

Unitized





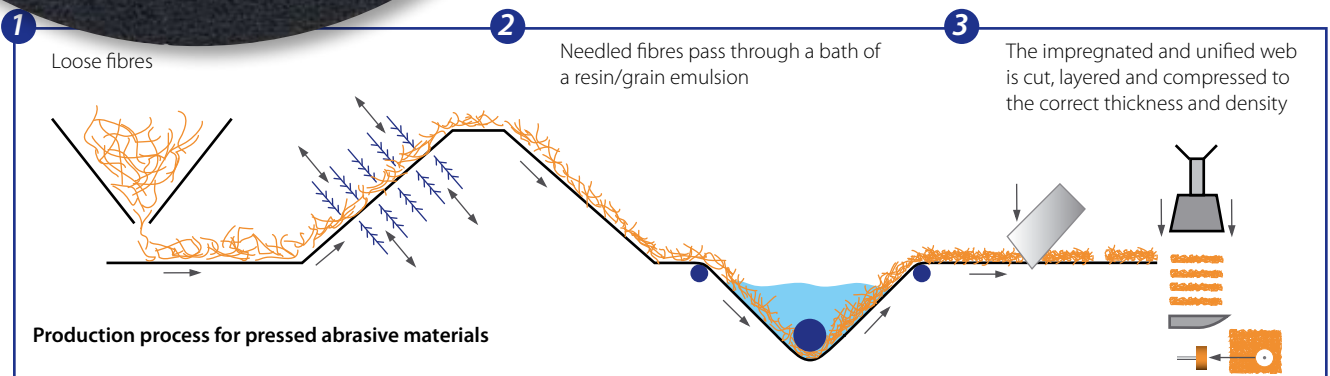
## Introduction

With its slogan "Time saving abrasives" Cibo is constantly striving to save our customers time and money. The range of unitized abrasive materials fits in perfectly with this strategy. Where much time and effort is required to achieve a high quality finish with traditional abrasive materials, unitized abrasive materials offer the perfect quick solution. A beautiful finish can be achieved in no time at all thanks to the unitized material. They are available in a wide range of dimensions, shapes, grain sizes and densities, so they are useable for an extensive range of applications.

## Unitized abrasive materials

The range of pressed abrasive materials or unitized material is a new generation of abrasive materials comprising a 3-dimensional web of nylon fibres soaked in synthetic resin, mixed with abrasive grains. This impregnated nylon web is ingeniously unified and hot-pressed into solid sheets with a controlled density. The required shape is then made from these sheets.

Unitized abrasive materials exist in different thicknesses, coarsenesses, grain types and densities, allowing you to finish materials in a simple and consistent manner.



## Context

Pressed abrasive materials distinguish themselves from "traditional" abrasive materials by combining a certain degree of aggression with an excellent finish. At Cibo, we always strive to achieve more with less. The fact that a very high-quality finish can be achieved with unitized abrasive materials in fewer steps means that these products perfectly match the Cibo philosophy. The unitized material is an excellent supplement to the range of traditional abrasive materials because after material removal a perfect, consistent and reproducible finish of the workpiece is guaranteed.





## Properties

- Uniform and consistent density
- Flexibility
- The material adapts to the shape of the work piece
- Little dust formation
- Longer working life
- Non-ferrous – 100% Stainless steel safe
- Residue-free formula
- Cool processing
- Open web structure
- Available in a wide range of different shapes and dimensions with different grain types and densities

## Benefits

- Simple to achieve a consistent and high-quality finish
- No grinding or finishing faults
- A healthy working environment
- Economical to use
- No contamination of the work piece
- No adhesive residues, no smearing
- No burn marks
- Prevents clogging
- The most suitable material for any application always available

## Densities



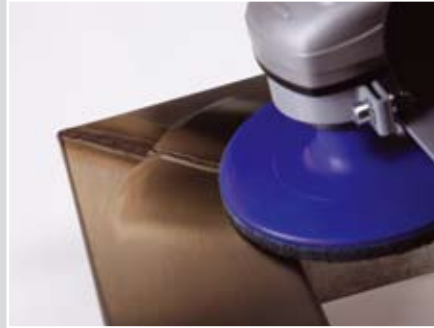
	SA10	SA8	SA7	SA6	SA5
density	Hardest	—————→			Softest
material removal	Most aggressive	—————→			Least aggressive
finish	Fine	—————→			Very fine
control on workpiece	Fairly limited	—————→			Very high



# Applications

## Weld discoloration removal

Not only the coloured haze, but also deeper burn marks that appear on the metal as a result of the heat created during welding can easily be removed.



