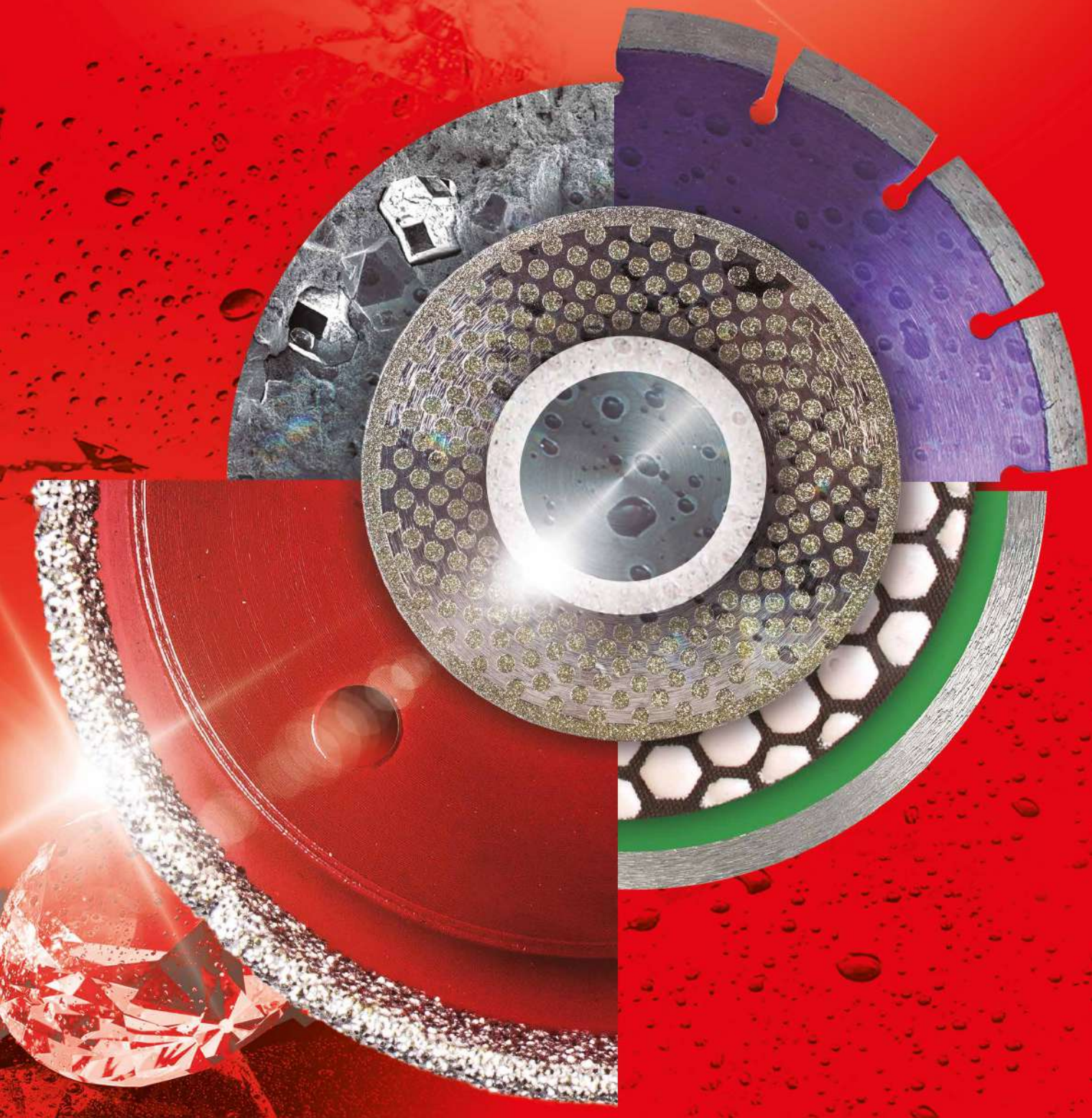
RUBI

DIAMOND EXPERT

Diamond Catalogue



www.rubi.com

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SYMBOLOGY

	Units per box		Drill without hammer		External diameter
RPM	Revolutions per minute		Zero Dust		Inside diameter
EAC	Russian EAC Regulations		Dry use		Disk pickup height
	Grinder		Use with water		
	Polisher		Thickness of the disc		
	Electric		Diameter of the disc		

	Germans Boada S.A. and its subsidiaries comply with directive 2002/96 / CE on waste electrical and / or electronic equipment and Directive 2002/95 / EC on restrictions of certain substances in their manufacture, applying the law of each member state of the EEC according to your specific criteria. (WEEE, WEEE, ecoRAEE, etc ...) (RoHS).
The images are approximate and are subject to change without prior notice.	

Germans Boada, S.A., RUBI was created in 1951 from the invention by the Boada brothers of a manual cutter for hydraulic mosaic. This new tool, baptized with the name of RUBI, served as a pillar to develop a solid company that currently designs, manufactures and distributes machinery and tools for the cutting, placement and maintenance of ceramics.

His international vocation makes Germans Boada S.A. is currently a global company, with a presence in more than 100 countries and an important network of subsidiaries and branches throughout the world. The group's headquarters are located in Rubí, near Barcelona and the logistics and industrial center in Santa Oliva (Tarragona). In these facilities are the production plant and the logistics center, equipped with an automated warehouse and with the most advanced technology in order management.

These means, combined with an optimal stock management, allow serving the main markets on a daily basis, in tight deadlines, thus satisfying the current needs of the different distribution channels throughout the world.

The RUBI range, constantly evolving according to changes in materials and their applications, offers construction professionals a range of specialized and technically advanced products that includes the tools and machines necessary for a good installation with finishes perfect.

The objective of RUBI is to maintain the current technological leadership through a firm commitment to research, innovation, design and development. For this reason, and constant improvement, the group has the RUBI TECHNOLOGY CENTER, located in the group's headquarters, very close to Barcelona, where a multidisciplinary team of engineers has the most advanced technological means.

On the other hand, to the contributions of the commercial teams distributed all over the world are added the participation of the end user in the creation and design of innovative products. The direct participation of professionals of the sector of different nationalities in the various phases of definition, creation and development is a key factor for the success of RUBI products.

A NEW CLUB RUBI

CLUB RUBI
Building Together
www.rubi.com

*The free extension of guarantee is exclusive for members, in certain ranges.

2+3 EXTRA * CLUBRUBI
WARRANTY
WWW.RUBI.COM

THE LARGEST CLUB OF CONSTRUCTION PROFESSIONALS IS RENEWED WITH NEW ADVANTAGES FOR MEMBERS

As a result of daily contact with users from all over the world, both in the works and on social networks, RUBI® launches a renewed Club RUBI with great advantages for members and with a very attractive project.

According to the requests of partners in more than 80 countries, Club RUBI members will have access to exclusive promotions and direct discounts on their purchases of RUBI® products.

Thus, in addition to the periodic reception of training documents and the free extension of the warranty period for the cutters, Club RUBI members will have a permanent discount on their purchases and will receive personalized offers with exclusive promotions.

To access these new advantages, Club RUBI members should download the ClubRUBI APP, freely available in the Play Store and Apple Store, on their mobile phones. With the ClubRUBI APP, members can register their products, check their points balance, read the opinions of other users, leave their comments, create their list of desired products so that RUBI® can notify them when they have a promotion or look for points of sale RUBI® nearby.

RUBI®, the RUBI Club and all its members follow a collaboration plan with different foundations and NGOs to work together in solidarity projects in developing countries in South America, Africa and Asia. Under the slogan “Building Together”, (building together), the RUBI Club wants to take advantage of the strength of its thousands of partners around the world to help build a better world.

APP CLUBRUBI

The new **APP ClubRUBI** is the ideal tool for all professionals in ceramic tile and construction in general.

Designed according to the demands of users around the world, the new ClubRUBI APP offers great advantages, with exclusive promotions and discounts that reward your fidelity with the RUBI brand.

Thanks to the ClubRUBI APP, the user will get points for each purchase of RUBI® products at any point of sale in the world. These points can be exchanged for gift vouchers of up to 10% of the purchase value or for contributions to charitable projects of ClubRUBI.

In addition, through the new Club RUBI APP, users and members of the RUBI Club will receive offers and exclusive promotions adapted to their needs and preferences.

The main functions of the new ClubRUBI App are the following:

- **Product registration and points accumulation.**
- **Product Catalog, Ratings and Wish List.**
- **Promotions and discounts.**
- **Integration of DIAMOND EXPERT and CLEANING EXPERT applications.**
- **Extra points.**

android iOS

APP DIAMOND EXPERT

RUBI® offers a new consultation tool to all professionals in the sector: the RUBI DIAMOND EXPERT APP, integrated in the ClubRUBI APP.

With this application, the professional can find the diamond blades model best suited to their needs.

APP FOR DIAMOND BLADE

iOS
Download APP iOS

Download APP Android

RUBI, DIAMOND EXPERT

In the field of diamond tools, RUBI launches its first range of specialized blades for cutting ceramic tiles in 1992.
Since then, the range has been extended and renewed with the highest priority to meet the needs of construction professionals.

EXPERTS

Since RUBI launched its first range of diamond blades in 1992, we have not failed to observe the needs of the markets.
We have seen these needs evolve and change, and during all these years of learning we have become a benchmark in the range of diamond tools.

All our experience in the field of cutting and drilling ceramic materials, combined with the latest technologies and production processes, allows us to offer the RUBI range of diamond tools to the construction professional.

A range that has been designed to meet the real needs of construction professionals. For this reason, in RUBI we carry out, during the design process of our diamond tools, hundreds of hours of tests to be able to adjust and modify the product up to the marked objective.

SPECIALISTS IN DIAMOND

The constant evolution of the materials, and the new needs of the construction professionals, have made RUBI have a range of diamond tools totally specialized in cutting, drilling and roughing.

The range of RUBI diamond tools has been traditionally focused on covering all the needs of the professional ceramic tile installer. However, in its desire to excel and its commitment to the construction sector, RUBI increases its range of diamond tools with a selection of more general products that encompass a much broader range of possibilities.

RUBI offers all the necessary solutions, both in dry cutting and in wet cutting, so that this group of professionals can reach the highest levels of quality in all their jobs.

The objective of RUBI is to always have the best products. In each new project, RUBI seeks the excellence of all its products, and to achieve it we demand the best. Because we know that professionals from all over the world will do the same.

MATERIALS TO CUT

Diamond tools can work with such a wide variety of materials that it would be practically impossible to classify them all in this catalog. For simplicity, we will focus on the stone materials that make up the most popular set in the construction sector.

Basically, these materials can be classified by their hardness in two categories:
HARD MATERIALS: They are the set of materials that offer the highest resistance to cutting. The main effect is a greater wear of the diamond particle against wear of the binder. The tool suffers more and requires more maintenance..
ABRASIVE MATERIALS: The cut resistance is very low, but as its name suggests, its high abrasivity directly affects the life of the diamond tool.

Or, by its nature:
SILÍCEOS MATERIALS: Composed mainly by silica, they are materials of medium - high hardness, and some, even can present very high degrees of abrasiveness. Among them, we will highlight mainly, ceramics (tile, stoneware, porcelain stoneware), glass or granite, among others.
CALCAREOUS MATERIALS: In these materials the main compound is calcium carbonate. Calcareous materials, generally, have a medium - low hardness, which is why they are easy to cut materials. The most common are marble, limestone or travertine.

Of course there are other options but, we will focus on these as the basic and most common.

