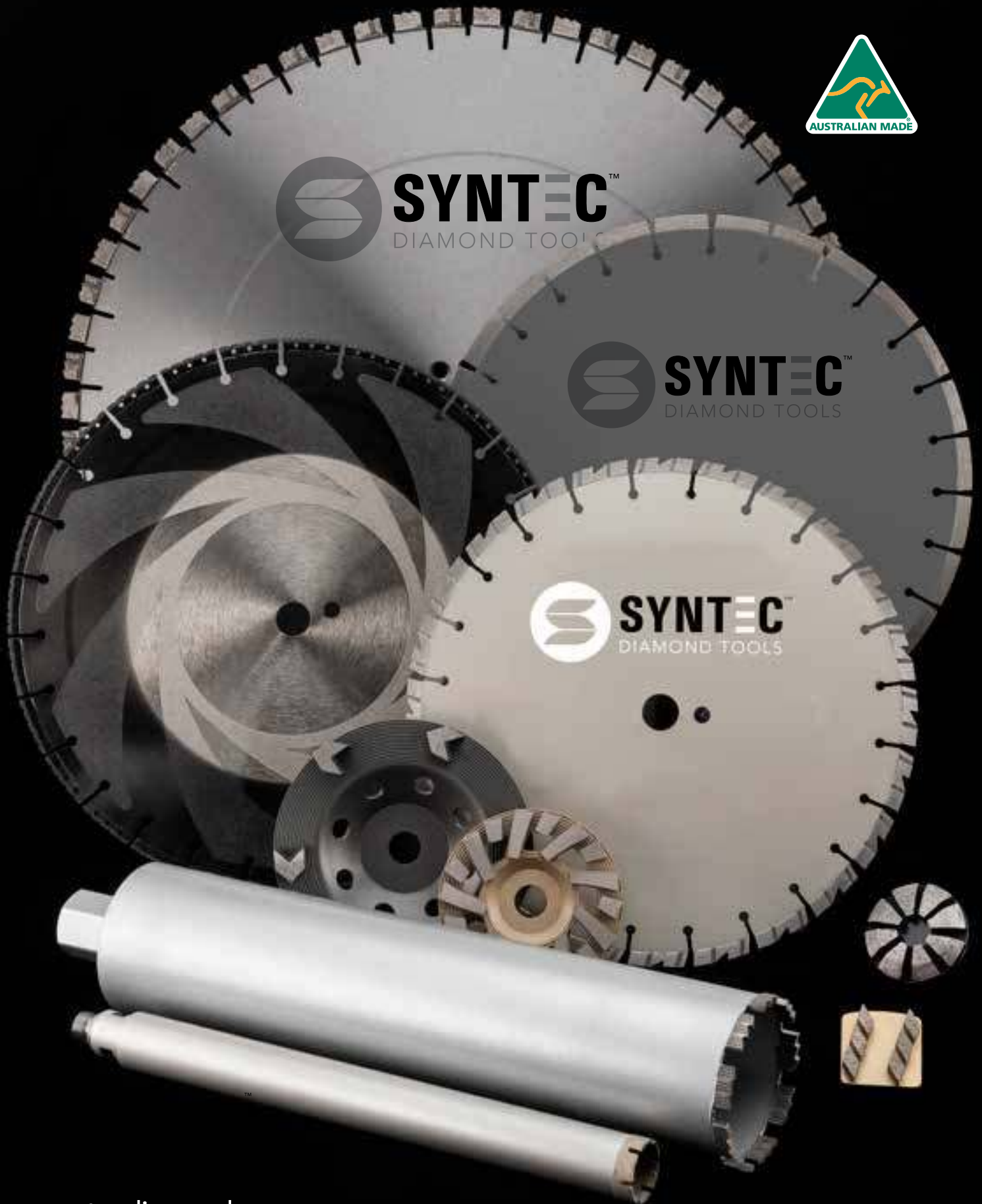




PRODUCT CATALOGUE 2021





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.

Today, more than 27 years after being founded, 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

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 DiamondTools 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 DiamondTools 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 DiamondTools products.

OUR IDEAS AND INNOVATION

Syntec DiamondTools 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.

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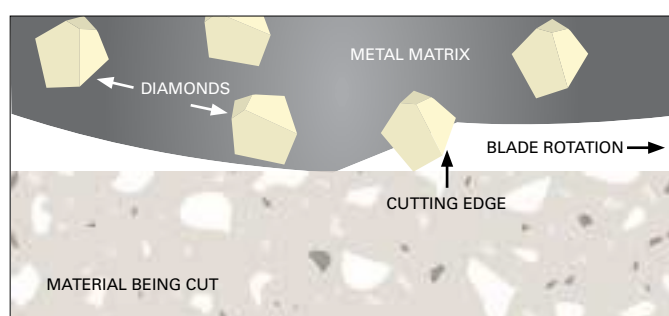
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DIAMONDS

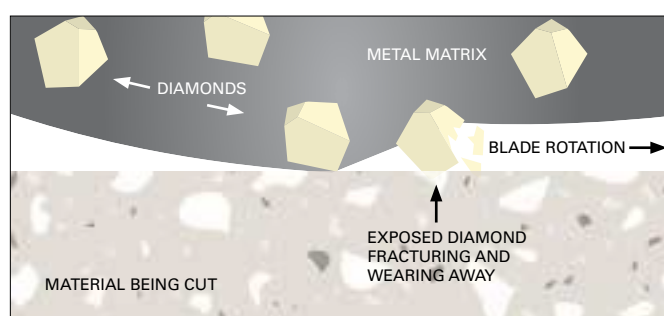
HOW DO DIAMOND TOOLS WORK?

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.

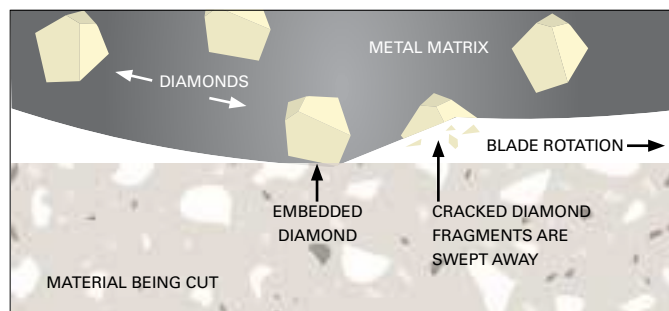
The bond plays a crucial role in a diamond tool's performance as it determines the strength of the material that can be cut or ground. With time the diamonds fracture or are pulled out of the bond. Simultaneously the bond wears away exposing new diamonds. Here it is important to select the right bond 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.



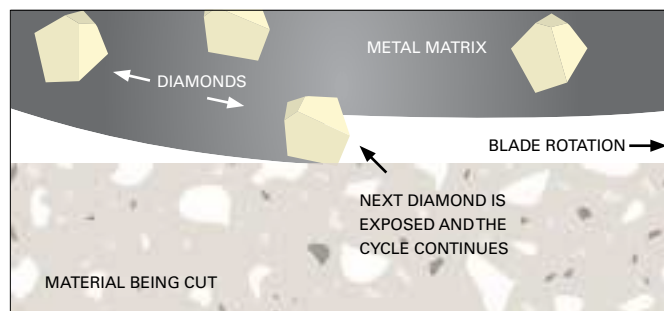
1. The actual grinding work is done by exposed diamond crystals that are held in place by the metal matrix or bond. Each diamond is supported by a bond tail which trails behind the diamond. While the blade rotates through the material, the exposed diamonds on the surface grind the material.



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



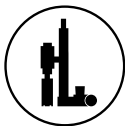
LOW HP
WALK-BEHIND



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



BRICK SAW BLADE



CP

TRADESMAN

PREMIUM

SEMI-PRO



14"

355mm
MAX



SA-005-01
Early Entry Blade



SA-005-04
Early Entry Blade

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.

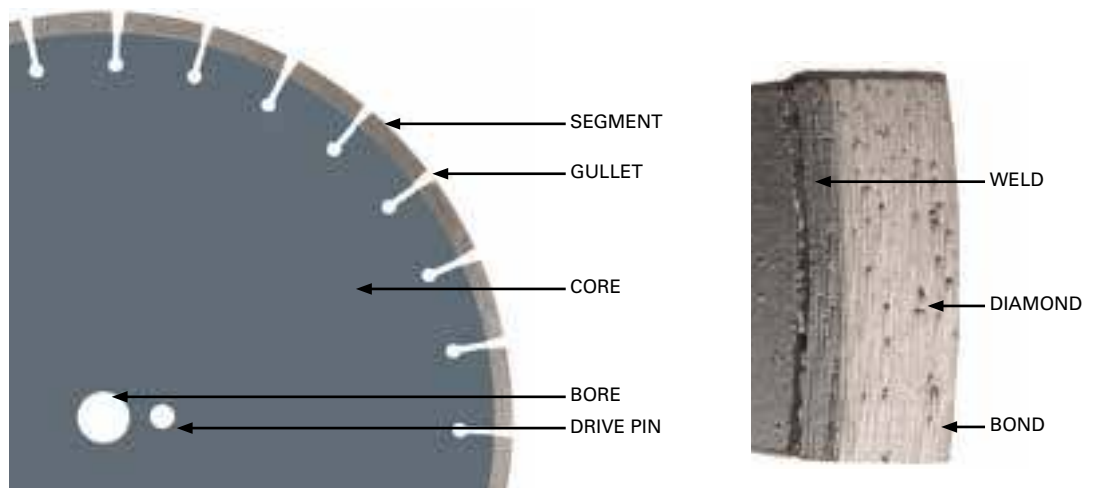
THE CORE

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.

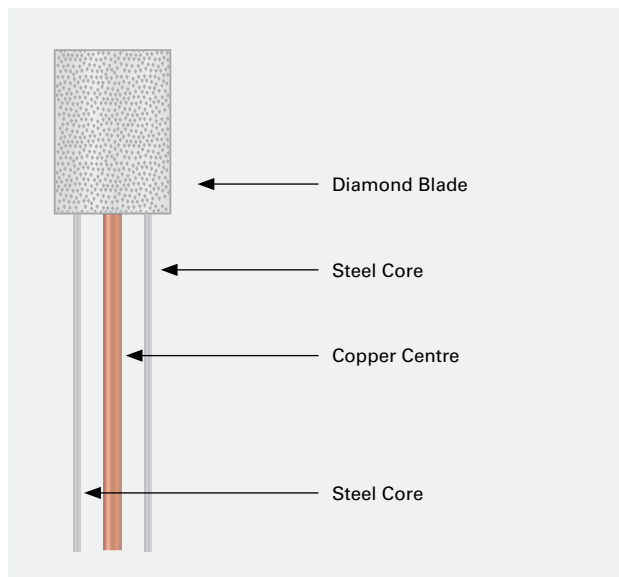
PREMIUM OPTIONS

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, saving quality and operator safety.

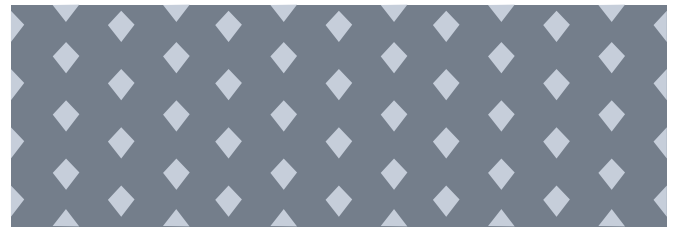
Typically, blades are only available as a silent version, if the machine they are used on does not overpower the noise of the blade itself. Syntec offers bespoke specifications for a range of masonry, core and refractory blades.



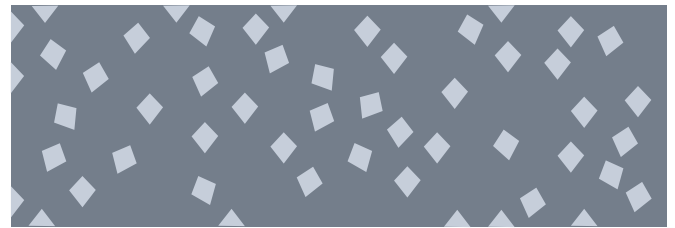
Silent Core Blade

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.



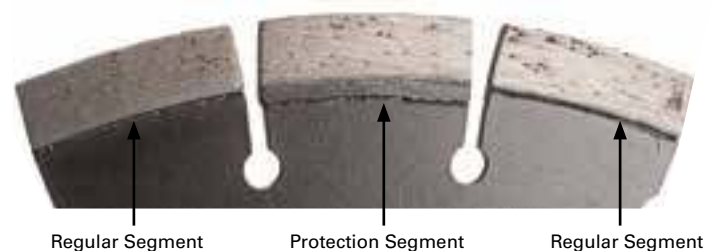
CPP Technology: Diamonds placed in a templated arrangement



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).

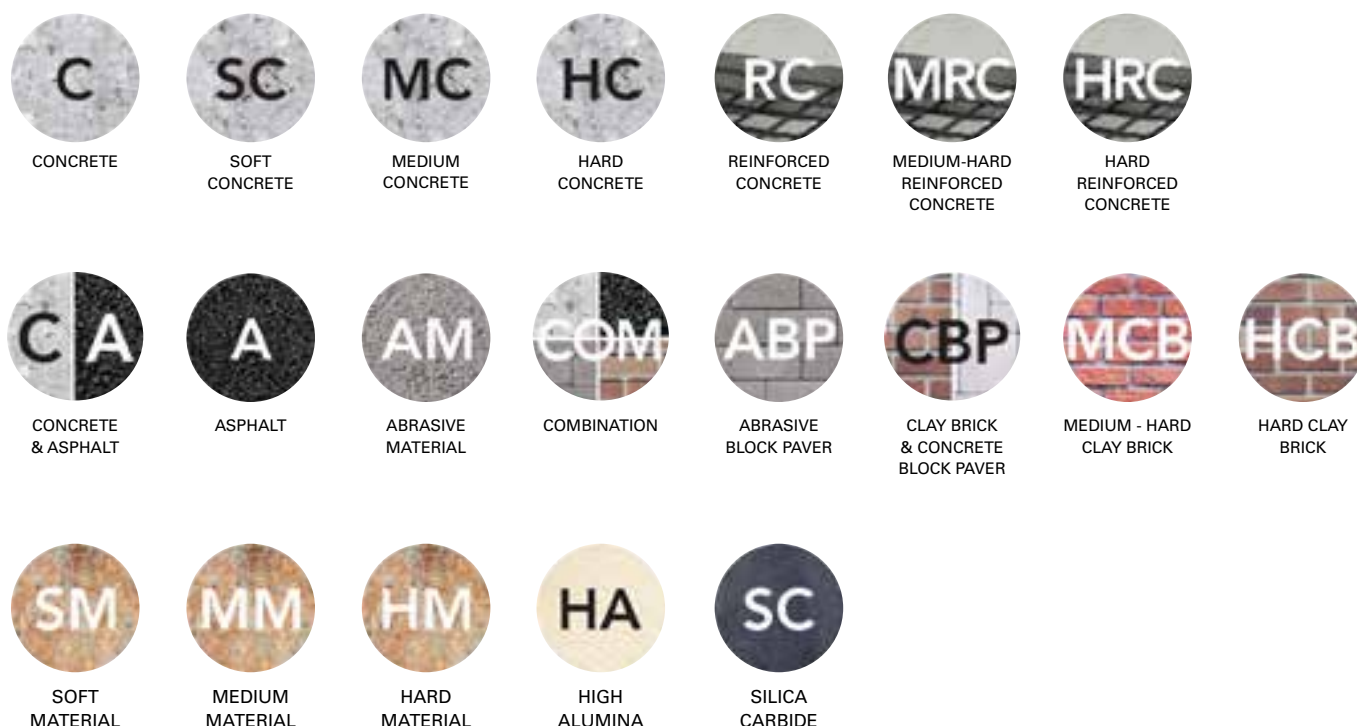
Dry cutting ideally should only be resorted to if the area needs to be kept dry or electrical power tools are being used, making it unsafe to use water around the power source. The fine dust created when dry cutting on masonry, glass and other hard materials presents a safety hazard to those in the vicinity. 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.

MATERIAL LEGEND



SEGMENT AND GULLET TYPES

SEGMENT TYPES



REGULAR

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



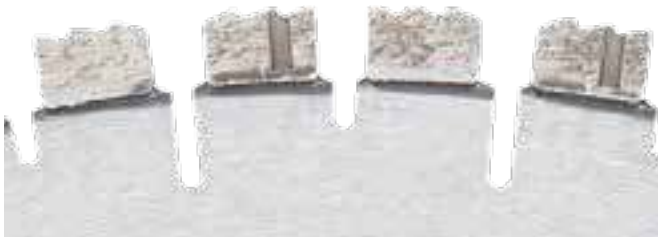
TURBO

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.

CATEGORIES



TRADESMAN

Entry-level blades for tradies who use blades occasionally, however not primarily. Good balance between performance and price.

High diamond quality, medium diamond concentration.

PREMIUM

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

High diamond quality, medium-high 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.

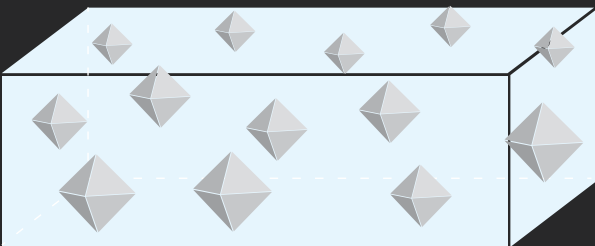
PRO

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

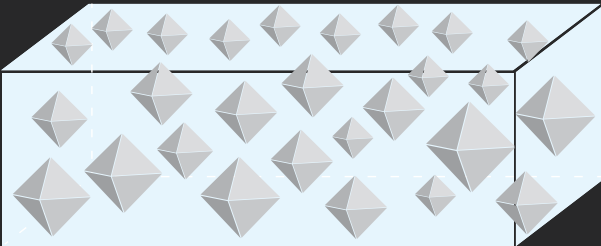
Highest diamond quality, highest diamond concentration.

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.



Low concentration of diamond powder



High concentration of diamond powder



FLOOR SAW BLADES

Each belonging to the Pro range, Syntec offers a variety of blades for high horsepower (> 25 HP) walk-behind floor saws. Torque tested to ensure a solid bond, these floor saws were specially created with the needs of professionals in mind and feature the highest quality and concentration of diamonds, resulting in maximum speed and life.

The Pinnacle and Max Series comprise blades for self-propelled equipment, whereas the other ranges are designed for manually operated machines.