## Smoothing, deburring and rounding off angles

The burrs created when cutting the metal workpiece are removed in no time.



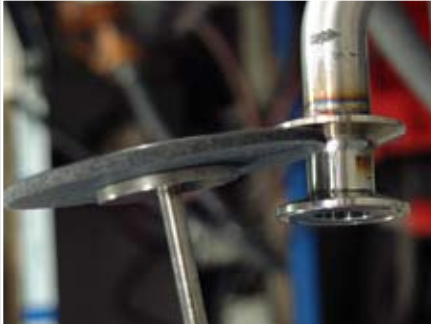
Angles and edges are rounded off in a flash with unitized abrasive materials.

Smoothing of drilled, punched or milled openings



### Removal of TIG weld seams

Fine TIG weld seams on stainless steel workpieces can be processed easily and with a consistent finish.



### Abrasion fault correction and scratch removal

Scratches on the metal or grinding faults caused by the use of overly rough or incorrect abrasive materials can be removed with the unitized material.



### Milling line removal

On milled-out workpieces, the path followed by the cutter can often still be seen. The unitized material can be used to finish these surfaces.



# Applications

## Paint and coatings removal

Remains of paint, glue and coatings can easily be removed with no risk of damaging the workpiece and without altering the geometry of the workpiece.



## Rust removal

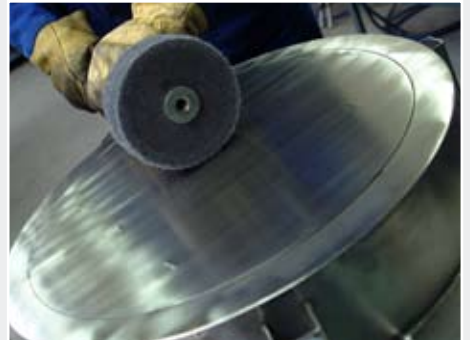
Old and oxidized metals or stainless steel surfaces look like new again in moments.





## Polishing

Polishing often requires a considerable number of steps. Preliminary grinding with the unitized material is an ideal final step before high-gloss polishing and one which will save you considerable time and effort.



## Repair of turbine blades, propellers and propeller blades

Finishing, maintenance and repair of the propeller blades of pump housings, aircraft propellers, ship transmission gear and turbine blades, etc.



## Improvement of surface roughness

Extremely high demands are placed on the surface roughness of products in the pharmaceutical and food industry. With unitized material, the roughness value of the surface can be precisely controlled.







# Application recommendations

The speed, pressure and angle at which the unitized abrasive material is used play an important part in the finishing level achieved with the material. Correct selection of the most suitable reference also improves the efficiency and quality of the work to be carried out. When in doubt, consult your Cibo application expert.

## Speed

- Always check the product label for our recommended speed
- Too high speed can lead to excessive heat development and premature wear
- Low speed for maximum efficiency and a better finish

## Angle

- Using the edge or using at an angle ensures greater aggressiveness
- Flat use guarantees a better finish and better control while grinding

## Product selection

Selection criteria:

- Shape & dimensions
- Density
- Grain size

The most suitable shape or dimension combined with the right density and grit size will contribute significantly to efficient use and significantly increase the quality of the work carried out.

**Do you want to finish or remove weld discolorations?**

➔ Start with an SA5

**Do you want to remove material ? E.g. deburr or remove TIG weld seams**




➔ Start with an SA7. You can then always go up or down in aggressiveness, depending on the desired result.

## Pressure


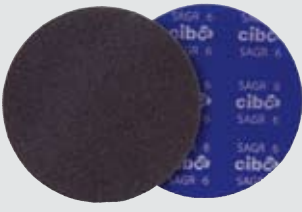


Always use medium pressure

- Excessive pressure generates extra heat, which can lead to abrasion faults and premature wear.
- Not enough pressure does not grind the product enough, if at all.

# SA Range

	Unitized wheels with centre hole	Unitized 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>- Milling line removal</li> <li>- Structuring</li> <li>- Surface finish improvement</li> <li>- Weld discoloration removal</li> </ul>	<ul style="list-style-type: none"> <li>- Grinding away and/or finishing TIG weld seams</li> <li>- Weld discoloration removal</li> </ul>	<ul style="list-style-type: none"> <li>- Grinding and cleaning of internal diameters and poorly accessible surfaces</li> <li>- Weld discoloration removal</li> <li>- Improving 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>



Abrasive discs on fibre glass backing	Unitized grip discs	Quick-Change	Unitized mounted points
			
