearing, realign shaft or replace blade mounting arbour.
		The bond is too hard for the material resulting in separation due to impact, fatigue or frictional heat.	Use a blade with correct specifications for the application.
		The blade has been dropped, damaging the core or segment.	Ensure blades are handled carefully.
Undercutting	If highly abrasive material grinds against the blade's core. This can lead to the core wearing away faster than the segments, just beneath the segments. Over time undercutting can cause segment loss.	The core wears faster than segments due to highly abrasive material grinding against it.	Use a blade with undercut protection, supply adequate amounts of water to the core and avoid cutting into the subbase. Flush out the cut to remove debris and slurry.
Overexposed diamonds / premature diamond loss	Over time a blade's bond wears away, exposing diamonds to continue cutting. If however, the bond wears away too quickly the diamonds within the bond aren't supported anymore and fall out before the diamond is fractured or dull.	The bond is too soft for the diamond quality.	Choose a blade with a harder bond.
		The bond is too soft for the material.	Choose a blade with a harder bond.
Loss of tension	When a blade loses its tension it will appear to wobble as the machine spins it.	Misaligned or poorly aligned saw.	Align saw correctly.
		The blade is too hard for material.	Choose a softer bond to reduce stress on the blade.
		The material is not kept in place during cut resulting in blade twisting.	The material must be held in place firmly.
		The blade is being used at incorrect RPM.	Check intended RPM and whether the spindle is rotating accordingly.
		Overheating of the core due to the blade spinning on the arbour.	Tighten blade shaft nut, check drive pin is working properly and ensure adequate water supply.
		Overheating of the core due to friction caused by too rapid or uneven wear of the rim.	Choose a blade with more side clearance or one that is better suited to the material.

BLADES - TROUBLESHOOTING - CONTINUED

PROBLEM	DESCRIPTION	CAUSE	SOLUTION
Loss of tension *continued*	When a blade loses its tension it will appear to wobble as the machine spins it.	The blade flexes due to too small flanges or flanges of different diameters.	Use adequate and equally sized flanges.
		The blade is not mounted correctly on the shaft resulting in bent flanges when tightened.	Place blade securely on arbour shoulder until outside flange and nut are tightened.
Blade out of round	If the blade doesn't run smoothly, pay attention to the following:	The engine is not properly tuned, leading to surges in blade rotation.	Tune the engine.
		The blade is running eccentrically due to worn shaft bearings.	Replace the bearings. Lubricate the machine.
		The machine's spindle may be damaged by previous blades.	Ensure the condition of the spindle.
		The bore is damaged.	Re-bore the blade if it is still in good condition.
		The bore is worn or the wrong size.	Replace the arbour bushing or shaft.
		The bond is too hard for the material, causing the machine to pound and therefore leading to irregular wear.	Choose a blade with a softer bond.
		The flange is not properly tightened resulting in the blade turning or rotating on the shaft.	Tighten the flange.
		The flange is worn or dirty so that the blade can't be clamped properly.	Clean or replace the flange.
		The blade is not mounted correctly leading to hammering and distortion.	Ensure the shaft has the correct diameter and that the pinhole slides over the drive pin.
Excessive wear	The diamonds on a blade can become over-exposed if the wrong specification has been chosen. This can lead to excessive wear and impact the blade's lifespan.	A wrong blade specification on highly abrasive material.	Choose a harder bond.
		Insufficient coolant, resulting in excessive wear in the centre of the segment.	Check that the water supply is adequate.
		The drive belt is loose, leading to a slower speed and softening of the specification.	Tension the belt or replace it if it is worn.
		The blade has lost its shape due to poor bearings or a worn spindle.	Check the bearings and spindle and replace them if they are worn.
		The cutting speed is too fast.	Reduce the cutting speed.
		The blade is misaligned.	Check the alignment of the blade and machine.
		The speed of the spindle isn't high enough.	Ensure the drive spindle is rotating at the right speed.