MECHANICS OF CUTTING

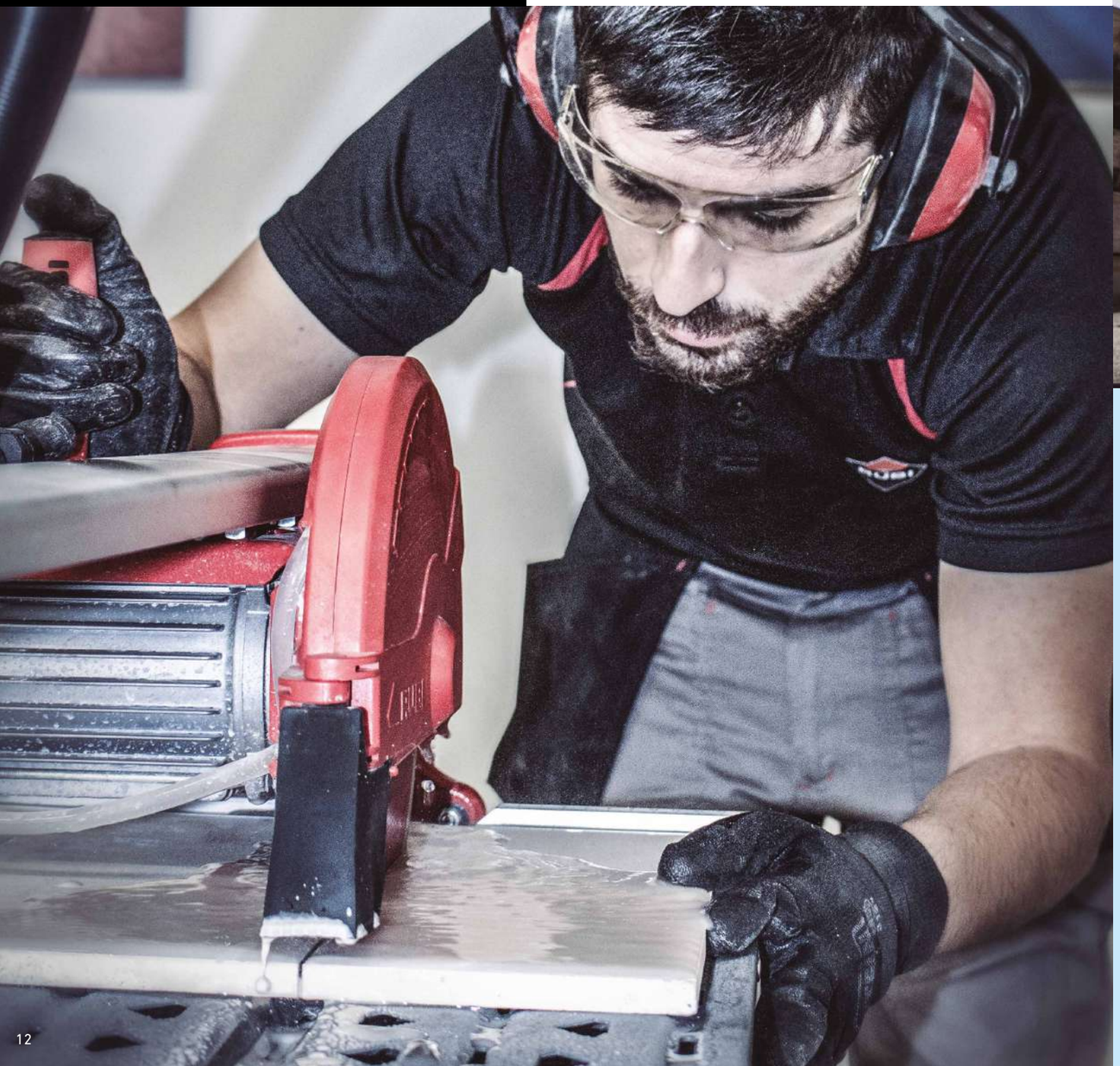
Both the discs and the diamond drills cut by friction. We must not forget, that after all, they are super-abrasive tools.

These mechanics gives rise to high temperatures during cutting or drilling, which causes two types of cutting based on cooling:
WET CUT and DRY CUT.

During the cut, another important aspect to keep in mind, and that must always be respected, is speed. When cutting materials, the correct average speed is 1 cm / s.

The cutting speed is directly affected by several factors:

- Hardness and thickness of the material: the greater they are, the lower the speed.
- Cooling: the wet cut will always be slower than the dry one.
- Power of the machine: The higher it is, the more it can be demanded.
- Diamond tool thickness: The smaller the thickness, the higher the cutting speed.



WET CUT

The tool is cooled with water, which prevents its heating and facilitates the evacuation of the dust produced in the process.
Using diamond tools with wet cutting without water causes excessive temperature, resulting in poor performance, irreparable damage to the tool and safety problems for those close to the cutting operation.

Wet cutting tools should **not be** used dry.

DRY CUT

The tool works with the only refrigeration that is produced by the flow of air that circulates around it. For this reason, dry cutting tools are recommended exclusively for intermittent cuts. This means that, every few seconds of cutting, the air must be allowed to flow around the core to dissipate the heat.
Dry-cut diamond tools are not recommended for long cuts under continuous cutting pressure, nor for full depth cuts in a single pass.

Most dry cutting tools can be used with water to help reduce dust. However, cutting in wet with a dry cutting tool can affect its performance.

DIAMOND BLADES

TYPOLOGIES

The diamond blades are constituted by a circular body, mostly steel, called the core.
The core has, in its periphery, the "cutting" material in the form of segments, or in the form of a continuous or turbo crown.
This "cutting" material, which we will call diamond band, can be shaped in different ways:

By sintering. The diamond particles are mixed with the metallic binder (alloy of different metals according to the type of diamond tool) and are consolidated by pressure and temperature, generating a system with different layers of diamond that are exposed as the tool is worn down. Then, the resulting diamond band is fixed to the steel core by sintering, capillary welding or laser welding. The latter being the most resistant.

By electrodeposition. In the electrodeposited tools, the diamond is fixed to the diamond band by electrolysis generating a single layer of diamond, but with the characteristic of generating less vibrations during cutting or drilling.

By vacuum welding (vacuum brazing). These tools, like the electrodeposited ones, generate a single layer of diamond. In these cases, the diamond is fixed by firing in vacuum furnaces. Giving rise to a diamond band much more resistant than electrodeposited, condition very suitable for dry cutting tools.

CONTINUOUS

The best finish. For cutting and mitreing ceramic tile and other cold-pressed materials with thickness less than 25 mm.

SEGMENTED

The fastest. Maximum speed and better cooling of the disk. For cutting materials with thickness greater than 25 mm.

TURBO

A great combination High performance and cutting speed with high quality finishes.

J-SLOT

Cutting-edge technology High speed in the hardest materials. Specially designed for the straight cut of Porcelain Stoneware.

VIPER

The best of a TURBO, with a higher quality of finishes and cutting speed.

CLASSIFICATION BY COLORS

GENERAL PURPOSE

Recommended blade for cutting all types of construction materials, including reinforced concrete. High performance and cutting speed.

GENERAL PURPOSE

Blades recommended for the general cutting of construction materials such as brick, concrete, terrazzo, natural stones, etc...

GENERAL CERAMIC MATERIAL

Blades recommended for the general cutting of ceramic tile (porcelain, stoneware, tiles, etc ...).

HARD MATERIALS

Blades recommended for cutting hard materials such as granite, slate, refractory brick, etc...

PORCELAIN

Recommended blade for fine cutting of porcelain tiles.

ABRASIVE

Blades recommended for cutting abrasive materials such as bricks in general, calcareous terrazzo, marble, sandstone, etc...

MARBLE

Blades recommended for cutting marble, fibers and other materials with high risk of breakage.

RESCUE

Blades recommended for the general cutting of all types of materials such as: sheet steel, wood, masonry, fiberglass, PVC, steel rods, concrete, reinforced concrete, etc...

PRO SUPERPRO

Taking into account the particularities of each type of blade (continuous, turbo, etc) and the materials for which it was designed, RUBI offers the professional two blade qualities: **PRO** and **SUPERPRO**.

PRO discs offer the professional user the best relationship between performance and price.

The **SUPERPRO** discs highlight, in each blade, its most important characteristic. They are the most suitable option for the most demanding jobs.

Super Pro

Pro

PACKAGING

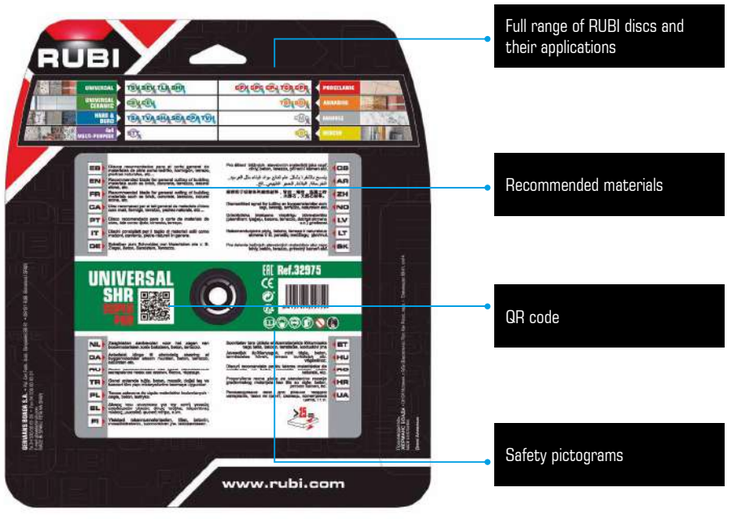


TABLE OF MATERIALS

DRY CUT

		Sandstone	Asphalt	Tile	Cooked mud	Concrete block	Rubber	Sheet steel	Quartzite	Fiberglass	Asbestos cement	Granite	Glazed stoneware	Extruded stoneware	Porcelain stoneware	Armed hormigoon	Cellular concrete	Cured concrete	Fresh concrete	Klinker	Brick face view	Firebrick	Wood	Marble	Aluminum profile	Volcanic stone	Board	Arabic tile	Concrete tile	Glazed tile	Calcareous terrazzo	Terrazzo silicon	Concrete pipe	Polyethylene pipe	PVC	Steel rod
CONTINUOUS	CSV			◉	◉							◉	◉	◉	◉									◉				◉		◉							
	CPR														◉																						
J-SLOT	CPJ														◉																						
TURBO	TSV	○	○		○	○			○		○	○		○			○	○	○	○	○	○		○		○	○	○	○	○	○	○	○				
	TSA								◉			◉		◉				◉		◉		◉					◉					◉					
	TCR														◉																						
VIPER	TVA								◉			◉	◉	◉	○					◉		◉					◉					◉					
SEGMENTED	STT	○	○			○			○		○	○				◉	○	○	○	○	○	○		○		○	○		○		○	○	○				
	SEV	○	○		○	○			○		○	○					○	○	○	○	○	○		○		○	○	○	○		○	○	○				
	SHA								◉			◉						◉		◉		◉					◉					◉					
	SCA								◉			◉						◉		◉		◉					◉					◉					
	SON	◉	◉		◉	◉					◉						◉		◉		◉			◉		◉		◉	◉		◉		◉				
ELECTROPLATED	EMG									◉	○													◉													
	ECD	○		○	○				○	○	○	○	○	○	○					○				○		○	○	○		○	○	○					
VACUUM BRAZED	RSQ	○	○		○	○	◉	◉	○	○	◉	○				○	○	○	○	○	○	○	◉	○	◉	○	○	○	○		○	○	◉	◉	◉	◉	

◉ Optimal use
○ Alternative use

TABLE OF MATERIALS

WET CUT

		Sandstone	Asphalt	Tile	Cooked mud	Concrete block	Quartzite	Asbestos cement	Granite	Glazed stoneware	Extruded stoneware	Porcelain stoneware	Cellular concrete	Cured concrete	Fresh concrete	Klinker	Brick face view	Firebrick	Marble	Vitreous materials	Volcanic stone	Board	Arabic tile	Concrete tile	Glazed tile	Calcareous terrazzo	Terrazzo silicon	Concrete pipe
CONTINUOUS	CEV			⊙	⊙				◎	◎	◎	◎							◎				⊙		⊙			
	CPA						⊙		⊙	⊙	⊙	◎								◎		⊙							
	CPC											⊙																	
J-SLOT	CPX											⊙																	
TURBO	TON	⊙	⊙		⊙	⊙		⊙					⊙		⊙		⊙		⊙		⊙		⊙	⊙	⊙	⊙		⊙
	TPI											⊙																	
VIPER	TVH						⊙		⊙	⊙	⊙	◎				⊙		⊙				⊙					⊙	
SEGMENTED	SHR	◎	◎		◎	◎	◎	◎	◎				◎	◎	◎	◎	◎	◎	◎		◎	◎	◎	◎		◎	◎	◎

⊙ Optimal use
◎ Alternative use

STT

GENERAL PURPOSE SEGMENTED DIAMOND BLADE

Materials to cut	Recommended for:	Alternative cutting:
	Reinforced concrete, face brick, refractory brick, cellular concrete, cured concrete, fresh concrete, calcareous terrazzo and terrazzo silicon.	Sandstone, Asphalt, Fired clay, Concrete block, Quartzite, Fiber cement, Granite, Klinker, Marble, Volcanic stone, Slate, Arab tile, Concrete tile and Concrete pipe.
Features	High performance and cutting speed.	
Special considerations	For cutting materials with thickness> 25 mm. Only for straight cutting, not suitable for mitre cutting.	

	REF					
STT 115 SUPERPRO	30974	115 mm	22,2 mm	2,2 mm	10 mm	1
STT 125 SUPERPRO	30975	125 mm	22,2 mm	2,2 mm	10 mm	1
STT 230 SUPERPRO	30976	230 mm	22,2 mm	2,4 mm	10 mm	1

SEV

GENERAL PURPOSE SEGMENTED DIAMOND BLADE

Materials to cut	Recommended for:	Alternative cutting:
	Exposed brick, refractory brick, cellular concrete, cured concrete, fresh concrete, calcareous terrazzo and terrazzo silicon.	Sandstone, Asphalt, Fired clay, Concrete block, Quartzite, Fiber cement, Granite, Klinker, Marble, Volcanic stone, Slate, Arab tile, Concrete tile and Concrete pipe.
Features	The fastest. Maximum speed and better cooling of the blade.	
Special considerations	For cutting materials with thickness> 25 mm. Disc with perforated core for better cooling and decrease in tension during cutting. Only for straight cutting, not suitable for mitre cutting.	

