

Your guide
to Abrasive
solutions

METAL FABRICATION



Grinding and Cutting
Wheels



Flap Discs, Fibre Discs
and Specialties



Convolute Wheels,
Unified Wheels
and Specialties

Compagnie de Saint-Gobain

Saint-Gobain, A world leader with a focus on Leading Edge Technology

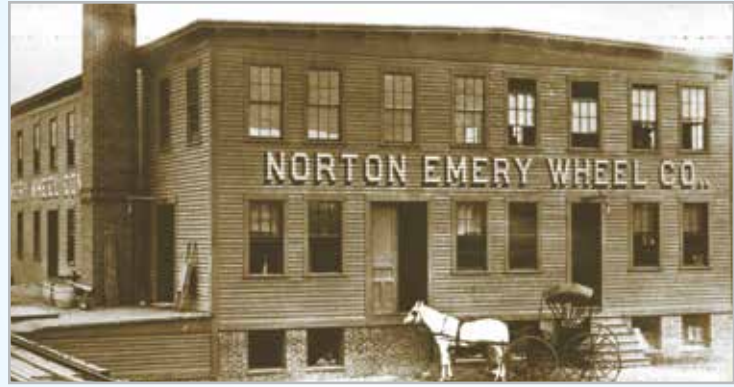
Saint-Gobain, the world leader in habitat and construction markets designs, manufactures and distributes innovative materials, providing cutting edge solutions since 1665. As one of the Top 100 Industrial Groups in the world, Saint-Gobain's core focus of activities has been in Innovative Materials, Construction Products, Building Distribution and Packaging. With a worldwide turnover of Euro 43.2 Billion in 2012-13 and nearly 193,000 employees, Saint-Gobain is present across 64 Countries.



Saint-Gobain is committed to be "The Leader" in all markets, by being responsive to customer needs, developing state-of-the-art products and maintaining the most modern manufacturing facilities.



Norton - A Brand Trusted for over 125 YEARS



In 1885, seven Worcester entrepreneurs established Norton Emery Wheel Company to manufacture the world's first grinding wheel. Originally made in a pottery shop, this grinding wheel was the first ceramic-bonded wheel to be precision-made and mass produced. It would eventually revolutionize the metalworking industry by replacing the metal cutting process with precision grinding.

During the next century, the company changed its name to Norton Company and grew to become the world's leading supplier of abrasives and high-performance materials. Saint-Gobain, itself a world leader, acquired the company in 1990 but retained the Norton brand name for many of its products sold throughout the world. Saint-Gobain's headquarters offices for its worldwide abrasives business are still located in Worcester, exactly where Norton was founded 125 years ago.

Since the last 125 years, Norton has focused on providing Innovative Abrasive Products that solve customers' manufacturing needs wherever materials are cut, shaped or finished. Norton offers our customers with the industry's most comprehensive line of quality abrasives and has unmatched solutions across all industry segments for abrasive grinding to finishing. To continually develop superior sanding results, the abrasive industry's largest research and development team supports Norton product engineer by continually developing more innovative, value-driven abrasive products.

Grindwell Norton Ltd

Founded in 1941, Grindwell Abrasives, as Grindwell Norton was then known, pioneered the manufacturing of grinding wheels in India. Grindwell Norton came into being in 1970, through a partnership between Grindwell and Norton Company, USA, the then world leader in abrasives. In 1990, Saint-Gobain acquired Norton Company, USA worldwide and six years later Grindwell Norton became the first majority owned subsidiary of Saint-Gobain in India.

Grindwell Norton is an Indian arm of Saint-Gobain Conglomerate which has eight companies across India with a group turnover of over 36000 MINR.

Grindwell Norton Limited, with a turnover of over 9900MINR in 2012-13, Grindwell Norton is the leader in Abrasives in India with manufacturing plants at • Bangalore • Baddi • Mora • Nagpur • Tirupati.

Grindwell Norton manufactures the most comprehensive range of world-class Coated Abrasive and Non-woven surface finishing products at its state-of-the-art plants across India (Bangalore, Nagpur & Himachal Pradesh). Combining world

class Saint-Gobain Abrasives' technology and Asia's largest and most modernized plant, Grindwell Norton brings to the Indian market a wide range of Coated Abrasives for various applications like Automobile Assy., Aircraft manufacture, Glass, Watch strap, Fabrication, Hand tools, general engineering, Leather, Shoes, Furniture, Wood working and many others.

Being a part of the global Saint-Gobain Abrasives family gives us access to the world's best abrasives technologies and products from the leading abrasives manufacturers the world over.



Research & Development Center

Industry Classification

Saint-Gobain houses Abrasive Technology Centres across the globe with headquarters in North America.

Product, process and application technologies form the core competencies of any organization. With a view to integrate the efforts in enhancing these competencies and an objective to become a true abrasive solutions provider the Grinding Technology Centre has been built at Saint-Gobain Abrasives plant in India.

The Indian, Research & Development in the Grinding Technology centre focuses on

- New Product Development
- Exploratory Researches
- Application Engineering Projects
- Quality Assurance Activities and
- Education & Training

The technology centres with a team of Research Scientists are decentralised at an abrasive business segment level which supports in product development and process optimisations projects.



Product development centre at Bangalore



Grinding Technology Centre at Bangalore



Abrasive Product Display Centre



Abrasive Product Testing Centre

METAL FABRICATION INDUSTRY



Metal Fabrication Industry

Industry Classification

In order to help our customers to choose the right product for their specific application in a given industry segment, we have classified the Fabrication industry in to following,



Process Equipment

Stainless Steel / High Alloy Steel Equipment's which are used in industries such as Chemicals, Pharmaceuticals, Food, Dairy, Breweries & similar industries

Heat Exchangers, Boilers & Radiators

Mild Steel Equipment's which are used in industries such as Power, Oil, Gas, Refineries, Petrochemicals, Fertilizers and similar industries.



Kitchen Equipment

Stainless Steel equipment's such as Kitchen Cabinets, Sinks, Processing Machines such as Sandwich makers, grinders, etc, Work Tables, Oven cabinets.

Cutlery's & Utensils

Stainless Steel products which are used in daily life such as Plates, Bowls, Spoons, Knives, Forks, etc.



Enclosures

Sheet Metal Products which are used for enclosing Generators, Temporary Power Units, CNC Equipment's, Circuit Boards, etc

Metal Furniture & Decorative

Components such as Stainless Steel Pipes & Tubes generally used in constructions, interior decorative components such as curtains, hangers, etc.



Material Types & Importance

Material Types & Importance

Typical raw materials used in Fabrication Industry are various grades of Stainless Steel, Mild Steel & Cold Rolled Steels.

Stainless Steel

Stainless steel does not corrode, rust or stain with water as ordinary steel does. There are different grades and surface finishes of stainless steel to suit the environment the alloy must endure. Stainless steel is used where both the properties of steel and resistance to corrosion are required.

Most Commonly used grades of Steel in Indian Fabrication Industry are,

Grade	Key Properties	Industry Segments
200 Series (SS 202)	Low content of Nickel, Low cost & General Purpose Steel	<ul style="list-style-type: none">• Cutlery & Utensils,• Kitchen Equipment's• Construction component (Low Cost)
300 Series (SS 304, 304L, 316 & 316L)	Austenitic Steel, Higher % of Nickel, Expensive, Better Corrosion Resistance, Universally accepted Food Grade, L-Grades are lower carbon content and hence better weld ability but weaker than regular grades	<ul style="list-style-type: none">• Process Equipment's,• Heat Exchangers & Furnaces• Kitchen Equipment's
400 Series (SS 410)	Martensitic Steel, Wear Resistance but less corrosion resistance	<ul style="list-style-type: none">• High End Cutlery's• Construction (Products like Flats, Bars, etc)• Cutting Tools

Mild Steel

Mild steel is the most common form of steel because its price is relatively low while it provides material properties that are acceptable for many applications. Low carbon steel contains approximately 0.05–0.15% carbon and mild steel contains 0.16–0.29% carbon; making it malleable and ductile, but it cannot be hardened by heat treatment. Mild steel has a relatively low tensile strength, but it is cheap and malleable; surface hardness can be increased through carburizing.

Mild Steel with corrosion resistant metal mixture is used in pressure vessels, heat exchangers, furnaces, etc.

Cold Rolled & Close Annealed Steel

These are Mild Steel in the form of sheets, strips or coils manufactured by cold rolling of hot rolled steel into thinner gauge (0.2mm to 3mm) and annealing after. These are generally not corrosion resistant if used as is without treatment.

