



ATI

ABRASIVE TECHNOLOGY INDUSTRIES, Co.
شركة مصانع تكنولوجيا المواد الكاشطة



INSTA»
Procurement Streamlined

Bonded & Coated Abrasives



Organization for the Safety of Abrasive

The Symbol of Safety

ATI is the first manufacturer in the GCC certified by the oSa (Organization for the Safety of Abrasives), which guarantees that the product has been manufactured and tested to meet the highest safety standards

oSa® - Build a safer and more secure world of abrasive

The Organization for the Safety of Abrasive is an association of abrasive manufactures whose members commit to adhering to all European safety standards applicable to abrasive tools and to promote and enforce stricter production and testing regulations. As an expression of their voluntary commitment, the oSa awards a Safety seal that is protected world-wide.

The 7 criteria that guarantee oSa® safety

- ❖ Voluntary self-commitment of the manufacturer
- ❖ Test machines and test competence in-house at the manufacturer
- ❖ Certified quality management system with documented processes
- ❖ Independent testing of products
- ❖ Independent safety audit by external auditors
- ❖ Regular safety checks and monitoring of production
- ❖ Safety by traceability of the product to the manufacturer

ATI continue the leading position without compromising innovation, trust and quality. ATI strive to produce world class, safe, high quality abrasive products.



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Introduction

ATI provides the whole range of cutting-off and grinding wheels for both portable and fixed machines. Our Swords brand provides superior performance in the most stringent working environment through a longer life wheel that gives the shortest cutting cycles with high stock removal and at the lowest cost possible.

Being supported by the Italian manufacturing technology and recipes; ATI have permitted a selective optimization for diverse application needs. Each design meets all practical requirements, allowing the user to find the ideal cut-off wheel for any type of work.

ATI Vision: "Being a hub for the international abrasives trading, operating from the KSA"

ATI Mission: "Produce and develop abrasive products that provide effective and efficient solutions for various fields and levels of industrial and construction applications ,having the flexibility to customize our products and logistic services ,ATI will provide abrasive products for local and international customers along with logistic services for those who export their brands internationally"

Values: "ATI is committed for Professionalism, Quality and Transparency in dealing with our valuable customers"

Certificates and Approvals.

- ARAMCO approved supplier- vendor no. I 0047173 -
Quality Management System (ISO 9001 : 2015)



Applications (MATERIALS)

Metal



Stainless steel



Aluminium



Stone



Cast Iron



Safety Symbols



Not Suitable for Hand-Held Machines



Not Suitable for grinding



Read the Instructions



wear dust mask



Wear ear protection



Wear safety protection



Wear safety gloves



Do not use if damaged

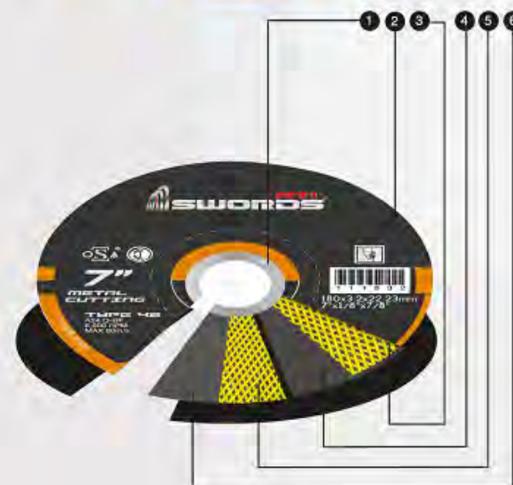
Symbols & Designations of the Wheel

Information & Description of the disc

- ① European Safety standards EN: 12413
- ② " **SWORDS** " Our Premium trusted brand
- ③ Usage
- ④ Disc dimension
- ⑤ Product barcode Safety Instructions
- ⑥
- ⑦ Specifications & max rotation speed
- ⑧ Application Grade
- ⑨ Validity & Batch Number
- ⑩

Disc Anatomy

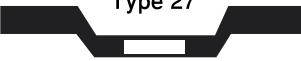
- ① Bore ring
- ② Label
- ③ Reinforcement
- ④ Abrasive Grain
- ⑤ Reinforcement
- ⑥ (Glass fabric with paper)



Speed Conversion Following En 12413

Wheel diameter (mm)	Maximum peripheral operating speed in 80 m/s
	RPM
100	15300
115	13300
125	12250
180	8500
230	6650
300	5100
350	4400
400	3850

