







WHAT IS UNITIZED?

Unitized is made of a 3-D web of nylon threads, impregnated with resin, to which abrasive grains are added. This is then pressed into plates of a specific density.

Unitized or pressed abrasive materials are the latest generation in 3D abrasive materials. Pressed abrasive materials are a great help when traditional materials would otherwise require considerable time and effort to achieve a quality finish. Indeed, they stand out in the way they combine an aggressive action with an outstanding finish.



DID YOU KNOW...

At Cibo we produce our own unitized raw material and are therefore in full control of the process. We can therefore guarantee a very consistent level of quality. Moreover, we are extremely fast and flexible in reacting to new market trends. We are therefore able to provide the most advanced unitized range on the market.

WHY CHOOSE UNITIZED?

1. HIGH LEVEL OF CONTROL

When using unitized you can give components a particular finish, without affecting the geometry of the work piece or grinding down the sinking. This means that there will be no impact on your critical tolerances.



2. COOL GRINDING

The grinding action is cooler than "coated" and "bonded" abrasive materials, meaning there is less chance of deforming or discolouring the work piece.

3. UNIFORM FINISH

Unitized achieves a uniform, consistent and replicable finish.

ADVANTAGES

- Constant and replicable finish
- Flexible: adapts to the shape of the work piece
- Cool grinding: less chance of discoloration
- Also suited to materials generating extreme heat (e.g. titanium & cobalt alloys)
- Forgiving
- Iron-free stainless steel safe: no contamination
- Open structure prevents clogging
- Economic usage: total cost of grinding is low



APPLICATIONS

- Deburring
- Structuring
- Removing scratches and milling lines
- Cleaning
- · Removing oxidation
- · Removing welds
- Removing welding discoloration
- Improving surface roughness
- Finishing
- Pre-polishing
- Correcting sanding errors
- Removing varnish and coatings

100% VOC FREE

Volatile Organic Compounds (VOC) stands for a group of substances including fuel and solvents. Upon vaporisation these substances cause global

warming, acidification and are harmful to health. Solvent is commonly used in the production of unitized. The entire Rebel One range, on the other hand, is **100% solvent-free**, **VOC free compliant** and contains no polymers coming from **bisphenol A**.

FOR A WORLD WITHOUT SHARP EDGES.

An aggressively durable Unitized disc with exceptional **tear resistance** and an **extended lifespan**, designed for the efficient removal of light burrs and precise edge rounding.

WHAT IS THE 🛟 LINE?

The groundbreaking + line, which takes 3D sanding materials to the next level. This line offers improved performance, durability, and higher aggressiveness, without compromising on the quality of Rebel One Unitized.

The + line products are designed for light deburring applications, making them an exceptional alternative to traditional steel

wire, plastic bonded deburring brushes and traditional abrasives.

Improve your workflow with Cibo's + line and experience the future of 3D abrasive materials. Discover the benefits of our durable and efficient line wheels now!



Ø 150 x 3 mm Ø 5,9" x 0,12"

> RPM 6.000

adv 89M

ð 150 x 3 mn ð 5.9° x 0.12

RPM

HE IDEAL PARTNER FOR ROBOTIC GRINDING.

The + line is the perfect partner for robotic grinding, elevating industrial surface finishing with unmatched precision and efficiency!

Looking for a automated sanding solution? Contact us at info@ciborobotics.com



+ ADVANTAGES

- **1. OWN PRODUCTION**
- **2. QUICK DELIVERY**
- 3. CUSTOMISATION POSSIBLE
- 4. WITHOUT SOLVENTS & ANIMAL DERIVATIVES

APPLICATIONS



Removing welding discoloration.



Correcting sanding errors, removing scratches.



Breaking angles, deburring and rounding.



Removing TIG welds.



Prepolishing: ideal last step before mirror polishing.



Improving surface roughness. Controlling the Ra value.



Removing varnish, coatings and rust without affecting the geometry.



Finishing, maintaining and repairing turbine and propeller blades, without affecting their geometry.



Removing milling lines.

RANGE

S-LINE



Removing scratches and correcting sanding errors, pre-polishing.

Wide range of application uses, most universal quality.

S Ideal for removing light burrs, rounding edges.

grain	silicon carbide	
density	5 = 2SF 6 = 3SF 7 = 6SF	
finish	• • • • • • 3 • • • • • • • 3 • 3 • 3 •	
stock removal	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	
control over work piece	• • • • • • • • • • • • • • • • • • •	
lifespan	• • • • • • 3 • • • • • •	
tear resistance	● ● ● ● ● ● S ³ ● ● ● ● ● ●	

M-LINE



Removing milling lines and welds, deburring.

More aggressive than the S-line, with a slightly rougher finish.

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U	-

Remove milling lines and welds, deburring with longer lifespan.

grain	aluminium oxide	
density	5 → 8	
finish		
stock removal		
control over work piece		
lifespan		
tear resistance		

F-LINE



Removing weld discoloration, varnish and coatings; structuring.