	REF					
SEV 115 PRO	25915	115 mm	22,2 mm	1,6 mm	7 mm	1
SEV 125 PRO	32940	125 mm	22,2 mm	1,6 mm	7 mm	1
SEV 180 PRO	25938	180 mm	22,2 mm	2 mm	7 mm	1
SEV 230 PRO	25916	230 mm	22,2 mm	2,3 mm	7 mm	1
SEV 115 SUPERPRO	32942	115 mm	22,2 mm	2,2 mm	10 mm	1
SEV 125 SUPERPRO	32943	125 mm	22,2 mm	2,2 mm	10 mm	1
SEV 230 SUPERPRO	32948	230 mm	22,2 mm	2,6 mm	10 mm	1

TSV

GENERAL PURPOSE TURBO DIAMOND BLADE

Materials to cut	Recommended for:	Alternative cutting:
	Exposed brick, refractory brick, cellular concrete, cured concrete, fresh concrete, calcareous terrazzo and terrazzo silicon.	Sandstone, Asphalt, Fired clay, Concrete block, Quartzite, Fiber cement, Granite, Extruded stoneware, Klinker, Marble, Volcanic stone, Slate, Arabic tile, Concrete tile, Glazed tile and Concrete pipe.
Features	A great combination. High performance and cutting speed with high quality finishes.	
Special considerations	Only for straight cutting, not suitable for mitre cutting.	

	REF					
TSV 115 PRO	25917	115 mm	22,2 mm	2 mm	7 mm	1
TSV 125 PRO	31980	125 mm	22,2 mm	2,2 mm	7 mm	1
TSV 230 PRO	25918	230 mm	22,2 mm	2,5 mm	7 mm	1
TSV 125 SUPERPRO	31982	125 mm	22,2 mm	2 mm	7 mm	1

DRY CUT

EAC

Consult uses and recommendations pgs. 70-73

Consult uses and recommendations pgs. 70-73

DRY CUT

CSV

CERAMIC TILES CONTINOUS RIM DIAMOND BLADE

Materials to cut	Optimal cut:	Alternative cut:
	Tile, baked clay, Arabic tile and enameled tile.	Granite, Glazed stoneware, Marble, Extruded stoneware and Porcelain stoneware..
Features	The best finish. For ceramic tiles and other stone coating materials with thicknesses <25 mm.	
Special considerations	Only for straight cutting, not suitable for mitre cutting.	

	REF					
CSV 115 PRO	25910	115 mm	22,2 mm	1,6 mm	7 mm	1
CSV 125 PRO	31915	125 mm	22,2 mm	1,6 mm	7 mm	1
CSV 115 SUPERPRO	30882	115 mm	22,2 mm	1,6 mm	7 mm	1
CSV 125 SUPERPRO	30883	125 mm	22,2 mm	1,6 mm	7 mm	1
CSV 230 SUPERPRO	30888	230 mm	22,2 mm	1,9 mm	7 mm	1

TSA

HARD MATERIALS TURBO DIAMOND BLADE

Materials to cut	Optimum cut:	
	Quartzite, Granite, Extruded stoneware, Cured concrete, Klinker, Refractory brick, Slate and Terrazzo silicon.	
Features	A great combination. High performance and cutting speed with high quality finishes.	
Special considerations	Only for straight cutting, not suitable for mitre cutting.	

	REF					
TSA 115 PRO	31952	115 mm	22,2 mm	2 mm	7 mm	1
TSA 125 PRO	31953	125 mm	22,2 mm	2,2 mm	7 mm	1
TSA 180 PRO	31956	180 mm	22,2 mm	2,2 mm	7 mm	1
TSA 230 PRO	31958	230 mm	22,2 mm	2,5 mm	8 mm	1

Consult uses and recommendations pgs. 70-73

TVA

HARD MATERIALS TURBO VIPER DIAMOND BLADE

Materials to cut	Optimal cut:	Alternative cut:
	Quartzite, Granite, Glazed stoneware, Extruded stoneware, Klinker, Refractory brick, Slate and Terrazzo silicon.	Porcelain stoneware.
Features	The specific design of the diamond band offers a higher cutting speed in the hardest materials without sacrificing the quality of the finish.	
Special considerations	Only for straight cutting, not suitable for mitre cutting.	

	REF					
TVA 115 SUPERPRO	31932	115 mm	22,2 mm	1,4 mm	10 mm	1
TVA 125 SUPERPRO	31933	125 mm	22,2 mm	1,4 mm	10 mm	1
TVA 180 SUPERPRO	31934	180 mm	22,2 mm	1,6 mm	10 mm	1
TVA 230 SUPERPRO	31935	230 mm	22,2 mm	1,6 mm	10 mm	1

Consult uses and recommendations pgs. 70-73

DRY CUT

SHA

HARD MATERIALS SEGMENTED DIAMOND BLADE

Materials to cut	Optimum cut: Quartzite, Granite, Cured Concrete, Klinker, Refractory brick, Slate and Terrazzo silicon.
Features	The fastest. Maximum speed and better cooling of the blade.
Special considerations	For cutting materials with thickness> 25 mm. Only for straight cutting, not indicated for mitre cutting.

	REF					
SHA 115 PRO	32922	115 mm	22,2 mm	2,2 mm	7 mm	1
SHA 230 PRO	32928	230 mm	22,2 mm	2,8 mm	7 mm	1
SHA 180 SUPERPRO	32926	180 mm	22,2 mm	2,4 mm	7 mm	1

SON

ABRASIVE MATERIALS SEGMENTED DIAMOND BLADE

Materials to cut	Optimum cut: Sandstone, Asphalt, Baked clay, Concrete block, Fiber cement, Cellular concrete, Fresh concrete, Face brick, Marble, Volcanic stone, Arab tile, Concrete tile, Calcareous terrazzo, Concrete pipe.
Features	Ideal for masonry and limestone.
Special considerations	Only for straight cutting, not suitable for mitre cutting.

	REF					
SON 115 SUPERPRO	32902	115 mm	22,2 mm	2,2 mm	7 mm	1
SON 125 SUPERPRO	32903	125 mm	22,2 mm	2,2 mm	7 mm	1
SON 230 SUPERPRO	32908	230 mm	22,2 mm	2,6 mm	7 mm	1

SCA

HARD MATERIALS SEGMENTED DIAMOND BLADE "CANTERO"

Materials to cut	Optimum cut: Quartzite, Granite, Cured Concrete, Klinker, Refractory brick, Slate and Terrazzo silicon.
Features	Long duration and high performance. Segment of 12 mm. High cutting speed For cutting materials with thickness> 25 mm.
Special considerations	Only for straight cutting, not suitable for mitre cutting.

	REF					
SCA 230 SUPERPRO	30904	230 mm	22,2 mm	3 mm	12 mm	1

CPR

PORCELAIN TILES CONTINOUS RIM DIAMOND BLADE

Materials to cut	Optimum cut: Porcelain stoneware.
Features	For the fine cutting of porcelain stoneware. The best finish. For cutting materials with thickness <25mm.
Special considerations	Only for straight cutting, not suitable for mitre cutting.

	REF					
CPR 115 SUPERPRO	30972	115 mm	22,2 mm	1,7 mm	7 mm	1
CPR 125 SUPERPRO	30973	125 mm	22,2 mm	1,7 mm	7 mm	1

TCR

PORCELAIN TILES TURBO DIAMOND BLADE

Materials to cut	Optimum cut: Porcelain stoneware.
Features	A great combination. High performance and cutting speed with high quality finishes.
Special considerations	Only for straight cutting, not suitable for mitre cutting.

	REF					
TCR 115 SUPERPRO	31972	115 mm	22,2 mm	1,4 mm	7 mm	1
TCR 125 SUPERPRO	31973	125 mm	22,2 mm	1,4 mm	7 mm	1
TCR 180 SUPERPRO	31975	180 mm	22,2 mm	1,6 mm	7 mm	1
TCR 230 SUPERPRO	31978	230 mm	22,2 mm	2 mm	7 mm	1

Consult uses and recommendations pgs. 70-73

CPJ

PORCELAIN TILES J-SLOT DIAMOND BLADE

Materials to cut	Optimum cut: Porcelain stoneware.
Features	Especially recommended for straight cuts and high cutting speed. Thanks to its J-Slot typology, this disc increases the cutting speed in very hard Porcelain Stoneware tiles, at the same time reducing the stresses generated during cutting. Its original design for dry cutting, also allows wet cutting.
Special considerations	Not suitable for mitre cutting.

	REF					
CPJ 115 SUPERPRO	32932	115 mm	22,2 mm	1,4 mm	7 mm	1
CPJ 125 SUPERPRO	32933	125 mm	22,2 mm	1,4 mm	7 mm	1

DRY CUT

EMG

MARBLE ELECTROPLATED DIAMOND BLADE

Materials to cut	Optimal cut:	Alternative cut:
	Marble and Fiberglass.	Asbestos cement.
Features	Less vibrations. For cutting materials with high risk of breakage, such as marbles and fibers.	
Special considerations	Only for straight cutting, not suitable for mitre cutting.	

	REF					
EMG 115 SUPERPRO	30995	115 mm	22,2 mm	2,5 mm	3 mm	1
EMG 125 SUPERPRO	30996	125 mm	22,2 mm	2,5 mm	3 mm	1
EMG 230 SUPERPRO	30997	230 mm	22,2 mm	3 mm	3 mm	1

ECD

2IN1 CUTTING AND GRINDING DIAMOND BLADE

Materials to cut	Recommended cut:	Alternative cut:
	Natural stone, all types of ceramic tiles (including porcelain tiles) and synthetic materials.	Sandstone, Tile, Clay, Quartzite, Fiberglass, Fiber Cement, Granite, Glazed stoneware, Extruded stoneware, Porcelain stoneware, Klinker, Marble, Volcanic stone, Slate, Arabic tile, Glazed tile, Calcareous terrazzo, Terrazzo silicon.
Features	Blade type continuous electrodeposited double-sided reversible for a maximum use of the disc. High cutting speed Fine roughing.	
Special considerations	For thickness <25 mm. For use in GRINDERS. Connection: M14 thread.	

	REF					
ECD 115 2IN1 SUPERPRO	31964	115 mm	M14 mm	1,8 mm	5,6 mm	1
ECD 125 2IN1 SUPERPRO	31965	125 mm	M14 mm	1,8 mm	5,6 mm	1

RSQ

RESCUE DIAMOND BLADE

Materials to cut	Optimal cut:	Alternative cut:
	Rubber, Steel sheet, Fiber cement, Wood, Aluminum profile, Concrete pipe, Polyethylene pipe, PVC, Steel rod.	Sandstone, Asphalt, Fired clay, Concrete block, Quartzite, Fiberglass, Granite, Reinforced concrete, Cellular concrete, Cured concrete, Fresh concrete, Klinker, Face brick, Refractory brick, Marble, Volcanic stone, Slate, Arabic tile, Concrete tile, calcareous terrazzo and concrete pipe.
Features	Vacuum Brazed Technology. Greater resistance to high temperatures during cutting, reduction of sparks generated. High speed and performance.	
Special considerations	Only for straight cutting, not suitable for mitre cutting.	

	REF					
RSQ 115 SUPERPRO	30900	115 mm	22,2 mm	2,4 mm	4 mm	1
RSQ 125 SUPERPRO	30901	125 mm	22,2 mm	2,4 mm	4 mm	1
RSQ 230 SUPERPRO	30902	230 mm	22,2 mm	2,6 mm	4 mm	1

DRY CUT

WET CUT

SHR

GENERAL PURPOSE SEGMENTED DIAMOND BLADE

Materials to cut	Recommended cut:	Alternative cut:
	Exposed brick, refractory brick, cellular concrete, cured concrete, fresh concrete, calcareous terrazzo and terrazzo silicon.	Sandstone, Asphalt, Fired clay, Concrete block, Quartzite, Fiber cement, Granite, Klinker, Marble, Volcanic stone, Slate, Arab tile, Concrete tile and Concrete pipe.
Features	The fastest. Maximum speed and better cooling of the blade. For cutting materials with thickness> 25 mm.	
Compatible with	DC-250, DS-250 N, DX-250 Plus, DX-350 N, DR-350.	

	REF					
SHR 250 PRO	32974	250 mm	25,4 mm	2,6 mm	10 mm	1
SHR 300 PRO	32972	300 mm	25,4 mm	2,6 mm	10 mm	1
SHR 250 SUPERPRO	32975	250 mm	25,4 mm	2,6 mm	10 mm	1
SHR 300 SUPERPRO	32970	300 mm	25,4 mm	2,6 mm	10 mm	1
SHR 350 SUPERPRO	32971	350 mm	25,4 mm	3 mm	10 mm	1

CEV

CERAMIC TILES CONTINOUS RIM DIAMOND BLADE

Materials to cut	Optimal cut:	Alternative cut:
	Tile, baked clay, Arabic tile and enameled tile.	Granite, enameled stoneware, extruded stoneware, porcelain stoneware and marble.
Features	The best finish. To cut and mitre ceramic tile and other stone coating materials with thicknesses <25 mm.	
Compatible with	ND-180, ND-200, DU-200 EVO, DV-200, DC-250, DS-250 N, DX-250 Plus, DX-350 N, DR-350.	

