



**Rebel One<sup>®</sup>** EN  
**UNITISED**

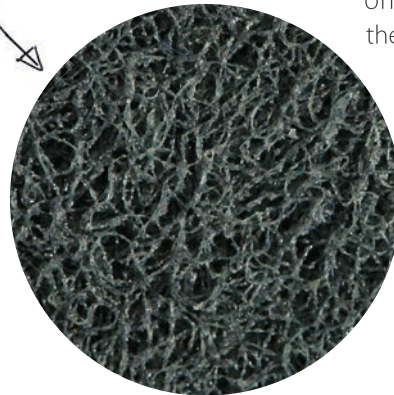
**cibo**  
time saving abrasives



# WHAT IS UNITISED?

Unitised 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.

Unitised 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 unitised 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 unitised range on the market.

# WHY CHOOSE UNITISED?



## 1. HIGH LEVEL OF CONTROL

When using unitised 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

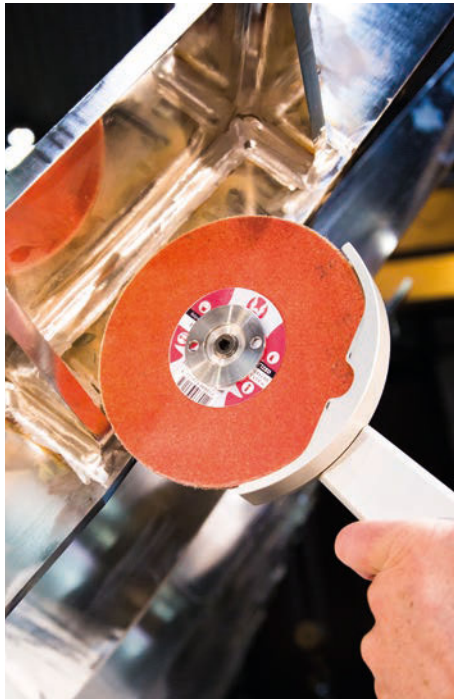
The grinding action is cooler than “coated” and “bonded” abrasive materials, meaning there is less chance of deforming or discolouring the work piece.

## 3. UNIFORM FINISH

Unitised 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 unitised.

The entire Rebel One range, on the other hand, is **100% solvent-free, VOC free compliant** and contains no polymers coming from **bisphenol A**.



# RANGE

## S-LINE



Removing scratches and correcting sanding errors, pre-polishing.

Wide range of application uses, most universal quality.

**grain** silicon carbide

**density** 5 → 7

finish ● ● ● ● ● ● ● ●

stock removal ● ● ● ● ● ● ● ●

control over work piece ● ● ● ● ● ● ● ●

## M-LINE



Removing milling lines and welds, deburring.

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

**grain** aluminium oxide

**density** 5 → 8

finish ● ● ● ● ● ● ● ●









stock removal ● ● ● ● ● ● ● ●

control over work piece ● ● ● ● ● ● ● ●



# SHAPES

	Unitised WHEELS WITH CENTRE HOLE	Unitised WHEELS WITH CENTRE HOLE FOR FINIT-EASY	ABRASIVE WHEELS ON SHAFT	
				
<b>APPLICATIONS</b>	<ul style="list-style-type: none"> <li>• Deburring the sides of a work piece</li> <li>• Removing milling lines</li> <li>• Structuring</li> <li>• Improving the surface finish</li> </ul>	<ul style="list-style-type: none"> <li>• Grinding and/or finishing TIG weld seams</li> <li>• Removing welding discoloration</li> </ul>	<ul style="list-style-type: none"> <li>• Grinding and cleaning interior diameters and surfaces that are hard to reach</li> <li>• Removing welding discoloration</li> <li>• Improving the Ra value</li> </ul>	
<b>MACHINE</b>	<ul style="list-style-type: none"> <li>• Stationary machine</li> <li>• Flexible shaft machine</li> <li>• Straight grinder</li> </ul>	<ul style="list-style-type: none"> <li>• Finit-Easy</li> </ul>	<ul style="list-style-type: none"> <li>• Flexible shaft machine</li> <li>• Straight grinder</li> </ul>	
<b>AVAILABLE IN</b>				