Shape Specification System

		
*All grinding wheels from 100 mm To 230 mm diameter	*All universal thin cutting wheels from 100 mm to 230 mm *All cutting wheels from 300mm- 400mm diameter	*All cutting wheels other than Universal thin wheels from 100mm-230mm diameter
Application: Grinding	Application: Cutting- off	Application: Cutting- off

Steel, Cast Steel	Non-hardened, non-heat treated steels up to 1.200 N/mm ² (< 38 HRC)	Construction steels, carbon steels, tool steels,	non-alloyed steels, case-hardened steels, cast steel
	Hardened, heat-treated steels exceeding 1.200 N/mm ² (> 38 HRC)	Tool steels, tempering steels,	cast steels
Stainless steel (INOX)	Rust and acid-resistant steels		Austentic and ferritic stainless steels
Non-ferrous metals	Soft non-ferrous metals	Aluminium alloys, brass,	copper, zinc

Tool drives	Wheel/disc diameter (mm)	Ø 100	Ø 115	Ø 125	Ø 178	Ø 230
Performance classes	Type of machine	Power in watts				
Air-powered/turbine, high-frequency	Air-powered, speed controlled High-frequency (300 Hz)	-	< 1.000	< 2.000	< 4.500	< 4.500
High power	Air-powered	-	< 800	< 1.000	< 1.900	< 2.200
	Electrical, speed controlled	-	< 1.400	< 1.500	< 2.500	< 2.800
Low power	Electrical	< 700	< 1.000	< 1.200	< 2.200	< 2.500
	Air-powered	< 400	< 600	< 800	< 1.500	< 1.800
	Electrical	< 500	< 700	< 900	< 1.800	< 2.000

* Should the machine watts output be in doubt we recommend that you focus on output level "Low Power"

Cutting Disc

Metal / Stainless Steel / Stone / Aluminium / Cast Iron

Type 41

Type 42

H
D

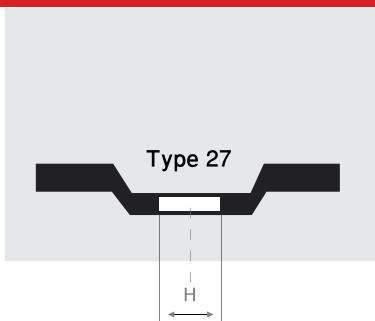


Cutting

Usage	Size In Inch	Dimensions D x T x B	Max RPM	Pieces / Carton	Machine type
Cutting	4	100x3x16	15300	100	
	4.5	115x3.2x22.23	13300	100	
	5	125x3.2x22.23	12250	50	
	7	180x3.2x22.23	8500	50	
	9	230x3.2x22.23	6650	25	
	12	300x3.0x25.4	5100	25	
	12	300x3.2x25.4	5100	25	
	12	300x3.8x25.4	5100	25	
	14	350x3.0x25.4	4400	25	
	14	350x3.2x25.4	4400	25	
	14	350x3.8x25.4	4400	25	
	16	400x3.5x25.4	3850	20	

Grinding Disc

Metal / Stainless Steel / Stone / Aluminium / Cast Iron



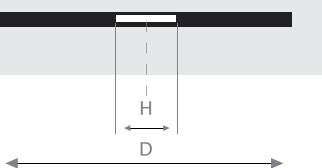
Usage	Size In Inch	Dimensions D x T x B	Max RPM	Pieces / Carton	Machine type
Grinding	4	100x6.4x16	15300	50	
	4.5	115x6.4x22.23	13300	50	
	5	125x6.4x22.23	12250	20	
	7	180x6.4x22.23	8500	25	
	9	230x6.4x22.23	6650	10	

Thin Cutting Disc

**Bonded
Abrasives**

Metal / Stainless Steel / Aluminium / Cast Iron

Type 41



Usage	Size In Inch	Dimensions D x T x B	Max RPM	Pieces / Carton	Machine type
Cutting TYPE 41	4	100x1.0X16	15300	200	
	4	100x1.2x16	15300	200	
	4	100x1.6x16	15300	200	
	4.5	115x1.0x22.23	13300	200	
	4.5	115x1.2x22.23	13300	200	
	4.5	115x1.6x22.23	13300	200	
	5	125x1.0x22.23	12250	100	
	5	125x1.2x22.23	12250	100	
	5	125x1.6x22.23	12250	100	
	7	180x1.6x22.23	8500	90	
	9	230x1.9x22.23	6650	50	



Flap Disc

Coated
Abrasives

Metal / Stainless Steel / Aluminium / Wood

DESCRIPTION Alumina, Zirconia & Ceramic Flap discs
Strong, high quality and optimum performance for Carbon Steel, Alloy Steel, Cast Iron and Stainless steel.