	REF					
CEV 180 PRO	25912	180 mm	22,2 - 25,4 mm	1,7 mm	7 mm	1
CEV 200 PRO	25913	200 mm	25,4 mm	1,7 mm	7 mm	1
CEV 230 PRO	25914	230 mm	22,2 - 25,4 mm	2 mm	7 mm	1
CEV 250 PRO	25934	250 mm	25,4 mm	2,2 mm	7 mm	1
CEV 180 SUPERPRO	30945	180 mm	22,2 - 25,4 mm	1,7 mm	7 mm	1
CEV 200 SUPERPRO	30946	200 mm	25,4 mm	1,7 mm	7 mm	1
CEV 230 SUPERPRO	30948	230 mm	22,2 - 25,4 mm	2 mm	7 mm	1
CEV 250 SUPERPRO	30949	250 mm	25,4 mm	2,2 mm	7 mm	1
CEV 300 SUPERPRO	30950	300 mm	25,4 mm	2,2 mm	10 mm	1
CEV 350 SUPERPRO	30951	350 mm	25,4 mm	2,6 mm	10 mm	1

Consult uses and recommendations pgs. 70-73

CPA

HARD MATERIALS CONTINOUS RIM DIAMOND BLADE

Materials to cut	Optimal cut:	Alternative cut:
	Quartzite, Granite, Enameled Stoneware, Extruded Stoneware and Slate.	Porcelain stoneware and glass materials.
Features	The best finish. For cutting and mitreing ceramic tile and other stone coating materials with thickness <25 mm.	
Compatible with	ND-180, ND-200, DU-200 EVO, DV-200, DC-250, DS-250 N, DX-250 Plus, DX-350 N, DR-350.	

	REF					
CPA 180 SUPERPRO	30925	180 mm	22,2 mm	1,7 mm	7 mm	1
CPA 200 SUPERPRO	30926	200 mm	25,4 mm	1,7 mm	7 mm	1
CPA 230 SUPERPRO	30928	230 mm	22,2 mm	2 mm	7 mm	1
CPA 250 SUPERPRO	30929	250 mm	25,4 mm	2,2 mm	7 mm	1
CPA 300 SUPERPRO	30930	300 mm	25,4 mm	2,2 mm	10 mm	1
CPA 350 SUPERPRO	30931	350 mm	25,4 mm	2,6 mm	10 mm	1

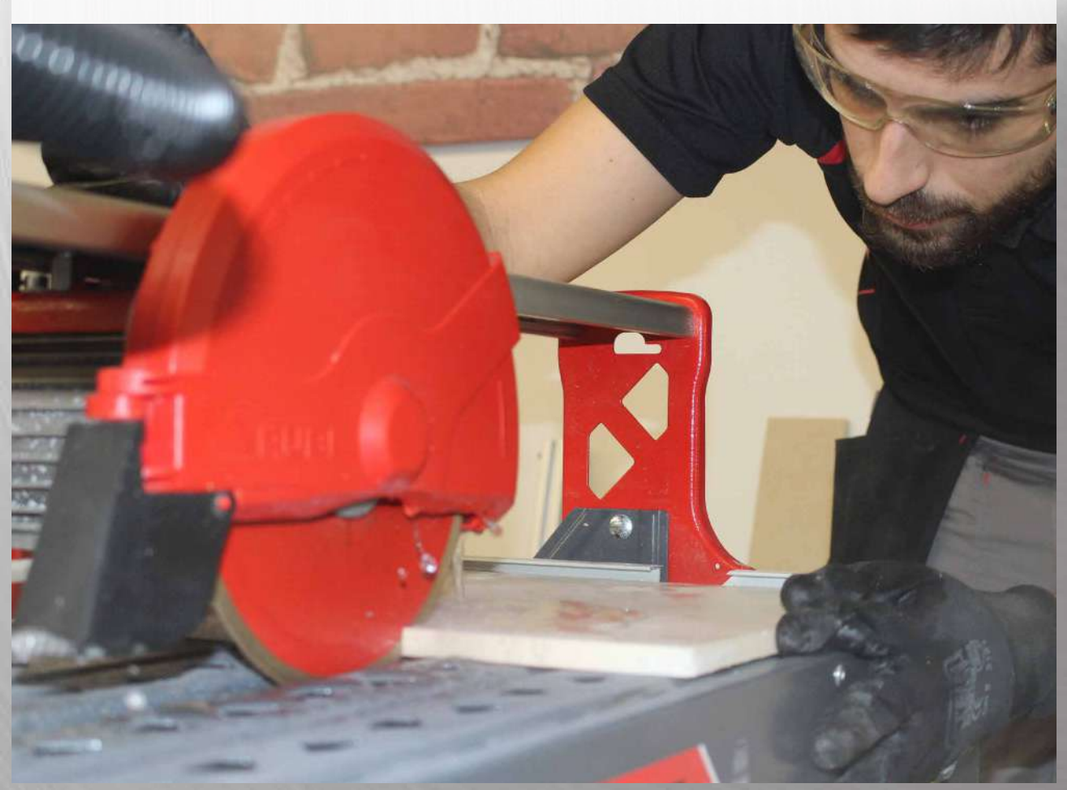
Consult uses and recommendations pgs. 70-73

CPC

PORCELAIN TILES CONTINOUS RIM DIAMOND BLADE

Materials to cut	Optimum cut: Porcelain stoneware.
Features	Recommended blade for fine cutting of porcelain stoneware with thicknesses <25 mm.
Considerations Special	Especially recommended for mitre cutting.
Compatible with	ND-180, ND-200, DU-200 EVO, DV-200, DC-250, DS-250 N, DX-250 Plus, DX-350 N, DR-350.

	REF					
CPC 180 PRO	30955	180 mm	22,2 - 25,4 mm	1,7 mm	7 mm	1
CPC 200 PRO	30956	200 mm	25,4 mm	1,7 mm	7 mm	1
CPC 230 PRO	30958	230 mm	22,2 - 25,4 mm	2 mm	7 mm	1
CPC 250 PRO	30959	250 mm	25,4 mm	2,2 mm	7 mm	1
CPC 300 PRO	30960	300 mm	25,4 mm	2,2 mm	10 mm	1
CPC 350 PRO	30961	350 mm	25,4 mm	2,6 mm	10 mm	1



CPX

PORCELAIN TILES J-SLOT DIAMOND BLADE

Materials to cut	Optimum cut: Porcelain stoneware.
Features	Cutting-edge technology. High speed in the straight cut of porcelain stoneware.
Considerations Special	Only for straight cutting, not suitable for mitre cutting.
Compatible with	DC-250, DS-250 N, DX-250 Plus, DX-350 N, DR-350

	REF					
CPX 200 PRO	30964	200 mm	25,4 mm	1,6 mm	7 mm	1
CPX 250 PRO	30962	250 mm	25,4 mm	1,6 mm	7 mm	1
CPX 300 PRO	30963	300 mm	25,4 mm	1,6 mm	7 mm	1

TPI

PORCELAIN TILES MITRE TURBO DIAMOND BLADE

Materials to cut	Optimum cut: Porcelain stoneware.
Features	Special features mitre. Great stability and cutting speed.
Considerations Special	Special Sintered turbo type disc. Laser welding.
Compatible with	DC-250, DS-250 N, DX-250 Plus.

	REF					
TPI 200 SUPERPRO	31966	200 mm	25,4 mm	2,5 mm	7,5 mm	1
TPI 230 SUPERPRO	31967	250 mm	25,4 mm	2,5 mm	7,5 mm	1
TPI 250 SUPERPRO	31969	253,3 mm	25,4 mm	2,5 mm	7,5 mm	1

WET CUT

EAC

Consult uses and recommendations pgs. 70-73

Consult uses and recommendations pgs. 70-73

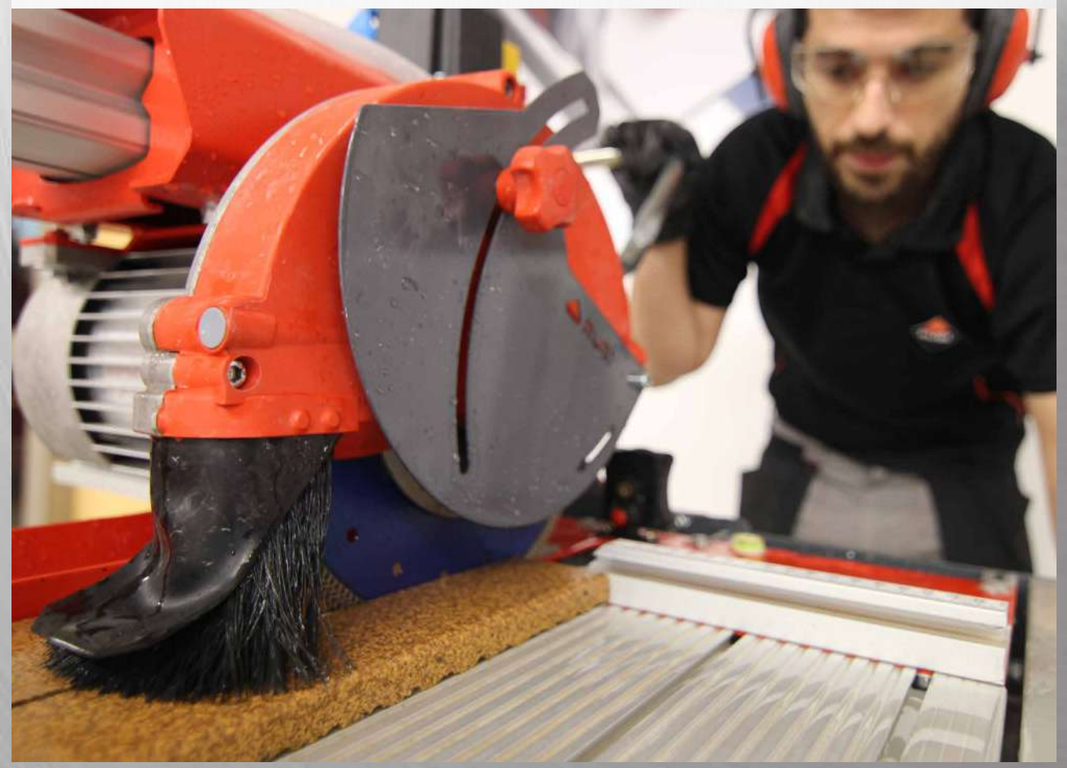
WET CUT

TVH

HARD MATERIALS TURBO VIPER DIAMOND BLADE

Materials to cut	Optimal cut:	Alternative cut:
	Quartzite, Granite, Glazed stoneware, Extruded stoneware, Klinker, Refractory brick, Slate and Terrazzo silicon.	Porcelain stoneware.
Features	The specific design of the diamond band offers a higher cutting speed in the hardest materials without sacrificing the quality of the finish.	
Special considerations	Only for straight cutting, not suitable for mitre cutting.	
Compatible with	DC-250, DS-250 N, DX-250 Plus, DX-350 N, DR-350.	

	REF					
TVH 200 SUPERPRO	31936	200 mm	25,4 mm	1,6 mm	10 mm	1
TVH 250 SUPERPRO	31937	250 mm	25,4 mm	1,6 mm	10 mm	1
TVH 300 SUPERPRO	31938	300 mm	25,4 mm	2 mm	10 mm	1
TVH 350 SUPERPRO	31939	350 mm	25,4 mm	2,4 mm	10 mm	1



Consult uses and recommendations pgs. 70-73

TON

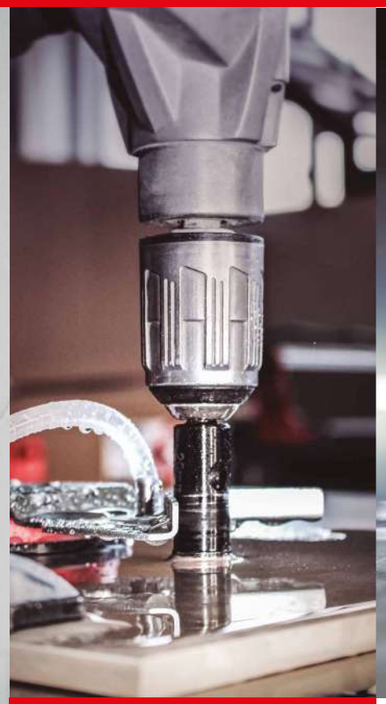
ABRASIVE MATERIALS TURBO DIAMOND BLADE

Materials to cut	Optimum cut:
	Sandstone, Asphalt, Fired clay, Concrete block, Fiber cement, Cellular concrete, Fresh concrete, Face brick, Marble, Volcanic stone, Arabic tile, Concrete tile, Glazed tile, Calcareous terrazzo, Concrete pipe.
Features	A great combination. High performance and cutting speed with high quality finishes.
Compatible with	DC-250, DS-250 N, DX-250 Plus, DX-350 N, DR-350.