HARD: > 40 MPa concrete

MEDIUM: 30 MPa concrete

SOFT: 20-25 MPa concrete

PRO (HIGH HP)



	CONCRETE	ASPHALT
PINNACLE SERIES	<p>PIN14HC</p> <p>PIN14MC</p> <p>PIN14SC</p>	<p>PIN14A</p>
MAX SERIES	<p>MAX14HC</p> <p>MAX14MC</p> <p>MAX14SC</p>	<p>MAX14A</p>
MAX 4MM SERIES	<p>MAX414HC</p> <p>MAX414MC</p> <p>MAX414SC</p>	<p>MAX414A</p>
CPP SERIES	<p>CPP14HC-4</p> <p>CPP14MC-4</p> <p>CPP14SC-4</p>	
LOOP/JOINT	<p>LBCJB12-6.4</p>	<p>LBCJBA12-6.4</p>

PINNACLE SERIES PRO CONCRETE/ASPHALT

Containing the highest concentration of super abrasive diamonds in our highest quality bond, Syntec's Pinnacle Series Blades are suitable for a wide range of applications when sawing concrete.

Available with a 15mm segment height for hard, medium and soft concrete as well as asphalt.

**HARD PRO CONCRETE BLADES**

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
PIN14HC	14" (355mm)	1" + DP	40x4x15mm	● Metallic Blue
PIN16HC	16" (410mm)	1" + DP	40x4x15mm	● Metallic Blue
PIN18HC	18" (455mm)	1" + DP	40x4x15mm	● Metallic Blue
PIN20HC	20" (510mm)	1" + DP	40x4x15mm	● Metallic Blue
PIN24HC	24" (610mm)	1" + DP	40x4x15mm	● Metallic Blue
PIN26HC	26" (660mm)	1" + DP	40x4x15mm	● Metallic Blue
PIN30HC	30" (760mm)	1" + DP	40x4x15mm	● Metallic Blue
PIN36HC	36" (915mm)	1" + DP	40x4x15mm	● Metallic Blue
PIN42HC	42" (1065mm)	1" + DP	40x4x15mm	● Metallic Blue
PIN48HC	48" (1220mm)	1" + DP	40x4x15mm	● Metallic Blue

**MEDIUM PRO CONCRETE BLADES**

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
PIN14MC	14" (355mm)	1" + DP	40x4x15mm	● Pink
PIN16MC	16" (410mm)	1" + DP	40x4x15mm	● Pink
PIN18MC	18" (455mm)	1" + DP	40x4x15mm	● Pink
PIN20MC	20" (510mm)	1" + DP	40x4x15mm	● Pink
PIN24MC	24" (610mm)	1" + DP	40x4x15mm	● Pink
PIN26MC	26" (660mm)	1" + DP	40x4x15mm	● Pink
PIN30MC	30" (760mm)	1" + DP	40x4x15mm	● Pink
PIN36MC	36" (915mm)	1" + DP	40x4x15mm	● Pink
PIN42MC	42" (1065mm)	1" + DP	40x4x15mm	● Pink
PIN48MC	48" (1220mm)	1" + DP	40x4x15mm	● Pink

PINNACLE SERIES PRO CONCRETE/ASPHALT - CONTINUED

Containing the highest concentration of super abrasive diamonds in our highest quality bond, Syntec's Pinnacle Series Blades are suitable for a wide range of applications when sawing concrete.

Available with a 15mm segment height for hard, medium and soft concrete as well as asphalt.

**SOFT PRO CONCRETE BLADES**

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
PIN14SC	14" (355mm)	1" + DP	40x4x15mm	● Magenta
PIN16SC	16" (410mm)	1" + DP	40x4x15mm	● Magenta
PIN18SC	18" (455mm)	1" + DP	40x4x15mm	● Magenta
PIN20SC	20" (510mm)	1" + DP	40x4x15mm	● Magenta
PIN24SC	24" (610mm)	1" + DP	40x4x15mm	● Magenta
PIN26SC	26" (660mm)	1" + DP	40x4x15mm	● Magenta
PIN30SC	30" (760mm)	1" + DP	40x4x15mm	● Magenta
PIN36SC	36" (915mm)	1" + DP	40x4x15mm	● Magenta
PIN42SC	42" (1065mm)	1" + DP	40x4x15mm	● Magenta
PIN48SC	48" (1220mm)	1" + DP	40x4x15mm	● Magenta

**PRO ASPHALT BLADES**

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
PIN14A	14" (355mm)	1" + DP	40x4x15mm	● Black
PIN16A	16" (410mm)	1" + DP	40x4x15mm	● Black
PIN18A	18" (455mm)	1" + DP	40x4x15mm	● Black
PIN20A	20" (510mm)	1" + DP	40x4x15mm	● Black
PIN24A	24" (610mm)	1" + DP	40x4x15mm	● Black
PIN26A	26" (660mm)	1" + DP	40x4x15mm	● Black
PIN30A	30" (760mm)	1" + DP	40x4x15mm	● Black
PIN36A	36" (915mm)	1" + DP	40x4x15mm	● Black

MAX SERIES PRO CONCRETE/ASPHALT

Containing the highest grade of super abrasive diamonds in a very high quality bond only surpassed by our Pinnacle Blades, Syntec's Max Series is suitable for a wide range of applications when sawing concrete.

Available with a 12mm segment height for hard, medium and soft concrete as well as 10mm segment height for asphalt.

**HARD PRO CONCRETE BLADES**

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
MAX14HC	14" (355mm)	1" + DP	40x3.3x12	● Metallic Blue
MAX16HC	16" (410mm)	1" + DP	40x3.3x12	● Metallic Blue
MAX18HC	18" (455mm)	1" + DP	40x3.5x12	● Metallic Blue
MAX20HC	20" (510mm)	1" + DP	40x3.5x12	● Metallic Blue
MAX24HC	24" (610mm)	1" + DP	40x3.5x12	● Metallic Blue
MAX26HC	26" (660mm)	1" + DP	40x3.5x12	● Metallic Blue
MAX30HC	30" (760mm)	1" + DP	40x3.5x12	● Metallic Blue
MAX36HC	36" (915mm)	1" + DP	40x3.5x12	● Metallic Blue
MAX42HC	42" (1065mm)	1" + DP	40x3.5x12	● Metallic Blue
MAX48HC	48" (1220mm)	1" + DP	40x3.5x12	● Metallic Blue

**MEDIUM PRO CONCRETE BLADES**

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
MAX14MC	14" (355mm)	1" + DP	40x3.3x12	● Pink
MAX16MC	16" (410mm)	1" + DP	40x3.3x12	● Pink
MAX18MC	18" (455mm)	1" + DP	40x3.5x12	● Pink
MAX20MC	20" (510mm)	1" + DP	40x3.5x12	● Pink
MAX24MC	24" (610mm)	1" + DP	40x3.5x12	● Pink
MAX26MC	26" (660mm)	1" + DP	40x3.5x12	● Pink
MAX30MC	30" (760mm)	1" + DP	40x3.5x12	● Pink
MAX36MC	36" (915mm)	1" + DP	40x3.5x12	● Pink
MAX42MC	42" (1065mm)	1" + DP	40x3.5x12	● Pink
MAX48MC	48" (1220mm)	1" + DP	40x3.5x12	● Pink

MAX SERIES PRO CONCRETE/ASPHALT - CONTINUED

Containing the highest grade of super abrasive diamonds in a very high quality bond only surpassed by our Pinnacle Blades, Syntec's Max Series is suitable for a wide range of applications when sawing concrete.

Available with a 12mm segment height for hard, medium and soft concrete as well as 10mm segment height for asphalt.

**SOFT PRO CONCRETE BLADES**

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
MAX14SC	14" (355mm)	1" + DP	40x3.3x12	● Magenta
MAX16SC	16" (410mm)	1" + DP	40x3.3x12	● Magenta
MAX18SC	18" (455mm)	1" + DP	40x3.5x12	● Magenta
MAX20SC	20" (510mm)	1" + DP	40x3.5x12	● Magenta
MAX24SC	24" (610mm)	1" + DP	40x3.5x12	● Magenta
MAX26SC	26" (660mm)	1" + DP	40x3.5x12	● Magenta
MAX30SC	30" (760mm)	1" + DP	40x3.5x12	● Magenta
MAX36SC	36" (915mm)	1" + DP	40x3.5x12	● Magenta
MAX42SC	42" (1065mm)	1" + DP	40x3.5x12	● Magenta
MAX48SC	48" (1220mm)	1" + DP	40x3.5x12	● Magenta

**PRO ASPHALT BLADES**

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
MAX14A	14" (355mm)	1" + DP	40x3.3x10	● Black
MAX16A	16" (410mm)	1" + DP	40x3.3x10	● Black
MAX18A	18" (455mm)	1" + DP	40x3.5x10	● Black
MAX20A	20" (510mm)	1" + DP	40x3.5x10	● Black
MAX24A	24" (610mm)	1" + DP	40x3.5x10	● Black
MAX26A	26" (660mm)	1" + DP	40x3.5x10	● Black
MAX30A	30" (760mm)	1" + DP	40x3.5x10	● Black
MAX36A	36" (915mm)	1" + DP	40x3.5x10	● Black

MAX SERIES 4MM PRO CONCRETE/ASPHALT

Containing the highest grade of super abrasive diamonds in a very high quality bond only surpassed by our Pinnacle Blades, Syntec's Max Series 4mm is suitable for a wide range of applications when sawing concrete. Featuring 4mm thick segments and a slightly thicker core, these blades withstand higher stress on higher HP machines and offer the benefit of not having to change between blades for precuts.

Available with a 12mm segment height for hard, medium and soft concrete as well as 10mm segment height for asphalt.



HARD PRO CONCRETE BLADES

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
MAX414HC	14" (355mm)	1" + DP	40x4x12mm	● Metallic Blue
MAX416HC	16" (410mm)	1" + DP	40x4x12mm	● Metallic Blue
MAX418HC	18" (455mm)	1" + DP	40x4x12mm	● Metallic Blue
MAX420HC	20" (510mm)	1" + DP	40x4x12mm	● Metallic Blue
MAX424HC	24" (610mm)	1" + DP	40x4x12mm	● Metallic Blue
MAX426HC	26" (660mm)	1" + DP	40x4x12mm	● Metallic Blue
MAX430HC	30" (760mm)	1" + DP	40x4x12mm	● Metallic Blue
MAX436HC	36" (915mm)	1" + DP	40x4x12mm	● Metallic Blue
MAX442HC	42" (1065mm)	1" + DP	40x4x12mm	● Metallic Blue
MAX448HC	48" (1220mm)	1" + DP	40x4x12mm	● Metallic Blue



MEDIUM PRO CONCRETE BLADES

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
MAX414MC	14" (355mm)	1" + DP	40x4x12mm	● Pink
MAX416MC	16" (410mm)	1" + DP	40x4x12mm	● Pink
MAX418MC	18" (455mm)	1" + DP	40x4x12mm	● Pink
MAX420MC	20" (510mm)	1" + DP	40x4x12mm	● Pink
MAX424MC	24" (610mm)	1" + DP	40x4x12mm	● Pink
MAX426MC	26" (660mm)	1" + DP	40x4x12mm	● Pink
MAX430MC	30" (760mm)	1" + DP	40x4x12mm	● Pink
MAX436MC	36" (915mm)	1" + DP	40x4x12mm	● Pink
MAX442MC	42" (1065mm)	1" + DP	40x4x12mm	● Pink
MAX448MC	48" (1220mm)	1" + DP	40x4x12mm	● Pink

MAX SERIES 4MM PRO CONCRETE/ASPHALT - CONTINUED

Containing the highest grade of super abrasive diamonds in a very high quality bond only surpassed by our Pinnacle Blades, Syntec's Max Series 4mm is suitable for a wide range of applications when sawing concrete. Featuring 4mm thick segments and a slightly thicker core, these blades withstand higher stress on higher HP machines and offer the benefit of not having to change between blades for precuts.

Available with a 12mm segment height for hard, medium and soft concrete as well as 10mm segment height for asphalt.

**SOFT PRO CONCRETE BLADES**

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
MAX414SC	14" (355mm)	1" + DP	40x4x12mm	● Magenta
MAX416SC	16" (410mm)	1" + DP	40x4x12mm	● Magenta
MAX418SC	18" (455mm)	1" + DP	40x4x12mm	● Magenta
MAX420SC	20" (510mm)	1" + DP	40x4x12mm	● Magenta
MAX424SC	24" (610mm)	1" + DP	40x4x12mm	● Magenta
MAX426SC	26" (660mm)	1" + DP	40x4x12mm	● Magenta
MAX430SC	30" (760mm)	1" + DP	40x4x12mm	● Magenta
MAX436SC	36" (915mm)	1" + DP	40x4x12mm	● Magenta
MAX442SC	42" (1065mm)	1" + DP	40x4x12mm	● Magenta
MAX448SC	48" (1220mm)	1" + DP	40x4x12mm	● Magenta

**PRO ASPHALT BLADES**

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
MAX414A	14" (355mm)	1" + DP	40x4x10mm	● Black
MAX416A	16" (410mm)	1" + DP	40x4x10mm	● Black
MAX418A	18" (455mm)	1" + DP	40x4x10mm	● Black
MAX420A	20" (510mm)	1" + DP	40x4x10mm	● Black
MAX424A	24" (610mm)	1" + DP	40x4x10mm	● Black
MAX426A	26" (660mm)	1" + DP	40x4x10mm	● Black
MAX430A	30" (760mm)	1" + DP	40x4x10mm	● Black
MAX436A	36" (915mm)	1" + DP	40x4x10mm	● Black

CPP PRO CONCRETE

Syntec's high-speed CPP (Controlled Particle Placement) patterned technology used when developing these blades ensures extended life as well as smoother and faster cutting throughout the entire life of the blade. These blades contain the highest grade of super abrasive diamonds and are suitable for a wide range of applications when sawing concrete.

Available with 12mm high segments for hard, medium and soft concrete.



HARD PRO CONCRETE BLADES

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
CPP14HC-4	14" (355mm)	1" + DP	40x4x12mm	● Metallic Blue
CPP16HC-4	16" (410mm)	1" + DP	40x4x12mm	● Metallic Blue
CPP18HC-4	18" (455mm)	1" + DP	40x4x12mm	● Metallic Blue
CPP20HC-4	20" (510mm)	1" + DP	40x4x12mm	● Metallic Blue
CPP24HC-4	24" (610mm)	1" + DP	40x4x12mm	● Metallic Blue
CPP26HC-4	26" (660mm)	1" + DP	40x4x12mm	● Metallic Blue
CPP30HC-4	30" (760mm)	1" + DP	40x4x12mm	● Metallic Blue
CPP36HC-4	36" (915mm)	1" + DP	40x4x12mm	● Metallic Blue
CPP42HC-4	42" (1065mm)	1" + DP	40x4x12mm	● Metallic Blue
CPP48HC-4	48" (1220mm)	1" + DP	40x4x12mm	● Metallic Blue



MEDIUM PRO CONCRETE BLADES

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
CPP14MC-4	14" (355mm)	1" + DP	40x4x12mm	● Pink
CPP16MC-4	16" (410mm)	1" + DP	40x4x12mm	● Pink
CPP18MC-4	18" (455mm)	1" + DP	40x4x12mm	● Pink
CPP20MC-4	20" (510mm)	1" + DP	40x4x12mm	● Pink
CPP24MC-4	24" (610mm)	1" + DP	40x4x12mm	● Pink
CPP26MC-4	26" (660mm)	1" + DP	40x4x12mm	● Pink
CPP30MC-4	30" (760mm)	1" + DP	40x4x12mm	● Pink
CPP36MC-4	36" (915mm)	1" + DP	40x4x12mm	● Pink
CPP42MC-4	42" (1065mm)	1" + DP	40x4x12mm	● Pink
CPP48MC-4	48" (1220mm)	1" + DP	40x4x12mm	● Pink



SOFT PRO CONCRETE BLADES

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
CPP14SC-4	14" (355mm)	1" + DP	40x4x12mm	● Magenta
CPP16SC-4	16" (410mm)	1" + DP	40x4x12mm	● Magenta
CPP18SC-4	18" (455mm)	1" + DP	40x4x12mm	● Magenta
CPP20SC-4	20" (510mm)	1" + DP	40x4x12mm	● Magenta
CPP24SC-4	24" (610mm)	1" + DP	40x4x12mm	● Magenta
CPP26SC-4	26" (660mm)	1" + DP	40x4x12mm	● Magenta
CPP30SC-4	30" (760mm)	1" + DP	40x4x12mm	● Magenta
CPP36SC-4	36" (915mm)	1" + DP	40x4x12mm	● Magenta
CPP42SC-4	42" (1065mm)	1" + DP	40x4x12mm	● Magenta
CPP48SC-4	48" (1220mm)	1" + DP	40x4x12mm	● Magenta

LOOP/JOINT PRO CONCRETE/ASPHALT

With their thicker than standard, 6.4mm segments, Syntec's Loop/Join Blades are specially made for installing loop detectors at traffic lights or for creating expansion joints. Available with 10mm high segments for concrete or asphalt.



LOOP / JOINT PRO CONCRETE BLADES (other segment widths available upon request)

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
LBCJB12-6.4	12" (305mm)	1" + DP	40x6.4x10mm	● Titanium
LBCJB14-6.4	14" (355mm)	1" + DP	40x6.4x10mm	● Titanium
LBCJB16-6.4	16" (410mm)	1" + DP	40x6.4x10mm	● Titanium
LBCJB18-6.4	18" (455mm)	1" + DP	40x6.4x10mm	● Titanium



LOOP / JOINT PRO ASPHALT BLADES (other segment widths available upon request)

PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
LBCJBA12-6.4	12" (305mm)	1" + DP	40x6.4x10mm	● Black
LBCJBA14-6.4	14" (355mm)	1" + DP	40x6.4x10mm	● Black
LBCJBA16-6.4	16" (410mm)	1" + DP	40x6.4x10mm	● Black
LBCJBA18-6.4	18" (455mm)	1" + DP	40x6.4x10mm	● Black

Looking for a blade to suit your low horsepower (5-25 HP) walk-behind floor saw?



Our Semi Pro Hand Saw Blades (page 27) for concrete, concrete/asphalt and asphalt are also ideal for use on low HP floor saws.

SEMI PRO (LOW HP) - available in diameters 12" - 24"













MATERIAL	CONCRETE	CONCRETE/ ASPHALT	ASPHALT
CODE	C1212S	CA1212S	A1212S





HAND SAW BLADES

With their 12mm high segments, Syntec's Hand Saw Blades offer both fast cutting speed as well as a long lifespan.