These are generally used in manufacturing of Enclosures for CNC Machines, CNC Circuit Boards, Power Generators, Temporary Power Units (UPS), Servers& Storage Racks for Computer industry, etc.

Metal Finishes & Importance

The surface of Stainless Steel is actually and extremely thin but stable and passive Chromium rich oxide film, on which Stainless Steel relies for its excellent corrosion resistance. The surface finish on Stainless Steel should therefore be developed and maintained to ensure this vital property, and also for the secondary reason of the pleasing aesthetic appearance of Stainless Steel.

No. 2D Finish

A no. 1 Finish after being Cold Rolled, Annealed, Pickled and Passivated. This results in a uniform dull matt finish, superior to a No. 1 Finish. Suitable for industrial application and eminently suitable for severe deep drawing as the dull surface, (which may be polished after fabrication) retains the lubricant during the drawing operation.

No. 2B Finish

A 2D Finish is given a subsequent light skin pass cold rolling operation between polished rolls. This is the most common finish produced and called for on sheet material. It is brighter than 2D and is semi-reflective. It is commonly used for most deep drawing operations, and is more easily polished to the final finished required than is a 2D finish.

No. 3 Finish

Is a ground unidirectional uniform finish obtained with 80 - 100 grit abrasive. It is a good intermediate or starting surface finish for use in such instances where the surface will require further polishing operations to a finer finish after subsequent fabrication or forming.

No. 4 Finish

Is the workhorse of the light fabrication industry. The easiest of the finishes to maintain, No 4 finish is used for work surfaces, handrails and where appearance is important. A 'No 4' surface is produced by cutting the surface with abrasive belts to remove a very small amount of metal without affecting its thickness. This is a ground

unidirectional finish obtained with 150 grit abrasive. It is not highly reflective, but is a good general purpose finish on components which will suffer from fairly rough handling in service.

No. 6 Finish

These finishes are produced using rotating cloth mops (Tampico fibre, muslin or linen) which are loaded with abrasive paste. The finish depends on how fine and abrasive is used, the uniformity and finish of the original surface. The finish has a non-directional texture of varying reflectiveness. "Satin Blend" is an example of such a finish.

No. 7 Finish

This is a buffed finish having a high degree of reflectiveness. It is produced by progressively using finer and finer abrasives and finishing with Buffing compounds. Some fine scratches (grit lines) may remain from the original starting surface.

No. 8 Finish


















This is produced in an equivalent manner to a No. 7 Finish, the final operations being done with extremely fine buffing compounds. The final surface is blemish free with a high degree of image clarity and is the true mirror finish.

Note

The finer polished finishes (No. 4, No. 6, No. 7 and No. 8) are generally only produced one side of the sheet, the reverse side being either a 2B or No. 3 Finish.

ABRASIVE APPLICATIONS & SOLUTIONS



Abrasive Application	Description	Application		Abrasives Used
Metal Cutting	Cutting Metal in to required dimension and Sheet Metal / Angle / Pipe / Bar / Profile Cutting (CI/SS/MS)			Cut-Off Wheels Chopsaw Wheels
Heavy Duty Grinding	Removal of Excess Weld, Surface Grinding, Edge Chamfering, Beveling and Back Gouging			Grinding Wheels
Medium to Light Grinding	Remove heavy weld seams, excess material and weld spatter removal			Grinding Wheel, Flap Disc, Fibre Disc
De-burring	Remove burrs, radius and break sharp edges			Fibre Disc, Speed-Lok Disc, Convolute & Unified Wheels
Blending	Impart a uniform finish			Flap wheels, Bingri, Phat-Phata, Spitfire 1-2-3, SCF Discs, Vortex Rapid Blend
Surface Preparation & Cleaning	Remove dirt, rust or corrosion and prepare surface prior to coating or welding			Flap wheels, Coated Abrasive Belts, Rapid Strip Discs & Hand Pad
Finishing	Reduce surface roughness, (Finish - 2D, 2B, 3 & 4)			Flap wheels, Coated Abrasive Belts, Phat-Phata
Fine Finishing	Apply a cosmetic finish, prepare for polishing (Finish 6 & 7)			SCF Belts, Vortex Rapid Finish
Polishing	Final step to provide a high gloss finish			Unified Wheels

Process Equipment

Is an industry which design and manufacture equipment and components which are used in processing & manufacturing various materials / products those require highly controlled environment with respect to temperatures, cleanliness, non-reactive surfaces, etc.

Typically process equipment is found in processing of Dairy Products, Chemicals, Pharmaceutical products, Breweries, Food, etc. Pressure vessels are nothing but Reactors, Fermenters, Bioreactors, etc.

Most of these are manufactured using Stainless Steel or Alloys Steels.

Typical Abrasive Applications involved in this industry are,



Cutting

Abrasive Product	Machine	Diameter	Thickness	Grit
Cut-Off	Angle Grinder	7"	2.5mm	-

Best SpitFire R44X

De-burring

Abrasive Product	Machine	Diameter	Thickness	Grit
Fibre Disc	Angle Grinder	7"	-	36

Best ZirKon+ F881

Medium to Light Grinding

Abrasive Product	Machine	Diameter	Thickness	Grit
DCD / Fibre Disc	Angle Grinder	7"	2.5mm	-

Best SpitFire D30G **Better** ZirKon+ F881



Blending

Abrasive Product	Machine	Diameter	Thickness	Grit
Flap Disc SCF Disc	-	4.5" / 2"	-	#60/Medium to very fine

Best Norton Norfibre R822 **Better** Norton SCF

Finishing

Abrasive Product	Machine	Diameter	Thickness	Grit
Cloth Roll in Bingri form	Flexible Shaft Grinder	-	-	80/120

Best alKon Plus R208

Polishing

Abrasive Product	Machine	Diameter	Thickness	Grit
Unified Wheels	Flexible Shaft Grinder	-	-	Q-3SF Q-5SF

Best Q-Wheels



Heat Exchangers & Radiators

Industries those manufacture heat exchangers and radiators which are used across industry segments such as space heating, refrigeration, air conditioning, power plants, chemical plants, petrochemical plants, petroleum refineries, natural gas processing, automobiles, and sewage treatment.

Most of these are manufactured using Mild Steel or Cast Iron.

Typical Abrasive Applications involved in this industry are,



Cutting

Abrasive Product	Machine	Diameter	Thickness	Grit
Cut-Off	Angle Grinder	7"	3mm	Super

Best SpitFire R82H



De-burring

Abrasive Product	Machine	Diameter	Thickness	Grit
Fibre Disc	Angle Grinder	7"	-	36

Best ZirKon+ F881



Heavy Duty Grinding

Abrasive Product	Machine	Diameter	Thickness	Grit
DCD	Angle Grinder	7"	-	Super quick cut

Best SpitFire D3



Weld Blending

Abrasive Product	Machine	Diameter	Thickness	Grit
Flap Disc	Angle Grinder	4.5"	2.5mm	#60

Best Norton Norfibre R822



Kitchen Equipment

Kitchen Equipment's are products such as Sinks, Tables, Large Grinding Vessels, Kitchen Cabinets, etc. which are used across in industries like, Hotels, Restaurants and as well as house hold use.

Most of these are manufactured using Stainless Steel of 200 and 300 Series.

Typical Abrasive Applications involved in this industry are,



Cutting

Abrasive Product	Machine	Diameter	Thickness	Grit
Cutting Wheel	Angle Grinder	4"	1mm	SpitFire

Best SpitFire LT0530

De-burring

Abrasive Product	Machine	Diameter	Thickness	Grit
Fibre Disc	Angle Grinder	7"	-	36

Best Zirkon+ F881

Medium to Light Grinding

Abrasive Product	Machine	Diameter	Thickness	Grit
Fibre Disc	Angle Grinder	4"/7"	-	36

Best SpitFire D9X Better Zirkon+ F822



Blending

Abrasive Product	Machine	Diameter	Thickness	Grit
Flap Disc	Angle Grinder	4.5"/4"	2.5mm	60

Best Norton Norfibre R822 Better SpitFire D123

Finishing

Abrasive Product	Machine	Diameter	Thickness	Grit
Flap Wheel	Flexible Shaft Grinder / Pedestal Grinder	150mm x 25mm	-	#120

Best Spitfire R265

Fine Finishing

Abrasive Product	Machine	Diameter	Thickness	Grit
SCF Sleeves	Flexible Shaft Grinder / Pedestal Grinder	89mm x 390mm	-	Medium to Very Fine

Best Norton SCF



Polishing

Abrasive Product	Machine	Diameter	Thickness	Grit
Satinex Wheels	Flexible Shaft Grinder / Pedestal Grinder	100mm x 100mm / 19mm x 19mm	-	-

Best Spitfire R265



Cutlery & Utensils

Products such as Bowls, Trays, Spoons, Forks, Knives, Small Vessels, Sinks, Tables, Large Grinding Vessels, Kitchen Cabinets, etc. which are used across in industries like, Hotels, Restaurants and as well as House hold use.