	REF					
TON 200 SUPERPRO	31906	200 mm	25,4 mm	2,5 mm	7,5 mm	1
TON 250 SUPERPRO	31909	250 mm	25,4 mm	2,5 mm	7,5 mm	1
TON 300 SUPERPRO	31910	300 mm	25,4 mm	3 mm	7,5 mm	1

Consult uses and recommendations pgs. 70-73

DIAMOND DRILL BITS



TYPOLOGIES

With the evolution of ceramic materials, which are increasingly found in larger formats, with many more varied finishes and most notablably hardnesses, RUBI has gone a step further and has created a complete range to offer a solution to professional trades person, for each type of work.

Whether working in dry or wet, either with grinder (dry cutting only) or with drill, we can drill any type of ceramic tile or natural stone in a simple, fast and safe manner, obtaining the best finishes.

Like the blades, the diamond bits are constitute d by a main body, mostly steel, in the form of a glass, generally called "crown".
The diamond is in the periphery in the form of segments, or in the form of a continuous crown.

Diamond drill bits are manufactured using the techniques of:

- **Sintering.** The diamond particles are mixed with the metallic binder (alloy of different metals according to the type of diamond tool) and consolidated by pressure and temperature, generating a system with different layers of diamond that are exposed as the tool is worn. The resulting diamond band is fixed to the steel body by sintering, capillarity welding or laser welding. The latter being the most resistant.

- **Electrodeposition.** In the electrodeposited tools, the diamond is fixed to the diamond band by electrolysis generating a single layer of diamond, but with the particularity of generating less vibrations during cutting or drilling.

- **Vacuum welding** (vacuum brazing). These tools, like the electrodeposited ones, generate a single layer of diamond. In these cases, the diamond is fixed by firing in vacuum furnaces. Giving rise to a diamond band much more resistant than electrodeposited, condition very suitable for dry cutting tools.

TYPES

- Sintered drill bits:
  FORAGRES/MINIGRES
  Great durability and quality in the finishes.

- Electrodeposited drills:
  EASYGRES
  They generate very few vibrations. Ideal for the perforation of delicate materials.

- Vacuum brazed drills:
  DRYGRES/4DRILL
  High resistance to temperature and durability. The best option for dry drilling.

TABLE OF MATERIALS

DRY CUT

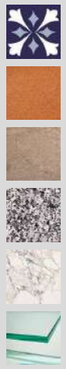
	Materials	Ø mm	Ø inch	REF	RPM	mm	inch	Utilization
 DRYGRES	Tile, Stoneware, Porcelain stoneware, Granite, Marble	6 mm	14/64″	05988	max. 14.000	36 mm	1 7/16″	 **GRINDER**  **MULTIDRILL GUIDE** (Ref. 50944)  **ZERO DUST GUIDE** (Ref. 05912) **Alternatively they can also be used with:**  **ELECTRIC DRIL** Without Percussion  **DRY CUT ADAPTER** for electric drill. (Ref. 05976)
		7 mm	1/4″	05994				
		8 mm	5/16″	05989				
		10 mm	13/32″	05990				
		12 mm	1/2″	05991				
		20 mm	3/4″	04910				
		28 mm	1 1/8″	04911				
		35 mm	1 3/8″	04912				
		43 mm	1 3/4″	04913				
		50 mm	2″	04914				
		60 mm	2 3/18″	04915				
		65 mm	2 1/2″	04916				
		68 mm	2 11/18″	04917				
		75 mm	3″	05992				
 DRYGRES 4DRILL	Ceramic coating, Stoneware, Porcelain stoneware, Natural stone	6 mm	14/64″	05904	min. 2.500	31 mm	1 1/4″	 **ELECTRIC DRILL Without Hammer** **ELECTRIC DRILL with Battery**  **MULTIDRILL GUIDE** (Ref. 50944)  **ZERO DUST GUIDE** (Ref. 05912)
		8 mm	5/16″	05905		36 mm	1/2″	
		10 mm	13/32″	05906				
		12 mm	1/2″	05907				
		14 mm	9/16″	05908				
		20 mm	3/4″	05909				

Maximum Drilling Depth

Recommended speed

TABLE OF MATERIALS

WET CUT

	Materials	Ø mm	Ø inch	REF	RPM	mm	inch	Utilization
 MINIGRES*	 Tile, Stoneware, Porcelain stoneware, Granite, Marble	6 mm	14/64″	04930	max. 1.200	35 mm	1 3/8″	 **HEAD DIAMOND DRILL** (Ref. 04937) **ELECTRIC DRILL** No hammer with rotating connector (Ref. 50907) **Adaptable Multidrill Guide** (Ref. 50944)
		8 mm	5/16″	04931				
		10 mm	13/32″	04932				
		12 mm	1/2″	04933				
 FORAGRES*		20 mm	3/4″	04970	max. 900	30 mm	1 3/16″	 **ELECTRIC DRILL** Without hammer Use with **Multidrill Guide, Deposit and Hose** (Ref. 50944 + 50947)
		28 mm	1 1/8″	04971				
		35 mm	1 3/8″	04972				
		40 mm	1 5/8″	04963				
		43 mm	1 3/4″	04981				
		50 mm	2″	04973				
		65 mm	2 1/2″	04974				
		68 mm	2 11/16″	04918				
		75 mm	3″	04975		33 mm	1 5/16″	
		100 mm	4″	04976	max. 450	30 mm	1 3/16″	 Use with: **GUIDE FORAGRES (Ref. 50900)**
		120 mm	4 3/4″	04977				
 EASYGRES*	 Tile, Stoneware, Porcelain stoneware, Granite, Marble, Glass	6 mm	14/64″	04927	Entre 400 y 1.000	25 mm	1″	 **ELECTRIC DRILL** Without hammer Use with **Multidrill Guide, Tank and Hose** (Ref. 50944 + 50947) ó Use with **KITS EASYGRES**
		6,5 mm	1/4″	04925				
		8 mm	5/16″	04928				
		10 mm	13/32″	04929				
		12 mm	1/2″	04926				
		20 mm	3/4″	05961	máx. 500	27 mm	1 1/16″	 **ELECTRIC DRILL** Without hammer Use with **Multidrill Guide, Tank and Hose** (Ref. 50944 + 50947)
		28 mm	1 1/8″	05962				
		35 mm	1 3/8″	05963				
		40 mm	1 5/8″	05964				
		43 mm	1 3/4″	05965				
		50 mm	2″	05966				
		55 mm	2 1/4″	05967				
		65 mm	2 1/2″	05969				
		68 mm	2 11/16″	05978				
		75 mm	3″	05979				
		100 mm	4″	05981				
		120 mm	4 3/4″	05982				

*Include Battery Drill in Utilization

↕ Maximum Drilling Depth RPM Recommended speed

DRY CUT

DRYGRES BITS

MAX. R.P.M. 14.000

DIAMOND DRYGRES DRILL BITS

Materials to drill	For dry drilling Tiles, Stoneware, Porcelain stoneware, Granite and Marble.
Features	Diamond drill by vacuum welding (vacuum brazed). Cooling by air, by orbital movement. The refs: 05988/89/90/91 incorporate a wax stopper to improve the initial lubrication of the bit (first 4 or 5 perforations).
Specials considerations	Maximum working speed 14,000 r.p.m. M14 thread finish. Usable with grinder (direct connection). Alternatively with electric drill (without hammer) + Adapter (ref.05976), with Multidrill Guide (ref.50944) or Zero dust Guide (ref.05912) *.

	REF		
DRYGRES DRILL BIT Ø 6 MM.	05988	36 mm	1
DRYGRES DRILL BIT Ø 7 MM.	05994		
DRYGRES DRILL BIT Ø 8 MM.	05989		
DRYGRES DRILL BIT Ø 10 MM.	05990		
DRYGRES DRILL BIT Ø 12 MM.	05991		
DRYGRES DRILL BIT Ø 20 MM.	04910		
DRYGRES DRILL BIT Ø 28 MM.	04911		
DRYGRES DRILL BIT Ø 35 MM.	04912		
DRYGRES DRILL BIT Ø 43 MM.	04913		
DRYGRES DRILL BIT Ø 50 MM.	04914		
DRYGRES DRILL BIT Ø 60 MM.	04915		
DRYGRES DRILL BIT Ø 65 MM.	04916		
DRYGRES DRILL BIT Ø 68 MM.	04917		
DRYGRES DRILL BIT Ø 75 MM.	05992		

See available guides on page 58

DRYGRES 4DRILL BITS

MIN. R.P.M. 2.500

DIAMOND DRYGRES 4DRILL BITS

Materials to drill	To drill For dry drilling Ceramic tiles, stoneware, porcelain stoneware and natural stone.
Features	Diamond drill by vacuum welding (vacuum brazed). Cooling by air, by orbital movement. They incorporate a wax stopper to improve the initial lubrication of the bit. Minimum working speed 2,500 r.p.m.
Specials considerations	Special Recommended hexagonal connection for drilling without hammer. Use with Multidrill Guide (ref.50944) *

	REF		
DRILL BIT DRYGRES 4DRILL Ø 6 MM. HEX	05904	31 mm	1
DRILL BIT DRYGRES 4DRILL Ø 8 MM. HEX	05905	36 mm	
DRILL BIT DRYGRES 4DRILL Ø 10 MM. HEX	05906		

	REF		
DRILL BIT DRYGRES 4DRILL Ø 12 MM. HEX	05907	36 mm	1
DRILL BIT DRYGRES 4DRILL Ø 14 MM. HEX	05908		
DRILL BIT DRYGRES 4DRILL Ø 20 MM. HEX	05909		

See available guides on page 58

EAC

DRY CUT

DRYGRES SET

MAX. R.P.M. 14.000

	REF	
4 BITS	50917	1
5 BITS	50936	1
6 BITS	50996	1

DIAMOND DRYGRES BIT SET

Materials to drill	To drill For dry drilling Tiles, Stoneware, Porcelain stoneware, Granite and Marble.
Features	Drills with M14 finish. Kit composed of Multidrill Guide (ref.50944) plus: Dry cut diamond drill bits Ø28, 35, 43 and 68 mm. (Ref.50917). Dry cut diamond drill bits Ø28, 35, 43, 50 and 68 mm. (Ref.50936). Dry cut diamond drill bits Ø6, 8, 20, 35, 50 and 68 mm. (Ref.50996).
Specials considerations	By means of a suction cup attachment, it allows holes to be made both horizontally and vertically, in the exact place, preventing the bit from moving.

TCR + DRYGRES BIT SET

MAX. R.P.M. 14.000

	REF	
	68923	1

DIAMOND TCR BLADE + DRYGRES DRILL BIT SET

Materials to drill	Especially suitable for cutting and drilling porcelain tiles.
Features	Kit composed by: Dry cut diamond disc TCR-115 SUPERPRO (ref.31972) + Four dry cut diamond drill bits (2x6mm, 20mm, 35mm). Connection M14 + Drill adapter M14 for drill.
Specials considerations	The drills can be used either in grinders or with drills without percussion, using the adapter included in the kit. It is recommended to use the drill bits with multidrill guide (ref.50944) or Zero dust guide (ref.05912).

MINI DRYGRES SET

MAX. R.P.M. 14.000

	REF	
	50938	1

DIAMOND MINI DRYGRES BIT SET

Materials to drill	To drill For dry drilling Porcelain tile, enameled stoneware, cladding, natural stone and other ceramic materials.
Features	Drills with M14 finish. Kit composed of: Ø 6, 8, 10 and 12 mm drill bits. + Drill adapter. They can be used either in grinders or with drills without percussion, using the adapter included in the kit.
Specials considerations	The use of the drill bits with multidrill guide (ref.50944) or Zero dust guide (ref.05912) is recommended.

See available guides on page 58

DRYGRES 4DRILL SET

MIN. R.P.M. 2.500

	REF	
	05911	1

DIAMOND DRYGRES 4DRILL BIT SET

Materials to drill	Ceramic tiles, stoneware, porcelain stoneware and natural stone.
Features	Hexagonal connection for drill without hammer. Kit composed of: Diamond drills DRYGRES 4DRILL dry cut Ø 6, 8, 10 and 12 mm.
Specials considerations	Minimum working speed: 2500 r.p.m. The use of the drill bits is recommended, with multidrill guide (ref.50944) or Zero dust guide (ref.05912).