	 Hard Reinforced Concrete	 Hard Concrete	 Medium-Hard Reinforced Concrete	 Abrasive Material
PRO	● MHS14	○ CPP14RS / ○ MAX14RS	● CPP14HSMC	● MHSAB14
	● CPP14HSFCS	● CPP16PC / ● MAX16PC		
	● CPP14HS			
SEMI PRO	 Concrete	 Concrete/Asphalt	 Asphalt	
	○ C1212S	● CA1212S	● A1212S	
	○ CPPC1212S	● CPPCA1212S		
PREMIUM	 Combination	 Concrete/Asphalt	 Asphalt	
	● STMG12	● STMCA12	● STMA12	
	● QC9GP			
TRADESMAN	 Combination	 Concrete/Asphalt		
	● STGP12	● STCA12		

PRO

Our Pro range was designed for professionals who require high performance. These blades are highly effective on materials ranging from stone through to hard reinforced concrete and feature protection segments throughout. Available for hard reinforced concrete and abrasive material as well as with Controlled Particle Placement (CPP) for hard reinforced concrete (10mm N segment for increased speed optional) and medium to hard reinforced concrete. Also included in Syntec's CCP range are Ring and Precut Blades for hard concrete. Precut Blades are used before ring saws to help stabilise Ring Saw Blades in a deep cut.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
HARD REINFORCED CONCRETE				
MHS14	14" (355mm)	1" + DP	40x3x12mm	● Titanium
MHS16	16" (410mm)	1" + DP	40x3x12mm	● Titanium



ABRASIVE MATERIAL				
MHSAB14	14" (355mm)	1" + DP	40x3x12mm	● Magenta
MHSAB16	16" (410mm)	1" + DP	40x3x12mm	● Magenta



CPP HARD REINFORCED CONCRETE - N SEGMENT				
CPP14HSFCS	14" (355mm)	1" + DP	40x3x10mm	● Titanium
CPP16HSFCS	16" (410mm)	1" + DP	40x3x10mm	● Titanium



CPP HARD REINFORCED CONCRETE				
CPP14HS	14" (355mm)	1" + DP	40x3x12mm	● Titanium
CPP16HS	16" (410mm)	1" + DP	40x3x12mm	● Titanium

PRO - CONTINUED

Our Pro range was designed for professionals who require high performance. These blades are highly effective on materials ranging from stone through to hard reinforced concrete and feature protection segments throughout. Available for hard reinforced concrete and abrasive material as well as with Controlled Particle Placement (CPP) for hard reinforced concrete (10mm N segment for increased speed optional) and medium to hard reinforced concrete. Also included in Syntec's CCP range are Ring or Precut Blades for hard concrete. Precut Blades are used before ring saws to help stabilise Ring Saw Blades in a deep cut.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
CPP MEDIUM - HARD REINFORCED CONCRETE				
CPP14HSMC	14" (355mm)	1" + DP	40x3x12mm	● Taupe
CPP16HSMC	16" (410mm)	1" + DP	40x3x12mm	● Taupe



CPP RING SAW BLADE - HARD CONCRETE				
CPP14RS	14" (355mm)	—	40x4x10mm	○ Clear
MAX14RS	14" (355mm)	—	40x4x10mm	○ Clear



RING SAW DRIVE DISC				
RSR350	—	—	—	● Black



CPP PRECUT BLADE - HARD CONCRETE				
CPP16PC	16" (410mm)	1" + DP	40x4.5x10mm	● Metallic Blue
MAX16PC	16" (410mm)	1" + DP	40x4.5x10mm	● Metallic Blue

SEMI PRO (LOW HP)

Our Semi Pro range is an excellent choice for construction companies looking for top-notch performance as well as rental yards to whom value is important, providing long life with their 12mm segments. This range comprises blades with or without CPP technology for concrete, concrete/asphalt and asphalt, the latter two of which including protection segments.

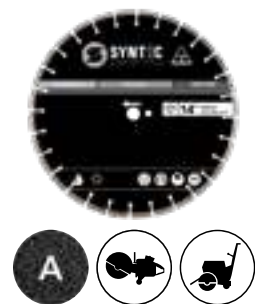
All Semi Pro Blades are also ideally suited for use on low horsepower (5-25 HP) walk-behind floor saws.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
CONCRETE - NO PROTECTION SEGMENT				
C1212S	12" (305mm)	1"+DP	40x3x12mm	○ White
C1412S	14" (355mm)	1"+DP	40x3x12mm	○ White
C1612S	16" (410mm)	1"+DP	40x3x12mm	○ White
C1412S-20	14" (355mm)	20mm	40x3x12mm	○ White
C1612S-20	16" (410mm)	20mm	40x3x12mm	○ White



CONCRETE / ASPHALT - PROTECTION SEGMENT				
CA1212S	12" (305mm)	1"+DP	40x3x12mm	● Charcoal
CA1412S	14" (355mm)	1"+DP	40x3x12mm	● Charcoal
CA1612S	16" (410mm)	1"+DP	40x3x12mm	● Charcoal
CA1412S-20	14" (355mm)	20mm	40x3x12mm	● Charcoal
CA1612S-20	16" (410mm)	20mm	40x3x12mm	● Charcoal



ASPHALT - PROTECTION SEGMENT				
A1212S	12" (305mm)	1"+DP	40x3x12mm	● Black
A1412S	14" (355mm)	1"+DP	40x3.3x12mm	● Black
A1612S	16" (410mm)	1"+DP	40x3.3x12mm	● Black
A1412S-20	14" (355mm)	20mm + DP	40x3.3x12mm	● Black
A1612S-20	16" (410mm)	20mm + DP	40x3.3x12mm	● Black



CPP CONCRETE - NO PROTECTION SEGMENT				
CPPC1212S	12" (305mm)	1"+DP	40x3x12mm	○ White
CPPC1412S	14" (355mm)	1"+DP	40x3x12mm	○ White
CPPC1612S	16" (410mm)	1"+DP	40x3x12mm	○ White
CPPC1412S-20	14" (355mm)	20mm	40x3x12mm	○ White
CPPC1612S-20	16" (410mm)	20mm	40x3x12mm	○ White



CPP CONCRETE / ASPHALT - PROTECTION SEGMENT				
CPPCA1212S	12" (305mm)	1"+DP	40x3x12mm	● Charcoal
CPPCA1412S	14" (355mm)	1"+DP	40x3x12mm	● Charcoal
CPPCA1612S	16" (410mm)	1"+DP	40x3x12mm	● Charcoal
CPPCA1412S-20	14" (355mm)	20mm	40x3x12mm	● Charcoal
CPPCA1612S-20	16" (410mm)	20mm	40x3x12mm	● Charcoal

PREMIUM

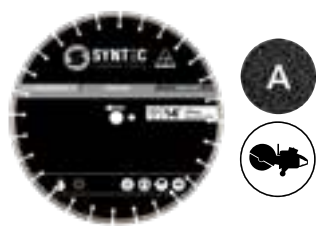
In the Premium range, you will find combination, concrete/asphalt and asphalt blades. Also included in this range are general purpose blades specially designed for cordless quick cut saws that feature a shorter than standard 10mm segment to allow for more pressure on the segment surface, providing a faster cut, less surface drag and therefore a lower draw on the battery.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
COMBINATION				
STMGP12	12" (305mm)	1"+DP	45x3x12mm	Silver
STMGP14	14" (355mm)	1"+DP	45x3x12mm	Silver
STMGP16	16" (410mm)	1"+DP	45x3x12mm	Silver
STMGP14-20	14" (355mm)	20mm	45x3x12mm	Silver
STMGP16-20	16" (410mm)	20mm	45x3x12mm	Silver



CONCRETE/ASPALT				
STMCA12	12" (305mm)	1"+DP	45x3x12mm	Charcoal
STMCA14	14" (355mm)	1"+DP	45x3x12mm	Charcoal
STMCA16	16" (410mm)	1"+DP	45x3x12mm	Charcoal
STMCA14-20	14" (355mm)	20mm	45x3x12mm	Charcoal
STMCA16-20	16" (410mm)	20mm	45x3x12mm	Charcoal



ASPALT				
STMA12	12" (305mm)	1"+DP	45x3x12mm	Black
STMA14	14" (355mm)	1"+DP	45x3x12mm	Black
STMA16	16" (410mm)	1"+DP	45x3x12mm	Black
STMA14-20	14" (355mm)	20mm	45x3x12mm	Black
STMA16-20	16" (410mm)	20mm	45x3x12mm	Black



COMBINATION - BATTERY OPERATED QUICK CUT SAW				
QC9GP	9" (229mm)	7/8"	30x2.8x10mm	Silver

TRADESMAN

Finally, the Tradesman range offers blades for combination and concrete/asphalt applications.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
COMBINATION				
STGP12	12" (305mm)	1"+DP	40x3x12mm	Silver
STGP14	14" (355mm)	1"+DP	40x3x12mm	Silver
STGP16	16" (410mm)	1"+DP	40x3x12mm	Silver

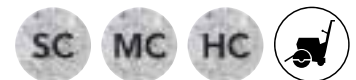


CONCRETE / ASPALT				
STCA12	12" (305mm)	1"+DP	40x3x12mm	Charcoal
STCA14	14" (355mm)	1"+DP	40x3x12mm	Charcoal
STCA16	16" (410mm)	1"+DP	40x3x12mm	Charcoal

Both the Premium and Tradesman ranges can also be used for brick and masonry applications.



EARLY ENTRY BLADES



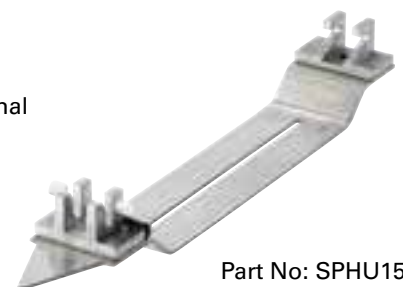
After the concrete is poured it hydrates and sets. During this process, the material shrinks and develops internal stresses that are visible as random cracks in the surface. To prevent these random cracks from occurring, controlled, shallow cuts can be made with Syntec's Early Entry Blades, reducing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

As a rule of thumb, 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	COLOUR
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



BRICK AND MASONRY BLADES

Syntec's high performance cutting blades for brick and masonry perform quick, accurate cutting of masonry materials and feature 12mm segments that provide a long blade life. The blades in this range have a high diamond count and provide a smooth cut, whether used wet or dry. They are ideal for cutting clay bricks, clay and concrete pavers, Besser block, split face, sandstone, granite, marble, bluestone, etc. A selection of our brick saw blades is also available in a silent laminated version.

We offer blades for hard clay brick (turbo and N segments), hard to medium clay brick, combi brick clay / concrete block pavers and abrasive block pavers.

Please note: Our combination and concrete/asphalt Tradesman and Premium Hand Saw Blades (page 28) are also suitable for this type of application.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
HARD CLAY BRICK - TURBO SEGMENT				
HB1415T*	14" (355mm)	1" + DP	15mm	● Blue

*Imported product

Products continue on page 31.

BRICK AND MASONRY BLADES - CONTINUED

Full description see page 30.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
CPP - HARD CLAY BRICK - N SEGMENT				
CPPHB14	14" (355mm)	1" +DP	40x3x10mm	● Metallic Gold
CPPHB16	16" (410mm)	1" +DP	40x3x10mm	● Metallic Gold
CPPHB14SIL	14" (355mm)	1" +DP	40x3x10mm	● Metallic Gold
CPPHB16SIL	16" (410mm)	1" +DP	40x3x10mm	● Metallic Gold
HARD - MEDIUM CLAY BRICK				
HMB14	14" (355mm)	1" +DP	40x3x12mm	● Dark Blue
HMB16	16" (410mm)	1" +DP	40x3x12mm	● Dark Blue
HMB18	18" (455mm)	1" +DP	40x3.5x12mm	● Dark Blue
HMB20	20" (510mm)	1" +DP	40x3.5x12mm	● Dark Blue
HMB24	24" (610mm)	1" +DP	40x3.5x12mm	● Dark Blue
HMB14SIL	14" (355mm)	1" +DP	40x3x12mm	● Dark Blue
HMB16SIL	16" (410mm)	1" +DP	40x3x12mm	● Dark Blue
HMB18SIL	18" (455mm)	1" +DP	40x3.5x12mm	● Dark Blue
HMB20SIL	20" (510mm)	1" +DP	40x3.5x12mm	● Dark Blue
HMB24SIL	24" (610mm)	1" +DP	40x3.5x12mm	● Dark Blue
COMBI BRICK CLAY / CONCRETE BLOCK PAVER				
CBB14	14" (355mm)	1" +DP	40x3x12mm	● Red
CBB16	16" (410mm)	1" +DP	40x3x12mm	● Red
CBB18	18" (455mm)	1" +DP	40x3.5x12mm	● Red
CBB20	20" (510mm)	1" +DP	40x3.5x12mm	● Red
CBB24	24" (610mm)	1" +DP	40x3.5x12mm	● Red
CBB14SIL	14" (355mm)	1" +DP	40x3x12mm	● Red
CBB16SIL	16" (410mm)	1" +DP	40x3x12mm	● Red
CBB18SIL	18" (455mm)	1" +DP	40x3.5x12mm	● Red
CBB20SIL	20" (510mm)	1" +DP	40x3.5x12mm	● Red
CBB24SIL	24" (610mm)	1" +DP	40x3.5x12mm	● Red
ABRASIVE BLOCK PAVER				
AB14	14" (355mm)	1" +DP	40x3x12mm	● Dark Green
AB16	16" (410mm)	1" +DP	40x3x12mm	● Dark Green
AB18	18" (455mm)	1" +DP	40x3.5x12mm	● Dark Green
AB20	20" (510mm)	1" +DP	40x3.5x12mm	● Dark Green
AB24	24" (610mm)	1" +DP	40x3.5x12mm	● Dark Green
AB14SIL	14" (355mm)	1" +DP	40x3x12mm	● Dark Green
AB16SIL	16" (410mm)	1" +DP	40x3x12mm	● Dark Green
AB18SIL	18" (455mm)	1" +DP	40x3.5x12mm	● Dark Green
AB20SIL	20" (510mm)	1" +DP	40x3.5x12mm	● Dark Green
AB24SIL	24" (610mm)	1" +DP	40x3.5x12mm	● Dark Green

CRACK CHASERS



Crack Chaser Diamond Blades feature wedge-shaped segments for incredible cutting speed and exceptional blade life. They are designed for cleaning out and widening cracks or imperfections in preparation for restoration or sealing on a wide variety of concrete and masonry surfaces. Crack Chasers can also be used in driveways, pool decks and walkways to add extra appeal. The shape of the segments allows for curve cutting.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
CC4	4" (102mm)	7/8"	30x6.4x10mm	● Black
CC5	5" (127mm)	7/8"	30x6.4x10mm	● Black
CC7	7" (178mm)	7/8"	30x6.4x10mm	● Black

SANDSTONE BLADES

AM

The requirements for Sandstone Blades can vary significantly in segments, diameter and bore. Depending on whether the blade is used on an excavator or bridging saw, the flange configuration also needs to be taken into consideration.

At Syntec, we work closely with each customer to ensure an optimal blade for each application. Let us quote you on a unique Sandstone Blade - specially made to suit your needs!

Custom-made every time:

- Regular cores up to 2500mm with customisable bores for excavator flanges
- Silent cores up to 1600mm
- Re-tipping service available



TUCK POINTERS



Tuck Pointer Diamond Blades are used for fast removal of mortar joints and preparation of any abrasive surfaces like sandstone, lime, render etc. They are perfect for routing decorative joints into stonework where cutting the stone proves too time-consuming or too difficult.



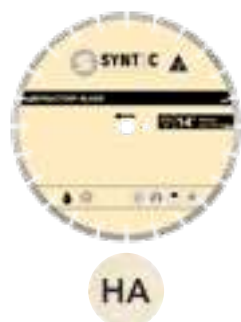
PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
TP4	4" (102mm)	7/8"	30x6.4x10mm	● Black
TP5	5" (127mm)	7/8"	30x6.4x10mm	● Black
TP7	7" (178mm)	7/8"	30x6.4x10mm	● Black

REFRACTORY BLADES

Syntec Diamond Tools Refractory Blades are high-quality blades designed to provide the lowest cutting cost and highest performance with bonds for cutting virtually any refractory material. Our Refractory Blades are made using a high diamond concentration for extremely aggressive fast cutting and superior blade life. These blades are ideal for cutting hard brick, block, masonry and stone and can be used for wet or dry cutting.

We offer high alumina as well as silica carbide Refractory Blades, both also available in a CPP version. All our Refractory Blades are available with a silent laminated finish.

Syntec's Aluminium Turbo and Arrow Cup Wheels with coarse segments complement the Refractory range.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
SILENT HIGH ALUMINA REFRACTORY BLADES				
RB14HA-Sil	14" (355mm)	1" + DP	40x3x10mm	● Cream
RB16HA-Sil	16" (410mm)	1" + DP	40x3x10mm	● Cream
RB18HA-Sil	18" (455mm)	1" + DP	40x3.5x10mm	● Cream
RB20HA-Sil	20" (510mm)	1" + DP	40x3.5x10mm	● Cream
RB24HA-Sil	24" (610mm)	1" + DP	40x4x10mm	● Cream



SILENT SILICA CARBIDE REFRACTORY BLADES				
RB14SC-Sil	14" (355mm)	1" + DP	40x3x10mm	● Brown
RB16SC-Sil	16" (410mm)	1" + DP	40x3x10mm	● Brown
RB18SC-Sil	18" (455mm)	1" + DP	40x3.5x10mm	● Brown
RB20SC-Sil	20" (510mm)	1" + DP	40x3.5x10mm	● Brown
RB24SC-Sil	24" (610mm)	1" + DP	40x4x10mm	● Brown



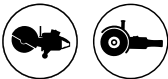
SILENT CPP HIGH ALUMINA REFRACTORY BLADES				
CPPRB14HA-Sil	14" (355mm)	1" + DP	40x3x10mm	● Cream
CPPRB16HA-Sil	16" (410mm)	1" + DP	40x3x10mm	● Cream
CPPRB18HA-Sil	18" (455mm)	1" + DP	40x3.5x10mm	● Cream
CPPRB20HA-Sil	20" (510mm)	1" + DP	40x3.5x10mm	● Cream
CPPRB24HA-Sil	24" (610mm)	1" + DP	40x4x10mm	● Cream



SILENT CPP SILICA CARBIDE REFRACTORY BLADES				
CPPRB14SC-Sil	14" (355mm)	1" + DP	40x3x10mm	● Brown
CPPRB16SC-Sil	16" (410mm)	1" + DP	40x3x10mm	● Brown
CPPRB18SC-Sil	18" (455mm)	1" + DP	40x3.5x10mm	● Brown
CPPRB20SC-Sil	20" (510mm)	1" + DP	40x3.5x10mm	● Brown
CPPRB24SC-Sil	24" (610mm)	1" + DP	40x4x10mm	● Brown



RESCUE/DUCTILE IRON BLADES



Typically blades are limited to a certain range of materials - abrasive wheels for metal, diamond blades for concrete and masonry, and carbide toothed blades for wood. Due to their unpredictability, fire and rescue applications, however, require a blade that provides extremely fast cutting on a wide range of materials without having to change blades or cutting tools.