Most of these are manufactured using Stainless Steel of 200 and 300 series.

Typical Abrasive Applications involved in this industry are,



Cutting

Abrasive Product	Machine	Diameter	Thickness	Grit
Cutting Wheel	Angle Grinder	4"	1mm	SpitFire

Best SpitFire LT0530



De-Burring

Abrasive Product	Machine	Diameter	Thickness	Grit
Fibre Disc	Angle Grinder	7"	-	36

Best Zirkon+ F881



Finishing

Abrasive Product	Machine	Diameter	Thickness	Grit
Flap Wheel	Pedestal Grinder	300mm x 50mm	-	#220/320

Best Spitfire R265



Polishing

Abrasive Product	Machine	Diameter	Thickness	Grit
Unified Wheels	Flexible Shaft Grinder Pedestal Grinder	7"	-	36

Best P-Series



Enclosures

Industries those manufacture Metal Cabinets / Enclosures for CNC machines, Generators, Panel Boards, Almerias, ATM Machines, etc.

Most of these are manufactured using CRCA Material and are powder coated as per customer requirement.

Typical Abrasive Applications involved in this industry are,



De-Burring

Abrasive Product	Machine	Diameter	Thickness	Grit
Fibre Disc	Angle Grinder	7"	-	36

Best Zirkon+ F881



Medium to Light Grinding

Abrasive Product	Machine	Diameter	Thickness	Grit
Fibre Disc	Angle Grinder	5"/7"	-	36

Best Zirkon+ F881



Blending

Abrasive Product	Machine	Diameter	Thickness	Grit
Flap Disc	Angle Grinder	4.5"	-	60

Best Norfibre R822



Finishing

Abrasive Product	Machine	Diameter	Thickness	Grit
Flap Wheel	Flexible Shaft Grinder Pedestal Grinder	150mm x 25mm	-	#120

Best Spitfire R265



Metal Furniture & Decorative

This sector encompasses industry segments who manufacture components such as architectural components such as door knobs, handles, curtain rods, glass mounting bobbins & spiders, stainless steel furniture such as chairs and tables etc and also SS / MS Tubes & Pipes. Generally these are used in both construction and decorative purposes.

Most of these are manufactured using 200 & 300 grade stainless steel grade material.

Typical Abrasive applications involved in this industry are,



Cutting

Abrasive Product	Machine	Diameter	Thickness	Grit
Cutting Wheel/ Chopsaw	Angle Grinder/ Chopsaw Machine	4" / 14"	1mm/ 3mm	SpitFire/ Norton Bear

Best SpitFire LT0530

Best Bear LT0154

Heavy Duty Grinding / Chamfering

Abrasive Product	Machine	Diameter	Thickness	Grit
DCD/ Cutoff	Angle Grinder	7"	7mm	Super Quick Cut

Best SpitFire D3

Medium to Light Grinding & Blehding

Abrasive Product	Machine	Diameter	Thickness	Grit
Narrow Belt / SDFW	Tool Post Grinder	50mm x 2000mm / 150mm	-	80/ 120

Best Zirkon R809 / Spitfire R265



Finishing

Abrasive Product	Machine	Diameter	Thickness	Grit
Flap Wheel	Centerless Grinder	300mm x 50mm	-	#220 / 320/ 400

Best Spitfire R265

Polishing







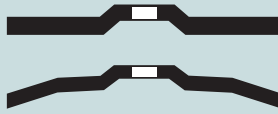
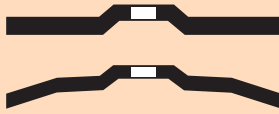













Abrasive Product	Machine	Diameter	Thickness	Grit
Flap Wheels	Centerless Grinder	300mm x 50mm	-	Very Fine & Ultra Fine

Best Q-Flap Wheels

Grinding & Cutting Wheels



Depressed Center Grinding and Cut-off Wheels may also be referred to as raised hub wheels or by their shape designation of "Type", with Type 27 being the most popular. The depressed center design allows the flange/lock nut to recess within the wheel so that it can be used for various grinding and cutting applications. Depressed center wheels are designed to handle the most severe right angle grinding applications from heavy stock removal to rough blending. More recently, depressed center wheels have been designed to increase the utility of the tool for cut-off applications. While large right angle grinders (7" & 9") have been around for many years, small or mini grinders that handle 4", 4-1/2" and 5" wheels have made this machine, and wheel category, the most popular in power tools.

				
Brand	ZirKon	Spit Fire		VULCAN
Class	Premium	Best	Better	Good
Abrasives	Zirkonia Alumina	Premium Aluminum Oxide	Aluminum Oxide	Aluminum Oxide
Product Attribute	Unmatched, premium performance for the discerning users	Widest Range and is recognized for 25+ Years of Performance, Safety and Reliability	A Winning combination of Higher Cut Rate and Longer Life	Grind and Cut 30% faster with less efforts
 Grinding at 10-30° Availability-Shape, Size & Thickness				
	125-230mm	100-230mm	100-230mm	100-180mm
	5-7mm	4-7mm	4-6.75mm	4-6mm
 Cutting at 90° Availability-Shape, Size & Thickness				
	125-180, 400mm	63-400mm	100-400mm	100-180mm
	3,4mm	2.5-4mm	3-4mm	2-3mm
Special Category	 Stainless Steel - Inox	 Metal / Steel	 Metal / Steel	 Metal / Steel
		 Stainless Steel - Inox		
		 Castiron		

Grinding Wheels

Class	Brand	Size	Specification	Item Code	Pack Size
Premium	Zirkon	180 x 7 x 22.23	Zirkon Long Life	ZD1	30
Premium	Zirkon	180 x 7 x 22.23	Zirkon Quick Cut	ZD11	30
Best	SpitFire	180 x 7 x 22.23	Fabrication Plus	D65N(H)	30
Best	SpitFire	180 x 7 x 22.23	Stainless Steel - INOX	D4	30
Best	SpitFire	180 x 7 x 22.23	Gold - Alloy Steel	D30G	30
Best	SpitFire	180 x 7 x 22.23	Super - Long Life	D2(H)	30
Best	SpitFire	180 x 7 x 22.23	Super - Quick Cut	D3(H)	30
Better	Xpert	180 x 6.5 x 22.23	Xpert Long Life	D60(H)	30
Better	Xpert	180 x 6.7 x 22.23	Xpert +	D38N	30
Better	Xpert	180X6X22.23	Quick Cut	DX75	40
Good	Vulcan	180 x 6 x 22.23	Norton Vulcan	D49(H)	30
Good	Norton	180 x 6.7 x 22.23	Norton Metal	TR315(H)	30

Class	Brand	Size	Specification	Item Code	Pack Size
Premium	Zirkon	125 x 5 x 22.23	Zirkon	ZD24	80
Best	SpitFire	100 x 4 x 16	Super - Long Life	D8(H)	120
Best	SpitFire	100 x 4 x 16	Super - Quick Cut	D9(H)	120
Best	SpitFire	100 x 6 x 16	Stainless Steel - INOX	D9X	80
Better	Xpert	125X6X22.23	Quick Cut	DX65H	60
Better	Xpert	100 x 4 x 16	Xpert Quick Cut	DX54H	120
Better	Xpert	100 x 6 x 16	Xpert Quick Cut	DX55H	100
Good	Vulcan	100 x 4 x 16	Norton Vulcan	DV47H	120
Good	Vulcan	100 x 6 x 16	Norton Vulcan	DV48H	80

Cutting Wheels

Class	Brand	Size	Specification	Item Code	Pack Size
Premium	Zirkon	180 x 3 x 22.23	Zirkon	ZR82	65
Premium	Zirkon	125 x 3 x 22.23	Zirkon	ZR04	120
Best	SpitFire	180 x 3 x 22.23	Super - A30TB	R82H	65
Best	SpitFire	180 x 4 x 22.23	Super - A30TB	R44H	50
Best	SpitFire	180 x 2.5 x 22.23	Stainless Steel - INOX	R44X	65
Best	SpitFire	180 x 1.6 x 22.23	Stainless Steel - INOX	LT0540	25
Better	Xpert	180 x 3.2 x 22.23	Norton Xpert	RX82H	65
Good	Vulcan	180 x 3.2 x 22.23	Norton Vulcan	RV82H	65