Aggressive and extremely flexible.

grain	aluminium oxide
density	3 → 5
finish	$\bullet \bullet \bullet \bullet \bullet \bullet$
stock removal	•••••
control over work piece	$\bullet \bullet \bullet \bullet \bullet \bullet$
lifespan	••••
tear resistance	$\bullet \bullet \bullet \bullet \bullet \bullet$

T -LINE



Aggressive grinding with fast and controlled stock removal.

Aggressive and extremely hard quality. Fast and controlled stock removal with acceptable finish.

grain	engineered
density	9 → 10
finish	•••••
stock removal	•••••
control over work piece	•••••
lifespan	$\bullet \bullet \bullet \bullet \bullet \bullet$
tear resistance	••••









	UNITIZED WHEELS WITH CENTRE HOLE	UNITIZED WHEELS WITH CENTRE HOLE FOR FINIT-EASY	ABRASIVE WHEELS ON SHAFT
APPLICATIONS	 Deburring the sides of a work piece Removing milling lines Structuring Improving the surface finish 	 Grinding and/or finishing TIG weld seams Removing welding discoloration 	 Grinding and cleaning interior diameters and surfaces that are hard to reach Removing welding discoloration Improving the Ra value
MACHINE	Stationary machineFlexible shaft machineStraight grinder	• Finit-Easy	Flexible shaft machineStraight grinder
AVAILABLE IN	S M E	S ⁺ M ⁺ F T	S M F

ABRASIVE DISCS ON FIBRE GLASS BACK- ING	UNITIZED GRIP DISCS	QUICK-CHANGE	UNITIZED MOUNTED POINTS
	SAGR 6 SAGR 6 CR 6 SAGR 6 CR 6 SAGR 6 SA		
 Used in addition to flap discs to remove scratches or to improve the surface Ideal last step before mirror polishing Breaking edges Removing welding discoloration 	 Material is extremely flexible, which is a particular advantage on flat work pieces Ideal last step before mirror polishing Improving the Ra value Removing welding discoloration 	 Applications where the contact surface of the disc needs to be small or where it is important to be able to control the grinding operation Removing welding discoloration Removing milling lines Improving surface roughness 	 For finishing internal welds and work pieces with limited accessibility Removing welding discoloration Breaking the edges of drilled, punched or milled openings
Adjustable angle grinderFinit-Easy	 Adjustable angle grinder Eccentric grinder Finit-Easy 	Pneumatic angle grinderElectric angle grinder	 Flexible shaft machine Straight grinder Angle grinder (electrical or pneumatic) with spindle adapter
S ⁺ M ⁺ F T	S	S ^P M ^P F	S M T

WHICH REBEL IS FOR YOU?

Our 3 steps will quickly help you to choose the right Rebel.

1. WHICH OPERATION?

Select the appropriate line to suit your particular application using the range summary.

2. WHICH SHAPE?

Determine the appropriate shape based on the work piece and the operation that needs to be carried out on the work piece. For flat operations you are best using a disc, but for angled welds a grinding wheel is more appropriate.

3. WHICH DENSITY?

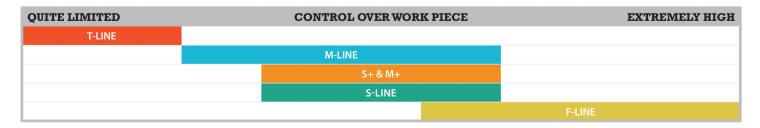
Using the 3 tables of comparison below you can quickly determine which variant is best for you. (be sure to read "What is density?")

Unable to find the right product? No problem. Just call us on **+32 16 618585** or send a mail to **EHBS@cibo.be** and we will quickly help you on your way.



FINE	FINISH	EXTREMELY FINE
T-LINE		
	F-LINE	
	M-LINE	
	S+ & M+	
	S-LINE	

MOST AGGRESSIVE	STOCK REMOVAL		LAEST AGGRESIVE	
T-LINE				
	M-LINE			
		S+ & M+		
		S-LINE		
			F-LI	NE



WHAT IS DENSITY?

Density refers to the hardness of a disc. The However, density is not directly related softer the disc, the more flexible it is and to stock removal. A flexible disc can, the more control there is over the work depending on the grit it contains, also be piece. Density is expressed on a scale from very aggressive. 1 (most supple) to 10 (least supple).



HIGH	TEAR RESISTANCE	
T-LINE		
	S+ & M+	
	M-LINE	
	S-LINE	
		F-LINE



FIRST AID WITH FINISHING JOBS



Are you looking for **a partner** to talk things through? One that gives you specific tips and tailored advice? One that is **flexible** and gets you out of trouble at the last minute?

Then choose Cibo and leave all your worries behind. Our team of application experts is there to tackle every grinding emergency. They are not only sales people, but also **trained advisors**, with the knowledge to support you in word and deed. They will happily come and visit you, with **no obligation**, to help you find the most suitable **solution**.

So, in short, we are at your service whenever you need us!

We will happily take over the worry of all your sanding, grinding, and polishing activities, allowing you to focus on your core tasks.





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