APPLICATION :

PRODUCT FEATURES: High consistent cut rate, operator friendly, finer finish, Long life, High stock removal, Less noise, high safety, Durable high strength fiber glass backing. Unique individual coating process. Minimum grain shedding. Premium X wt backing for aggressive grinding.



TYPE NO	SIZE	DIMENSIONS	Max RPM	GRIT
T27/T29	4"	100 x 16	15300	40, 60, 80, 100
T27/T29	4.5"	115 x 22	13300	40, 60, 80, 100
T27/T29	5"	125 x 22	12250	40, 60, 80, 100
T27/T29	7"	180 x 22	8500	40, 60, 80, 100

DESCRIPTION: Alumina, Zirconia & Ceramic Flap disc
Strong, high quality and performance for Carbon Steel, Alloy Steel, Cast Iron and Stainless steel.

PRODUCT FEATURES:

High and consistent cut rate, operator friendly, finer finish, High stock removal, long lasting, Economical, Less noise, high safety. Minimum grain shedding.



TYPE NO	SIZE	DIMENSIONS	Max RPM	GRIT
T27/T29	4"	100 x 16	15300	40, 60, 80, 100
T27/T29	4.5"	115 x 22	13300	40, 60, 80, 100
T27/T29	5"	125 x 22	12250	40, 60, 80, 100
T27/T29	7"	180 x 22	8500	40, 60, 80, 100

Mounted Flapper Wheels

Metal / Stainless Steel / Aluminium

DIAMETER X HEIGHT X SHAFT IN MM	MAX. RPM
25 x 20 x 6	30,500
25 x 15 x 6	30,500
30 x 15 x 6	25,400
40 x 15 x 6	19,000
40 x 20 x 6	19,000
50 x 15 x 6	15,200
50 x 20 x 6	15,200
50 x 30 x 6	15,200
60 x 15 x 6	12,700
60 x 20 x 6	12,700
60 x 30 x 6	12,700
60 x 40 x 6	12,700
80 x 15 x 6	9,500
80 x 20 x 6	9,500
80 x 30 x 6	9,500
80 x 40 x 6	9,500