See available guides on page 58

FORAGRES BITS

MAX. R.P.M. 900

MAX. R.P.M. 450 Ø100 AND 120 MM

DIAMOND FORAGRES DRILL BITS

Materials to drill	To drill For wet drilling Ceramic tiles, Porcelain Stoneware, Granite, Marble and Tile.
Features	Diamond band sintered and joined to the body by laser welding.
Specials considerations	Usable with Multidrill Guide (ref.50944) plus tank and hose. Always use refrigerated with water and electric drill without hammer. Drill Ø 40 mm., Special for housing the toilet flush button. Ø 100 and 120 mm drill bits only usable with Foragres Guide (ref.50900).

	REF		
FORAGRES DRILL BIT Ø 20 MM.	04970	30 mm	1
FORAGRES DRILL BIT Ø 28 MM.	04971		
FORAGRES DRILL BIT Ø 35 MM.	04972		
FORAGRES DRILL BIT Ø 40 MM.	04963		
FORAGRES DRILL BIT Ø 43 MM.	04981		
FORAGRES DRILL BIT Ø 50 MM.	04973		
FORAGRES DRILL BIT Ø 65 MM.	04974		
FORAGRES DRILL BIT Ø 68 MM.	04918		
FORAGRES DRILL BIT Ø 75 MM.	04975		
FORAGRES DRILL BIT Ø 100 MM.	04976		
FORAGRES DRILL BIT Ø 120 MM.	04977		

See available guides on page 58

FORAGRES SET

MAX. R.P.M. 900

REF	
50903	1

FORAGRES DRILL BIT SET

Materials to drill	For wet drilling Ceramic tiles, Porcelain Stoneware, Granite, Marble and Tile.
Features	Kit composed of: MULTIDRILL guide. + Tank and hose + FORAGRES diamond drill bits (Ø 20, 28, 35, 43, 50, 68 mm.).
Specials considerations	Use always cooled with water and electric drill without hammer.

DETACHABLE MINIGRES BITS

MAX. R.P.M. 1.200

DIAMOND DETACHABLE MINIGRES DRILL BITS

Materials to drill	For wet drilling Ceramic tiles, Porcelain Stoneware, Granite, Marble and Tile.
Features	Diamond band sintered and joined to the body by laser welding. Ideal for the installation of accessories and decorative elements.
Specials considerations	Use always cooled with water and electric drill without hammer. It is necessary to use the HEAD with 1/2 "thread. Ref. 04937 (Ø6 to 12 mm). Necessary to use the swivel connector. Ref. 50907.

	REF		
DETACHABLE MINIGRES DRILL BIT Ø 6 MM.	04930	35 mm	1
DETACHABLE MINIGRES DRILL BIT Ø 8 MM.	04931		1
DETACHABLE MINIGRES DRILL BIT Ø 10 MM.	04932		1
DETACHABLE MINIGRES DRILL BIT Ø 12 MM.	04933		1
MINIGRES DRILL BIT HEAD Ø 6 MM A 12 MM.	04937		1
SWIVEL CONNECTOR	50907		1

See available guides on page 58

EASYGRES BITS Ø6-12MM

MAX. R.P.M. 1.000

DIAMOND EASYGRES DRILL BITS Ø6 - Ø12MM

Materials to drill	Ceramic tiles, Gres, Porcelain stoneware, Granite, Marble and Glass.
Features	Electrodeposited diamond drills for use with electric drill without hammer. Average lifespan between 5 and 10 holes, depending on the material. Steel body and electrodeposited diamond tips. Side opening to improve cooling and allow the removal of solid waste after each hole. Ideal for placement of bathroom accessories and any type of decoration accessories on ceramic surfaces. Slot in the steel body. For increased cooling and greater ease during the extraction of the chip.
Specials considerations	Recommended speed of use between 400 and 1000 r.p.m., depending on the material to be drilled. For a better finish and longer life of the bit, it is important to respect the proper speed of rotation and exercise moderate pressure during drilling. They should always be used cooled with water.

	REF		
EASYGRES DRILL BIT Ø 6 MM.	04922	25 mm	10
EASYGRES DRILL BIT Ø 6,5 MM.	04920		
EASYGRES DRILL BIT Ø 8 MM.	04923		

	REF		
EASYGRES DRILL BIT Ø 10 MM.	04924	25 mm	10
EASYGRES DRILL BIT Ø 12 MM.	04921		

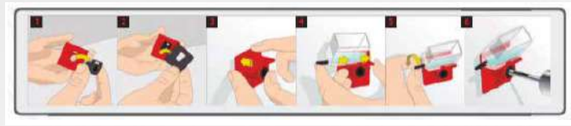
See available guides on page 58

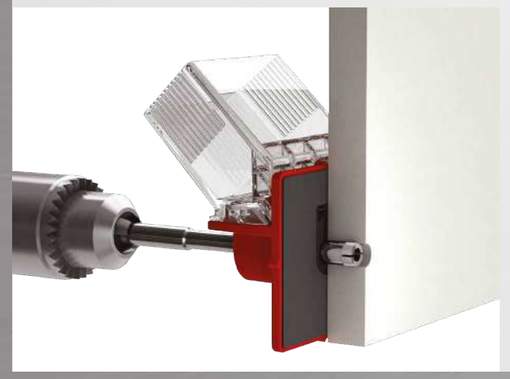
EASYGRES SETS

MAX. R.P.M. 1.000

EASYGRES DRILL BIT SETS

Materials to drill	Ceramic tiles, Gres, Porcelain stoneware, Granite, Marble and Glass.
Features	The EASYGRES guide allows holes to be made both vertically and horizontally, thanks to the functional design of its water tank that incorporates a flow regulating tap. The EASYGRES guide adheres easily to any surface, thanks to its system of replaceable adhesive pads. Kit composed of Easygres Guide, plus 10 adhesive pads and 1 or 2 drill bits (according to kit).
Specials considerations	Recommended speed of use between 400 and 1000 r.p.m., depending on the material to be drilled. For a better finish and longer life of the bit, it is important to respect the proper speed of rotation and exercise moderate pressure during drilling. They should always be used cooled with water and with the EASYGRES guide, which allows proper guidance and cooling, ensuring high precision and good finishes.





	REF		
KIT EASYGRES DRILL BIT Ø 6 MM.	04927	25 mm	10
KIT EASYGRES DRILL BIT Ø 6,5 MM.	04925		
KIT EASYGRES DRILL BIT Ø 8 MM.	04928		
KIT EASYGRES DRILL BIT Ø 10 MM.	04929		
KIT EASYGRES DRILL BIT Ø 12 MM.	04926		
KIT EASYGRES DRILL BIT Ø 6 Y 10 MM.	04919		
KIT EASYGRES DRILL BIT Ø 6,5 Y 10 MM.	04909		
KIT EASYGRES DRILL BIT Ø 6,8, 10 Y 12 MM.	04904		
REPLACEMENT ADHESIVES EASYGRES 20 U.	04999		

See available guides on page 58

WET CUT

EASYGRES BITS Ø20-120MM

MAX. R.P.M. 1.000

DIAMOND EASYGRES DRILL BITS Ø20-120 MM.

Materials to drill	Ceramic tiles, Gres, Porcelain stoneware, Granite, Marble and Glass.
Features	Body in steel and electrodeposited diamond tips. Side opening to improve cooling and allow the removal of solid waste after each hole. Slot in the steel body. For increased cooling and greater ease during the extraction of the chip.
Specials considerations	The working speed varies between 400 and 1000 rpm, depending on the material to be drilled. For a better finish and longer life of the bit, it is important to respect the proper rotation speed and exert moderate pressure during drilling. Always use cooled with water. It is recommended to use the multidrill guide (Ref. 50944) and the water tank (Ref. 50947) to cool and prevent the bit from moving during drilling, achieving good finishes.

	REF		
EASYGRES DRILL BIT Ø 20 MM.	05961	25 mm	1
EASYGRES DRILL BIT Ø 28 MM.	05962		
EASYGRES DRILL BIT Ø 35 MM.	05963		
EASYGRES DRILL BIT Ø 40 MM.	05964		
EASYGRES DRILL BIT Ø 43 MM.	05965		
EASYGRES DRILL BIT Ø 50 MM.	05966		
EASYGRES DRILL BIT Ø 55 MM.	05967		
EASYGRES DRILL BIT Ø 65 MM.	05969		
EASYGRES DRILL BIT Ø 68 MM.	05978		
EASYGRES DRILL BIT Ø 75 MM.	05979		
EASYGRES DRILL BIT Ø 100 MM.	05981		
EASYGRES DRILL BIT Ø 120 MM.	05982		

See available guides on page 58

EASYGRES Ø35MM BIT SET

MAX. R.P.M. 1.000

REF	
50921	1

EASYGRES Ø35MM DRILL BIT SET

Materials to drill	Ceramic tiles, Gres, Porcelain stoneware, Granite, Marble and Glass.
Features	Kit composed by: Multidrill guide, water tank and hose, plus EASYGRES drill (Ø 35 mm.). Ideal for water inlets.
Specials considerations	The working speed varies between 400 and 1000 r.p.m., depending on the material to be drilled.

EASYGRES PLUS BIT SET

MAX. R.P.M. 1.000

REF	
50937	1

DIAMOND EASYGRES PLUS DRILL BIT SET

Materials to drill	Ceramic tiles, Gres, Porcelain stoneware, Granite, Marble and Glass.
Features	Kit composed by: Multidrill guide, plus water tank and hose, plus EASYGRES drill (Ø 20, 28, 35, 43, 50, 68 and 75 mm.).
Specials considerations	The working speed varies between 400 and 1000 r.p.m., depending on the material to be drilled.

EAC

See available guides on page 58

FORAGRES GUIDE

Features Support for portable electric drill. Suitable for the use of diamond drills for wet drilling. Its use is necessary for 100 and 120 mm drill bits. (refs.04976, 04577, 05981 and 05982). Includes drill adapter Ref.50915.

REF	
50900	1

SWIVEL CONNECTOR

Features Adaptable to electric drill. It allows to realize vertical and horizontal drills on Stoneware, Porcelain and Granite with removable diamond bits of Ø 6, 8, 10 and 12 mm. (refs. 04930/31/32/33).

REF	
50907	1

MULTIDRILL GUIDE

Features By means of suction cup attachment, it allows to make horizontal and vertical holes in the exact place, avoiding movement of the drill.
Compatible with dry-cut diamond bits, removable drill bits (Ø 6 to 14 mm.) And wet-cut diamond bits (Ø 20 to 75 mm.).
To connect to hose and tank (Ref. 50947).

REF	
50944	1

WATER TANK

Features Capacity of 1200 ml. of capacity, with manual pressure pump. Includes 2 m. of hose.

REF	
50947	1

ZERO DUST GUIDE

Features For the centering and extraction of dust generated during dry drilling.
Compatible with the range of DRYGRES and DRYGRES 4DRILL drills.
Connection to vacuum cleaner. Adaptable to Ø 30 to 35 mm hose connectors.
Made of vulcanized rubber, from 100% recycled material, the ZERO DUST Guide presents daily wear. The centering guide is metallic for greater resistance to wear caused by friction with the drill bits during drilling.

REF	
05912	1

DRILL ADAPTER

Features For the use of dry cutting diamond bits (M14 thread) with electric drill.
Use without hammer.

REF	
05976	1

GRINDING AND POLISHING

GRINDING AND POLISHING

There is an important difference between the processes of grinding and polishing.
Although both, basically, are processes of mechanical elimination of material, we must never confuse them.

GRINDING is always the first step in the mechanical removal of material.
The main function of the grinding is to shape or obtain a surface as flat and homogeneous as possible.

The grinding can be classified in two:

COARSE GRINDING (G): Eliminates, mainly, large irregularities in the surface and a first level of homogeneity is obtained.
FINE GRINDING (F): Softens irregularities resulting from coarse grinding obtaining a level of homogeneity and superior planimetry.

The combination of coarse grinding and fine grinding prepares the surface to start the polishing process, considerably reducing the execution times.

POLISHING is a finishing process, much finer, detailed and superficial than grinding.
The purpose of polishing is to highlight or finish the appearance or shape of the material worked.
In most cases, the polishing ends with a phase of crystallization or creation of brightness on the surface of the material, for aesthetic purposes.

Correct polishing always goes through several phases. In them different sizes of grain of abrasive (granulometries) will be used.
The grain size with which the polishing process will start will always depend on the state of the surface to be worked, so we will not always start with the largest grain.

DOUBLE CROWN

DOUBLE ROW CROWN FOR CONCRETE GRINDING CUP WHEEL

Materials	Concrete materials.
Features	Glass grinding wheel with double crown of sintered segments for the grinding of surfaces and the grinding of concrete edges. Laser welded High performance steel body. High performance and durability.
Specials considerations	Maximum working speed: 15,300 RPM (Ref. 05917) and 12,250 RPM (Ref. 05918).

