

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231	Казань (843)206-01-48	Новокузнецк (3843)20-46-81	Смоленск (4812)29-41-54
Архангельск (8182)63-90-72	Калининград (4012)72-03-81	Новосибирск (383)227-86-73	Сочи (862)225-72-31
Астрахань (8512)99-46-04	Калуга (4842)92-23-67	Омск (3812)21-46-40	Ставрополь (8652)20-65-13
Барнаул (3852)73-04-60	Кемерово (3842)65-04-62	Орел (4862)44-53-42	Сургут (3462)77-98-35
Белгород (4722)40-23-64	Киров (8332)68-02-04	Оренбург (3532)37-68-04	Тверь (4822)63-31-35
Брянск (4832)59-03-52	Краснодар (861)203-40-90	Пенза (8412)22-31-16	Томск (3822)98-41-53
Владивосток (423)249-28-31	Красноярск (391)204-63-61	Пермь (342)205-81-47	Тула (4872)74-02-29
Волгоград (844)278-03-48	Курск (4712)77-13-04	Ростов-на-Дону (863)308-18-15	Тюмень (3452)66-21-18
Вологда (8172)26-41-59	Липецк (4742)52-20-81	Рязань (4912)46-61-64	Ульяновск (8422)24-23-59
Воронеж (473)204-51-73	Магнитогорск (3519)55-03-13	Самара (846)206-03-16	Уфа (347)229-48-12
Екатеринбург (343)384-55-89	Москва (495)268-04-70	Санкт-Петербург (812)309-46-40	Хабаровск (4212)92-98-04
Иваново (4932)77-34-06	Мурманск (8152)59-64-93	Саратов (845)249-38-78	Челябинск (351)202-03-61
Ижевск (3412)26-03-58	Набережные Челны (8552)20-53-41	Севастополь (8692)22-31-93	Череповец (8202)49-02-64
Иркутск (395)279-98-46	Нижний Новгород (831)429-08-12	Симферополь (3652)67-13-56	Ярославль (4852)69-52-93
Россия (495)268-04-70	Киргизия (996)312-96-26-47	Казахстан (7172)727-132	

Rubber bonded Grinding wheels.

The atto abrasives standard range of rubber bonded grinding wheels are offered in diameters up to 508 mm / 20" just let us know the sizes you require and we will manufacture the product as required to tight tolerances.

- Available in reinforced & non reinforced forms
- Including Rigid, Semi- flexible & Flexible bonds
- Customised sizes, shapes & formulations upon request
- Special faces & slots available on request

Benefits Include:

- Grades available for the grinding of all metallic types
- Provide a Superior finish
- Are a cost effective grinding solution
- Are available as composite wheels, with the capacity to grind & polish in a single pass.

Centerless Rubber Bonded Grinding wheels

atto Centerless rubber bonded wheels are formulated with a rubber bond for optimum performance. For centerless grinding applications, our rubber bond technology is designed to deliver superior results relative to many vitrified and resin wheels.

atto abrasives Centerless grinding wheels are used for the polishing & grinding of many cylindrical shapes which require a high precision finish. These include: Taper Roller Bearings, Ball Bearings, Shock Absorbers, Piston Rings, Steering rods and many more applications, across industries such as aerospace, automotive & medical device manufacturing to name just a few.

Sizes & Shapes

- Manufactured in a range of sizes to suit all major machine types.

- Composite & multi-zone wheels are available for conducting grind and polish in a single pass.
-

Polymer Bonded Grinding wheels

Formulated using polymer bonding systems, Polymer bonded wheels can be operated at higher speeds for optimum productivity.

They are suitable for both grinding and polishing applications. These products are also available in dual & multi-zone options to enable grinding and polishing in a single pass thereby reducing your set-up and loading times.