BLADES - TROUBLESHOOTING - CONTINUED

PROBLEM	DESCRIPTION	CAUSE	SOLUTION
Cracks in core	When the blade is subjected to extreme pressure and metal fatigue, the core can bend, flex and eventually crack. **WARNING:** **Never use a cracked blade!**	The bond is too hard for the material being cut.	Choose a blade with a softer bond.
		Improper operation - excessive cutting pressure or jamming/ twisting of blade resulting in the core flexing or bending.	Apply steady, even pressure without twisting the blade during the cut.
		Inadequate water supply.	Increase the water supply.
		Overheating due to incorrect use of dry blade (continuous use or deep cutting).	Allow the blade to cool down in between and ensure adequate airflow.
		Worn shafts or damaged bearings.	Check shaft and bearings and replace if needed.
		Mismounted blade, causing it to flutter.	Check the correct fit.
		Blade no longer steady due to loss of tension.	Replace blade, tighten shaft nut, check the operating speed as well as the drive pin.
Cracks in segments	When used incorrectly, the blade's segments may crack.	The blade is too hard for the material.	Choose a blade with a softer bond.
		The cutting speed is too fast.	Reduce the cutting speed.
Uneven segment wear	If the segments are only worn on one side, this can have an impact on the blade's side clearance.	An insufficient water supply to one side of the blade.	Check that the water is distributed evenly.
		An equipment issue is causing the blade to wear out of round.	Replace the bearings, worn arbour shaft or misaligned spindle.
		The blade is misaligned.	Check the wheels and their alignment on floor saws. Check the carriage alignment on masonry bench saws.
		The bond is too hard for the material being cut.	Choose a blade with a softer bond.
Mismounting	Not mounting the blade correctly, can lead to a number of issues when using it.	The blade flanges are not properly tightened or worn out.	Tighten or replace the flanges.
The blade doesn't run steadily	For the cut to be nice and clean the blade needs to run steadily. Ensure it is being used correctly.	Improper speed.	Check the engine speed.
		The arbour hole doesn't match shaft size.	Ensure the shaft diameter is correct and that the bore is clean and flat.
		The blade is bent due to dropping or twisting it.	Switch to a new blade.

TROUBLESHOOTING - CORE BITS

PROBLEM	DESCRIPTION	CAUSE	SOLUTION
Overheating	Overheating typically happens when drilling harder materials.	There isn't enough water reaching the drilling area.	Increase the water flow through the core and the sides of the drill pointing at the drilling area.
Core bit won't cut	Over time a core bit's bond wears away, exposing diamonds to continue cutting. If however, the bond doesn't wear away as intended, diamonds no longer get exposed, resulting in the core bit slowing down until eventually, it stops cutting. This smoothing of the core bit's cutting edge is referred to as glazing or polishing.	The drilling speed is too high.	Reduce RPM speed.
		The drilling pressure is too low for RPM.	Increase drilling pressure and decrease speed of rotation.
		Segments have glazed as the material is too hard.	Redress or sharpen the core bit with soft concrete block or abrasive stone to expose diamonds. Drill 3-5 holes with plenty of water to expose new diamonds. Adding a little builder's sand down the hole can also have the same effect - run the drill at a slower speed, with reduced downwards pressure, so that an abrasive paste forms that will sharpen the segments. If recurring, select a core bit with a softer bond.
		The water pressure may be too high, resulting in a pillow effect, preventing the core bit to contact the material properly.	Decrease the water flow and make sure the water is evenly distributed. The water should be milky/cloudy.
		The machine is unstable or not fixed properly.	Tighten anchor and ensure stability.
		The drill motor isn't powerful enough.	Ensure the machine's horsepower is high enough and match it to the drilling diameter.
		Excessive play within the carriage guides.	Adjust the carriage on the side to reduce play.
		Material core (plug) is stuck inside of core bit.	Check inside of core bit.
Segment loss	In the unlikely event of segments falling off a core bit, these can be the causes:	Bond is too hard, resulting in the bit bouncing.	Lower speed or use a core bit with a softer bond.
		Overheating.	Increase water supply.
		Drill and core bit are moving while drilling.	Hold the drill firmly or mount it on a stand.
		The hole is cluttered with debris.	Flush out debris, rebar fragments, etc. with increased water supply.
		The drill rig is not properly anchored.	Tighten anchor or check vacuum pressure.
		Core bit is hitting loose rebar.	Decrease RPM until rebar is cut and increase water flow.
		Speed too high at start-up.	Start with a lower speed and gradually increase it.
Bent segments	Segments must be straight to cut as intended. Possible reasons for deformation are:	Segments subjected to too much pressure by the operator when drilling rebar.	Replace core bit and decrease pressure when cutting rebar.
		Insufficient coolant.	Increase water supply.
		The material is too hard.	Select a suitable core bit.