Specially developed for time-sensitive applications, Syntec's Rescue/Ductile Iron Blades offer superior quality with their vacuum brazed, laser welded finish and can be used on a broad spectrum of materials including ductile iron, steel, plastic, metal, concrete, rebar, wood, glass, stucco, masonry, tile and corrugated roofing with only minimal sparking.

These blades are not recommended for use on abrasives or non-ferrous construction materials.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
RBDT9	9" (230mm)	7/8"	40x3.3x10mm	● Black/Silver
RBDT12	12" (305mm)	1" + DP	40x3.3x10mm	● Black/Silver
RBDT14	14" (355mm)	1" + DP	40x3.3x10mm	● Black/Silver
RBDT16	16" (405mm)	1" + DP	40x3.3x10mm	● Black/Silver



CORE SAW BLADES

Syntec's Core Saw Blades are designed to cut soft, medium and hard core, offering the optimum meterage of cuts per blade. Our mechanically balanced Core Saw Blades assist in maintaining straight edge cutting whilst minimising off-centre deviation and increasing the speed of cut. Available in both 12" (305mm) and 14" (355mm) to suit electric and hand-operated core saws, Syntec's Diamond Blades are seriously "Hard Core" within the mining industry.

These blades are all available in a silent version and can be manufactured with a special bore upon request. For your Core Saw Blade requirements and further information, please consult your local representative.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
HARD MATERIAL				
CB1-12	12" (305mm)	1" + DP	40x2.8x10	● Metallic Blue
CB1-14	14" (355mm)	1" + DP	40x3x10	● Metallic Blue
CB1-12SIL	12" (305mm) Silent	1" + DP	40x2.8x10	● Metallic Blue
CB1-14SIL	14" (355mm) Silent	1" + DP	40x3x10	● Metallic Blue
MEDIUM-HARD MATERIAL				
CB2-12	12" (305mm)	1" + DP	40x2.8x10	● Pink
CB2-14	14" (355mm)	1" + DP	40x3x10	● Pink
CB2-12SIL	12" (305mm) Silent	1" + DP	40x2.8x10	● Pink
CB2-14SIL	14" (355mm) Silent	1" + DP	40x3x10	● Pink
SOFT MATERIAL				
CB3-12	12" (305mm)	1" + DP	40x2.8x10	● Magenta
CB3-14	14" (355mm)	1" + DP	40x3x10	● Magenta
CB3-12SIL	12" (305mm) Silent	1" + DP	40x2.8x10	● Magenta
CB3-14SIL	14" (355mm) Silent	1" + DP	40x3x10	● Magenta



WALL SAW BLADES



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.



PART NO.	DIAMETER	BORE	SEGMENT SIZE	COLOUR
WALL SAW BLADES - TWIN SEGMENT 13MM				
WSN600187	24" (610mm)	1"	20x4.8x13mm	○ Clear
WSN600220	24" (610mm)	1"	20x5.6x13mm	○ Clear
WSN600250	24" (610mm)	1"	20x6.4x13mm	○ Clear
WSN650187	26" (650mm)	1"	20x4.8x13mm	○ Clear
WSN650220	26" (650mm)	1"	20x5.6x13mm	○ Clear
WSN650250	26. (650mm)	1"	20x6.4x13mm	○ Clear
WSN760187	30" (760mm)	1"	20x4.8x13mm	○ Clear
WSN760220	30" (760mm)	1"	20x5.6x13mm	○ Clear
WSN760250	30" (760mm)	1"	20x6.4x13mm	○ Clear
WSN810187	32" (810mm)	1"	20x4.8x13mm	○ Clear
WSN810220	32" (810mm)	1"	20x5.6x13mm	○ Clear
WSN810250	32" (810mm)	1"	20x6.4x13mm	○ Clear
WSN914187	36" (910mm)	1"	20x4.8x13mm	○ Clear
WSN914220	36" (910mm)	1"	20x5.6x13mm	○ Clear
WSN914250	36" (910mm)	1"	20x6.4x13mm	○ Clear



CORE BITS

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 $(5 \times 2 + 1 =)$ 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 COLOUR GUIDE

SEGMENT TYPE / MATERIAL		HIGH SPEED	ROOFTOP	SHARKTOOTH
	Reinforced Concrete			
	Abrasive Material			

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 1/4" 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.

CORE BITS

HIGHSPEED CORE BITS

Standard Drill Depth: 350mm

Segment Type: Highspeed Crowns

Fitting: 1/2" BSP **Colour:** Titanium



PART NO	DIAMETER
CCB-HS12	1/2" (12mm)
CCB-HS13	(13mm)
CCB-HS14	(14mm)
CCB-HS15	(15mm)
CCB-HS16	5/8" (16mm)
CCB-HS18	(18mm)
CCB-HS19	3/4" (19mm)
CCB-HS20	(20mm)
CCB-HS22	(22mm)
CCB-HS23	7/8" (23mm)
CCB-HS24	(24mm)
CCB-HS25	1" (25mm)
CCB-HS26	(26mm)
CCB-HS28	1 1/8" (28mm)
CCB-HS29	(29mm)
CCB-HS30	(30mm)
CCB-HS32	1 1/4" (32mm)
CCB-HS34	(34mm)
CCB-HS35	1 3/8" (35mm)
CCB-HS36	(36mm)
CCB-HS38	1 1/2" (38mm)
CCB-HS39	(39mm)
CCB-HS40	(40mm)
CCB-HS45	1 3/4" (45mm)

SHARK TOOTH CORE BITS

Standard Drill Depth: 430mm

Segment Type: Shark Tooth Segments/Crowns

Fitting: 1 1/4" UNC **Colour:** Silver



PART NO	DIAMETER
SHK45-S	1 3/4" (45mm)
SHK50-S	2" (50mm)
SHK57-S	2 1/4" (57mm)
SHK64-S	2 1/2" (64mm)
SHK70-S	2 3/4" (70mm)
SHK76-S	3" (76mm)
SHK83-S	3 1/4" (83mm)
SHK89-S	3 1/2" (89mm)
SHK95-S	3 3/4" (95mm)
SHK102-S	4" (102mm)
SHK108-S	4 1/4" (108mm)
SHK114-S	4 1/2" (114mm)
SHK127-S	5" (127mm)
SHK140-S	5 1/2" (140mm)
SHK152-S	6" (152mm)
SHK180-S	7" (180mm)
SHK203-S	8" (203mm)
SHK229-S	9" (229mm)
SHK254-S	10" (254mm)
SHK279-S	11" (279mm)
SHK305-S	12" (305mm)
SHK354-S	14" (354mm)
SHK405-S	16" (405mm)
SHK456-S	18" (456mm)
SHK506-S	20" (506mm)
SHK560-S	22" (560mm)
SHK610-S	24" (610mm)

CORE BITS

ROOFTOP CORE BITS FOR REINFORCED CONCRETE

Standard Drill Depth: 430mm **Segment Type:** Rooftop Segments/Crowns

Fitting: 1 1/4" UNC **Colour:** Dark Green



PART NO	DIAMETER	PART NO	DIAMETER	PART NO	DIAMETER
CCB12-S	1/2" (12mm)	CCB38-S	1 1/2" (38mm)	CCB127-S	5" (127mm)
CCB14-S	(14mm)	CCB40-S	(40mm)	CCB140-S	5 1/2" (140mm)
CCB16-S	5/8" (16mm)	CCB42-S	1 5/8" (42mm)	CCB152-S	6" (152mm)
CCB18-S	(18mm)	CCB45-S	1 3/4" (45mm)	CCB180-S	7" (180mm)
CCB19-S	3/4" (19mm)	CCB50-S	2" (50mm)	CCB203-S	8" (203mm)
CCB20-S	(20mm)	CCB57-S	2 1/4" (57mm)	CCB229-S	9" (229mm)
CCB22-S	(22mm)	CCB64-S	2 1/2" (64mm)	CCB254-S	10" (254mm)
CCB23-S	7/8" (23mm)	CCB70-S	2 3/4" (70mm)	CCB279-S	11" (279mm)
CCB24-S	(24mm)	CCB76-S	3" (76mm)	CCB305-S	12" (305mm)
CCB25-S	1" (25mm)	CCB83-S	3 1/4" (83mm)	CCB354-S	14" (354mm)
CCB26-S	(26mm)	CCB89-S	3 1/2" (89mm)	CCB405-S	16" (405mm)
CCB28-S	1 1/8" (28mm)	CCB95-S	3 3/4" (95mm)	CCB456-S	18" (456mm)
CCB30-S	(30mm)	CCB102-S	4" (102mm)	CCB506-S	20" (506mm)
CCB32-S	1 1/4" (32mm)	CCB108-S	4 1/4" (108mm)	CCB560-S	22" (560mm)
CCB35-S	1 3/8" (35mm)	CCB114-S	4 1/2" (114mm)	CCB610-S	24" (610mm)

ROOFTOP CORE BITS FOR ABRASIVE MATERIAL

Standard Drill Depth: 430mm **Segment Type:** Abrasive Rooftop Segments/Crowns

Fitting: 1 1/4" UNC **Colour:** Black



PART NO	DIAMETER	PART NO	DIAMETER	PART NO	DIAMETER
ACB12-S	1/2" (12mm)	ACB38-S	1 1/2" (38mm)	ACB127-S	5" (127mm)
ACB14-S	(14mm)	ACB40-S	(40mm)	ACB140-S	5 1/2" (140mm)
ACB16-S	5/8" (16mm)	ACB42-S	1 5/8" (42mm)	ACB152-S	6" (152mm)
ACB18-S	(18mm)	ACB45-S	1 3/4" (45mm)	ACB180-S	7" (180mm)
ACB19-S	3/4" (19mm)	ACB50-S	2" (50mm)	ACB203-S	8" (203mm)
ACB20-S	(20mm)	ACB57-S	2 1/4" (57mm)	ACB229-S	9" (229mm)
ACB22-S	(22mm)	ACB64-S	2 1/2" (64mm)	ACB254-S	10" (254mm)
ACB23-S	7/8" (23mm)	ACB70-S	2 3/4" (70mm)	ACB279-S	11" (279mm)
ACB24-S	(24mm)	ACB76-S	3" (76mm)	ACB305-S	12" (305mm)
ACB25-S	1" (25mm)	ACB83-S	3 1/4" (83mm)	ACB354-S	14" (354mm)
ACB26-S	(26mm)	ACB89-S	3 1/2" (89mm)	ACB405-S	16" (405mm)
ACB28-S	1 1/8" (28mm)	ACB95-S	3 3/4" (95mm)	ACB456-S	18" (456mm)
ACB30-S	(30mm)	ACB102-S	4" (102mm)	ACB506-S	20" (506mm)
ACB32-S	1 1/4" (32mm)	ACB108-S	4 1/4" (108mm)	ACB560-S	22" (560mm)
ACB35-S	1 3/8" (35mm)	ACB114-S	4 1/2" (114mm)	ACB610-S	24" (610mm)

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



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

SEGMENTS AND CROWNS

Syntec offers individual segments (available for 45 - 200mm barrels) and regular crowns (12 - 44mm) for re-tipping worn out core bits. Please refer to the chart below for the number of segments required for your sized core bit.

PART CODES SEGMENTS AND CROWNS

	ROOFTOP SEGMENTS	ABRASIVE ROOFTOP SEGMENTS	SHARK TOOTH SEGMENTS	REGULAR CROWNS
PART NO	SPCDSxx	SPCDABSxx	SHKSEG-xx	SYCRCCxx

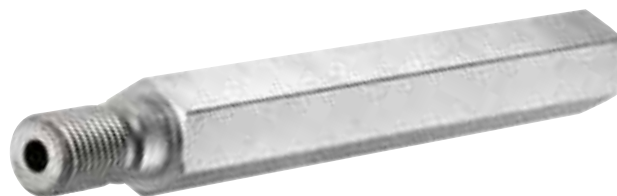
xx = core bit diameter

CORE BIT DIAMETER (MM)	NO. OF SEGMENTS
45	4
50	5
51	5
57	5
64	6
70	6
76	7
83	7
89	8
95	8
100	9
102	9
108	10
114	10
127	11
140	13
152	13
165	14
178	15
180	15
200	16

ACCESSORIES

CORE BIT EXTENSION RODS - 1 1/4" UNC

With the help of Syntec's core bit extension rods, you can quickly increase the drilling depth of your core bit by 150mm, 300mm or 450mm. Extension rods are suitable for core bits with a diameter > 45mm.



PART NO	LENGTH
EXROD150	150mm
EXROD300	300mm
EXROD450	450mm

CORE BIT ADAPTORS

Syntec offers adaptors with which you can convert your existing drill fitting, allowing you to use core bits with a different fitting.



PART NO.	CONVERT
ADAPTOR-7UNC-1/2" BSP	1 1/4" UNC to 1/2" BSP
ADAPTOR-HILTI-7UNC	Hilti to 1 1/4" UNC



SURFACE PREP

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
 - Slim Fit
 - Uni-Lock
 - Bent HTC
 - Scanmaskin
 - Schwamborn
- Polishing Tools

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 or trip hazards, 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 grinders 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.



V

Suited for: Removal of light coatings and general concrete prep.

With their angled positioning, V-segments provide fewer scratch marks.



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.



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.



SPIRAL

Suited for: Removal of soft and abrasive materials like thin set from concrete. General concrete prep.

Typically, spiral cups are used for edging with hand grinders. Positioned at an angle, these segments are designed to reduce gouges on the floor. Fewer segments offer more speed, more segments offer twice the life. More segments are better suited when the concrete is a little softer, perfect for removing soft and abrasive materials like thin set.



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.



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.



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.



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.



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.

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.

SIMPLIFIED STEPS



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.

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.

ICON LEGEND



REMOVE



GRIND



POLISH

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.

Suitable for Richmond grinders, Kub grinders, Edco/Galaxy concrete mowers and cretemowers.



PCD PLATES 10" 5 FULL ROUND PCD + 5 SEGMENT

PART NO.	SEG SIZE	SEGS	HAND	COLOUR
CM10PCD-5RH	40x10x6	5 + 5	R	● Metallic Blue
CM10PCD-5LH	40x10x6	5 + 5	L	● Metallic Blue

GRINDING PLATES - CONTINUED



10" CRETEMOWER PLATES

PART NO.	SEG SIZE	SEGS	BOND	GRIT	COLOUR
CM10S-10C	40x10x10	10	S	C	○ White
CM10GP-10C	40x10x10	10	GP	C	○ White
CM10GP-20C	40x10x10	20	GP	C	○ White
CM10H-10C	40x10x10	10	H	C	● Green
CM10H-20C	40x10x10	20	H	C	● Black
CM10GP-20M	40x10x10	20	GP	M	● Magenta
CM10GP-20F	40x10x10	20	GP	F	● Titanium
CMA10H-10C	A10	10	H	C	● Black
CMA10H-20C	A10	20	H	C	● Black

R A10 segments can also be used for removal



8" POWER PLATES

PP8GP-12C	40x10x10	12	GP	C	● Red
PP8GP-12F	40x10x10	12	GP	F	● Titanium
PP8GP-24C	28x7x9	24	GP	C	● Red
PPA8H-12C	A10	12	H	C	● Black

R A10 segments can also be used for removal



WEDGE BLOCKS - STANDARD QUALITY

WB10GP-4C-S	40x10x10	4	GP	C	● Red
WB15GP-4C-S	40x10x15	4	GP	C	● Red



WEDGE BLOCKS - PREMIUM QUALITY - 16MM TAPERED, CHAMFERED FITTING

WBAH-3XC-P	A10	3	H	XC	● Dark Blue
WBAH-3C-P	A10	3	H	C	● Black
WBAH-4XC-P	A10	4	H	XC	● Dark Blue
WBAH-4C-P	A10	4	H	C	● Black
WB10GP-4C-P	40x10x10	4	GP	C	● Black
WB10H-4C-P	40x10x10	4	H	C	● Black
WB10GP-4F-P	40x10x10	4	GP	F	● Titanium

R A10 segments can also be used for removal



CUP WHEELS

With cup wheels for a vast spectrum of applications ranging from trip hazard removal, general concrete preparation and coating/glue removal to concrete grinding and polishing, Syntec is sure to have the right diamond cup wheel for you. Suitable for 5" and 9" angle grinders, HILTI DG150, Satellites, Meteors and concrete mowers.