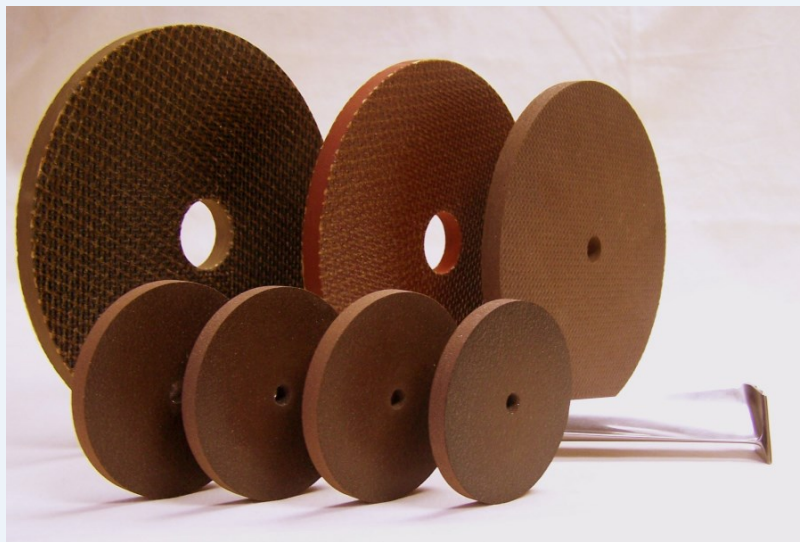
- Available in sizes up to diameter 900mm (35.4" inches).
 - Type-1, Type-2 & Cup shapes available (see *image for shapes*)
 - Special shapes, mounting systems & grinding face angles can be manufactured.
 - Custom formulated for optimum performance.
 - Full range of specifications, abrasive grits & designations available to fulfill all requirements.
-
- ***Click here to email in your special requests.***

atto abrasives Flute Grinding wheels

atto Flute grinding wheels are available in a wide range of bonds. These include High-Density bonds for fast cool grinding, longer wheel life and higher quality finishes.

Flexible bonds are available for Flute grinding & polishing where finer finishes are needed.

- Suitable for Flute grinding. Clearance grinding, Chamfering, Squaring, Polishing and Pointing.
Used for the grinding of Drills, Taps, Reamers, End Mills, etc.



PRECISION GRINDING WHEELS

**Rubber Bonded Grinding,
Polishing and Flute Wheels**



Flute Wheels

The atto Flute Wheel range is suitable for Flute Clearance Grinding, Chamfering, Squaring, Polishing and Pointing.

Features

- ◆ High Density Bonds
- ◆ Quality Finish
- ◆ Close Thickness Tolerances
- ◆ Cooler Grinding
- ◆ High “G” Ratio
- ◆ Slotted and Special Faces



Availability

Grit Types:	A, WA, C and Ceramic Grits
Grit Sizes:	46 to 240 (FEPA)
Diameter:	From 100 to 510mm (4” to 20”)
Thickness:	From 1 to 32mm (0.040” to 1.250”)
Tolerance:	Standard +/-0.1mm (+/-0.004) <i>Special Tolerances on Request</i>
Faces:	All Standard and relief slots <i>Specials on Request</i>
Max Speed:	Up to 80m/sec.

The *atto Abrasives* product line includes,
but is not limited to:

- ⇒ Centreless Regulating Wheels in Rubber and Cork Bond
- ⇒ Centreless Work Wheels
- ⇒ Rubber Bonded Precision Cutting Wheels
- ⇒ Resin Bonded Precision Cutting Wheels
- ⇒ Polymer Bonded Super Finishing Wheels

Rubber Bonded Grinding Wheels

atto Abrasives Grinding Wheels can eliminate one or more intermediate grinding operations. The wheels are suitable for materials such as Stainless Steel, Tungsten or Titanium.



atto Pekay wheels are specified for grinding aerospace components and jet engine blades.