CORE BITS - TROUBLESHOOTING - CONTINUED

PROBLEM	DESCRIPTION	CAUSE	SOLUTION
Excessive segment wear	The diamonds in a segment can become over-exposed if the wrong specification has been chosen. This can lead to excessive wear and impact the bit's lifespan.	Insufficient coolant.	Increase water supply and check the water lines.
		Too low RPM.	Increase speed within recommended RPM.
		Too much motor power.	Adjust machine power to core bit diameter.
		Vibrating drill.	Ensure drill rig is secured firmly and stable. Check bearings, rollers, spindle and drill, etc. Tighten carriage guides.
		The specifications are not suitable for material or unexpected patches within it.	Choose core bit with the right specifications.
Excessive wear on steel tube	Excessive wear can lead to the tube thinning, decreasing the bit's life.	Vibrating drill.	Ensure the drill rig is secured firmly. Check bearings, rollers, etc.
		The barrel is warped or is no longer running true.	Replace barrel.
		The hole is cluttered with debris.	Flush out debris, rebar fragments, etc. with increased water supply.
		The barrel is misaligned to the drill.	Ensure barrel is aligned and centred on drill spindle.
Cracks in segments	When used incorrectly, the core bit's segments may crack.	The bond is too hard.	Decrease the RPM or use a bit with a softer bond.
		The drill is moving while drilling.	Hold the drill firmly or mount it on a stand.
Cracks in barrel	When the core bit is subjected to extreme pressure and metal fatigue, the barrel can eventually crack.	Too much pressure by the operator.	Reduce pressure.
		The bond is too hard.	Use a core bit with a softer bond.
Belled barrel	When too much pressure is applied, the barrel can lose its shape.	Too much pressure by the operator.	Reduce pressure.
Uneven drill holes	Uneven drill holes can occur when the material being drilled or the drill itself vibrates.	The core bit is vibrating.	Ensure the machine is mounted correctly onto the drill rig and that the core bit is tightly connected to the machine. Check the machine's condition and replace worn parts if needed.
		The material is moving.	Ensure the material is held in place using clamps.
Core bit jams in hole	The core bit can get stuck in the drill hole.	The material or patches within this are too hard.	Use a core bit suitable for the toughest material likely to be encountered.
		Rubble of broken off segment has filled drilling hole.	Flush out the drill hole completely before continuing to drill and ensure adequate coolant supply.
		The core bit's side clearance is not sufficient for the segments to operate effectively.	Check side clearance or replace the core bit if needed.

CORE BITS - TROUBLESHOOTING - CONTINUED

PROBLEM	DESCRIPTION	CAUSE	SOLUTION
Excessive chipping of the material	With the correct application, core bits provide a clean cut. If the material is chipping, these can be the causes:	The core bit's bond isn't suitable for the material.	Select a bond that suits the material.
		Insufficient coolant reaching the drilling area.	Ensure the water supply is adequate.
		Incorrect RPM speed is being used.	Alter speed in line with recommendations.
		The material is moving.	Ensure the material is held in place using clamps.
Core hangs up	The core can get stuck in the core barrel.	Insufficient water to remove the slurry.	Increase water flow after removing bit and driving core out with a spike through the hub. Remove debris.
		The core barrel is dented from hammering on it to remove previous stuck pieces.	Replace the core bit.