ABRASIVE DISCS ON FIBRE GLASS BACKING	Unitised GRIP DISCS	QUICK-CHANGE	Unitised MOUNTED POINTS
			
<ul style="list-style-type: none"> <li>Used in addition to flap discs to remove scratches or to improve the surface</li> <li>Ideal last step before mirror polishing</li> <li>Breaking edges</li> <li>Removing welding discoloration</li> </ul>	<ul style="list-style-type: none"> <li>Material is extremely flexible, which is a particular advantage on flat work pieces</li> <li>Ideal last step before mirror polishing</li> <li>Improving the Ra value</li> <li>Removing welding discoloration</li> </ul>	<ul style="list-style-type: none"> <li>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</li> <li>Removing welding discoloration</li> <li>Removing milling lines</li> <li>Improving surface roughness</li> </ul>	<ul style="list-style-type: none"> <li>For finishing internal welds and work pieces with limited accessibility</li> <li>Removing welding discoloration</li> <li>Breaking the edges of drilled, punched or milled openings</li> </ul>
<ul style="list-style-type: none"> <li>Adjustable angle grinder</li> <li>Finit-Easy</li> </ul>	<ul style="list-style-type: none"> <li>Adjustable angle grinder</li> <li>Eccentric grinder</li> <li>Finit-Easy</li> </ul>	<ul style="list-style-type: none"> <li>Pneumatic angle grinder</li> <li>Electric angle grinder</li> </ul>	<ul style="list-style-type: none"> <li>Flexible shaft machine</li> <li>Straight grinder</li> <li>Angle grinder (electrical or pneumatic) with spindle adapter</li> </ul>
			

# APPLICATIONS



Removing welding discoloration.



Correcting sanding errors, removing scratches.



Breaking angles, deburring and rounding.



Removing TIG welds.



Prepolishing: ideal last step before mirror polishing.



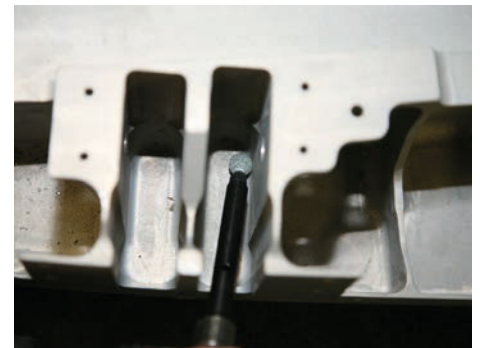
Improving surface roughness. Controlling the Ra value.



Removing varnish, coatings and rust without affecting the geometry.



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



Removing milling lines.



# APPLICATION RECOMMENDATIONS

## SPEED

Follow the recommended speed on the product label

- low speed = maximum efficiency and a better finish
- high speed = excessive heat generation & premature wear



## ANGLE

- flat use = better finish
- used on end face = increased aggressive action



## PRESSURE

Always apply medium pressure.

- pressure too high = excessive heat generation & premature wear
- pressure too low = little or no result



## FIRST AID WITH FINISHING JOBS

If in doubt ask your Cibo application experts for advice. Call +32 16 61 85 85 or mail [EHBS@cibo.be](mailto:EHBS@cibo.be).



**FREE**  
**FIRST AID**  
**WITH FINISHING JOBS**

# 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.



T-line



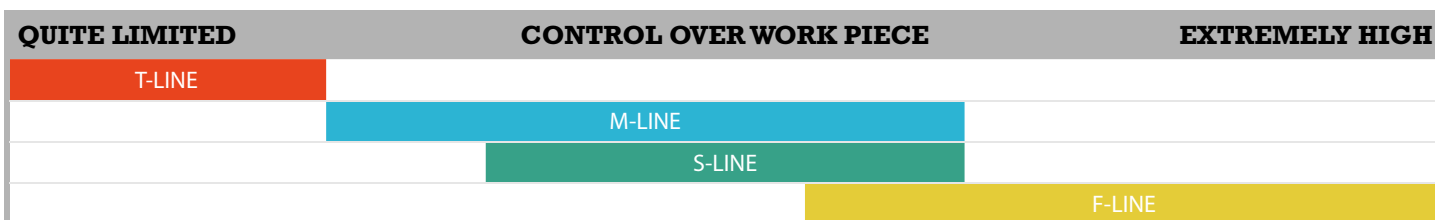
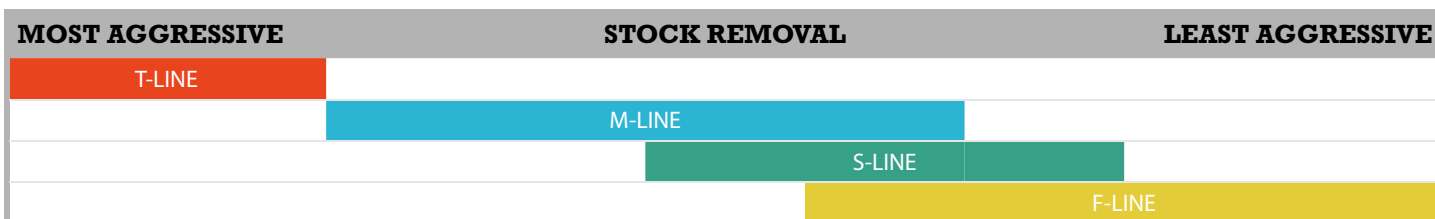
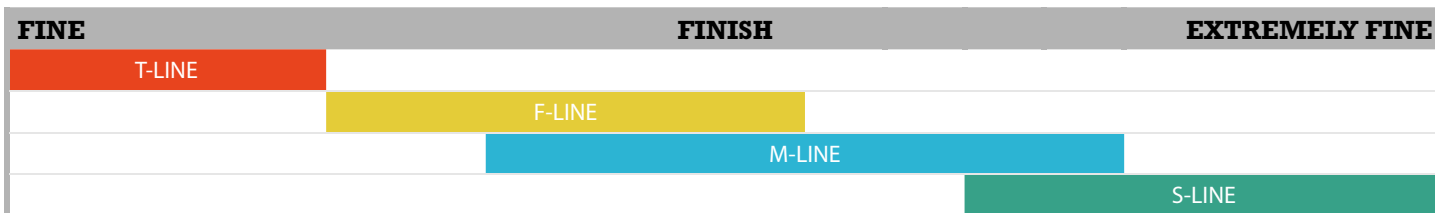
F-line