PCD CUPS 10" 5 FULL ROUND PCD + 5 SEGMENT

PART NO.	DIAMETER	BORE	SEG	COLOUR
PCDC5-4	5" (127mm)	7/8"	4	● Metallic Blue
PCDHC6-6	6" (150mm)	Hilti	6	● Metallic Blue
PCDC7-6	7" (178mm)	7/8"	6	● Metallic Blue
PCDC7-8	7" (178mm)	7/8"	8	● Metallic Blue
PCDTC10-4	10" (250mm)	7/8"	4&4	● Metallic Blue



SUPA SPIKE CUPS

PART NO.	DIAMETER	TYPE	BORE	SEG	COLOUR
SSC4-5	4" (102mm)	STD	20mm	5	● Black
SSC5-6	5" (127mm)	STD	7/8"	6	● Black
SSC7-8	7" (178mm)	STD	7/8"	6	● Black
SSTC5-3	5" (127mm)	Tornado	7/8"	3	● Black
SSTC5-6	5" (127mm)	Tornado	7/8"	6	● Black
SSHC6-3	6" (150mm)	Hilti	19mm	3	● Black
SSHC6-6	6" (150mm)	Hilti	19mm	6	● Black
SSTC7-3	7" (178mm)	Tornado	7/8"	3	● Black
SSTC7-6	7" (178mm)	Tornado	7/8"	6	● Black
SSTC10-3	10" (250mm)	Tornado	7/8"	3	● Black
SSTC10-6	10" (250mm)	Tornado	7/8"	6	● Black

CUP WHEELS - CONTINUED



ARROW CUPS - HEIGHT 10MM

PART NO.	DIAMETER	BORE	SEG	BOND	GRIT	COLOUR
AC4GP-5C	4" (102mm)	20mm	5	GP	C	● Green
AC4H-5C	4" (102mm)	20mm	5	H	C	● Black
AC5GP-6C	5" (127mm)	7/8"	6	GP	C	● Green
AC5H-6C	5" (127mm)	7/8"	6	H	C	● Black
AC7GP-6C	7" (178mm)	7/8"	6	GP	C	● Green
AC7H-6C	7" (178mm)	7/8"	6	H	C	● Black
AC7GP-6XC	7" (178mm)	7/8"	6	GP	XC	● Titanium
AC7H-6XC	7" (178mm)	7/8"	6	H	XC	● Charcoal
AC7GP-10C	7" (178mm)	7/8"	10	GP	C	● Green
AC7H-10C	7" (178mm)	7/8"	10	H	C	● Black
AC7GP-10XC	7" (178mm)	7/8"	10	GP	XC	● Titanium
AC7H-10XC	7" (178mm)	7/8"	10	H	XC	● Charcoal



MINI ARROW CUPS

PART NO.	DIAMETER.	BORE	SEG	GRIT	COLOUR
AC5MA	5" (127mm)	7/8"	8	C	● Black
AC7MA	7" (178mm)	7/8"	12	C	● Black



T CUPS

PART NO.	DIAMETER.	BORE	SEG	BOND	GRIT	COLOUR
TE4GP-C	4" (102mm)	20mm	8	GP	C	● Black
TE5GP-C	5" (127mm)	7/8"	10	GP	C	● Black
TE7GP-C	7" (178mm)	7/8"	14	GP	C	● Black

CUP WHEELS - CONTINUED



SPIRAL CUPS - HEIGHT 8MM

PART NO.	DIAMETER	BORE	SEG	BOND	GRIT	COLOUR
SC4-9C	4" (102mm)	20mm	9	GP	C	● Titanium
SC5-10C	5" (127mm)	7/8"	10	GP	C	● Titanium
SC5-20C	5" (127mm)	7/8"	20	GP	C	● Titanium
SC5-10M	5" (127mm)	7/8"	10	GP	M	● Yellow
SC5-20M	5" (127mm)	7/8"	20	GP	M	● Yellow
SC5-10F	5" (127mm)	7/8"	10	GP	F	● Red
SC5-20F	5" (127mm)	7/8"	20	GP	F	● Red
SC7-12C	7" (178mm)	7/8"	12	GP	C	● Titanium
SC7-24C	7" (178mm)	7/8"	24	GP	C	● Titanium
SC7-12M	7" (178mm)	7/8"	12	GP	M	● Yellow
SC7-24M	7" (178mm)	7/8"	24	GP	M	● Yellow
SC7-12F	7" (178mm)	7/8"	12	GP	F	● Red
SC7-24F	7" (178mm)	7/8"	24	GP	F	● Red



TORNADO CUPS - HEIGHT 6MM

TC5S-3C	5" (127mm)	7/8"	3	VS	C	○ White
TC5S-6C	5" (127mm)	7/8"	6	S	C	● Grey
TC5GP-9C	5" (127mm)	7/8"	9	M	C	● Green
TC5GP-18F	5" (127mm)	7/8"	18	M	F	● Titanium
TC5GP-18M	5" (127mm)	7/8"	18	M	M	● Magenta
TC5H-18C	5" (127mm)	7/8"	18	H	C	● Black
TC7S-3C	7" (178mm)	7/8"	3	VS	C	○ White
TC7S-6C	7" (178mm)	7/8"	6	S	C	● Grey
TC7GP-9C	7" (178mm)	7/8"	9	M	C	● Green
TC7GP-18F	7" (178mm)	7/8"	18	M	F	● Titanium
TC7GP-18M	7" (178mm)	7/8"	18	M	M	● Magenta
TC7H-18C	7" (178mm)	7/8"	18	H	C	● Black
TC10S-3C	10" (250mm)	7/8"	3	VS	C	○ White
TC10S-6C	10" (250mm)	7/8"	6	S	C	● Grey
TC10GP-9C	10" (250mm)	7/8"	9	M	C	● Green
TC10GP-18F	10" (250mm)	7/8"	18	M	F	● Titanium
TC10GP-18M	10" (250mm)	7/8"	18	M	M	● Magenta
TC10H-18C	10" (250mm)	7/8"	18	H	C	● Black

CUP WHEELS - CONTINUED



TORNADO ARROW CUPS – HEIGHT 10MM

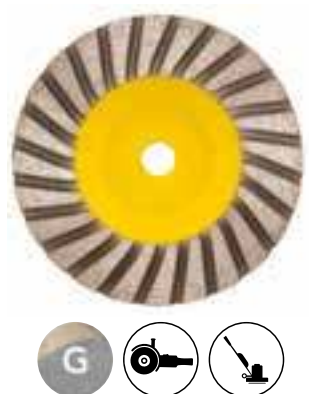
PART NO.	DIAMETER	BORE	SEG	BOND	GRIT	COLOUR
TCA5GP-6C	5" (127mm)	7/8"	6	GP	C	● Green
TCA5H-6C	5" (127mm)	7/8"	6	H	C	● Black
TCA5GP-6XC	5" (127mm)	7/8"	6	GP	XC	● Titanium
TCA5H-6XC	5" (127mm)	7/8"	6	H	XC	● Charcoal
TCA7GP-10C	7" (178mm)	7/8"	10	GP	C	● Green
TCA7H-10C	7" (178mm)	7/8"	10	H	C	● Black
TCA7GP-10XC	7" (178mm)	7/8"	10	GP	XC	● Titanium
TCA7H-10XC	7" (178mm)	7/8"	10	H	XC	● Charcoal
TCA10GP-10C	10" (250mm)	7/8"	10	GP	C	● Green
TCA10H-10C	10" (250mm)	7/8"	10	H	C	● Black
TCA10VH-10C	10" (250mm)	7/8"	10	VH	C	● Blue
TCA10GP-10XC	10" (250mm)	7/8"	10	GP	XC	● Titanium
TCA10H-10XC	10" (250mm)	7/8"	10	H	XC	● Charcoal
TCA10VH-10XC	10" (250mm)	7/8"	10	VH	XC	● Magenta



TORNADO CUPS SUITABLE FOR HILTI

PART NO.	DIAMETER	SEG	BOND	GRIT	COLOUR
HCA6H-6C	6" (150mm)	6	H	C	● Black
HC6VS-3C	6" (150mm)	3	VS	C	○ White
HC6S-6C	6" (150mm)	6	S	C	● Grey
HC6GP-9C	6" (150mm)	9	GP	C	● Green
HC6H-18C	6" (150mm)	18	H	C	● Black
HC6GP-18M	6" (150mm)	18	GP	M	● Magenta
HC6GP-18F	6" (150mm)	18	GP	F	● Titanium

R HCA6H-6C is a 6mm Arrow Segment and suitable for removal and grinding



TURBO CUPS - ALUMINIUM

PART NO.	DIAMETER	BORE	GRIT	COLOUR
TBC4-C-M14	4" (102mm)	M14	C	○ Clear
TBC4-M-M14	4" (102mm)	M14	M	● Yellow
TBC4-F-M14	4" (102mm)	M14	F	● Red
TBC5-C-M14	5" (127mm)	M14	C	○ Clear
TBC5-C	5" (127mm)	7/8"	C	○ Clear
TBC7-C	7" (178mm)	7/8"	C	○ Clear

CUP WHEELS - CONTINUED



DOUBLE ROW CUPS - HEIGHT 6MM

PART NO.	DIAMETER	BORE	BOND	GRIT	COLOUR
DR4GP-C	4" (102mm)	20mm	GP	C	● Titanium
DR5GP-C	5" (127mm)	7/8"	GP	C	● Titanium
DR7GP-C	7" (178mm)	7/8"	GP	C	● Titanium
DR4AB-C	4" (102mm)	20mm	AB	C	● Black
DR5AB-C	5" (127mm)	7/8"	AB	C	● Black
DR7AB-C	7" (178mm)	7/8"	AB	C	● Black



CERAMIC CUPS - M14 THREAD

PART NO.	DIAMETER	GRIT	ARBOR
CER125-30	5"	30	Threaded
CER125-50	5"	50	Threaded
CER125-100	5"	100	Threaded
CER125-200	5"	200	Threaded
CER125-400	5"	400	Threaded
CER178-30	7"	30	Threaded
CER178-50	7"	50	Threaded
CER178-100	7"	100	Threaded
CER178-200	7"	200	Threaded
CER178-400	7"	400	Threaded



SHROUDS

PART NO.	DIAMETER	SHROUD	COLOUR
ECDS5	5" (127mm)	Rubber	● Black
ECDS7	7" (178mm)	Rubber	● Black



CUP ADAPTORS

PART NO.	TYPE
ADP-M14	M14 Adaptor
ADP-S	Short
ADP-M	Medium
ADP-L	Long
ADP-XL	XL Long



PLUGS AND PUCKS

We offer a large selection of pucks and plugs for all applications and equipment with puck or plug tooling plates.

Plugs are suitable for any machines that accept 2" taper fit plugs, Satellites, Master Finish terrazzo grinders, Terrco, STI and Blastrac grinders. Pucks are suitable for STI and Terrco machines. For Pucks please contact your supplier.



3 SEGMENT ARROW PLUGS – 70MM

PART NO.	BOND	GRIT	COLOUR
AP3S-16	S	16	Orange
AP3S-30	S	30	Orange
AP3M-16	M	16	Red
AP3M-30	M	30	Red
AP3H-16	H	16	Black
AP3H-30	H	30	Black
AP3VH-16	VH	16	Dark Blue
AP3VH-30	VH	30	Dark Blue
AP3VVH-16	VVH	16	Magenta
AP3VVH-30	VVH	30	Magenta



5 SEGMENT ARROW PLUGS - 70MM

PART NO.	BOND	GRIT	COLOUR
AP5S-16	S	16	Orange
AP5S-30	S	30	Orange
AP5M-16	M	16	Red
AP5M-30	M	30	Red
AP5H-16	H	16	Black
AP5H-30	H	30	Black
AP5VH-16	VH	16	Dark Blue
AP5VH-30	VH	30	Dark Blue
AP5VVH-16	VVH	16	Magenta
AP5VVH-30	VVH	30	Magenta

PLUGS AND PUCKS - CONTINUED



5 SEGMENT NON-BEVELLED PLUGS – 76MM

PART NO.	SEGS	BOND	GRIT	COLOUR
PNBSCARN5-16	5	EH	16	● Dark Blue
PNBSCARN5-30	5	EH	30	● Dark Blue
PNBSCARN5-80	5	EH	80	● Dark Blue



8 SEGMENT NON-BEVELLED PLUGS – 76MM

PNBSCARN8-16	8	EH	16	● Dark Blue
PNBSCARN8-30	8	EH	30	● Dark Blue
PNBSCARN8-80	8	EH	80	● Dark Blue



5 SEGMENT BEVELLED PLUGS - 70MM

PART NO.	BOND	GRIT	COLOUR
PB5XS-16	XS	16	○ White
PB5XS-30	XS	30	○ White
PB5XS-80	XS	80	○ White
PB5XS-120	XS	120	○ White
PB5S-16	S	16	● Orange
PB5S-30	S	30	● Orange
PB5S-80	S	80	● Orange
PB5S-120	S	120	● Orange
PB5M-16	M	16	● Red
PB5M-30	M	30	● Red
PB5M-80	M	80	● Red
PB5M-120	M	120	● Red
PB5H-16	H	16	● Black
PB5H-30	H	30	● Black
PB5H-80	H	80	● Black
PB5H-120	H	120	● Black

PLUGS AND PUCKS - CONTINUED



8 SEGMENT BEVELLED PLUGS - 76MM

PART NO.	BOND	GRIT	COLOUR
PB8XS-16	XS	16	○ White
PB8XS-30	XS	30	○ White
PB8XS-80	XS	80	○ White
PB8XS-120	XS	120	○ White
PB8S-16	S	16	● Orange
PB8S-30	S	30	● Orange
PB8S-80	S	80	● Orange
PB8S-120	S	120	● Orange
PB8M-16	M	16	● Red
PB8M-30	M	30	● Red
PB8M-80	M	80	● Red
PB8M-120	M	120	● Red
PB8H-16	H	16	● Black
PB8H-30	H	30	● Black
PB8H-80	H	80	● Black
PB8H-120	H	120	● Black



SOLID PLUGS - 50MM (2")

SPXS-16	XS	16	○ White
SPXS-30	XS	30	○ White
SPXS-60	XS	60	○ White
SPXS-120	XS	120	○ White
SPS-16	S	16	● Orange
SPS-30	S	30	● Orange
SPS-60	S	60	● Orange
SPS-120	S	120	● Orange
SPM-16	M	16	● Red
SPM-30	M	30	● Red
SPM-60	M	60	● Red
SPM-120	M	120	● Red
SPH-16	H	16	● Black
SPH-30	H	30	● Black
SPH-60	H	60	● Black
SPH-120	H	120	● Black

METAL BOND TOOLING



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.

SEGMENT	BOND	FAST CHANGE	TRAPEZOID	SLIM FIT	UNI-LOCK	BENT HTC	SCANMASKIN	SCHWAMBORN
Single Arrow	Soft	●	●	●	●	●	●	●
	Medium	●	●	●	●	●	●	●
	Hard	●	●	●	●	●	●	●
	Very Hard	●	●	●	●	●	●	●
	Extremely Hard	●	●	●	●	●	●	●
Double Arrow	Soft	●	●	●	●	●	●	●
	Medium	●	●	●	●	●	●	●
	Hard	●	●	●	●	●	●	●
	Very Hard	●	●	●	●	●	●	●
	Extremely Hard	●	●	●	●	●	●	●
Single V	Soft	●	●	●	●	●	●	●
	Medium	●	●	●	●	●	●	●
	Hard	●	●	●	●	●	●	●
	Very Hard	●	●	●	●	●	●	●
	Extremely Hard	●	●	●	●	●	●	●
Double V	Soft	●	●	●	●	●	●	●
	Medium	●	●	●	●	●	●	●
	Hard	●	●	●	●	●	●	●
	Very Hard	●	●	●	●	●	●	●
	Extremely Hard	●	●	●	●	●	●	●
Single D26	Soft	●	●	●	●	●	●	●
	Medium	●	●	●	●	●	●	●
	Hard	●	●	●	●	●	●	●
Double D26	Soft	●	●	●	●	●	●	●
	Medium	●	●	●	●	●	●	●
	Hard	●	●	●	●	●	●	●
Single Rapida		●	●	●	●	●	●	●
Double Rapida		●	●	●	●	●	●	●
2PCD		●	●	●	●	●	●	●
2PCD + buffer		●	●	●	●	●	●	●
2 Half 10mm PCD + buffer		●	●	●	●	●	●	●
2 Mini Jet PCD + Half 10mm PCD		●	●	●	●	●	●	●
2 Jet PCD + Half 13mm PCD		●	●	●	●	●	●	●
2 Full Jet PCD + 3mm PCD		●	●	●	●	●	●	●
3 Full Jet PCD + 3mm PCD		●	●	●	●	●	●	●

FAST CHANGE

Syntec Fast Change - streamline your tooling to one style with this alternative for most machines. The Fast Change system is quick and easy to use without the need for unnecessary hardware or expensive magnets. Using Fast Change will help you reduce downtime, save money and increase production.



FAST CHANGE SINGLE ARROW SEGMENT

PART NO.	BOND	GRIT	COLOUR
FCAS-1-18	S	18	Orange
FCAS-1-30	S	30	Orange
FCAM-1-18	M	18	Red
FCAM-1-30	M	30	Red
FCAH-1-18	H	18	Black
FCAH-1-30	H	30	Black
FCAVH-1-18	VH	18	Blue
FCAVH-1-30	VH	30	Blue
FCAXH-1-18	XH	18	Magenta
FCAXH-1-30	XH	30	Magenta



FAST CHANGE DOUBLE ARROW SEGMENT

FCAS-2-18	S	18	Orange
FCAS-2-30	S	30	Orange
FCAM-2-18	M	18	Red
FCAM-2-30	M	30	Red
FCAH-2-18	H	18	Black
FCAH-2-30	H	30	Black
FCAVH-2-18	VH	18	Blue
FCAVH-2-30	VH	30	Blue
FCAXH-2-18	XH	18	Magenta
FCAXH-2-30	XH	30	Magenta

FAST CHANGE - CONTINUED



FAST CHANGE SINGLE V SEGMENT

PART NO.	BOND	GRIT	COLOUR
FCDVS-1-6	S	6	● Orange
FCDVS-1-18	S	18	● Orange
FCDVS-1-30	S	30	● Orange
FCDVS-1-60	S	60	● Orange
FCDVS-1-80	S	80	● Orange
FCDVS-1-120	S	120	● Orange
FCDVM-1-6	M	6	● Red
FCDVM-1-18	M	18	● Red
FCDVM-1-30	M	30	● Red
FCDVM-1-60	M	60	● Red
FCDVM-1-80	M	80	● Red
FCDVM-1-120	M	120	● Red
FCDVH-1-6	H	6	● Black
FCDVH-1-18	H	18	● Black
FCDVH-1-30	H	30	● Black
FCDVH-1-60	H	60	● Black
FCDVH-1-80	H	80	● Black
FCDVH-1-120	H	120	● Black
FCDVVH-1-6	VH	6	● Blue
FCDVVH-1-18	VH	18	● Blue
FCDVVH-1-30	VH	30	● Blue
FCDVVH-1-60	VH	60	● Blue
FCDVVH-1-80	VH	80	● Blue
FCDVVH-1-120	VH	120	● Blue
FCDVXH-1-6	XH	6	● Magenta
FCDVXH-1-18	XH	18	● Magenta
FCDVXH-1-30	XH	30	● Magenta
FCDVXH-1-60	XH	60	● Magenta
FCDVXH-1-80	XH	80	● Magenta
FCDVXH-1-120	XH	120	● Magenta

FAST CHANGE - CONTINUED



FAST CHANGE DOUBLE V SEGMENT

PART NO.	BOND	GRIT	COLOUR
FCDVS-1-6	S	6	● Orange
FCDVS-1-18	S	18	● Orange
FCDVS-1-30	S	30	● Orange
FCDVS-1-60	S	60	● Orange
FCDVS-1-80	S	80	● Orange
FCDVS-1-120	S	120	● Orange
FCDVM-1-6	M	6	● Red
FCDVM-1-18	M	18	● Red
FCDVM-1-30	M	30	● Red
FCDVM-1-60	M	60	● Red
FCDVM-1-80	M	80	● Red
FCDVM-1-120	M	120	● Red
FCDVH-1-6	H	6	● Black
FCDVH-1-18	H	18	● Black
FCDVH-1-30	H	30	● Black
FCDVH-1-60	H	60	● Black
FCDVH-1-80	H	80	● Black
FCDVH-1-120	H	120	● Black
FCDVVH-1-6	VH	6	● Blue
FCDVVH-1-18	VH	18	● Blue
FCDVVH-1-30	VH	30	● Blue
FCDVVH-1-60	VH	60	● Blue
FCDVVH-1-80	VH	80	● Blue
FCDVVH-1-120	VH	120	● Blue
FCDVXH-1-6	XH	6	● Magenta
FCDVXH-1-18	XH	18	● Magenta
FCDVXH-1-30	XH	30	● Magenta
FCDVXH-1-60	XH	60	● Magenta
FCDVXH-1-80	XH	80	● Magenta
FCDVXH-1-120	XH	120	● Magenta