TROUBLESHOOTING - SURFACE PREP

PROBLEM	DESCRIPTION	CAUSE	SOLUTION
Glazing (tool won't grind)	Over time a tool's bond wears away, exposing diamonds to continue grinding. If however, the bond doesn't wear away as intended, diamonds no longer get exposed, resulting in the tool slowing down until eventually it stops grinding. This smoothing of the segments is referred to as glazing or polishing.	Bond too hard for material - bond doesn't wear away appropriately to expose diamonds.	Choose a tool with a softer bond.
		Material too hard.	Dress or sharpen tool with a soft concrete block or abrasive wheel to expose diamonds. If reoccurring, switch to a tool with a softer bond.
		Overheating.	Saturate concrete (without the water puddling) to cool it. Alternatively, introduce sand or use cutting lubricants.
		Speed too high.	Reduce operating speed.
		When grinding wet, too much coolant.	Reduce the amount of coolant.
Overexposed diamonds / premature diamond loss	Over time a tool's bond wears away, exposing diamonds to continue cutting. If however, the bond wears away to quickly the diamonds within the bond aren't supported anymore and fall off before the diamond is fractured or dull.	The bond is too soft for the material.	Choose a tool with a harder bond.
		Dust extraction not sufficient.	Increase the capacity of dust extraction and clean up the surface if necessary.

SURFACE PREP - TROUBLESHOOTING - CONTINUED

PROBLEM	DESCRIPTION	CAUSE	SOLUTION
Excessive wear	The diamonds in a tool can become over-exposed if the wrong specification has been chosen. This can lead to excessive wear and impact the tool's lifespan.	A wrong specification on highly abrasive material.	Choose a harder bond. Please note: the wear on abrasive material is higher in general and can only be reduced to a certain degree.
		When grinding wet, insufficient coolant, resulting in excessive wear.	Check that the water supply is adequate.
		The operating speed is too fast.	Reduce the grinding speed.
Segment loss	In the unlikely event of segments falling off a tool, these can be the causes:	Areas of the floor were 'above grade' meaning they were raised above the surface level.	Cut off/hand grind surface to level or smack areas with a hammer to knock below grade. Be very careful when using a hand grinder as too much material can be taken away, especially in low spots. Spot grind the concrete with a concrete planer if the spot is above 10mm high.
Isolated thick or deep scratches	If thick, deep scratches come up, this is most likely due to the wrong application.	Wrong grit.	Select a finer grit or take more time when grinding.
		Too fast operating speed.	Move slower and go through all steps from a coarser to a finer grit. Ensure all scratches are removed in each step.
		Concrete can be softer in one area than another and therefore scratch more easily.	If lots of scratches occur, go back a step and use a coarser grit.
Narrow and deep regular marks	If a tool is too aggressive for an application narrow, deep marks can occur.	The tool is too coarse and aggressive.	Select a finer grit or a tool with a larger surface area, e.g. a cup wheel rather than a plug, so the pressure is distributed over a larger area.
Scratches when using tools with resin bonds	When using a finer grit, whether with a metal or resin bond, and something gets stuck between the surface and the grinding tool, this will introduce scratches.	Foreign objects stuck in between tool and surface.	Check the tool every 20-30mins when grinding to make sure nothing is stuck in between and clean the area if necessary. If grinding wet, increase the water supply.
Poor overall finish	When grinding a step-by-step process is important to achieve a high-quality finish.	The more material is removed by each grinding point, the larger the individual chips and the rougher the surface.	Choose a finer grit size and reduce the relative speed of the wheel and workpiece.
Cloudy surface	The way concrete is poured and cured has a high impact on the final result when grinding.	The concrete may have been tamped down too hard so the solids have sunk to the bottom or the concrete may not have been vibrated and walked upon properly.	To get to the aggregate more surface needs to be taken off from the entire floor. This however may not be viable.
Discolouration of floor	Once discoloured, there is little that can be done to save a floor.	An adhesive may have discoloured the matrix.	Unfortunately, this issue cannot be fixed.

SYNTEC™
DIAMOND TOOLS

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