MAX. R.P.M. 15.300 REF.05917

MAX. R.P.M. 12.250 REF.05918

	REF					
DOUBLE CROWN Ø100 SUPERPRO	05917	100 mm	22,2 mm	19 mm	6 mm	1
DOUBLE CROWN Ø125 SUPERPRO	05918	125 mm	22,2 mm	19 mm	6 mm	1

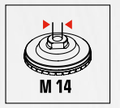
TURBO

TURBO FOR NATURAL STONE GRINDING CUP WHEEL

Materials	Natural stone.
Features	TURBO sintered glass grinding wheel for grinding surfaces and grinding natural stone edges. Laser welded High performance aluminum body. High grinding speed.
Specials considerations	Maximum working speed: 15,300 RPM. Connection M14.

MAX. R.P.M. 15.300

	REF					
TURBO Ø100 SUPERPRO	05921	100 mm	M14 mm	19,5 mm	7 mm	1



DRY CUT

FAN CUP

FUN CUP FOR CONCRETE GRINDING CUP WHEEL

Materials	Concrete materials.
Features	Glass cup type “FAN CUP” with sintered segments for the rapid grinding of surfaces and the grinding of concrete edges. Laser welded High performance steel body. High grinding speed. Wide holes in the steel body for better cooling.
Specials considerations	Maximum working speed: 15,300 RPM (Ref. 05919) and 12,250 RPM (Ref. 05920).

MAX. R.P.M. 15.300 REF.05919

MAX. R.P.M. 12.250 REF.05920

	REF					
FAN CUP Ø100 SUPERPRO	05919	100 mm	22,2 mm	16,5 mm	5 mm	1
FAN CUP Ø125 SUPERPRO	05920	125 mm	22,2 mm	16,5 mm	5 mm	1

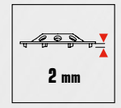
PCD

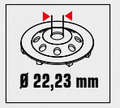
PCD FOR EPOXY AND FIBER GRINDING CUP WHEEL

Materials	Epoxy paints, fibers, adhesives and waste.
Features	PCD diamond cup grinding wheel for grinding surfaces with epoxy coatings or fibers. Laser welded High performance aluminum body. High quality.
Specials considerations	Maximum working speed: 12,250 RPM.

MAX. R.P.M. 12.250

	REF					
PCD Ø125 SUPERPRO	05922	125 mm	22,2 mm	10,5 mm	2 mm	1





EAC

GRINDING BLADES

VDG / VDF GRINDING BLADES

Materials	Natural stone, all types of ceramic tile and paint or resin coatings.
Features	For grinding edges and surfaces. Diamond plate by vacuum welding (VACUUM BRAZED).
Specials considerations	Recommended maximum speed of use: 15,300 RPM. Fine grinding (Ref.31974) Heavy grinding (Ref.31979)

MAX. R.P.M. 15.300

	REF				
VDF 100 FINO PRO	31974	100 mm	22,2 mm	2,1 mm	1
VDG 100 GRUESO PRO	31979	100 mm	22,2 mm	2,1 mm	1

ECD

2IN1 CUTTING AND GRINDING DIAMOND BLADE

Materials to cut	Recommended cut:	Alternative cut:
	Natural stone, all types of ceramic tiles (including porcelain tiles) and synthetic materials.	Sandstone, Tile, Clay, Quartzite, Fiberglass, Fiber Cement, Granite, Glazed stoneware, Extruded stoneware, Porcelain stoneware, Klinker, Marble, Volcanic stone, Slate, Arabic tile, Glazed tile, Calcareous terrazzo, Terrazzo silicon.
Features	Disc type continuous electrodeposited double-sided reversible for a maximum use of the blade. High cutting speed Fine grinding.	
Specials considerations	For thicknesses <25 mm. For use in GRINDERS. Connection: M14 thread.	

MAX. R.P.M. 13.300

	REF					
ECD 115 2IN1 SUPERPRO	31964	115 mm	M14 mm	1,8 mm	5,6 mm	1
ECD 125 2IN1 SUPERPRO	31965	125 mm	M14 mm	1,8 mm	5,6 mm	1

DRY POLISH

DRY DIAMOND BLADE

Materials to polish	Concrete, marble, granite and other natural ornamental stones.
Features	Range of flexible discs for dry polishing natural stone. It allows the elimination of scratches and superficial damages in a fast and simple way.
Specials considerations	Maximum working speed: 3,000 rpm. Different granulometries. # 50, # 100 and # 200 for roughing. # 400, # 800, # 1500 and # 3000 for polishing and closing the pore. Fixation by VELCRO® to the support for blades ref. 62986.

MAX. R.P.M. 3.000

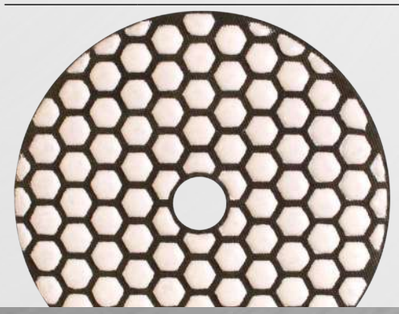
	REF		
RESIN DRY POLISHING PAD #50 - Ø100 MM	62970	100 mm	1
RESIN DRY POLISHING PAD #100 - Ø100 MM	62971	100 mm	1
RESIN DRY POLISHING PAD #200 - Ø100 MM	62972	100 mm	1
RESIN DRY POLISHING PAD #400 - Ø100 MM	62973	100 mm	1
RESIN DRY POLISHING PAD #800 - Ø100 MM	62974	100 mm	1
RESIN DRY POLISHING PAD #1500 - Ø100 MM	62975	100 mm	1
RESIN DRY POLISHING PAD #3000 - Ø100 MM	62976	100 mm	1

DRY BUFF

DIAMOND BLADE FOR DRY BUFF

Materials to buff	Concrete, marble, granite and other natural ornamental stones.
Features	Flexible blade for final polishing. Get a natural and lasting shine.
Specials considerations	Maximum working speed: 3,000 rpm. Fixation by VELCRO® to the support for blades ref. 62986.

MAX. R.P.M. 3.000



REF		
62977	100 mm	1

DRY CUT

WET CUT

WET POLISH

MAX. R.P.M. 4.500

DIAMOND DISC TO WET POLISH

Materials to polish	Concrete, marble, granite and other natural ornamental stones.
Features	Range of flexible blades for polishing natural wet stone. It allows the elimination of scratches and superficial damages in a fast and simple way.
Specials considerations	Maximum working speed: 4,500 rpm. Different granulometries. # 50, # 100 and # 200 for roughing. # 400, # 800, # 1500 and # 3000 for polishing and closing the pore. Fixation by VELCRO® to the support for discs ref. 62986.

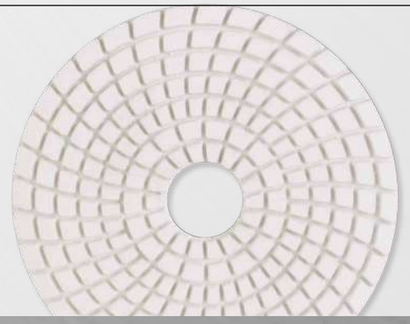
	REF	⌀	
RESIN WET POLISHING PAD #50 - Ø100 MM	62978	100 mm	1
RESIN WET POLISHING PAD #100 - Ø100 MM	62979	100 mm	1
RESIN WET POLISHING PAD #200 - Ø100 MM	62980	100 mm	1
RESIN WET POLISHING PAD #400 - Ø100 MM	62981	100 mm	1
RESIN WET POLISHING PAD #800 - Ø100 MM	62982	100 mm	1
RESIN WET POLISHING PAD #1500 - Ø100 MM	62983	100 mm	1
RESIN WET POLISHING PAD #3000 - Ø100 MM	62984	100 mm	1

WET BUFF

MAX. R.P.M. 4.500

DIAMOND DISC FOR WET BUFF

Materials to buff	Concrete, marble, granite and other natural ornamental stones.
Features	Flexible disc for wet final polishing. Get a natural and lasting shine.
Specials considerations	Maximum working speed: 4,500 rpm. Fixation by VELCRO® to the support for discs ref. 62986.



REF	⌀	
62985	100 mm	1

SUPPORT

FLEXIBLE SUPPORT DISC FOR POLISHING AND BUFFING

Features	Fixing pad for polishing and polishing flexible blades Ø100 mm.
Specials considerations	Compatible with dry and water-cooled blades. Fixation by VELCRO®. Connection to polisher / grinder with M14 thread.

REF	⌀	
62986	100 mm	1

POLISHING HAND PADS

DIAMOND HAND PADS FOR POLISHING

Materials to polish	Natural stone and ceramic tile.
Features	Range of diamond rubber pads for the roughing and polishing of edges, cuts and surfaces. Semi-flexible. Good adaptation to the user's hand. Wet use is recommended. Different granulometries: # 60, # 120 and # 200 for roughing. # 400 for polishing.
Specials considerations	Dimensions of the diamond plate: 55x90 mm. Dimensions of the rubber block: 58x94x30 mm.

	REF	
MANUAL POLISHING PADS #60	61974	10
MANUAL POLISHING PADS #120	61975	10
MANUAL POLISHING PADS #200	61976	10
MANUAL POLISHING PADS #400	61977	10

DRY CUT

WET CUT

DIAMOND BLADES

RECOMMENDATIONS

VARIABLES THAT INFLUENCE THE USE OF DIAMOND BLADES

1. THE DIAMOND BLADE

If when buying a disc, it is not going to be used immediately, it should be left on a flat surface or, preferably, suspended by the shaft. **You should never leave supported.**

For the proper functioning of the blades and to obtain from each one the maximum performance, we must remember that we must clean them periodically by using the cleaning blocks (ref 05973 or 05974).
Blocks must be used before using the blade for the first time or when the blade has been idle for a long period.
It is recommended to clean the blade each time the material is changed or when it is detected that the cutting speed decreases.

The correct use of the blocks is by cutting thin slices in the entire section of the block.

2. THE MACHINE

The state of the machine greatly influences the realization of the cut. These are the most relevant aspects to review:

- Worn or damaged bearings.
- Wrong axis measurement or worn disc clamping plates.
- Worn shaft.
- Misaligned machine
- Clogged water / coolant system.
- Worn or loose drive belts.
- Inadequate electrical supply or power cables.
- Inadequate power.
- Damaged water pump.
- Incorrect RPM

3. THE OPERATOR...

As operators, we can often make mistakes that can reduce the performance of the machine and the diamond blade.

The most common errors are:

- Not using the correct specification of the diamond blade in the task to be performed.
- Carry out the assembly of the blade in the direction of rotation not indicated by the arrow engraved on the blade's steel core.
- Twisting the blade during cutting
- Make the blade jump or squeeze the blade during the cut.
- Allow the material to slide when cut.
- Not using a sufficient amount of refrigerant.
- Mount the blade incorrectly.
- Not cutting at the recommended revolutions.
- Before proceeding with the assembly of the blade, not checking the cleaning of the support shaft or the clamping plates. If necessary, use a fine abrasive for cleaning. Also check the condition of the edges of the clamping plates. If it is necessary to rectify with a soft file.

SECURITY RECOMMENDATIONS

BEFORE STARTING THE MACHINE

1. Make sure that the specifications of the diamond blade and the machine are correct for each particular task.
2. Inspect the blade carefully. If there is any sign of damage or irregular wear, **DO NOT USE THE DISC**.
3. Inspect the machine to make sure that all the components are in correct working conditions. See the instructions for use.
4. Wear appropriate safety clothing and comply with all regulations.
5. Before assembling the blade in the machine, make sure that the blade and chucks are clean and free of dirt and debris.
6. Mount the blade solidly and firmly. Tighten the shaft nut.
7. Place all safety devices in the proper position.
8. Check the water flow in terms of quantity on both sides of the blade. For cutting machines with rollers, verify that the cutting carriage and accessories are properly coupled and aligned, observe that the water level covers the cooling pump.
9. For concrete machines, align the machine on the appropriate cutting path **BEFORE** you start.
10. Clear the work area of unnecessary people. Never allow anyone to be in front of a machine that is about to be started or that is cutting.
11. Check the rpm of the machine to verify that they meet the specified requirements.
12. Make sure that electrical machines are plugged into an earthed supply.
13. Verify that the ventilation is suitable for gasoline or diesel machines.
14. Uncouple the transmission or put them in neutral before starting the self-propelled concrete machines.

DURING THE CUTTING

1. Cut in a straight line.
2. Cut only as deep as the specifications of each task and the conditions require it, respecting the maximum depth.
3. For machines with moving table, keep the material on which the cut has to be made firm and safe, and feed the material slowly and uniformly.
4. For concrete machines, lower the blade in the cut slowly and proceed to cut forward with uniform pressure, without forcing the disc to "climb" out of the cut.
5. For dry cutting blades, we must not cut deeper than 25 mm per pass with a radial machine or grinder, and no more than 75 mm deep per pass with a high speed cutting machine.
6. Cut in stages to get deeper cuts.

OPERATOR SAFETY

Wear appropriate clothing, safety shoes, safety glasses, ear protection, head protection, dust mask or some type of respirator.

Strict attention is required to the manufacturer's instructions for the safe use of the equipment, when cutting with diamond baldes, for the protection of its operator and other persons around the cutting area.