Class	Brand	Size	Specification	Item Code	Pack Size
Best	SpitFire	100 x 3 x 16	Super - A30TB	R41SF(H)	180
Best	SpitFire	100 x 2 x 16	Stainless Steel - INOX	R41X	25
Best	SpitFire	105 x 1 x 16	Stainless Steel - INOX	LT0530	25
Better	Xpert	100 x 3 x 16	Norton Xpert	RX41(H)	180
Good	Vulcan	100 x 2 x 16	Norton Vulcan	RV41H	25
Good	Norton	105 x 1 x 16	Norton Metal	RNU01H	400

Chopsaw Wheel

Class	Brand	Size	Specification	Item Code	Pack Size
Best	Bear	350 x 3.2 x 22.23	A24-R Bear	LT0154	25
Best	Bear	300 x 3 x 22.23	A24-R Bear	LT0153	25

Ultra ThinWheels

consists of Type 01 straight and Type 27 depressed center cut-off wheels from 4" to 9" diameters. These wheels come in ultra thin .035 for quick burn/burr free cutting to .125" for more durable applications. All are reinforced for the demanding nature of portable cut-off.

Spitfire

Benefits

- Best-in-class cut-rate and long life
- Upto 3 times better life than other cutting wheels
- Maximum safety
- No Contamination

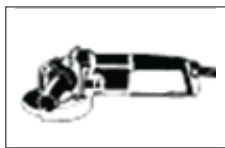
Typical Applications

- Fabrication / Construction / Auto-After – Cutting of SS / MS Sheet Metal, Angle, Pipe, Rod, Channel, Profile Cutting

Availability

- Sizes – 105 to 230 mm
- Thickness: 1, 1.6, 1.9 mm

Machine Used



Stk. No.	Size Dia X Thk X Bore	Specification	Std. Pkg.
LT0530*	100 x 1 x 16	SpitFire	25
LT0531*	100 x 1.6 x 16	SpitFire	25
LT0533*	125 x 1 x 22.23	SpitFire	25
LT0534*	125 x 1.6 x 22.23	SpitFire	25
LT0540*	180 x 1.6 x 22.23	SpitFire	25
LT0541*	230 x 1.9 x 22.23	SpitFire	25

Chopsaw

is a light, low horsepower portable machine. Although very similar to a compound miter saw, it is designed for cutting denser materials, like metal bar, tubing or pipe. Chop saw cut-off wheels are designed specifically for this machine with finer grit, softer grades, and reinforcement layers that match the application.

Bear Chopsaw Wheels

Benefits

- Cuts Faster, Lasts longer than any other wheel in India
- Upto 30% longer life than the nearest competitor
- High stability
- White and clean cutting

Typical Applications

- Cutting of SS / MS pipes, angles, channels, rods etc.

Availability

- Sizes – 300 & 350 mm diameters
with 3.2 mm thickness

Machine Used



Stk. No.	Size Dia X Thk X Bore	Specification	Std. Pkg.
LT0153*	300 x 3 x 25.4	BEAR Chopsaw	25
LT0154*	300 x 3 x 25.4	BEAR Chopsaw	25

Flap Disc, Fibre Disc and Specialties



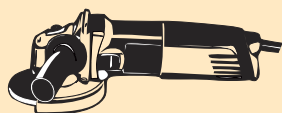
Flap Disc

are versatile grinding and finishing tools, consisting of three main components: a backing plate, adhesive, and abrasive cloth flaps. The rectangular flaps are overlapped and glued to the backing plate. Flap discs are designed for right angle grinder applications ranging from heavy stock removal to surface blending.

				
Brand	NORFIBER	ZirKon	alKon	NORTON BEAR
Class	Best	Better	Better	Good
Grains	Zirkonia Alumina	Zirconia Alumina	Premium Aluminium Oxide	Aluminum Oxide
CAP	R822	R808	R209	R202
Product Attribute	<ul style="list-style-type: none"> Aggressive, consistent, cooler cut Norzon Zirconia grain for good stock removal 	<ul style="list-style-type: none"> Comfortable working Consistent & Cooler cut Long product life 	<ul style="list-style-type: none"> 3 in 1 Metal Working Champion Medium cut rate 	<ul style="list-style-type: none"> Economical Ideal for Low Pressure applications

Typical Applications

- Heavy to Low Grinding Applications
- Weld Blending & Finishing
- Edge De-burring
- Chamfering



Types

Flap Disc Shapes



Grind at Flatter Angles:
0°-15°

Type 27 Flat - The Best choice for finishing

- Used primarily on flat surfaces
- The best choice for blending & smooth finishing



Grind at Steeper Angles:
15°-25°

Type 29 Conical - The Best choice for Aggressive Stock Removal

- Conical flap discs have angled flaps and may be used on both contoured and edge work
- The angle provides greater surface contact for stock removal on flat surfaces
- The best choice when speed & stock removal are primary considerations

Abrasive Flap Densities



Standard Density

- Excellent for heavy-duty applications and rapid stock removal



High Density

- Ideal when working on uneven or curved surfaces, as well as finer grit blending

Application / Grit Recommendation Chart

Coarser (Grinding)

Finer (Finishing)

24	36	40	50	60	80	100	120
Heavy Stock Removal		Edge Chamfering/Beveling		Weld Bleding		Deburring/Deflashing	
				Rust Removal/Blending		Cleaning And Finishing	

Flap Disc

Norfibre	STK. No.	SIZE / TYPE	GRIT	CAP CODE
	FP131H	100 x 16 Type 29	40	R822
	FP132H	100 x 16 Type 29	60	R822
	FP133H	100 x 16 Type 29	80	R822
	FP134H	100 x 16 Type 29	100	R822
	FP139H	100 x 16 Type 29	40	R822
	FP140H	100 x 16 Type 29	60	R822
	FP141H	100 x 16 Type 29	80	R822
	FP142H	100 x 16 Type 29	100	R822
	FP135H	100 x 16 Type 29	40	R822
	FP136H	100 x 16 Type 29	60	R822
	FP137H	100 x 16 Type 29	80	R822
	FP138H	100 x 16 Type 29	100	R822

ZirKon	STK. No.	SIZE / TYPE	GRIT	CAP CODE
	FP161H	100 x 16	36	R808
	FP162H	100 x 16	60	R808
	FP163H	100 x 16	80	R808
	FP165H	100 x 16	120	R808
	FP171H	115 x 16	36	R808
	FP172H	115 x 16	60	R808
	FP173H	115 x 16	80	R808
	FP175H	115 x 16	120	R808

alkon	STK. No.	SIZE / TYPE	GRIT	CAP CODE
	FP437H	100 x 16	36	R209
	FP432H	100 x 16	60	R209
	FP433H	100 x 16	80	R209
	FP434H	100 x 16	120	R209

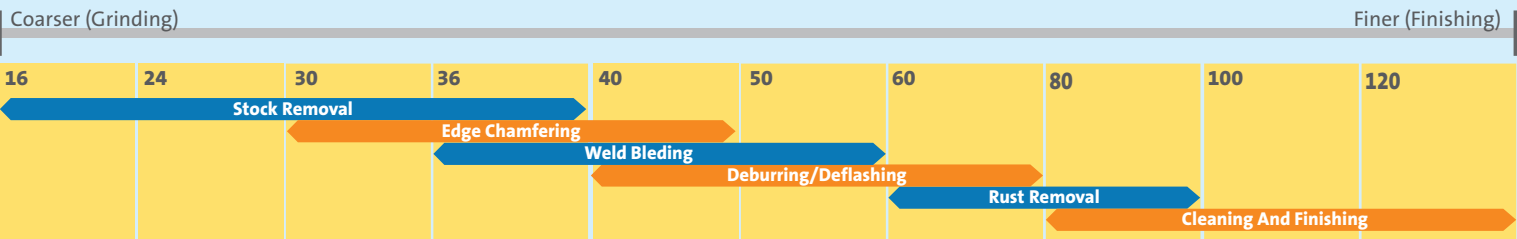
Bear	STK. No.	SIZE / TYPE	GRIT	CAP CODE
	FP637H	100 x 16	36	R202
	FP632H	100 x 16	60	R202
	FP633H	100 x 16	80	R202
	FP634H	100 x 16	120	R202

Fibre Disc

is The most heavy-duty of coated abrasive discs with resin over resin construction on heavy-duty vulcanized fiber backing. Designed for applications ranging from heavy stock removal to surface blending. Used with back-up pads on portable angle grinders.