FAST CHANGE - CONTINUED



FAST CHANGE D26 X 10 SINGLE SEGMENT

PART NO.	BOND	GRIT	COLOUR
FC26S-1-6	S	6	● Orange
FC26S-1-18	S	18	● Orange
FC26S-1-30	S	30	● Orange
FC26S-1-60	S	60	● Orange
FC26S-1-80	S	80	● Orange
FC26S-1-120	S	120	● Orange
FC26M-1-6	M	6	● Red
FC26M-1-18	M	18	● Red
FC26M-1-30	M	30	● Red
FC26M-1-60	M	60	● Red
FC26M-1-80	M	80	● Red
FC26M-1-120	M	120	● Red
FC26H-1-6	H	6	● Black
FC26H-1-18	H	18	● Black
FC26H-1-30	H	30	● Black
FC26H-1-60	H	60	● Black
FC26H-1-80	H	80	● Black
FC26H-1-120	H	120	● Black



FAST CHANGE D26 X 10 DOUBLE SEGMENT

FC26S-2-6	S	6	● Orange
FC26S-2-18	S	18	● Orange
FC26S-2-30	S	30	● Orange
FC26S-2-60	S	60	● Orange
FC26S-2-80	S	80	● Orange
FC26S-2-120	S	120	● Orange
FC26M-2-6	M	6	● Red
FC26M-2-18	M	18	● Red
FC26M-2-30	M	30	● Red
FC26M-2-60	M	60	● Red
FC26M-2-80	M	80	● Red
FC26M-2-120	M	120	● Red
FC26H-2-6	H	6	● Black
FC26H-2-18	H	18	● Black
FC26H-2-30	H	30	● Black
FC26H-2-60	H	60	● Black
FC26H-2-80	H	80	● Black
FC26H-2-120	H	120	● Black

FAST CHANGE - CONTINUED


**FAST CHANGE
RAPIDA SINGLE SEGMENT X 10MM**

PART NO.	BOND	GRIT	COLOUR
FCRAP-1-18	1	18	● Gold
FCRAP-1-30	1	30	● Gold
FCRAP-1-40	1	40	● Gold


**FAST CHANGE
RAPIDA DOUBLE SEGMENT X 10MM**

FCRAP-2-18	2	18	● Gold
FCRAP-2-30	2	30	● Gold
FCRAP-2-40	2	40	● Gold
FCRAP-2-60	2	60	● Gold
FCRAP-2-80	2	80	● Gold


FAST CHANGE 2 PCD

PART NO.	COLOUR
FC2PCD-LH	● Metallic Blue
FC2PCD-RH	● Metallic Blue


**FAST CHANGE 2 PCD
WITH 40X10 BUFFER SEGMENT**

FC2PCDSEG-LH	● Metallic Blue
FC2PCDSEG-RH	● Metallic Blue


**FAST CHANGE 2 HALF 10MM PCD
WITH SEGMENT BUFFERS**

FC2PCD10-LH	● Metallic Blue
FC2PCD10-RH	● Metallic Blue


**FAST CHANGE 2 MINI JET PCD SEGMENTS
WITH HALF 10MM PCD**

FC2MJ10-LH	● Metallic Blue
FC2MJ10-RH	● Metallic Blue


**FAST CHANGE 2 JET PCD SEGMENTS
HALF 13MM PCD**

FC2J13-LH	● Metallic Blue
FC2J13-RH	● Metallic Blue


**FAST CHANGE 2 FULL JET PCD SEGMENTS
13MM PCD**

FC2FJ13-LH	● Metallic Blue
FC2FJ13-RH	● Metallic Blue


**FAST CHANGE 3 FULL JET PCD SEGMENTS
13MM PCD**

FC3FJ13-LH	● Metallic Blue
FC3FJ13-RH	● Metallic Blue

TRAPEZOID

Traditional 3-hole bolt-on Trapezoid tooling now with additional holes for Diamatic style magnetic plates.



TRAPEZOID BOLT-ON SINGLE ARROW SEGMENT

PART NO.	BOND	GRIT	COLOUR
HDAS-1-18	S	18	Orange
HDAS-1-30	S	30	Orange
HDAM-1-18	M	18	Red
HDAM-1-30	M	30	Red
HDAH-1-18	H	18	Black
HDAH-1-30	H	30	Black
HDAVH-1-18	VH	18	Blue
HDAVH-1-30	VH	30	Blue
HDAXH-1-18	XH	18	Magenta
HDAXH-1-30	XH	30	Magenta



TRAPEZOID BOLT-ON DOUBLE ARROW SEGMENT

HDAS-2-18	S	18	Orange
HDAS-2-30	S	30	Orange
HDAM-2-18	M	18	Red
HDAM-2-30	M	30	Red
HDAH-2-18	H	18	Black
HDAH-2-30	H	30	Black
HDAVH-2-18	VH	18	Blue
HDAVH-2-30	VH	30	Blue
HDAXH-2-18	XH	18	Magenta
HDAXH-2-30	XH	30	Magenta



TRAPEZOID BOLT-ON SINGLE V SEGMENT

HDDVS-1-6	S	6	Orange
HDDVS-1-18	S	18	Orange
HDDVS-1-30	S	30	Orange
HDDVS-1-60	S	60	Orange
HDDVS-1-80	S	80	Orange
HDDVS-1-120	S	120	Orange
HDDVM-1-6	M	6	Red
HDDVM-1-18	M	18	Red
HDDVM-1-30	M	30	Red
HDDVM-1-60	M	60	Red
HDDVM-1-80	M	80	Red
HDDVM-1-120	M	120	Red

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TRAPEZOID - CONTINUED



TRAPEZOID BOLT-ON SINGLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
HDDVH-1-6	H	6	● Black
HDDVH-1-18	H	18	● Black
HDDVH-1-30	H	30	● Black
HDDVH-1-60	H	60	● Black
HDDVH-1-80	H	80	● Black
HDDVH-1-120	H	120	● Black
HDDVVH-1-6	VH	6	● Blue
HDDVVH-1-18	VH	18	● Blue
HDDVVH-1-30	VH	30	● Blue
HDDVVH-1-60	VH	60	● Blue
HDDVVH-1-80	VH	80	● Blue
HDDVVH-1-120	VH	120	● Blue
HDDVXH-1-6	XH	6	● Magenta
HDDVXH-1-18	XH	18	● Magenta
HDDVXH-1-30	XH	30	● Magenta
HDDVXH-1-60	XH	60	● Magenta
HDDVXH-1-80	XH	80	● Magenta
HDDVXH-1-120	XH	120	● Magenta



TRAPEZOID BOLT-ON DOUBLE V SEGMENT

HDDVS-2-6	S	6	● Orange
HDDVS-2-18	S	18	● Orange
HDDVS-2-30	S	30	● Orange
HDDVS-2-60	S	60	● Orange
HDDVS-2-80	S	80	● Orange
HDDVS-2-120	S	120	● Orange
HDDVM-2-6	M	6	● Red
HDDVM-2-18	M	18	● Red
HDDVM-2-30	M	30	● Red
HDDVM-2-60	M	60	● Red
HDDVM-2-80	M	80	● Red
HDDVM-2-120	M	120	● Red
HDDVH-2-6	H	6	● Black
HDDVH-2-18	H	18	● Black
HDDVH-2-30	H	30	● Black
HDDVH-2-60	H	60	● Black
HDDVH-2-80	H	80	● Black
HDDVH-2-120	H	120	● Black

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TRAPEZOID - CONTINUED

TRAPEZOID BOLT-ON DOUBLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
HDDVVH-2-6	VH	6	● Blue
HDDVVH-2-18	VH	18	● Blue
HDDVVH-2-30	VH	30	● Blue
HDDVVH-2-60	VH	60	● Blue
HDDVVH-2-80	VH	80	● Blue
HDDVH-2-120	VH	120	● Blue
HDDVXH-2-6	XH	6	● Magenta
HDDVXH-2-18	XH	18	● Magenta
HDDVXH-2-30	XH	30	● Magenta
HDDVXH-2-60	XH	60	● Magenta
HDDVXH-2-80	XH	80	● Magenta
HDDVXH-2-120	XH	120	● Magenta


TRAPEZOID BOLT-ON D26 X 10 SINGLE SEGMENT

HD26S-1-6	S	6	● Orange
HD26S-1-18	S	18	● Orange
HD26S-1-30	S	30	● Orange
HD26S-1-60	S	60	● Orange
HD26S-1-80	S	80	● Orange
HD26S-1-120	S	120	● Orange
HD26M-1-6	M	6	● Red
HD26M-1-18	M	18	● Red
HD26M-1-30	M	30	● Red
HD26M-1-60	M	60	● Red
HD26M-1-80	M	80	● Red
HD26M-1-120	M	120	● Red
HD26H-1-6	H	6	● Black
HD26H-1-18	H	18	● Black
HD26H-1-30	H	30	● Black
HD26H-1-60	H	60	● Black
HD26H-1-80	H	80	● Black
HD26H-1-120	H	120	● Black

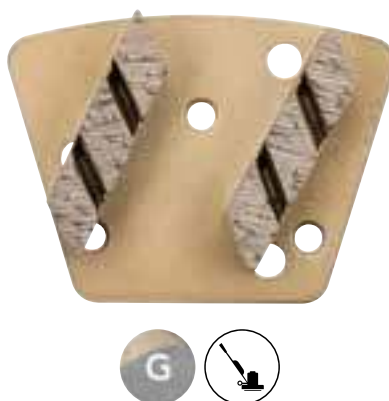
TRAPEZOID - CONTINUED

TRAPEZOID BOLT-ON D26 X 10 DOUBLE SEGMENT

PART NO.	BOND	GRIT	COLOUR
HD26S-2-6	S	6	● Orange
HD26S-2-18	S	18	● Orange
HD26S-2-30	S	30	● Orange
HD26S-2-60	S	60	● Orange
HD26S-2-80	S	80	● Orange
HD26S-2-120	S	120	● Orange
HD26M-2-6	M	6	● Red
HD26M-2-18	M	18	● Red
HD26M-2-30	M	30	● Red
HD26M-2-60	M	60	● Red
HD26M-2-80	M	80	● Red
HD26M-2-120	M	120	● Red
HD26H-2-6	H	6	● Black
HD26H-2-18	H	18	● Black
HD26H-2-30	H	30	● Black
HD26H-2-60	H	60	● Black
HD26H-2-80	H	80	● Black
HD26H-2-120	H	120	● Black


TRAPEZOID BOLT-ON RAPIDA SINGLE SEGMENT X 10MM

PART NO.	SEGS	GRIT	COLOUR
HDRAP-1-18	1	18	● Gold
HDRAP-1-30	1	30	● Gold
HDRAP-1-40	1	40	● Gold


TRAPEZOID BOLT-ON RAPIDA DOUBLE SEGMENT X 10MM

HDRAP-2-18	2	18	● Gold
HDRAP-2-30	2	30	● Gold
HDRAP-2-40	2	40	● Gold
HDRAP-2-60	2	60	● Gold
HDRAP-2-80	2	80	● Gold

TRAPEZOID - CONTINUED


TRAPEZOID BOLT-ON 2 PCD
PART NO.
COLOUR

HD2PCD-LH

Metallic Blue

HD2PCD-RH

Metallic Blue


**TRAPEZOID BOLT-ON 2 PCD
WITH 40X10 BUFFER SEGMENT**

HD2PCDSEG-LH

Metallic Blue

HD2PCDSEG-RH

Metallic Blue


**TRAPEZOID BOLT-ON 2 HALF 10MM PCD
WITH SEGMENT BUFFERS**

HD2PCD10-LH

Metallic Blue

HD2PCD10-RH

Metallic Blue


**TRAPEZOID BOLT-ON 2 MINI JET PCD
SEGMENTS WITH HALF 10MM PCD**

HD2MJ10-LH

Metallic Blue

HD2MJ10-RH

Metallic Blue


**TRAPEZOID BOLT-ON 2 JET PCD SEGMENTS
HALF 13MM PCD**

HD2J13-LH

Metallic Blue

HD2J13-RH

Metallic Blue


**TRAPEZOID BOLT-ON 2 FULL JET PCD
SEGMENTS 13MM PCD**

HD2FJ13-LH

Metallic Blue

HD2FJ13-RH

Metallic Blue


**TRAPEZOID BOLT-ON 3 FULL JET PCD
SEGMENTS 13MM PCD**

HD3FJ13-LH

Metallic Blue

HD3FJ13-RH

Metallic Blue

SLIM FIT

Premium quality diamond tooling to fit Lavina grinding machines.



SLIM FIT SINGLE ARROW SEGMENT

PART NO.	BOND	GRIT	COLOUR
SFAS-1-18	S	18	Orange
SFAS-1-30	S	30	Orange
SFAM-1-18	M	18	Red
SFAM-1-30	M	30	Red
SFAH-1-18	H	18	Black
SFAH-1-30	H	30	Black
SFAVH-1-18	VH	18	Blue
SFAVH-1-30	VH	30	Blue
SFAXH-1-18	XH	18	Magenta
SFAXH-1-30	XH	30	Magenta



SLIM FIT DOUBLE ARROW SEGMENT

SFAS-2-18	S	18	Orange
SFAS-2-30	S	30	Orange
SFAM-2-18	M	18	Red
SFAM-2-30	M	30	Red
SFAH-2-18	H	18	Black
SFAH-2-30	H	30	Black
SFAVH-2-18	VH	18	Blue
SFAVH-2-30	VH	30	Blue
SFAXH-2-18	XH	18	Magenta
SFAXH-2-30	XH	30	Magenta



SLIM FIT SINGLE V SEGMENT

SFDVS-1-6	S	6	Orange
SFDVS-1-18	S	18	Orange
SFDVS-1-30	S	30	Orange
SFDVS-1-60	S	60	Orange
SFDVS-1-80	S	80	Orange
SFDVS-1-120	S	120	Orange
SFDVM-1-6	M	6	Red
SFDVM-1-18	M	18	Red
SFDVM-1-30	M	30	Red
SFDVM-1-60	M	60	Red
SFDVM-1-80	M	80	Red
SFDVM-1-120	M	120	Red

Continued on next page

SLIM FIT - CONTINUED



SLIM FIT SINGLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
SFDVH-1-6	H	6	● Black
SFDVH-1-18	H	18	● Black
SFDVH-1-30	H	30	● Black
SFDVH-1-60	H	60	● Black
SFDVH-1-80	H	80	● Black
SFDVH-1-120	H	120	● Black
SFDVVH-1-6	VH	6	● Blue
SFDVVH-1-18	VH	18	● Blue
SFDVVH-1-30	VH	30	● Blue
SFDVVH-1-60	VH	60	● Blue
SFDVVH-1-80	VH	80	● Blue
SFDVVH-1-120	VH	120	● Blue
SFDVXH-1-6	XH	6	● Magenta
SFDVXH-1-18	XH	18	● Magenta
SFDVXH-1-30	XH	30	● Magenta
SFDVXH-1-60	XH	60	● Magenta
SFDVXH-1-80	XH	80	● Magenta
SFDVXH-1-120	XH	120	● Magenta



SLIM FIT DOUBLE V SEGMENT

SFDVS-2-6	S	6	● Orange
SFDVS-2-18	S	18	● Orange
SFDVS-2-30	S	30	● Orange
SFDVS-2-60	S	60	● Orange
SFDVS-2-80	S	80	● Orange
SFDVS-2-120	S	120	● Orange
SFDVM-2-6	M	6	● Red
SFDVM-2-18	M	18	● Red
SFDVM-2-30	M	30	● Red
SFDVM-2-60	M	60	● Red
SFDVM-2-80	M	80	● Red
SFDVM-2-120	M	120	● Red
SFDVH-2-6	H	6	● Black
SFDVH-2-18	H	18	● Black
SFDVH-2-30	H	30	● Black
SFDVH-2-60	H	60	● Black
SFDVH-2-80	H	80	● Black
SFDVH-2-120	H	120	● Black

Continued on next page

SLIM FIT - CONTINUED



SLIM FIT DOUBLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
SFDVVH-2-6	VH	6	● Blue
SFDVVH-2-18	VH	18	● Blue
SFDVVH-2-30	VH	30	● Blue
SFDVVH-2-60	VH	60	● Blue
SFDVVH-2-80	VH	80	● Blue
SFDVVH-2-120	VH	120	● Blue
SFDVXH-2-6	XH	6	● Magenta
SFDVXH-2-18	XH	18	● Magenta
SFDVXH-2-30	XH	30	● Magenta
SFDVXH-2-60	XH	60	● Magenta
SFDVXH-2-80	XH	80	● Magenta
SFDVXH-2-120	XH	120	● Magenta



SLIM FIT D26 X 10 SINGLE SEGMENT

SF26S-1-6	S	6	● Orange
SF26S-1-18	S	18	● Orange
SF26S-1-30	S	30	● Orange
SF26S-1-60	S	60	● Orange
SF26S-1-80	S	80	● Orange
SF26S-1-120	S	120	● Orange
SF26M-1-6	M	6	● Red
SF26M-1-18	M	18	● Red
SF26M-1-30	M	30	● Red
SF26M-1-60	M	60	● Red
SF26M-1-80	M	80	● Red
SF26M-1-120	M	120	● Red
SF26H-1-6	H	6	● Black
SF26H-1-18	H	18	● Black
SF26H-1-30	H	30	● Black
SF26H-1-60	H	60	● Black
SF26H-1-80	H	80	● Black
SF26H-1-120	H	120	● Black

SLIM FIT - CONTINUED



SLIM FIT D26 X 10 DOUBLE SEGMENT

PART NO.	BOND	GRIT	COLOUR
SF26S-2-6	S	6	● Orange
SF26S-2-18	S	18	● Orange
SF26S-2-30	S	30	● Orange
SF26S-2-60	S	60	● Orange
SF26S-2-80	S	80	● Orange
SF26S-2-120	S	120	● Orange
SF26M-2-6	M	6	● Red
SF26M-2-18	M	18	● Red
SF26M-2-30	M	30	● Red
SF26M-2-60	M	60	● Red
SF26M-2-80	M	80	● Red
SF26M-2-120	M	120	● Red
SF26H-2-6	H	6	● Black
SF26H-2-18	H	18	● Black
SF26H-2-30	H	30	● Black
SF26H-2-60	H	60	● Black
SF26H-2-80	H	80	● Black
SF26H-2-120	H	120	● Black



SLIM FIT RAPIDA SINGLE SEGMENT X 10MM

SFRAP-1-18	1	18	● Gold
SFRAP-1-30	1	30	● Gold
SFRAP-1-40	1	40	● Gold



SLIM FIT RAPIDA DOUBLE SEGMENT X 10MM

SFRAP-2-18	2	18	● Gold
SFRAP-2-30	2	30	● Gold
SFRAP-2-40	2	40	● Gold
SFRAP-2-60	2	60	● Gold
SFRAP-2-80	2	80	● Gold

SLIM FIT - CONTINUED



SLIM FIT 2 PCD

PART NO.	COLOUR
SF2PCD-LH	● Metallic Blue
SF2PCD-RH	● Metallic Blue


SLIM FIT 2 PCD
WITH 40X10 BUFFER SEGMENT

SF2PCDSEG-LH	● Metallic Blue
SF2PCDSEG-RH	● Metallic Blue


SLIM FIT 2 HALF 10MM PCD
WITH SEGMENT BUFFERS

SF2PCD10-LH	● Metallic Blue
SF2PCD10-RH	● Metallic Blue


SLIM FIT 2 MINI JET PCD
SEGMENTS WITH HALF 10MM PCD

SF2MJ10-LH	● Metallic Blue
SF2MJ10-RH	● Metallic Blue


SLIM FIT 2 JET PCD
SEGMENTS HALF 13MM PCD

SF2J13-LH	● Metallic Blue
SF2J13-RH	● Metallic Blue


SLIM FIT 2 FULL JET PCD
SEGMENTS 13MM PCD

SF2FJ13-LH	● Metallic Blue
SF2FJ13-RH	● Metallic Blue


SLIM FIT 3 FULL JET PCD
SEGMENTS 13MM PCD

SF3FJ13-LH	● Metallic Blue
SF3FJ13-RH	● Metallic Blue



UNI-LOCK

Premium quality diamond tooling suitable for Husqvarna plates.