S-line



M-line

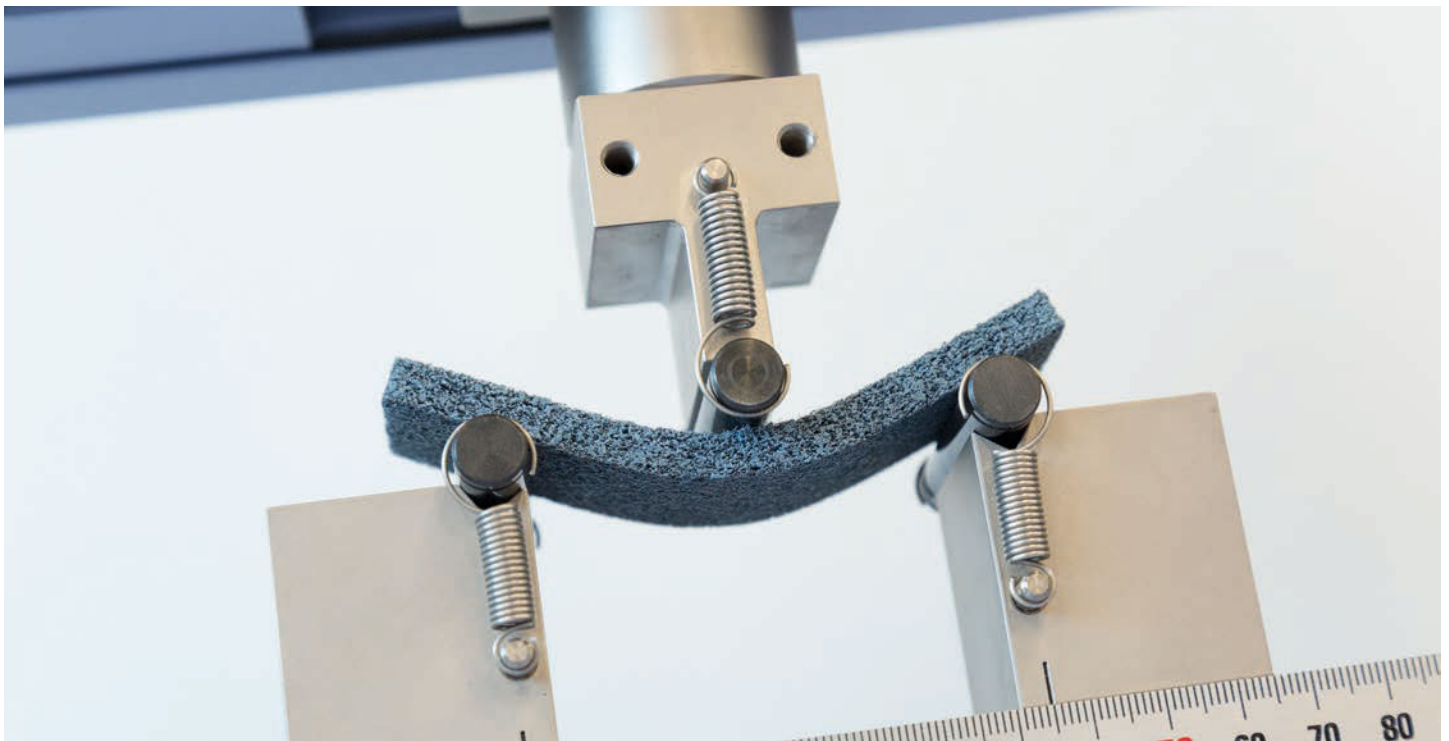


# WHAT IS DENSITY?

Density refers to the hardness of a disc. The softer the disc, the more flexible it is and the more control there is over the work piece. Density is expressed on a scale from 1 (most supple) to 10 (least supple).

However, density is not directly related to stock removal. A flexible disc can, depending on the grit it contains, also be very aggressive.

HARD	DENSITY		SOFT
T-LINE			
	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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