				
Brand				
Class	Best	Better	Better	Good
Grains	Zirconia Alumina	Premium Aluminum Oxide	Zirconia Alumina	Aluminum Oxide
CAP	R881	F224	F880	F280
Product Attribute	<ul style="list-style-type: none"> • High Cut Rate • Long Life 	<ul style="list-style-type: none"> • Consistent Cut • Uniform Finish 	<ul style="list-style-type: none"> • Good Price / Performance Ratio 	<ul style="list-style-type: none"> • Economical
Typical Applications	<ul style="list-style-type: none"> • Weld Removal • Weld Blending & Finishing • Edge De-burring • Chamfering 			
Size & Grits	4", 5" & 7" 24, 36, 60, 80 & 120 (only in 7")		4", 5" & 7" 24, 36, 60, 80 & 120	4", 5" & 7" 24, 36, 60, 80 & 120
Machine Used				

Application / Grit Recommendation Chart



alKon Fibre Disc

STK. No.	SIZE (mm)	GRIT	CAP
C1	178 x 22.23	24	F224
C2	178 x 22.23	36	F224
C4	178 x 22.23	60	F224
C5	178 x 22.23	80	F224
C6	178 x 22.23	120	F224
C76	178 x 22.23	120	F224
C21	127 x 22.23	24	F224
C22	127 x 22.23	36	F224
C24	127 x 22.23	60	F224
C25	127 x 22.23	80	F224
C26	127 x 22.23	120	F224
C31	102 x 16	24	F224
C32	102 x 16	36	F224
C34	102 x 16	60	F224
C35	102 x 16	80	F224
C36	102 x 16	120	F224

ZirKon Fibre Disc

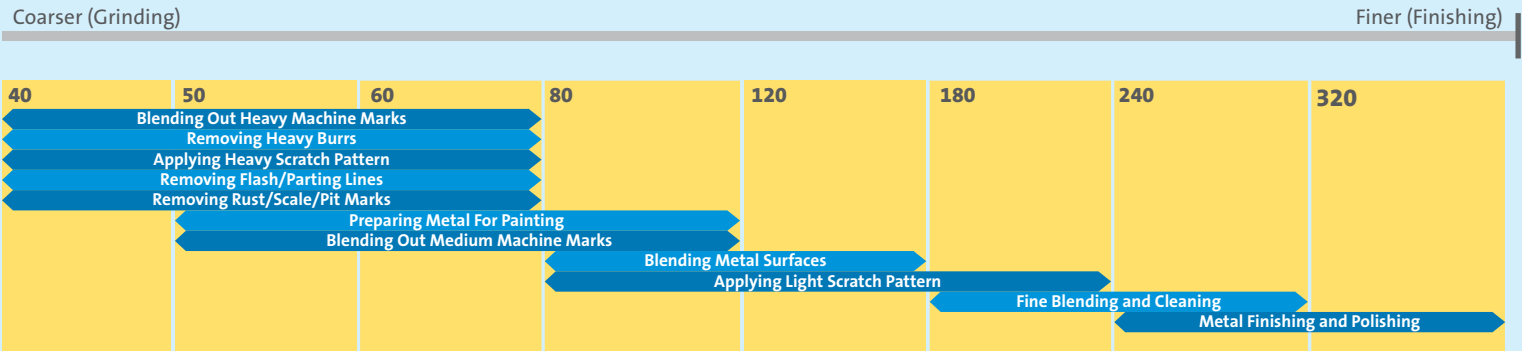
STK. No.	SIZE (mm)	GRIT	CAP
ZCP1	178 x 22.23	24	F881
ZCP2	178 x 22.23	36	F881
ZCP3	178 x 22.23	60	F881
ZCP9	178 x 22.23	80	F881
ZCP10	178 x 22.23	120	F881
ZCP21	127 x 22.23	24	F881
ZCP22	127 x 22.23	36	F881
ZCP23	127 x 22.23	60	F881
ZCP31	102 x 16	24	F881
ZCP32	102 x 16	36	F881
ZCP33	102 x 16	60	F881

Specialties

Flap Wheels & Spindle MOPS are an ideal choice for a wide variety of blending, deburring and finishing applications common in the metal fabrication, welding and polishing industries. Flap wheels are conformable to intricate shapes and contours. Designed to deliver a consistent finish with a uniform rate of cut, flap wheels wear away, continually exposing fresh abrasives.

Flap Wheels and Mops	
Brand	Spit Fire
Class	Best
Grains	Aluminium Oxide
CAP	R265
Product Attribute	<ul style="list-style-type: none">• Good Cut Rate• Good Finish• Good Price / Performance Ratio
Typical Applications	<ul style="list-style-type: none">• Weld Blending & Finishing• Material Cleaning• Polishing using off-hand machine and / or flexible shaft grinders
Size & Grits	Small & Large Diameter Wheels & Mops: 60, 80, 120, 150, 180, 220, 320, 400, 600
Machine Used	

Application / Grit Recommendation Chart



SpitFire Small Diameter Flap Wheels

STK. No.	SIZE (mm) DiaxWidthxBore	Grit	CAP
FA13	150 x 25 x 31.75	60	R265
FA14	150 x 25 x 31.75	80	R265
FA15	150 x 25 x 31.75	120	R265
FA16	150 x 25 x 31.75	220	R265
FA142	150 x 40 x 31.75	60	R265
FA143	150 x 40 x 31.75	80	R265
FA145	150 x 40 x 31.75	120	R265
FA415	150 x 25 x 31.75	36	R265
FA692	150 x 25 x 31.75	180	R265
FA192	150 x 40 x 31.75	220	R265
FA209	150 x 25 x 31.75	320	R265
FA135	150 x 25 x 31.75	400	R265

SpitFire Small Diameter Flap Wheels with Wooden Bush

STK. No.	SIZE (mm) DiaxWidthxBore	Grit	CAP
FW13	150 x 25 x 16	60	R265
FW14	150 x 25 x 16	80	R265
FW15	150 x 25 x 16	120	R265
FW16	150 x 25 x 16	220	R265

SpitFire MOPS





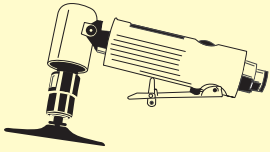

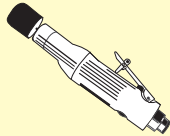
STK. No.	SIZE (mm) DiaxWidthxSpindle	Grit	CAP
FA53	25 x 25 x 6sp	60	R265
FA54	25 x 25 x 6sp	80	R265
FA55	25 x 25 x 6sp	120	R265
FA63	50 x 25 x 6sp	60	R265
FA64	50 x 25 x 6sp	80	R265
FA65	50 x 25 x 6sp	120	R265
FA73	60 x 40 x 6sp	60	R265
FA74	60 x 40 x 6sp	80	R265
FA75	60 x 40 x 6sp	120	R265

Cloth Rolls

Engineered for flexibility and fast cutting, cloth sheets and rolls have a longer life than paper. They tear cleanly and straight without shedding and are packed in a protective dispenser to eliminate waste and damage.

		
Brand	alKon PLUS	alKon
Class	Best	Better
Grains	Aluminum Oxide	Aluminum Oxide
CAP	R208	R265
Product Attribute	<ul style="list-style-type: none"> • Suitable for high to medium aggressive applications • Consistent cut-rate & finish 	<ul style="list-style-type: none"> • Suitable for low aggressive applications • Consistent cut-rate & finish
Typical Applications	<ul style="list-style-type: none"> • Weld Finishing • Material Cleaning • Polishing using off-hand machine and / or flexible shaft grinders 	
Size & Grits	Width – 25mm to 1300mm 60, 80, 120, 150, 180, 220, 320, 400	Width – 25mm to 1300mm 60, 80, 120, 150, 180, 220, 320, 400, 600
Machine Used		