UNI-LOCK SINGLE ARROW SEGMENT

PART NO.	BOND	GRIT	COLOUR
ULAS-1-18	S	18	Orange
ULAS-1-30	S	30	Orange
ULAM-1-18	M	18	Red
ULAM-1-30	M	30	Red
ULAH-1-18	H	18	Black
ULAH-1-30	H	30	Black
ULAVH-1-18	VH	18	Blue
ULAVH-1-30	VH	30	Blue
ULAXH-1-18	XH	18	Magenta
ULAXH-1-30	XH	30	Magenta



UNI-LOCK DOUBLE ARROW SEGMENT

ULAS-2-18	S	18	Orange
ULAS-2-30	S	30	Orange
ULAS-2-18	M	18	Red
ULAS-2-30	M	30	Red
ULAH-2-18	H	18	Black
ULAH-2-30	H	30	Black
ULAVH-2-18	VH	18	Blue
ULAVH-2-30	VH	30	Blue
ULAXH-2-18	XH	18	Magenta
ULAXH-2-30	XH	30	Magenta



UNI-LOCK SINGLE V SEGMENT

ULDVS-1-6	S	6	Orange
ULDVS-1-18	S	18	Orange
ULDVS-1-30	S	30	Orange
ULDVS-1-60	S	60	Orange
ULDVS-1-80	S	80	Orange
ULDVS-1-120	S	120	Orange
ULDVM-1-6	M	6	Red
ULDVM-1-18	M	18	Red
ULDVM-1-30	M	30	Red
ULDVM-1-60	M	60	Red
ULDVM-1-80	M	80	Red
ULDVM-1-120	M	120	Red

Continued on next page

UNI-LOCK - CONTINUED



UNI-LOCK SINGLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
ULDVH-1-6	H	6	● Black
ULDVH-1-18	H	18	● Black
ULDVH-1-30	H	30	● Black
ULDVH-1-60	H	60	● Black
ULDVH-1-80	H	80	● Black
ULDVH-1-120	H	120	● Black
ULDVVH-1-6	VH	6	● Blue
ULDVVH-1-18	VH	18	● Blue
ULDVVH-1-30	VH	30	● Blue
ULDVVH-1-60	VH	60	● Blue
ULDVVH-1-80	VH	80	● Blue
ULDVVH-1-120	VH	120	● Blue
ULDVXH-1-6	XH	6	● Magenta
ULDVXH-1-18	XH	18	● Magenta
ULDVXH-1-30	XH	30	● Magenta
ULDVXH-1-60	XH	60	● Magenta
ULDVXH-1-80	XH	80	● Magenta
ULDVXH-1-120	XH	120	● Magenta



UNI-LOCK DOUBLE V SEGMENT

ULDVS-2-6	S	6	● Orange
ULDVS-2-18	S	18	● Orange
ULDVS-2-30	S	30	● Orange
ULDVS-2-60	S	60	● Orange
ULDVS-2-80	S	80	● Orange
ULDVS-2-120	S	120	● Orange
ULDVM-2-6	M	6	● Red
ULDVM-2-18	M	18	● Red
ULDVM-2-30	M	30	● Red
ULDVM-2-60	M	60	● Red
ULDVM-2-80	M	80	● Red
ULDVM-2-120	M	120	● Red
ULDVH-2-6	H	6	● Black
ULDVH-2-18	H	18	● Black
ULDVH-2-30	H	30	● Black
ULDVH-2-60	H	60	● Black
ULDVH-2-80	H	80	● Black
ULDVH-2-120	H	120	● Black

Continued on next page

UNI-LOCK - CONTINUED



UNI-LOCK DOUBLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
ULDVVH-2-6	VH	6	Blue
ULDVVH-2-18	VH	18	Blue
ULDVVH-2-30	VH	30	Blue
ULDVVH-2-60	VH	60	Blue
ULDVVH-2-80	VH	80	Blue
ULDVVH-2-120	VH	120	Blue
ULDVXH-2-6	XH	6	Magenta
ULDVXH-2-18	XH	18	Magenta
ULDVXH-2-30	XH	30	Magenta
ULDVXH-2-60	XH	60	Magenta
ULDVXH-2-80	XH	80	Magenta
ULDVXH-2-120	XH	120	Magenta

UNI-LOCK D26 X 10 SINGLE SEGMENT

UL26S-1-6	S	6	Orange
UL26S-1-18	S	18	Orange
UL26S-1-30	S	30	Orange
UL26S-1-60	S	60	Orange
UL26S-1-80	S	80	Orange
UL26S-1-120	S	120	Orange
UL26M-1-6	M	6	Red
UL26M-1-18	M	18	Red
UL26M-1-30	M	30	Red
UL26M-1-60	M	60	Red
UL26M-1-80	M	80	Red
UL26M-1-120	M	120	Red
UL26H-1-6	H	6	Black
UL26H-1-18	H	18	Black
UL26H-1-30	H	30	Black
UL26H-1-60	H	60	Black
UL26H-1-80	H	80	Black
UL26H-1-120	H	120	Black

UNI-LOCK - CONTINUED



UNI-LOCK D26 X 10 DOUBLE SEGMENT

PART NO.	BOND	GRIT	COLOUR
UL26S-2-6	S	6	Orange
UL26S-2-18	S	18	Orange
UL26S-2-30	S	30	Orange
UL26S-2-60	S	60	Orange
UL26S-2-80	S	80	Orange
UL26S-2-120	S	120	Orange
UL26M-2-6	M	6	Red
UL26M-2-18	M	18	Red
UL26M-2-30	M	30	Red
UL26M-2-60	M	60	Red
UL26M-2-80	M	80	Red
UL26M-2-120	M	120	Red
UL26H-2-6	H	6	Black
UL26H-2-18	H	18	Black
UL26H-2-30	H	30	Black
UL26H-2-60	H	60	Black
UL26H-2-80	H	80	Black
UL26H-2-120	H	120	Black



UNI-LOCK RAPIDA SINGLE SEGMENT X 10MM

PART NO.	—	GRIT	COLOUR
ULRAP-1-18	—	18	Gold
ULRAP-1-30	—	30	Gold
ULRAP-1-40	—	40	Gold



UNI-LOCK RAPIDA DOUBLE SEGMENT X 10MM

ULRAP-2-18	—	18	Gold
ULRAP-2-30	—	30	Gold
ULRAP-2-40	—	40	Gold
ULRAP-2-60	—	60	Gold
ULRAP-2-80	—	80	Gold

UNI-LOCK - CONTINUED



UNI-LOCK 2 PCD

PART NO.	COLOUR
UL2PCD-LH	● Metallic Blue
UL2PCD-RH	● Metallic Blue


UNI-LOCK 2 PCD
WITH 40X10 BUFFER SEGMENT

UL2PCDSEG-LH	● Metallic Blue
UL2PCDSEG-RH	● Metallic Blue


UNI-LOCK 2 HALF 10MM PCD
WITH SEGMENT BUFFERS

UL2PCD10-LH	● Metallic Blue
UL2PCD10-RH	● Metallic Blue


UNI-LOCK 2 MINI JET PCD
SEGMENTS WITH HALF 10MM PCD

UL2MJ10-LH	● Metallic Blue
UL2MJ10-RH	● Metallic Blue


UNI-LOCK 2 JET PCD
SEGMENTS HALF 13MM PCD

UL2J13-LH	● Metallic Blue
UL2J13-RH	● Metallic Blue


UNI-LOCK 2 FULL JET PCD
SEGMENTS 13MM PCD

UL2FJ13-LH	● Metallic Blue
UL2FJ13-RH	● Metallic Blue


UNI-LOCK 3 FULL JET PCD
SEGMENTS 13MM PCD

UL3FJ13-LH	● Metallic Blue
UL3FJ13-RH	● Metallic Blue



BENT HTC

Premium quality diamond tooling made to fit a variety of HTC slide-on machines.



BENT HTC SINGLE ARROW SEGMENT

PART NO.	BOND	GRIT	COLOUR
BHAS-1-18	S	18	Orange
BHAS-1-30	S	30	Orange
BHAM-1-18	M	18	Red
BHAM-1-30	M	30	Red
BHAH-1-18	H	18	Black
BHAH-1-30	H	30	Black
BHAVH-1-18	VH	18	Blue
BHAVH-1-30	VH	30	Blue
BHAXH-1-18	XH	18	Magenta
BHAXH-1-30	XH	30	Magenta

BENT HTC DOUBLE ARROW SEGMENT

BHAS-2-18	S	18	Orange
BHAS-2-30	S	30	Orange
BHAM-2-18	M	18	Red
BHAM-2-30	M	30	Red
BHAH-2-18	H	18	Black
BHAH-2-30	H	30	Black
BHAVH-2-18	VH	18	Blue
BHAVH-2-30	VH	30	Blue
BHAXH-2-18	XH	18	Magenta
BHAXH-2-30	XH	30	Magenta

BENT HTC SINGLE V SEGMENT

BHDVS-1-6	S	6	Orange
BHDVS-1-18	S	18	Orange
BHDVS-1-30	S	30	Orange
BHDVS-1-60	S	60	Orange
HDDVS-1-80	S	80	Orange
BHDVS-1-120	S	120	Orange
BHDVM-1-6	M	6	Red
BHDVM-1-18	M	18	Red
BHDVM-1-30	M	30	Red
BHDVM-1-60	M	60	Red
BHDVM-1-80	M	80	Red
BHDVM-1-120	M	120	Red

Continued on next page

BENT HTC - CONTINUED



BENT HTC SINGLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
BHDVH-1-6	H	6	● Black
BHDVH-1-18	H	18	● Black
BHDVH-1-30	H	30	● Black
BHDVH-1-60	H	60	● Black
BHDVH-1-80	H	80	● Black
BHDVH-1-120	H	120	● Black
BHDVVH-1-6	VH	6	● Blue
BHDVVH-1-18	VH	18	● Blue
BHDVVH-1-30	VH	30	● Blue
BHDVVH-1-60	VH	60	● Blue
BHDVVH-1-80	VH	80	● Blue
BHDVVH-1-120	VH	120	● Blue
BHDVXH-1-6	XH	6	● Magenta
BHDVXH-1-18	XH	18	● Magenta
BHDVXH-1-30	XH	30	● Magenta
BHDVXH-1-60	XH	60	● Magenta
BHDVXH-1-80	XH	80	● Magenta
BHDVXH-1-120	XH	120	● Magenta



BENT HTC DOUBLE V SEGMENT

BHDVS-2-6	S	6	● Orange
BHDVS-2-18	S	18	● Orange
BHDVS-2-30	S	30	● Orange
BHDVS-2-60	S	60	● Orange
BHDVS-2-80	S	80	● Orange
BHDVS-2-120	S	120	● Orange
BHDVM-2-6	M	6	● Red
BHDVM-2-18	M	18	● Red
BHDVM-2-30	M	30	● Red
BHDVM-2-60	M	60	● Red
BHDVM-2-80	M	80	● Red
BHDVM-2-120	M	120	● Red
BHDVH-2-6	H	6	● Black
BHDVH-2-18	H	18	● Black
BHDVH-2-30	H	30	● Black
BHDVH-2-60	H	60	● Black
BHDVH-2-80	H	80	● Black
BHDVH-2-120	H	120	● Black

Continued on next page

BENT HTC - CONTINUED



BENT HTC DOUBLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
BHDVVH-2-6	VH	6	Blue
BHDVVH-2-18	VH	18	Blue
BHDVVH-2-30	VH	30	Blue
BHDVVH-2-60	VH	60	Blue
BHDVVH-2-80	VH	80	Blue
BHDVH-2-120	VH	120	Blue
BHDVXH-2-6	XH	6	Magenta
BHDVXH-2-18	XH	18	Magenta
BHDVXH-2-30	XH	30	Magenta
BHDVXH-2-60	XH	60	Magenta
BHDVXH-2-80	XH	80	Magenta
BHDVXH-2-120	XH	120	Magenta

BENT HTC D26 X 10 SINGLE SEGMENT

BH26S-1-6	S	6	Orange
BH26S-1-18	S	18	Orange
BH26S-1-30	S	30	Orange
BH26S-1-60	S	60	Orange
BH26S-1-80	S	80	Orange
BH26S-1-120	S	120	Orange
BH26M-1-6	M	6	Red
BH26M-1-18	M	18	Red
BH26M-1-30	M	30	Red
BH26M-1-60	M	60	Red
BH26M-1-80	M	80	Red
BH26M-1-120	M	120	Red
BH26H-1-6	H	6	Black
BH26H-1-18	H	18	Black
BH26H-1-30	H	30	Black
BH26H-1-60	H	60	Black
BH26H-1-80	H	80	Black
BH26H-1-120	H	120	Black

BENT HTC - CONTINUED



BENT HTC D26 X 10 DOUBLE SEGMENT

PART NO.	BOND	GRIT	COLOUR
BH26S-2-6	S	6	Orange
BH26S-2-18	S	18	Orange
BH26S-2-30	S	30	Orange
BH26S-2-60	S	60	Orange
BH26S-2-80	S	80	Orange
BH26S-2-120	S	120	Orange
BH26M-2-6	M	6	Red
BH26M-2-18	M	18	Red
BH26M-2-30	M	30	Red
BH26M-2-60	M	60	Red
BH26M-2-80	M	80	Red
BH26M-2-120	M	120	Red
BH26H-2-6	H	6	Black
BH26H-2-18	H	18	Black
BH26H-2-30	H	30	Black
BH26H-2-60	H	60	Black
BH26H-2-80	H	80	Black
BH26H-2-120	H	120	Black



BENT HTC RAPIDA SINGLE SEGMENT X 10MM

BHRAP-1-18	18	Gold
BHRAP-1-30	30	Gold
BHRAP-1-40	40	Gold



BENT HTC RAPIDA DOUBLE SEGMENT X 10MM

BHRAP-2-18	18	Gold
BHRAP-2-30	30	Gold
BHRAP-2-40	40	Gold
BHRAP-2-60	60	Gold
BHRAP-2-80	80	Gold

BENT HTC - CONTINUED



BENT HTC 2 PCD

PART NO.	COLOUR
BH2PCD-LH	● Metallic Blue
BH2PCD-RH	● Metallic Blue



BENT HTC 2 PCD WITH 40X10 BUFFER SEGMENT

BH2PCDSEG-LH	● Metallic Blue
BH2PCDSEG-RH	● Metallic Blue



BENT HTC 2 HALF 10MM PCD WITH SEGMENT BUFFERS

BH2PCD10-LH	● Metallic Blue
BH2PCD10-RH	● Metallic Blue



BENT HTC 2 MINI JET PCD SEGMENTS WITH HALF 10MM PCD

BH2MJ10-LH	● Metallic Blue
BH2MJ10-RH	● Metallic Blue



BENT HTC 2 JET PCD SEGMENTS HALF 13MM PCD

BH2J13-LH	● Metallic Blue
BH2J13-RH	● Metallic Blue



BENT HTC 2 FULL JET PCD SEGMENTS 13MM PCD

BH2FJ13-LH	● Metallic Blue
BH2FJ13-RH	● Metallic Blue



BENT HTC 3 FULL JET PCD SEGMENTS 13MM PCD

BH3FJ13-LH	● Metallic Blue
BH3FJ13-RH	● Metallic Blue



SCANMASKIN

Premium quality diamond tooling suitable for Scanmaskin plates.