<ul style="list-style-type: none"> <li>- Supplementary use on flap wheels to remove scratches or improve the surface</li> <li>- Ideal final step before high gloss polishing</li> <li>- Smoothing the edges</li> <li>- Weld discoloration removal</li> </ul>	<ul style="list-style-type: none"> <li>- Material is very flexible, being a particular advantage on flat work pieces.</li> <li>- Ideal final step before high gloss polishing</li> <li>- Improving Ra value</li> <li>- Weld discoloration removal</li> </ul>	<ul style="list-style-type: none"> <li>- Applications where the contact area of the disc must be small or where abrasion control is important.</li> <li>- Weld discoloration removal</li> <li>- Milling line removal</li> <li>- Surface finish improvement</li> </ul>	<ul style="list-style-type: none"> <li>- For finishing internal weld seams and work pieces with limited accessibility.</li> <li>- Weld discoloration removal</li> <li>- Smoothing 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 sander</li> <li>- Finit-Easy*</li> </ul>	<ul style="list-style-type: none"> <li>- Pneumatic angle grinder</li> <li>- Electrical angle grinder</li> </ul>	<ul style="list-style-type: none"> <li>- Flexible shaft machine</li> <li>- Straight grinder</li> <li>- Angle grinding machine (electric and pneumatic) with spindle adaptor</li> </ul>

\* ask for the special Finit-Easy leaflet





## Summary table

Unitized wheels with centre hole						
Diameter	Width	Centre hole	Density	Order code	Max. RPM	Quantity
Ø 150	25	Ø 25,4	SA5	SA5T33	6.000	3
	25	Ø 25,4	SA6	SA6T33	6.000	3
	25	Ø 25,4	SA7	SA7T33	6.000	3
	25	Ø 25,4	SA8	SA8T33	6.000	3
Unitized wheels with centre hole for Finit-Easy						
Diameter	Width	Centre hole	Density	Order code	Max. RPM	Quantity
Ø 150	3	Ø 25,4	SA7	SA7T30	6.000	6
	3	Ø 25,4	SA8	SA8T30	6.000	6
	3	Ø 25,4	SA10	SA10T30	6.000	6
	6	Ø 25,4	SA5	SA5T31	6.000	6
	6	Ø 25,4	SA6	SA6T31	6.000	6
	6	Ø 25,4	SA7	SA7T31	6.000	6
	6	Ø 25,4	SA8	SA8T31	6.000	6
	6	Ø 25,4	SA10	SA10T31	6.000	6
Unitized wheels on shaft						
Diameter	Width	shaft	Density	Order code	Max. RPM	Quantity
Ø 75	25	Ø 6	SA5	SAUS/5/75256	15.000	5
Ø 100	13	Ø 6	SA7	SAUS/7/100136	12.000	5
Unitized discs on glass fibre backing						
Dimensions	Density	Order code	Max. RPM	Quantity		
Ø 115x22	SA5	SAG/5/115	10.000	5		
Ø 115x22	SA6	SAG/6/115	10.000	5		
Ø 115x22	SA7	SAG/7/115	10.000	5		
Ø 125x22	SA5	SAG/5/125	8.000	5		
Ø 125x22	SA6	SAG/6/125	8.000	5		
Ø 125x22	SA7	SAG/7/125	8.000	5		
Unitized grip discs						
Diameter	Density	Order code	Max. RPM	Quantity		
Ø 115	SA5	SAGR/5/S104	10.000	5		
	SA6	SAGR/6/S104	10.000	5		
	SA7	SAGR/7/S104	10.000	5		
Quick-Change						
Diameter	Width	Density	Order code	Max. RPM	Quantity	
Ø 75 (socatt)	6	SA5	QSSA/5/756	12.000	10	
	6	SA6	QSSA/6/756	12.000	10	
	6	SA7	QSSA/7/756	12.000	10	
	6	SA8	QSSA/8/756	12.000	10	
	6	SA5	QLSA/5/756	12.000	10	
Ø 75 (lockit)	6	SA6	QLSA/6/756	12.000	10	
	6	SA7	QLSA/7/756	12.000	10	
	6	SA8	QLSA/8/756	12.000	10	
Unitized mounted points						
Diameter	shaft	Density	Order code	Max. RPM	Quantity	
Ø 25	Ø 6	SA7	SAUSA21731	34.500	5	
Ø 10	Ø 3	SA7	SAUSB121731	45.300	5	
Ø 13	Ø 3	SA7	SAUSW183732	51.700	5	
Ø 13	Ø 3	SA6	SAUSW185632	34.500	5	



For other dimensions or densities: contact CIBO

Your dealer

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