Speed-Lok Discs and Other Specialities






				
Brand	NORTON SG BLAZE	ZirKon	NORTON SG BLAZE	NORTON SG BLAZE
Class	Best	Better	Best	Best
Grains	Premium Ceramic Aluminium Oxide	Zirconia Alumina	Premium Ceramic Aluminium Oxide	Premium Ceramic Aluminium Oxide
CAP	R980	R809/R868	R980	R980
Product Attribute	<ul style="list-style-type: none"> • These heavy-duty, 3-ply polyester laminate construction discs are the most aggressive • Norton SG ceramic grain with elflubricating, supersize treatment provides coolest cut; significantly faster cut rates 	<ul style="list-style-type: none"> • New, improved zirconia lumina provides a constant supply of sharp cutting edges for a fast, • Aggressive cutting action for use on contours surfaces 	<ul style="list-style-type: none"> • With their exclusive ceramic grain technology, grinding aid, and custom design backing, Merit Blaze products outperform all competitive ceramic, zirconia, and aluminum oxide specialty products in today's markets • Merit Blaze specialties cut cooler and last longer on stainless steel, cobalt, Inconel, titanium and other hard-to-grind materials 	<ul style="list-style-type: none"> • Lasts 50% to 200% longer on mild and carbon steel, stainless, • Norton SG ceramic alumina grain cobalt, chrome, Inconel and titanium • Cuts 20% faster than the current generation of ceramic alumina grinding belts • Y-wt. polyester waterproof cloth backing Edge-fray resistance • Advanced "supersize" grinding • Cooler cutting during the life of the belt lubricant • Improved part finish and integrity
Typical Applications	<div> <div> Speed-Lok Discs <ul style="list-style-type: none"> • welding grinding and blending; heavy metal removal; light deburring and finishing • light- to medium-pressure grinding; blending, leveling, • Finishing applications; for use on contours or flat surfaces </div> <div> Cartridge & Spiral Rolls <ul style="list-style-type: none"> • Effective for flash removal • Polishing or removing machine tool marks • Edge Breaking • Valuable abrasive tool for reaching into corners, where larger diameter tools cannot work </div> <div> File Belts <ul style="list-style-type: none"> • Light weld removal and blending, shape and contour sanding, surface preparation prior to coating and plating, removing cutting tool marks from molds and dies, general clean-up and finishing </div> </div>			
Size & Grits	Dia – 2" & 3" with Speed-lok button 36, 60, 80 & 120	Dia – 2" & 3" with Speed-lok button 36, 60, 80 & 120	Ask your local distributor and sales representative 36, 60, 80 & 120	Width: 10mm to 25mm 36, 60, 80 & 120
Machine Used				

Convolute Wheels, Unified Wheels & Specialties



Unified Wheels and Convolute Wheels

Made from non-woven synthetic fiber mesh, which is impregnated with abrasives and bound with resins, non-woven wheels are designed to create desired surface finish where little or no stock removal is required. The industry's broadest offer is available for light stock removal, deburring, blending, finishing and polishing. Non woven wheels have an open mesh construction that is waterproof, washable, conformable and non-loading.

Unified Wheels				
Brand				
Class	Best	Better	Good	Good
CAP	NEX	Q - Series	P - Series	U - Series
Product Attribute	<ul style="list-style-type: none"> • High Cut Rate • Aggressive 	<ul style="list-style-type: none"> • Imparts Glossy Finish • Extremely Low Dust Generation 	<ul style="list-style-type: none"> • Best for Dull Finish • Long life 	<ul style="list-style-type: none"> • Economical • Good for Matt Finish
Typical Applications	<ul style="list-style-type: none"> • Blending of Titanium weld, de-burring of edges • Bright bar finish, stainless steel parts polishing • Finishing of metal parts, cutlery polishing • Descaling 			
Size & Grits	1" and 6" in Diameter upto 1" Width Coarse, Medium, Fine	6", 8", 10", and 12" Diameter 1" and 2" Width Fine, Very Fine, Ultra Fine	6" and 8" in Diameter 1" and 2" Width Fine and Very Fine	6" and 8" in Diameter 1" and 2" Width Fine and Very Fine

Q-series

STK. No.	SIZE (mm)	SP	MOQ	PRICE
	Dia x Width x Bore			₹
UX579	150 x 25	Q-1SF	5NOS	368.61
UX577	150 x 25	Q5SF	5NOS	528.33
UX418	150 x 25	Q8SF	5NOS	614.35
UX763	150 x 25	Q10SF	5NOS	780.22
UX764	150 x 25	Q12SF	5NOS	810.95
UX765	150 x 50	Q1SF	5NOS	572.59
UX766	150 x 50	Q3SF	5NOS	721.72
UX627	150 x 50	Q5SF	5NOS	852.94
UX629	150 x 50	Q8SF	5NOS	965.42
UX767	150 x 50	Q9SF	5NOS	1121.33
UX768	150 x 50	Q10SF	5NOS	1282.38
UX769	150 x 50	Q12SF	5NOS	1348.00
UX406	200 x 25	Q5SF	5NOS	780.22
UX410	200 x 25	Q8SF	5NOS	896.96
UX414	200 x 25	Q10SF	5NOS	1154.97
UX669	200 x 25	Q12SF	5NOS	1175.01
UX430	200 x 50	Q5SF	5NOS	1288.23
UX431	200 x 50	Q8SF	5NOS	1560.45
UX772	200 x 50	Q10SF	5NOS	2185.82
UX638	200 x 50	Q12SF	5NOS	1898.92

P Series Wheels

STK. No.	SIZE (mm)	SP	MOQ	PRICE
	Dia x Width x Bore			₹
PX20	150 x 25	PoAVF	20NOS	79.96
PX21	150 x 25	P1AVF	20NOS	97.29
PX23	150 x 25	P3AVF	20NOS	169.60
PX25	150 x 25	P5AVF	20NOS	211.03
PX30	150 x 25	PoAVF	10NOS	192.91
PX31	150 x 50	P1AVF	10NOS	252.46
PX33	150 x 50	P3AVF	10NOS	310.71
PX35	150 x 50	P5AVF	10NOS	380.64
PX40	150 x 50	PoAVF	20NOS	176.07
PX41	150 x 50	P1AVF	20NOS	229.17
PX43	150 x 50	P3AVF	20NOS	280.94
PX45	150 x 50	P5AVF	20NOS	327.54
PX50	200 x 25	PoAVF	10NOS	304.25
PX51	200 x 25	P1AVF	10NOS	398.76
PX53	200 x 25	P3AVF	10NOS	503.61
PX55	200 x 25	P5AVF	10NOS	609.79

U Series

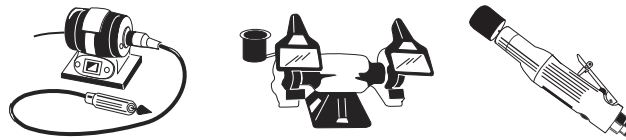
STK. No.	SIZE (mm)	SP	MOQ	PRICE
	Dia x Width x Bore			₹
UX01	200 x 50	U1SVF	10NOS	293.04
UX03	200 x 50	U3SVF	10NOS	383.19
UX05	200 x 50	U5SVF	10NOS	484.62
UX08	200 x 50	U8SVF	10NOS	586.06
UX257	200 x 25	U1SVF	20NOS	169.06
UX221	200 x 25	U3SVF	20NOS	219.76
UX217	200 x 25	U5SVF	20NOS	270.50
UX219	200 x 25	U8SVF	20NOS	315.57
UX31	150 x 50	U1SVF	10NOS	185.97
UX33	150 x 50	U3SVF	10NOS	242.31
UX35	150 x 50	U5SVF	10NOS	298.66
UX38	150 x 50	U8SVF	10NOS	366.29
UX21	150 x 25	U1SVF	20NOS	107.07
PX23	150 x 25	U3SVF	20NOS	135.24
PX25	150 x 25	U5SVF	20NOS	163.43
PX28	150 x 25	U8SVF	20NOS	202.87

Convolute Wheels

Product Name	Classification	Brand	CAP	Benefits
Convolute Wheels	Best	Bear-Tex	1000 series	Long Life & consistent high quality results
Convolute Wheels	Best	Bear-Tex	4000 series	Long Life for heavy deburring
Convolute Wheels	Best	Bear-Tex	HD series	Heavy burr removal



Machines Used



STK. No.	SIZE (mm)	SP	MOQ	PRICE
	Dia x Thik x Bore			₹
CX544	200 x 12.5 x 76	1-9SF	3	2278.71
CX535	150 x 25 x 25.4	4-8AM	3	2795.22
CX198	200 x 25 x 76.2	4-8AM	3	4885.56
CX539	200 x 12.5 x 76.2	4-8AM	3	2326.12
CX530	150 x 12.5 x 25	4-8AM	3	1960.30
CX561	200 x 25 x 76	1-7SF	3	2846.65
CX52	150 x 25 x 25	1-9SF	3	2220.27
CX521	200 x 25 x 76	1-9SF	3	3611.30