SCANMASKIN SINGLE ARROW SEGMENT

PART NO.	BOND	GRIT	COLOUR
SMAS-1-18	S	18	Orange
SMAS-1-30	S	30	Orange
SMAM-1-18	M	18	Red
SMAM-1-30	M	30	Red
SMAH-1-18	H	18	Black
SMAH-1-30	H	30	Black
SMAVH-1-18	VH	18	Blue
SMAVH-1-30	VH	30	Blue
SMAHX-1-18	XH	18	Magenta
SMAHX-1-30	XH	30	Magenta

SCANMASKIN DOUBLE ARROW SEGMENT

SMAS-2-18	S	18	Orange
SMAS-2-30	S	30	Orange
SMAM-2-18	M	18	Red
SMAM-2-30	M	30	Red
SMAH-2-18	H	18	Black
SMAH-2-30	H	30	Black
SMAVH-2-18	VH	18	Blue
SMAVH-2-30	VH	30	Blue
SMAHX-2-18	XH	18	Magenta
SMAHX-2-30	XH	30	Magenta

SCANMASKIN SINGLE V SEGMENT

SMDVS-1-6	S	6	Orange
SMDVS-1-18	S	18	Orange
SMDVS-1-30	S	30	Orange
SMDVS-1-60	S	60	Orange
SMDVS-1-80	S	80	Orange
SMDVS-1-120	S	120	Orange
SMDVM-1-6	M	6	Red
SMDVM-1-18	M	18	Red
SMDVM-1-30	M	30	Red
SMDVM-1-60	M	60	Red
SMDVM-1-80	M	80	Red
SMDVM-1-120	M	120	Red

Continued on next page

SCANMASKIN - CONTINUED



SCANMASKIN SINGLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
SMDVH-1-6	H	6	● Black
SMDVH-1-18	H	18	● Black
SMDVH-1-30	H	30	● Black
SMDVH-1-60	H	60	● Black
SMDVH-1-80	H	80	● Black
SMDVH-1-120	H	120	● Black
SMDVVH-1-6	VH	6	● Blue
SMDVVH-1-18	VH	18	● Blue
SMDVVH-1-30	VH	30	● Blue
SMDVVH-1-60	VH	60	● Blue
SMDVVH-1-80	VH	80	● Blue
SMDVVH-1-120	VH	120	● Blue
SMDVXH-1-6	XH	6	● Magenta
SMDVXH-1-18	XH	18	● Magenta
SMDVXH-1-30	XH	30	● Magenta
SMDVXH-1-60	XH	60	● Magenta
SMDVXH-1-80	XH	80	● Magenta
SMDVXH-1-120	XH	120	● Magenta



SCANMASKIN DOUBLE V SEGMENT

SMDVS-2-6	S	6	● Orange
SMDVS-2-18	S	18	● Orange
SMDVS-2-30	S	30	● Orange
SMDVS-2-60	S	60	● Orange
SMDVS-2-80	S	80	● Orange
SMDVS-2-120	S	120	● Orange
SMDVM-2-6	M	6	● Red
SMDVM-2-18	M	18	● Red
SMDVM-2-30	M	30	● Red
SMDVM-2-60	M	60	● Red
SMDVM-2-80	M	80	● Red
SMDVM-2-120	M	120	● Red
SMDVH-2-6	H	6	● Black
SMDVH-2-18	H	18	● Black
SMDVH-2-30	H	30	● Black
SMDVH-2-60	H	60	● Black
SMDVH-2-80	H	80	● Black
SMDVH-2-120	H	120	● Black

Continued on next page

SCANMASKIN - CONTINUED



SCANMASKIN DOUBLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
SMDVVH-2-6	VH	6	● Blue
SMDVVH-2-18	VH	18	● Blue
SMDVVH-2-30	VH	30	● Blue
SMDVVH-2-60	VH	60	● Blue
SMLDVH-2-80	VH	80	● Blue
SMDVVH-2-120	VH	120	● Blue
SMDVXH-2-6	XH	6	● Magenta
SMDVXH-2-18	XH	18	● Magenta
SMDVXH-2-30	XH	30	● Magenta
SMDVXH-2-60	XH	60	● Magenta
SMDVXH-2-80	XH	80	● Magenta
SMDVXH-2-120	XH	120	● Magenta

SCANMASKIN D26 X 10 SINGLE SEGMENT

SM26S-1-6	S	6	● Orange
SM26S-1-18	S	18	● Orange
SM26S-1-30	S	30	● Orange
SM26S-1-60	S	60	● Orange
SM26S-1-80	S	80	● Orange
SM26S-1-120	S	120	● Orange
SM26M-1-6	M	6	● Red
SM26M-1-18	M	18	● Red
SM26M-1-30	M	30	● Red
SM26M-1-60	M	60	● Red
SM26M-1-80	M	80	● Red
SM26M-1-120	M	120	● Red
SM26H-1-6	H	6	● Black
SM26H-1-18	H	18	● Black
SM26H-1-30	H	30	● Black
SM26H-1-60	H	60	● Black
SM26H-1-80	H	80	● Black
SM26H-1-120	H	120	● Black

SCANMASKIN - CONTINUED



SCANMASKIN D26 X 10 DOUBLE SEGMENT

PART NO.	BOND	GRIT	COLOUR
SM26S-2-6	S	6	● Orange
SM26S-2-18	S	18	● Orange
SM26S-2-30	S	30	● Orange
SM26S-2-60	S	60	● Orange
SM26S-2-80	S	80	● Orange
SM26S-2-120	S	120	● Orange
SM26M-2-6	M	6	● Red
SM26M-2-18	M	18	● Red
SM26M-2-30	M	30	● Red
SM26M-2-60	M	60	● Red
SM26M-2-80	M	80	● Red
SM26M-2-120	M	120	● Red
SM26H-2-6	H	6	● Black
SM26H-2-18	H	18	● Black
SM26H-2-30	H	30	● Black
SM26H-2-60	H	60	● Black
SM26H-2-80	H	80	● Black
SM26H-2-120	H	120	● Black



SCANMASKIN RAPIDA SINGLE SEGMENT X 10MM

PART NO.	BOND	GRIT	COLOUR
SMRAP-1-18	—	18	● Gold
SMRAP-1-30	—	30	● Gold
SMRAP-1-40	—	40	● Gold



SCANMASKIN RAPIDA DOUBLE SEGMENT X 10MM

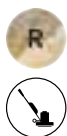
SMRAP-2-18	—	18	● Gold
SMRAP-2-30	—	30	● Gold
SMRAP-2-40	—	40	● Gold
SMRAP-2-60	—	60	● Gold
SMRAP-2-80	—	80	● Gold

SCANMASKIN - CONTINUED



SCANMASKIN 2 PCD

PART NO.	COLOUR
SM2PCD-LH	● Metallic Blue
SM2PCD-RH	● Metallic Blue


SCANMASKIN 2 PCD
WITH 40X10 BUFFER SEGMENT

SM2PCDSEG-LH	● Metallic Blue
SM2PCDSEG-RH	● Metallic Blue


SCANMASKIN 2 HALF 10MM PCD
WITH SEGMENT BUFFERS

SM2PCD10-LH	● Metallic Blue
SM2PCD10-RH	● Metallic Blue


SCANMASKIN 2 MINI JET PCD
SEGMENTS WITH HALF 10MM PCD

SM2MJ10-LH	● Metallic Blue
SM2MJ10-RH	● Metallic Blue


SCANMASKIN 2 JET PCD
SEGMENTS
HALF 13MM PCD

SM2J13-LH	● Metallic Blue
SM2J13-RH	● Metallic Blue


SCANMASKIN 2 FULL JET PCD
SEGMENTS 13MM PCD

SM2FJ13-LH	● Metallic Blue
SM2FJ13-RH	● Metallic Blue


SCANMASKIN 3 FULL JET PCD
SEGMENTS 13MM PCD

SM3FJ13-LH	● Metallic Blue
SM3FJ13-RH	● Metallic Blue



SCHWAMBORN

Premium quality diamond tooling suitable for Schwamborn plates.



SCHWAMBORN SINGLE ARROW SEGMENT

PART NO.	BOND	GRIT	COLOUR
SWMAS-1-18	S	18	Orange
SWMAS-1-30	S	30	Orange
SWMAM-1-18	M	18	Red
SWMAM-1-30	M	30	Red
SWMAH-1-18	H	18	Black
SWMAH-1-30	H	30	Black
SWMAVH-1-18	VH	18	Blue
SWMAVH-1-30	VH	30	Blue
SWMAXH-1-18	XH	18	Magenta
SWMAXH-1-30	XH	30	Magenta

SCHWAMBORN DOUBLE ARROW SEGMENT

SWMAS-2-18	S	18	Orange
SWMAS-2-30	S	30	Orange
SWMAM-2-18	M	18	Red
SWMAM-2-30	M	30	Red
SWMAH-2-18	H	18	Black
SWMAH-2-30	H	30	Black
SWMAVH-2-18	VH	18	Blue
SWMAVH-2-30	VH	30	Blue
SWMAXH-2-18	XH	18	Magenta
SWMAXH-2-30	XH	30	Magenta

SCHWAMBORN SINGLE V SEGMENT

SWMDVS-1-6	S	6	Orange
SWMDVS-1-18	S	18	Orange
SWMDVS-1-30	S	30	Orange
SWMDVS-1-60	S	60	Orange
SWMDVS-1-80	S	80	Orange
SWMDVS-1-120	S	120	Orange
SWMDVM-1-6	M	6	Red
SWMDVM-1-18	M	18	Red
SWMDVM-1-30	M	30	Red
SWMDVM-1-60	M	60	Red
SWMDVM-1-80	M	80	Red
SWMDVM-1-120	M	120	Red

Continued on next page

SCHWAMBORN - CONTINUED



SCHWAMBORN SINGLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
SWMDVH-1-6	H	6	● Black
SWMDVH-1-18	H	18	● Black
SWMDVH-1-30	H	30	● Black
SWMDVH-1-60	H	60	● Black
SWMDVH-1-80	H	80	● Black
SWMDVH-1-120	H	120	● Black
SWMDVVH-1-6	VH	6	● Blue
SWMDVVH-1-18	VH	18	● Blue
SWMDVVH-1-30	VH	30	● Blue
SWMDVVH-1-60	VH	60	● Blue
SWMDVVH-1-80	VH	80	● Blue
SWMDVVH-1-120	VH	120	● Blue
SWMDVXH-1-6	XH	6	● Magenta
SWMDVXH-1-18	XH	18	● Magenta
SWMDVXH-1-30	XH	30	● Magenta
SWMDVXH-1-60	XH	60	● Magenta
SWMDVXH-1-80	XH	80	● Magenta
SWMDVXH-1-120	XH	120	● Magenta



SCHWAMBORN DOUBLE V SEGMENT

SWMDVS-2-6	S	6	● Orange
SWMDVS-2-18	S	18	● Orange
SWMDVS-2-30	S	30	● Orange
SWMDVS-2-60	S	60	● Orange
SWMDVS-2-80	S	80	● Orange
SWMDVS-2-120	S	120	● Orange
SWMDVM-2-6	M	6	● Red
SWMDVM-2-18	M	18	● Red
SWMDVM-2-30	M	30	● Red
SWMDVM-2-60	M	60	● Red
SWMDVM-2-80	M	80	● Red
SWMDVM-2-120	M	120	● Red
SWMDVH-2-6	H	6	● Black
SWMDVH-2-18	H	18	● Black
SWMDVH-2-30	H	30	● Black
SWMDVH-2-60	H	60	● Black
SWMDVH-2-80	H	80	● Black
SWMDVH-2-120	H	120	● Black

Continued on next page

SCHWAMBORN - CONTINUED



SCHWAMBORN DOUBLE V SEGMENT - CONTINUED

PART NO.	BOND	GRIT	COLOUR
SWMDVVH-2-6	VH	6	● Blue
SWMDVVH-2-18	VH	18	● Blue
SWMDVVH-2-30	VH	30	● Blue
SWMDVVH-2-60	VH	60	● Blue
SWMDVVH-2-80	VH	80	● Blue
SWMDVVH-2-120	VH	120	● Blue
SWMDVXH-2-6	XH	6	● Magenta
SWMDVXH-2-18	XH	18	● Magenta
SWMDVXH-2-30	XH	30	● Magenta
SWMDVXH-2-60	XH	60	● Magenta
SWMDVXH-2-80	XH	80	● Magenta
SWMDVXH-2-120	XH	120	● Magenta

SCHWAMBORN D26 X 10 SINGLE SEGMENT

SWM26S-1-6	S	6	● Orange
SWM26S-1-18	S	18	● Orange
SWM26S-1-30	S	30	● Orange
SWM26S-1-60	S	60	● Orange
SWM26S-1-80	S	80	● Orange
SWM26S-1-120	S	120	● Orange
SWM26M-1-6	M	6	● Red
SWM26M-1-18	M	18	● Red
SWM26M-1-30	M	30	● Red
SWM26M-1-60	M	60	● Red
SWM26M-1-80	M	80	● Red
SWM26M-1-120	M	120	● Red
SWM26H-1-6	H	6	● Black
SWM26H-1-18	H	18	● Black
SWM26H-1-30	H	30	● Black
SWM26H-1-60	H	60	● Black
SWM26H-1-80	H	80	● Black
SWM26H-1-120	H	120	● Black

SCHWAMBORN - CONTINUED



SCHWAMBORN D26 X 10 SINGLE SEGMENT

PART NO.	BOND	GRIT	COLOUR
SWM26S-2-6	S	6	● Orange
SWM26S-2-18	S	18	● Orange
SWM26S-2-30	S	30	● Orange
SWM26S-2-60	S	60	● Orange
SWM26S-2-80	S	80	● Orange
SWM26S-2-120	S	120	● Orange
SWM26M-2-6	M	6	● Red
SWM26M-2-18	M	18	● Red
SWM26M-2-30	M	30	● Red
SWM26M-2-60	M	60	● Red
SWM26M-2-80	M	80	● Red
SWM26M-2-120	M	120	● Red
SWM26H-2-6	H	6	● Black
SWM26H-2-18	H	18	● Black
SWM26H-2-30	H	30	● Black
SWM26H-2-60	H	60	● Black
SWM26H-2-80	H	80	● Black
SWM26H-2-120	H	120	● Black



SCHWAMBORN RAPIDA SINGLE SEGMENT X 10MM

SWMRAP-1-18	—	18	● Gold
SWMRAP-1-30	—	30	● Gold
SWMRAP-1-40	—	40	● Gold



SCHWAMBORN RAPIDA DOUBLE SEGMENT X 10MM

SWMRAP-2-18	—	18	● Gold
SWMRAP-2-30	—	30	● Gold
SWMRAP-2-40	—	40	● Gold
SWMRAP-2-60	—	60	● Gold
SWMRAP-2-80	—	80	● Gold

SCHWAMBORN - CONTINUED



SCHWAMBORN 2 PCD

PART NO.	COLOUR
SM2PCD-LH	● Metallic Blue
SM2PCD-RH	● Metallic Blue


SCHWAMBORN 2 PCD
WITH 40X10 BUFFER SEGMENT

SM2PCDSEG-LH	● Metallic Blue
SM2PCDSEG-RH	● Metallic Blue


SCHWAMBORN 2 HALF
10MM PCD WITH SEGMENT BUFFERS

SM2PCD10-LH	● Metallic Blue
SM2PCD10-RH	● Metallic Blue


SCHWAMBORN 2 MINI JET PCD
SEGMENTS WITH HALF 10MM PCD

SM2MJ10-LH	● Metallic Blue
SM2MJ10-RH	● Metallic Blue


SCHWAMBORN 2 JET PCD
SEGMENTS HALF 13MM PCD

SM2J13-LH	● Metallic Blue
SM2J13-RH	● Metallic Blue


SCHWAMBORN 2 FULL JET PCD
SEGMENTS 13MM PCD

SM2FJ13-LH	● Metallic Blue
SM2FJ13-RH	● Metallic Blue


SCHWAMBORN 3 FULL JET PCD
SEGMENTS 13MM PCD

SM3FJ13-LH	● Metallic Blue
SM3FJ13-RH	● Metallic Blue



POLISHING TOOLS

Syntec's Polishing Tools* 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.

CERAMIC PADS**

Designed for polishing.



3" (76MM), 10MM SHINER - CERAMIC PADS

PART NO.	GRITS
CSP7630A	30
CSP7650A	50
CSP76100A	100
CSP76200A	200
CSP76400A	400

** Ceramic cups, designed for edging, prepping and polishing simultaneously, can be found in the cup wheels section, see page 54.

METAL RESIN PADS

Quickly remove scratches caused by metal bonds.



3" (76MM), 10MM SHINER - METAL BOND RESIN PADS

PART NO.	GRITS
MRSP7630A	30
MRSP7650A	50
MRSP76100A	100
MRSP76200A	200
MRSP76400A	400

RESIN PADS

Quickly remove scratches caused by metal bonds and metal resin bonds.



4" (100MM) POLISHING PADS

PART NO.	GRITS
PP450D	50
PP4100D	100
PP4200D	200
PP4400D	400
PP4800D	800
PP41500D	1500
PP43000D	3000

5" (120MM) POLISHING PADS

PP550D	50
PP5100D	100
PP5200D	200
PP5400D	400
PP5800D	800
PP51500D	1500
PP53000D	3000

3" (76MM), 10MM NTW RESIN PADS

NTW7630	30
NTW7650	50
NTW76100	100
NTW76200	200
NTW76400	400
NTW76800	800
NTW761500	1500
NTW763000	3000

3" (76MM), 10MM SHINER RESIN PADS

RSP7630A	30
RSP7650A	50
RSP76100A	100
RSP76200A	200
RSP76400A	400
RSP76800A	800
RSP761500A	1500
RSP763000A	3000

*Imported product

POLISHING TOOLS - CONTINUED

**BURNISHING PADS**

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

PART NO.	DIAMETER	GRIT
SFP275-30A	11"	30
SFP275-50A	11"	50
SFP275-100A	11"	100
SFP275-200A	11"	200
SFP275-400A	11"	400
SFP275-800A	11"	800
SFP275-1500A	11"	1500
SFP275-3000A	11"	3000
MP430-30A	17"	30
MP430-50A	17"	50
MP430-100A	17"	100
MP430-200A	17"	200
MP430-4000A	17"	400
MP430-800A	17"	800
MP430-1500A	17"	1500
MP430-3000A	17"	3000
MP535-30A	21"	30
MP535-50A	21"	50
MP535-100A	21"	100
MP535-200A	21"	200
MP535-400A	21"	400
MP535-800A	21"	800
MP535-1500A	21"	1500
MP535-3000A	21"	3000
MP686-30A	27"	30
MP686-50A	27"	50
MP686-100A	27"	100
MP686-200A	27"	200
MP686-400A	27"	400
MP686-800A	27"	800
MP686-1500A	27"	1500
MP686-3000A	27"	3000

**SPONGE RESINS BOND**

Designed to restore and maintain the shine on already polished floors.

7" (180MM) SPONGE RESIN	
PART NO.	GRITS
SYMY-7-50	50
SYMY-7-100	100
SYMY-7-200	200
SYMY-7-400	400
SYMY-7-800	800
SYMY-7-1500	1500
SYMY-7-3000	3000
9" (230MM) SPONGE RESIN	
PART NO.	GRITS
SYMY-9-50	50
SYMY-9-100	100
SYMY-9-200	200
SYMY-9-400	400
17" (430MM) SPONGE RESIN	
PART NO.	GRITS
SYMY-17-50	50
SYMY-17-100	100
SYMY-17-200	200
SYMY-17-400	400
SYMY-17-800	800
SYMY-17-1500	1500
SYMY-17-3000	3000
20" (500MM) SPONGE RESIN	
PART NO.	GRITS
SYMY-20-50	50
SYMY-20-100	100
SYMY-20-200	200
SYMY-20-400	400
SYMY-20-800	800
SYMY-20-1500	1500
SYMY-20-3000	3000

PAD HOLDERS

Attach polishing pads and resins to your machine with Syntec's holders.



M14 PAD HOLDER	
PART NO.	DIAMETER
PPH4	4"
PPH5	5"
PPH7	7"

**PLUG WITH VELCRO RESIN HOLDER**

PART NO.	DIAMETER
VRH76	76mm

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.

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BLADES - TROUBLESHOOTING - CONTINUED

PROBLEM	DESCRIPTION	CAUSE	SOLUTION
Loss of tension <i>continued</i>	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	<p>When the blade is subjected to extreme pressure and metal fatigue, the core can bend, flex and eventually crack.</p> <p>WARNING: Never use a cracked blade!</p>	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.
Segment loss	In the unlikely event of segments falling off a core bit, these can be the causes:	Material core (plug) is stuck inside of core bit.	Check inside of core bit.
		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.
Bent segments	Segments must be straight to cut as intended. Possible reasons for deformation are:	Speed too high at start-up.	Start with a lower speed and gradually increase it.
		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 too 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.



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