Features

- ◆ Full Range of Sizes
- ◆ Custom Formulated Specifications
- ◆ High Quality Standards
- ◆ Special Shapes and Machining

Availability

Grit Types:	A, WA, RAA, C
Grit Sizes:	46 to 240 (FEPA)
Bonds:	Flexible to Firm
Hardness:	Soft to Hard

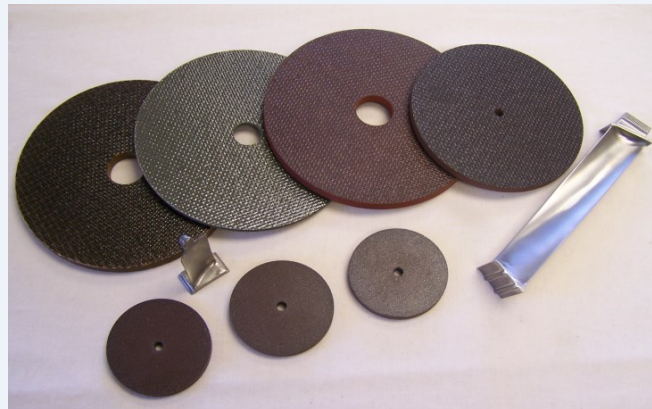
Soft Rubber Slabs, Sticks and Mounted Points

Multi-Application rubber bonded products are also available as slabs, sticks and mounted points.

Sizes: Standard and Special
Sizes Available

Grit Types: A, WA, C and GC

Grit Sizes: 46 to 240 (FEPA)



Applications

Suitable for the Production of Stainless Steel, Tungsten or Titanium Finished Parts. Further Applications include:

- Foundry Industry
- Modern Precision Tools including twist drills, reamers and milling cutters
- Aerospace Components
- Engine Blades
- Medical Devices
- Cutlery

Application Guide

Aerospace Components (incl. Turbine Blades)

Material	Grinding	Polishing
Titanium, Nimonics	A60-M-R95	C80-R-R75
Inconel	A80-M-R95	C80-R-R75
Stainless Steel	A80-M-R95	A100-N-R75
Nickel Alloy	A80-M-R95	A100-N-R75

Tool Room, Manufacturing and Maintenance

Material	Grinding	Polishing
Flute Clearing	WAA100-W-R100	WAA100-W-R100
Speciality Drills	WA100-P-R105	
Bearing Races	WA100-P-R105	
Twist Drills	A46-M-R757	
HSS Drill Bit & End Mill Sharpening	A240-M-R85	

Weld Blending and De-Burring

Material	Grinding	Polishing
Braze between Carbide tips and holder	A46-P-R75	
Stainless Steel	A46-K-R90	A60-Q-R75

Cutlery and Hand Tools

Material	Grinding	Polishing
Knives	RAA120-M-R85	A100-M-R70
Scissors	RAA120-M-R85	
Knife Bolsters	A120-P-R95	
High Carbon Steel	A120-K-R95	

Various

Material	Grinding	Polishing
Jewellery	A240-L-R85	
Saw Blanks		A60-K-R90
Glass Edging	A180-N-R70	

Rubber Bonded Flute, Clearance and Thread Grinding Wheels

atto Abrasives manufacture Rubber Flute Wheels in a range of bonds, including High-Density for fast cool grinding, longer wheel life and higher quality finishes.

Flexible bonds are available for Flute Polishing where even finer finishes are needed.

Suitable for Fluting, Clearance grinding, Chamfering, Squaring, Polishing and Pointing. Used for the grinding of Drills, Taps, Reamers, End Mills, etc.



Machine Types:

Junker
Gühring
Hertlein
Normac
Excello
Drake

Availability

Grit Types: A, WA, C and Ceramic Grits
Grit Sizes: 46 to 240 (FEPA)
Diameter: from 100 to 510mm
Thickness: from 1 to 32 mm
Tolerance: Standard ± 0.1 mm
Special on request
Faces: All standard - special on request
Relief slots: available
Max Speed: Up to 80 m/sec



Features

- ◆ High Density Bonds
- ◆ Cooler Grinding
- ◆ Quality Finish
- ◆ 80 m/s
- ◆ High “G” Ratio
- ◆ Close Thickness Tolerances
- ◆ Slotted and Special faces

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Россия (495)268-04-70

Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Киргизия (996)312-96-26-47

Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Казахстан (7172)727-132

Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93