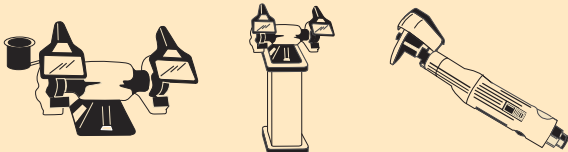
Application/Grit Recommendation Guide

	<div> <div>Most Aggressive</div> <div>Least Aggressive</div> </div>						
	Rapid Strip	Vortex & Nex Unified wheels	Series 4000 & 1000 Convolute wheels	Metal Finishing Convolute wheel	Clean & Finish Wheels	Light Finishing Convolute wheel	Non-Woven/Interleaf Flap Wheels
Scale Removal	BEST CHOICE						
Stock Removal		BEST CHOICE	2 nd CHOICE				
Heavy Deburring		BEST CHOICE	BEST CHOICE				
Decorative Finishing				BEST CHOICE	2 nd CHOICE		
Blending			BEST CHOICE	2 nd CHOICE			
Cleaning				2 nd CHOICE	BEST CHOICE		
Light Deburring			2 nd CHOICE			BEST CHOICE	
Light Finishing			2 nd CHOICE			BEST CHOICE	
Polishing						BEST CHOICE	2 nd CHOICE
Buffing							BEST CHOICE

Flap Wheels & Interleaved Flap Wheels



Non-woven surface finishing flap wheels are an ideal choice for a wide variety of blending and finishing applications common in the metal fabrication, welding and polishing industries. Flap wheels are conformable to intricate shapes and contours. Designed to deliver a consistent finish with a uniform rate of cut, flap wheels wear away continually exposing fresh abrasives. There are two types of non woven flap wheels: non-woven only abrasive flaps where finishing is the primary application, and interleaf with alternating cloth and non-woven abrasive flaps (less conformable, more aggressive) for stock removal and finishing. Interleaf flap wheels must always be run in the direction indicated by the arrow.

Product Name	Classification	Brand	CAP	Benefits	Application List
Flap Wheels	Better	Bear-Tex	24NM	Polishing surfaces and giving textures; Matt finish	Finishing of SS Sheets, Spindle mops reach hard to reach areas
Flap Wheels	Best	Bear-Tex	22NM	Polishing surfaces and giving textures; Matt finish	Finishing of SS Sheets Spindle mops reach hard to reach areas
Interleaved Flap Wheels	Better	Bear-Tex	22NM/ R265	Removes scratch, dents, spot weld marks	Grain finishing on sheets, removing imperfections
Interleaved Flap Wheels	Best	Bear-Tex	22NM/KF	Removes scratch, dents, spot weld marks	Grain finishing on sheets, removing imperfections

Machine Used							
Application / Grit Recommendation Chart	Coarser (Grinding) Finer (Finishing)						
	50	60	80	120	180	240	320
	Preparing Metal for Panting						
	Blending Out Medium Machine Marks						
			Blending Metal Surfaces	Applying Light Scratch Pattern			
				Fine Blending and Cleaning		Metal Finishn and Polishing	
Interleaf Flap Wheel				Non-Woven Flap Wheel			

Non-Woven Specialties

Norton non-woven discs are a combination of strong synthetic mesh and quality abrasives, bonded together by a smear-resistant adhesive. They are ideal for use on portable tools to clean and remove imperfections on metal surfaces, clean, deburr or finish a variety of surfaces, blend weld seams, or create decorative finishes. The open construction of the non-woven material enables aggressive cutting action and improved surface finish while maintaining its non-loading feature



Surface Conditioning Material	
Brand	
Class	Best
CAP	SCF
Product Attribute	<ul style="list-style-type: none"> • Available in Coarse to Very Fine • To impart final surface finish
Typical Applications	Blending of marks, Edge deburring, Finishing on SS Pipes, Finishing of sanitary taps and Handtools
Size & Grits	2" to 7" SCF disc with or without Speedlok buttons Coarse, Medium & Very Fine


SCF Disc and Belts

STK. NO.	SIZE	SPECIFICATION	MOQ	UNIT PRICE ₹
BD 06	1"	SCF COARSE	25 NOS	27.24
BD 12	1"	CF MEDIUM	25 NOS	24.97
BD 17	1"	SCF VERY FINE	25 NOS	24.97
BD 38	2"	SCF COARSE	25 NOS	53.16
BD 39	2"	SCF MEDIUM	25 NOS	47.26
BD 40	2"	SCF VERY FINE	25 NOS	47.26
BD 07	2.5"	SCF COARSE	25 NOS	69.28
BD 13	2.5"	SCF MED	25 NOS	60.25
BD 19	2.5"	SCF VERY FINE	25 NOS	60.25
BD 37	3"	SCF COARSE	25 NOS	95.70
BD 35	3"	SCF MEDIUM	25 NOS	81.52
BD 36	3"	SCF VERY FINE	25 NOS	81.58
BD 08	4"	SCF COARSE	10 NOS	134.06
BD 32	4"	SCF MEDIUM	10 NOS	110.19
BD 33	4"	SCF VERY FINE	10 NOS	110.19
BD 09	5"	SCF COARSE	10 NOS	215.06
BD 14	5"	SCF MEDIUM	10 NOS	177.23
BD 21	5"	SCF VERY FINE	10 NOS	170.42












SCF Disc and Belts

STK. NO.	SIZE	SPECIFICATION	MOQ	UNIT PRICE ₹
BD 10	6"	SCF COARSE	10 NOS	296.52
BD 15	6"	SCF MEDIUM	10 NOS	243.13
BD 22	6"	SCF VERY FINE	10 NOS	243.13
BD 11	7"	SCF COARSE	10 NOS	401.05
BD 16	7"	SCF MEDIUM	10 NOS	341.47
BD 23	7"	SCF VERY FINE	10 NOS	328.34
BD 141	19 x 520mm	COARSE BELT	10 NOS	254.02
BD 140	19 x 520mm	MEDIUM BELT	10 NOS	206.56
BD 142	19 x 520mm	VERY FINEE BELT	10 NOS	236.30
BD 163	6 x 520mm	COARSE BELT	10 NOS	170.42
BD 162	6 x 520mm	MEDIUM BELT	10 NOS	163.60
BD 139	89 x 389mm	COARSE BELT	5 NOS	673.49
BD 146	89 x 389mm	MEDIUM BELT	5 NOS	614.42
BD 170	89 x 389mm	VERY FINEE BELT	5 NOS	614.42

Rapid Strip Discs		
Brand	NORTON SG BLAZE	Rapid Strip
Class	Best	Better
CAP	SG Blaze	Rapid Strip
Product Attribute	<ul style="list-style-type: none"> • High Cut Rate 	<ul style="list-style-type: none"> • Cleans and conditions quickly • Increased productivity
Typical Applications	<ul style="list-style-type: none"> • Rust & Scale removal • Paint Stripping • Cleaning and conditioning welds 	
Size & Grit	3" Speed-Lok Discs/ Type 27 Extra Coarse	
Machine Used		

Application / Grit Recommendation Chart	<div> <div>← Most Aggressive</div> <div>Least Aggressive →</div> </div>						
	MERIT	Powerstrip	Deburring & Blending	AG, GD Surface Prep	GD, XC Surface Prep	HS Buffing, Buffing	Felt Polishing
		BLAZE Rapid Strip	Vortex Rapid Blend Vortex & Duburring & Blending	STE-CS, STE-VS Surface Prep	STE-VS, STE Surface Prep		
	Scale Removal	BEST CHOICE					
	Stock Removal	BEST CHOICE	2 nd CHOICE				
	Heavy Deburring	2 nd CHOICE	BEST CHOICE				
	Light Deburring		BEST CHOICE	2 nd CHOICE			
	Light Finishing			BEST CHOICE	2 nd CHOICE		
	Blending			BEST CHOICE	2 nd CHOICE		
	Cleaning			2 nd CHOICE	BEST CHOICE		
	Finishing				BEST CHOICE	2 nd CHOICE	
	Polishing						BEST CHOICE

have three components: strong synthetic fiber mesh and quality abrasives, bonded together by a smear-resistant adhesive. Rapid Strip discs have an open web construction that enables aggressive cutting action while inherently maintaining a cool, non-loading surface. Rapid Finish discs have a very tight unitized construction for deburring and finishing. Rapid Prep and Surface Preparation discs have a more open weave that excels in preparation and cleaning of a surface. Each product provides excellent cutting action while improving surface finish. The non-woven web is attached to a fiberglass backing plate (Rapid Strip/Rapid Finish/ Rapid Prep depressed center wheels) for direct mounting or onto a woven substrate backing (Surface Prep discs) for mounting on a rubber back-up pad.