GRIT

60	80	100
■	■	■



Belt

Coated
Abrasives

Metal / Stainless Steel / Wood / Aluminium

Product type	Grits Available	Size		Pack Qty nos	Applications												
		Width in mm	Length in mm		Steel	Stainless Steel	Non Ferrous	Castings	Wood	Glass	Leather	De burring	Finishing	Surface grinding	Finishing brass(Bat hroom fittings)	Finishing wood surfaces	Finishing of sheets and metal parts
X'wt Cloth (Aloxide,Zirconia Alumina and Silicon Carbide)	24,36,60,80,100,120,180,220,320,400	35	440	200	X				X	X	X	X	X	X	X	X	X
		50	440	200	X				X	X	X	X	X	X	X	X	X
		50	470	200	X				X	X	X	X	X	X	X	X	X
		50	915	100	X				X	X	X	X	X	X	X	X	X
		50	1220	100	X				X	X	X	X	X	X	X	X	X
		50	2000	50	X				X	X	X	X	X	X	X	X	X
		50	3500	50	X				X	X	X	X	X	X	X	X	X
		50	4000	50	X				X	X	X	X	X	X	X	X	X
		75	915	100	X				X	X	X	X	X	X	X	X	X
		75	1220	100	X				X	X	X	X	X	X	X	X	X
		75	2000	50	X				X	X	X	X	X	X	X	X	X
		75	3500	50	X				X	X	X	X	X	X	X	X	X
		75	4000	50	X				X	X	X	X	X	X	X	X	X
		100	915	50	X				X	X	X	X	X	X	X	X	X
		100	1220	50	X				X	X	X	X	X	X	X	X	X
		100	2000	50	X				X	X	X	X	X	X	X	X	X
		100	3500	50	X				X	X	X	X	X	X	X	X	X
		100	4000	50	X				X	X	X	X	X	X	X	X	X
		150	1220	50	X				X	X	X	X	X	X	X	X	X
		150	2000	50	X				X	X	X	X	X	X	X	X	X
		150	3500	20	X				X	X	X	X	X	X	X	X	X
		150	4000	20	X				X	X	X	X	X	X	X	X	X
		200	1220	25	X				X	X	X	X	X	X	X	X	X
		200	2000	25	X				X	X	X	X	X	X	X	X	X
		200	3000	20	X				X	X	X	X	X	X	X	X	X
		200	3500	20	X				X	X	X	X	X	X	X	X	X
		200	4000	20	X				X	X	X	X	X	X	X	X	X
		200	4000	20	X				X	X	X	X	X	X	X	X	X
		300	1500	10	X				X	X	X	X	X	X	X	X	X
		300	2000	10	X				X	X	X	X	X	X	X	X	X
		300	3500	10	X				X	X	X	X	X	X	X	X	X
		300	4000	10	X				X	X	X	X	X	X	X	X	X
Y'wt Cloth (Aloxide and Silicon Carbide)	36,60,80,100,120,180	35	440	200	X	X	X		X	X	X	X	X	X	X	X	X
		50	440	200	X	X	X		X	X	X	X	X	X	X	X	X
		50	470	200	X	X	X		X	X	X	X	X	X	X	X	X
		50	915	100	X	X	X		X	X	X	X	X	X	X	X	X
		50	1220	100	X	X	X		X	X	X	X	X	X	X	X	X
		50	2000	50	X	X	X		X	X	X	X	X	X	X	X	X
		50	3500	50	X	X	X		X	X	X	X	X	X	X	X	X
		50	4000	50	X	X	X		X	X	X	X	X	X	X	X	X
		75	915	100	X	X	X		X	X	X	X	X	X	X	X	X
		75	1220	100	X	X	X		X	X	X	X	X	X	X	X	X
		75	2000	50	X	X	X		X	X	X	X	X	X	X	X	X
		75	3500	50	X	X	X		X	X	X	X	X	X	X	X	X
		75	4000	50	X	X	X		X	X	X	X	X	X	X	X	X
		100	915	50	X	X	X		X	X	X	X	X	X	X	X	X
		100	1220	50	X	X	X		X	X	X	X	X	X	X	X	X
		100	2000	50	X	X	X		X	X	X	X	X	X	X	X	X
		100	3500	50	X	X	X		X	X	X	X	X	X	X	X	X
		100	4000	20	X	X	X		X	X	X	X	X	X	X	X	X
		150	4000	20	X	X	X		X	X	X	X	X	X	X	X	X
		200	1220	25	X	X	X		X	X	X	X	X	X	X	X	X
		200	2000	25	X	X	X		X	X	X	X	X	X	X	X	X
		200	3000	20	X	X	X		X	X	X	X	X	X	X	X	X
		200	4000	20	X	X	X		X	X	X	X	X	X	X	X	X
		300	1500	10	X	X	X		X	X	X	X	X	X	X	X	X
		300	2000	10	X	X	X		X	X	X	X	X	X	X	X	X
		300	3000	10	X	X	X		X	X	X	X	X	X	X	X	X
		300	3500	10	X	X	X		X	X	X	X	X	X	X	X	X
		300	4000	10	X	X	X		X	X	X	X	X	X	X	X	X
J'wt Cloth (Aloxide)	60,80,120,180,220,320	50	915	100	X				X	X	X	X	X	X	X	X	X
		50	1220	100	X				X	X	X	X	X	X	X	X	X
		50	2000	50	X				X	X	X	X	X	X	X	X	X
		50	3500	50	X				X	X	X	X	X	X	X	X	X
		50	4000	50	X				X	X	X	X	X	X	X	X	X
		75	915	100	X				X	X	X	X	X	X	X	X	X
		75	1220	100	X				X	X	X	X	X	X	X	X	X
		75	2000	50	X				X	X	X	X	X	X	X	X	X
		75	3500	50	X				X	X	X	X	X	X	X	X	X
		75	4000	50	X				X	X	X	X	X	X	X	X	X
		100	915	50	X				X	X	X	X	X	X	X	X	X
		100	1220	50	X				X	X	X	X	X	X	X	X	X
		100	2000	50	X				X	X	X	X	X	X	X	X	X
		100	3500	50	X				X	X	X	X	X	X	X	X	X
		100	4000	50	X				X	X	X	X	X	X	X	X	X
		150	1220	50	X				X	X	X	X	X	X	X	X	X
		150	2000	50	X				X	X	X	X	X	X	X	X	X
		150	3500	20	X				X	X	X	X	X	X	X	X	X
		150	4000	20	X				X	X	X	X	X	X	X	X	X
		200	1220	25	X				X	X	X	X	X	X	X	X	X
		200	2000	25	X				X	X	X	X	X	X	X	X	X
		200	3500	20	X				X	X	X	X	X	X	X	X	X
		200	4000	20	X				X	X	X	X	X	X	X	X	X
		300	1500	10	X				X	X	X	X	X	X	X	X	X
		300	2000	10	X				X	X	X	X	X	X	X	X	X
		300	3000	10	X				X	X	X	X	X	X	X	X	X
		300	3500	10	X				X	X	X	X	X	X	X	X	X
		300	4000	10	X				X	X	X	X	X	X	X	X	X