NON-COMPLIANCE COULD RESULT IN BODILY INJURY.

DO

READ and understand the instructions before operating the machine.
KEEP safety devices always in place.
ALWAYS wear tight clothing and approved protection for the ears, eyes, feet, breathing and head when using the machine.
KEEP all body parts away from the disc and all other moving parts.
KNOW how to stop the machine quickly in case of emergency.
MANIPULATE the fuel carefully,
INSPECT the blade, chucks and axles for damage, before installing the blade.
BE CAREFUL and follow the instructions when loading and unloading the machines.
MAKE SURE the blade is not touching anything before starting the machine.
CARRY OUT all repairs by qualified service personnel, except for the items indicated in the maintenance instructions of the machine.
USE gasoline powered machines only in well-ventilated areas.
TRANSPORT portable machines always with the engine stopped and with the silencer away from the body.
STOP the machine before depositing it on the ground.
KEEP portable hand grips dry, clean and free of oil and dirt.

DO NOT

DO NOT ALLOW other people to be near the machine when starting it, refueling, or cutting or grinding.
DO NOT use gasoline machines indoors unless it is properly ventilated.
DO NOT USE damaged equipment or blades.
DO NOT start the machines in places where fuel is stored. Sparks could cause fire or explosion.
DO NOT TOUCH or try to stop a moving blade with your hand.
DO NOT EXCEED the maximum operating speed marked by the blade.
DO NOT RECTIFY OR GRIND with a cutting blade.
DO NOT use any machine when tired or fatigued.
DO NOT BEGIN to cut until the working area is free and your feet are well secured.
DO NOT RAISE, squeeze, wedge or twist the blade during a cut.
DO NOT TRANSPORT a cutting machine with the blade mounted on the machine.
DO NOT operate a machine, unless you are specifically trained to do so.
DO NOT WORK with a damaged machine, improperly adjusted or not fully assembled and with safety elements.
DO NOT USE a blade that has been dropped or received a blow.
DO NOT TOUCH a dry cut diamond blade immediately after use. These blades require several minutes to cool down after each cut.
DO NOT LEAVE an unattended machine with the engine running.

PROBLEM RESOLUTION

EXCENTRIC AXIS

Cause: The axis of the machine is unevenly worn due to the defective blade being adjusted.
Remedy: Make sure the disc is properly adjusted before tightening the clamping plates.

Cause: Disc retaining plates not properly tightened allowing the disc to rotate on its axis.
Remedy: Always tighten the axle nut with a wrench, never tighten by hand only. Always use hex nuts do not use wing nuts.

Cause: Dirty or worn blade or shaft holding plates and do not perform the proper support function for the blade.
Remedy: Check the plates of the blade or shaft for wear. Both clamping plates should not be less than those recommended by the manufacturer. Replace worn parts with new ones.

Cause: Badly mounted blade.
Remedy: Fit the blade correctly, ensuring that the inner diameter of the blade fits correctly in the inner plate.

LOSS OF STRESS

Cause: Inadequate pressure of the clamping plates.
Remedy: Check that the plates have the same diameter and are of the minimum recommended diameter.

Cause: Superheated steel core due to friction with the material during cutting.
Remedy: Verify that the RPM of the blade is correct. Check that the blade used is suitable for the material being cut.

WEAR OF FRESH STEEL

Cause: The blade is too hard for the material being cut.
Remedy: Use correct disc with softer league.

Cause: Excessive cutting pressure, or tightening or twisting of the blade during cutting may cause the steel core to bend or flex. When this is subjected to extreme fatigue of the metal, the steel core of the blade cracks eventually.
Remedy: The operator of the machine must exert a constant, uniform input feed pressure and be careful not to twist or squeeze the blade during cutting.

Cause: Overheating due to inadequate water supply or improper use of dry cutting blades,
Remedy: Use adequate amount of water to cool the wet cutting blades. Allow adequate air flow around the dry cutting blades to avoid overheating.

NEVER USE A CRACKED BLADE

CRACKED SEGMENTS

Cause: The blade is too hard for the material to be cut.
Remedy: Use correct blades with softer ligament.

Cause: The blade has been forced during cutting.
Remedy: Reduce the cutting speed adapting to the power of the machine. Clean the blade with a cleaning block.

THE DISC DOES NOT WANT TO CUT

Cause: The blade is too hard for materials that are cut.
Remedy: Use the appropriate blade to cut the materials that are being worked on.

Cause: The blade has been dull due to continuous use on fairly hard or vitrified material.
Remedy: Use the cleaning block until the diamonds are exposed again, (This may be necessary occasionally, but if the dullness occurs too often, the disc is probably too hard for the material we are cutting.)

EXCESSIVE WEAR

Cause: Use an inappropriate blade on highly abrasive material.
Remedy: Use the appropriate blade to cut the materials that are being worked on.

Cause: Lack of sufficient cooling for the blade. Often excessive wear is seen in the center of the segment.
Remedy: Clean the cooling system and water passages. Make sure the pump is working properly.

NOTE: In both mentioned cases the diamonds are usually highly exposed.

EXCENTRIC DISC WEAR

Cause: The binder is too hard for the material that is being cut. The binder retains the diamonds that begin to round, causing the disc to become dull. Instead of cutting, the disc begins to strike, causing the blade to wear out irregularly,
Remedy: Switch to a softer binder that wears more easily allowing blunt diamonds to fall off, exposing new cutting edges.

Cause: The blade axis of the machine may have a slot marked on it, caused by a blade rolling between the clamping plates. A new blade, installed on the shaft, will settle into the slot, and run eccentrically immediately when the machine starts up.
Remedy: Replace the worn shaft.

Cause: The blade shaft bearings are worn, the shaft and the mandrel will run eccentrically causing the blade to wear out eccentrically as well. This happens more often with concrete machines when the proper lubrication of the bearings is neglected.
Remedy: Install new bearings on the shaft, In some cases, it may also be necessary to replace the shaft if it is worn or out of alignment.

SOCCERATED

Cause: Undercut is a state in which the steel core wears faster than the diamond segment. Especially in the areas where the segment and the steel core are joined. This condition is caused by highly abrasive materials rubbing against the blade during the cutting operation. They are usually very abrasive materials that contain siliceous sands.
Remedy: The flow of chips in abrasive cuts must be distributed over a wider area, away from the critical area of the segment.

LOSS OF THE SEGMENT

Cause: The material slides during cutting, which compresses or twists the segments weakening.
Remedy: Hold the material firmly during cutting.

Cause: The blade is too hard for the material being cut, causing excessive dullness that causes the segment to strike and / or fatigue,
Remedy: Use a softer blade specification.

Cause: Clamping plates worn or improperly mounted, allowing disc mobility on the shaft, or tightening is insufficient.
Remedy: Check the assembly of the plates or replace both plates if necessary.

Cause: The eccentric rotation of the blade that causes the knocking, caused by the worn shaft or defective bearings.
Remedy: Replace worn shaft or / and bearings.

Cause: Overheating. It is usually easily detected by a bluish color in the steel core and / or in the segments, especially in the area of the steel core where the segment was lost,
Remedy: Check the water system for clogging. Test the pump to see if it is working. For dry cutting it may be necessary to make shallower cuts and allow free running every few seconds to let the air cool the blade.

UNEQUAL WEAR OF SEGMENTS

Cause: Usually caused by misalignment of the machine or lack of sufficient water on both sides of the blade, or excessive mitering.
Remedy: Check the alignment of the machine, clean the cooling system. Check to see if the pump is supplying enough water and evenly.

Cause: The blade is eccentrically worn due to defective bearings, worn shaft or excessive dullness.
Remedy: Replace worn bearings or shaft as required.

DIAMOND DRILL BITS

RECOMMENDATIONS

RECOMMENDATIONS FOR USE

For proper use of diamond bits, we must take into account some important aspects, but the most prominent are two: speed and cooling.

WORK SPEED
Before using any diamond drill we must know what is the recommended speed of use, and verify that the drill or grinder meets these requirements.

Working, both below and above the recommended speed, has negative effects on the performance of the bit.

OPTIMAL REFRIGERATION
During drilling, the diamond drill must be in constant cooling, either with water or air. The overheating of the bit is fatal for it.
On wet cutting bits, we must maintain a constant supply of water at all times.
In those with a dry cut, allow air to circulate inside the bit. Either by making a slight orbital movement (slightly cocking the bit) or by drilling intermittently.
To avoid vibrations and excess temperature in the drill, it is recommended that the drill bit be correctly threaded and, if possible, completely supported.

Other aspects that we should also take into account when using diamond bits are:

DEPTH OF CUT
The thickness or depth of cut directly affects the performance of the bit, but it is also a fundamental aspect to take into account the level of cooling that the bits will need. The greater the thickness, the greater the cooling flow must be. If this is not met, the performance will plummet.

BITS ALWAYS CLEAN
OAnother point, very important, to take into account in the use of diamond drill bits is that before making any drilling we must ensure that there is not, inside the drill bit, any trace of perforated material.
It must be understood that the coolant (water or air) must circulate freely inside the drill to be able to carry out its function.

UNFORCED
Remember that diamond tools work by friction. For this reason, we must let the drill bit and the power of the electro-portable tool do their job.
Forcing the drill will only reduce the performance of the tool.

When using electric drills, they must always work WITHOUT the percussion function.

SECURITY RECOMMENDATIONS

BEFORE STARTING THE MACHINE
1. Make sure that the specifications of the diamond drill and the machine are correct for each particular task.
2. Inspect the bit carefully. If there is any sign of damage or irregular wear, **DO NOT USE THE DRILL**.
3. Inspect the machine to make sure that all the components are in correct working conditions. See the instructions for use.
4. Wear appropriate safety clothing and comply with all regulations.
5. Mount the drill solidly and firmly.
6. Place all safety devices in the proper position.
7. Check the cooling level.
8. Clear the work area of unnecessary people. Never allow anyone to be in front of a machine that is about to be started up.
9. Check the rpm of the machine to verify that they meet the specified requirements.
10. Make sure that electrical machines are plugged into an earthed supply.

DURING DRILLING
1. Cut only as deep as the specifications of each task and the conditions require it, respecting the maximum depth.
2. Pierce exclusively the material that is being worked on, do not complete the whole depth of the shaft.
3. Make sure that between drilling each hole there are no remains of material inside the bit.
4. Do not press or force the bit.
5. Perform a slight orbital movement to facilitate the cooling of the bit.

OPERATOR SAFETY
Wear appropriate clothing, safety shoes, safety glasses, ear protection, head protection, dust mask or some type of respirator.

Strict attention is required to the manufacturer's instructions for the safe use of the equipment, when cutting with diamond blades, for the protection of its operator and other persons around the cutting area.

GRINDING AND POLISHING

RECOMMENDATIONS

RECOMMENDATIONS FOR USE

As in the rest of the diamond tools, speed and cooling remain the two main aspects to consider before using blades or diamond cutters for grinding or polishing.

MAXIMUM RECOMMENDED SPEED
For the correct operation of the diamond grinding and polishing tools, it is important to NEVER overcome the recommended maximum working speed.

ALWAYS WELL REFRIGERATED
As is normal with diamond tools, cooling is essential. Forcing or over-pressing the grinding and polishing tool reduces its performance, makes it difficult to control and use, and consequently affects the level of the final finish.

In the grinding and polishing work it is important to know that it is not always necessary to start the grinding with the larger grain, since everything depends on the initial state of the surface on which we have to work. The most important thing is that once we start, whatever the grain, the advance MUST be progressive and we can not skip any intermediate grain until we reach the final grain.

SECURITY RECOMMENDATIONS

BEFORE STARTING THE MACHINE
Make sure that the specifications of the blade or diamond wheel and the machine are correct for each particular task.
1. Inspect the diamond tool carefully. If there is any sign of damage or irregular wear, DO NOT USE IT.
2. Inspect the machine to make sure that all the components are in correct working conditions. See the instructions for use.
3. Wear appropriate safety clothing and comply with all regulations.
4. Mount the diamond tool firmly and firmly.
5. Place all safety devices in the proper position.
6. Check the cooling level.
7. Clear the work area of unnecessary people. Never allow anyone to be in front of a machine that is about to be started up.
8. Check the rpm of the machine to verify that they meet the specified requirements.
9. Make sure that electrical machines are plugged into an earthed supply.

DURING GRINDING OR POLISHING
1. Make sure that the blade or wheel is not in contact with the surface to be worked on before starting the tool.
2. Move the disk in small circles without remaining fixed in the same place.
3. Do not press or force the grinding or polishing tool.
4. In the processes of grinding or polishing with different granulometries do not skip any intermediate grain.

OPERATOR SAFETY
Wear appropriate clothing, safety shoes, safety glasses, ear protection, head protection, dust mask or some type of respirator.

Strict attention is required to the manufacturer's instructions for the safe use of the equipment, in cutting with diamond blades, for the protection of its operator and others around the cutting area.

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