* Type of Joints : Butt Joint and Lap Joint

* Based on customer requirements non standard sizes of belts also we will supply

* Based on customer requirements Ceramic grains products also we will supply

CORRECT STORAGE

Please store in dry and well-ventilated premises without major temperature changes (temperatures between 10°C and 30°C and max. 70 % relative humidity). This will help preserve the physical properties of reinforced resin bonded grinding wheels for up to three years, up to two years for non-reinforced ones. The storage premises should be as close to the place of use as possible in order to avoid mechanical damage to the wheels during transport, as well as moisture condensation while in transit on colder days.

Do's & Don'ts

Never

- Permit untrained people to handle, store, mount or use abrasives
- Mount or remove a wheel until the machine has been isolated from its power source
- Mount a wheel that cannot be identified or one which does not bear the correct marking
- Mount a wheel on a machine which does not display its spindle speed
- Mount a wheel which is beyond its marked expiry date or recommended shelf life
- Mount a wheel that has been dropped, damaged or incorrectly stored
- Apply force to fit the wheel on the mounting device or alter the bore size or allow the wheel to overheat
- Tighten flanges with excessive force or use a hammer or extension
- Use damaged, distorted or dirty flanges and fastening screws
- Use a machine which is not in good condition or one with a damaged guard
- Turn on the machine until the wheel guard has been re-fitted, secured and adjusted correctly
- Stand in the line of the grinding wheel when starting the motor after fitting or re-fitting a wheel
- Start the wheel in contact with the workpiece or any other object
- Mount a wheel on a machine running at a speed higher than the maximum operating speed marked on the wheel
- Work from a ladder or in a position where you do not have full control of the machine
- Impact the work onto the wheel or the wheel onto the work
- Grind on the side of a wheel unless it is specially designed for this application
- Apply side pressure by trying to cut curves or by grinding surfaces with cutting-off wheels
- Allow the wheel to bounce or be trapped or pinched in the cut
- Use type 27 depressed centre grinding wheels at a steep angle or try to cut with them
- Dress the wheel with any device other than that recommended
- Press against the wheel surface to stop it or put down a machine until the wheel has stopped running
- Wear the wheel down to the mounting flanges
- Allow the gap between the wheel and workrest to exceed 3 mm
- Allow coolant to run on a stationary wheel or leave the wheel running on an unattended machine

Always

- Observe the safety recommendations of the machine and wheel manufacturer
- Keep the working area well lit, clean, tidy and free from obstructions
- Avoid slippery and uneven floors and do not work on ice or snow
- Ensure other workers in the vicinity and passers-by are protected from sparks and debris
- Exercise care when handling abrasive wheels – they can easily be damaged
- Store wheels in dry and frost-free conditions avoiding wide variations in temperature and the risk of damage
- Visually check the wheel for damage or defects and conduct a ring test before mounting
- Check that the wheel is the correct specification for the application and that the markings are intact and legible
- Use the correct tools when mounting or removing a wheel
- Ensure mounting flanges are in matched pairs, clean, free from burrs and undistorted
- Use blotters to prevent wheel slippage where required
- Make sure that workrests and workpiece clamping devices are secure and correctly positioned
- Ensure guards are in position and correctly adjusted so that they do not foul the wheel
- Rotate the wheel manually to ensure that it runs true and freely before turning on the power
- Wear suitable protective clothing
- Run the wheel for at least 30 seconds at operating speed after mounting or re-mounting. Stand out of the line of the wheel when turning on the machine
- Dress bench grinding wheels regularly to keep the cutting surface in good condition
- Allow the wheel to come to rest naturally after turning off the machine
- Ensure the workpiece is properly supported or clamped so that it cannot move during grinding or cutting
- Spin out residual coolant from the wheel before turning off the machine
- Report wheel breakages, keeping hold of all of the debris for examination
- Ensure machine spindle speed is checked periodically using a tachometer
- Ensure that damaged or defective wheels and worn-out wheels are destroyed to prevent them from being used
- Ensure that the wheel is removed before transporting or storing portable machines



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