	Vortex Rapid Blend	Unified Disc	Vortex Rapid Finish																																																																		
Unified Wheels																																																																					
Brand																																																																					
Class	Best	Good	Best																																																																		
CAP	5AM & 7AM	P-Series	5AM & 7AM																																																																		
Product Attribute	<ul style="list-style-type: none">• Eliminate Steps of surface finish• Long Lasting	Can be used on a Right Angle Grinder	Can be used on a Right Angle Grinder																																																																		
Typical Applications	Best for Blending & deburring	SS fabrication, surface finishing	<ul style="list-style-type: none">• Weld Bead removal• Weld splatter removal• Edge breaking• De-burring																																																																		
Size & Grits	2" to 3" disc with Speedlok buttons 5 & 7	4" x 1/2" Discs 1, 3 & 5	4" x 1/2" Discs 1, 3 & 5																																																																		
Machine Used	 																																																																				
Application / Grit Recommendation Chart	<div><div><div>Most Aggressive</div><div>Least Aggressive</div></div><table><tr><th>Type 27 Disc</th><th>BLAZE Rapid Strip, Powerstrip</th><th>Vortex Rapid Finish A/O Medium</th><th>Rapid Finish A/O Fine Rapid Pre</th><th>Rapid Finish S/O very Fine Rapid Pre</th><th>Abrasive Brush</th></tr><tr><td></td><td></td><td>Urface Prep A/O Coarse</td><td>Surface Prep A/O Medium</td><td>Surface Prep A/O Very Fine</td><td></td></tr><tr><td>Scale Removal</td><td>BEST CHOICE</td><td></td><td></td><td></td><td></td></tr><tr><td>Stock Removal</td><td>BEST CHOICE</td><td>2nd CHOICE</td><td></td><td></td><td></td></tr><tr><td>Heavy Deburring</td><td>2nd CHOICE</td><td>BEST CHOICE</td><td></td><td></td><td></td></tr><tr><td>Light Deburring</td><td></td><td>BEST CHOICE</td><td>2nd CHOICE</td><td></td><td></td></tr><tr><td>Light Finishing</td><td></td><td>2nd CHOICE</td><td>BEST CHOICE</td><td></td><td></td></tr><tr><td>Blending</td><td></td><td></td><td>BEST CHOICE</td><td>2nd CHOICE</td><td></td></tr><tr><td>Cleaning</td><td></td><td></td><td>2nd CHOICE</td><td>BEST CHOICE</td><td></td></tr><tr><td>Finishing</td><td></td><td></td><td></td><td>BEST CHOICE</td><td>2nd CHOICE</td></tr><tr><td>Polishing</td><td></td><td></td><td></td><td></td><td></td></tr></table></div>			Type 27 Disc	BLAZE Rapid Strip, Powerstrip	Vortex Rapid Finish A/O Medium	Rapid Finish A/O Fine Rapid Pre	Rapid Finish S/O very Fine Rapid Pre	Abrasive Brush			Urface Prep A/O Coarse	Surface Prep A/O Medium	Surface Prep A/O Very Fine		Scale Removal	BEST CHOICE					Stock Removal	BEST CHOICE	2nd CHOICE				Heavy Deburring	2nd CHOICE	BEST CHOICE				Light Deburring		BEST CHOICE	2nd CHOICE			Light Finishing		2nd CHOICE	BEST CHOICE			Blending			BEST CHOICE	2nd CHOICE		Cleaning			2nd CHOICE	BEST CHOICE		Finishing				BEST CHOICE	2nd CHOICE	Polishing					
Type 27 Disc	BLAZE Rapid Strip, Powerstrip	Vortex Rapid Finish A/O Medium	Rapid Finish A/O Fine Rapid Pre	Rapid Finish S/O very Fine Rapid Pre	Abrasive Brush																																																																
		Urface Prep A/O Coarse	Surface Prep A/O Medium	Surface Prep A/O Very Fine																																																																	
Scale Removal	BEST CHOICE																																																																				
Stock Removal	BEST CHOICE	2nd CHOICE																																																																			
Heavy Deburring	2nd CHOICE	BEST CHOICE																																																																			
Light Deburring		BEST CHOICE	2nd CHOICE																																																																		
Light Finishing		2nd CHOICE	BEST CHOICE																																																																		
Blending			BEST CHOICE	2nd CHOICE																																																																	
Cleaning			2nd CHOICE	BEST CHOICE																																																																	
Finishing				BEST CHOICE	2nd CHOICE																																																																
Polishing																																																																					

Safety - It's the Smart Thing to Do



SPEEDS

Check machine spindle speed and speed listed on machine against safe maximum operating speed marked on the grinding wheel. Do not overspeed the wheel.



FACE PROTECTION

Always wear government-approved face and eye protection when using abrasive products.



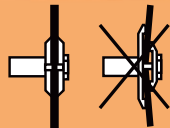
SAFETY GLOVES

Grinding applications are conducted in harsg environments. The use of proper fitting gloves is recommended



WHEEL GUARD

Always use the wheel guard as supplied by the machine manufacture, in the proper position.



FLANGES

When mounting most grinding wheels, use flanges of euql diameter and bearing surface. For exceptions, See ANSI B7.1



HEARING PROTECTION

Use of abrasive may create elevated sound levels. Hearing protection must be worn where required.



SAFETY GUIDES, MSDS AND WHEEL WARNING MESSAGES

Before using any abrasive materials, READ:

- The safety Guides
- Wheel Warning Messages
- Material Safety Dta Sheets (MSDS)

Norton provides information pertaining to the safe use of all products,. Please take the time to read it carefully. Contact suppliers of the workplace and abrasive materials for copies of the MSDS if one is not readily available. Norton abravises MSDS can be obtained on www.nortonabrasives.com



DUST PROTECTION

Exposure to dust generated from workpiece and/or abrasive materials can result in lung damage and/or other physical injury.

Use dust capture or local exhaust as stated in the MSDS.

Wear government-approved respiratory protection and eye and skin protection.

Failure to follow this warning can result in serious lung damage and/or physical injury.

This is a general dust warning and does not cover specific situations. For more information, refer to the MSDS dust warning provided with your products, and workplace.



WARNING

This warning icon appears on our produts and packaging. It is intended to draw your attention to the specific safety warning practices outlined after it.



Pistol Grip Air Sander

A DEADLY EQUATION

Pistol Grip Air Sander + Grinding Wheel = Certain Injury!

- Newer use a high speed air sander as a portable grinder
- Use only sanding discs specifically designed for sanders
- Because the speed fo these sanders far exceeds the maximum rated speeds for grinding wheels, a potentially lethal wheel broakage may occur

Breakages/Personal Injury

In the event of on-machine breakage of Norton abrasive product, call your local Norton distributor immediately. Whether involving personal injury or not, the abrasive user should leave the equipment and other evidence undisturbed until a Norton sales representative has been notified and conducts an investigation. Prompt action on the part of abrasive users, distributor, and Norton sales personnel is important to ensure swift determination of the breakage cause and to guard against recurrence.

Safe Operating Practices

Safe operating practices must be part of every grinding wheel user's operating. The greatest efficiency and lowest overall abrasives cost can be realized only if proven care and use techniques become standard practice.

- Be sure to read any safety material/guidelines provided with the abrasives product.
- Always check the wheel for crack or damage before use.
- Always properly maintain your machine; especially governors on pneumatic machines and linkage on floorstand machines.
- Never use the incorrect air, hydraulic or electric power supply.
- Never mount grinding wheels on the wrong size machine for the grinding wheel.
- Before mounting the wheel, use a tachometer to measure the spindle speed.
- Ensure the mounting flanges, backplate or adapter supplied by the machine manufacturer are used and kept in good condition.
- Ensure the correct wheel guard is in place before starting the wheel. Allow the wheel to come up to full operating speed before starting to grind for a minimum of one minute, and stand out of the plane of rotation.
- NEVER use a high speed air sander as a portable grinder.
- NEVER use grinding wheel with a rated speed less than that of the grinder.
- NEVER exceed the maximum operating speed marked on the wheel being used. The following formula may be used to calculate wheel speed:
- Avoid dropping or bumping the wheel.
- When not using the wheel, store the wheel in its original packing materials. This protects the wheel from chips and cracking, as well as provides easy identification of the wheel.

For more information on product safety, ask your Norton distributor or contact Customer Service Manager,
Grindwell Norton Ltd., Devanahalli Road, Off Old Madras Road,
 Bengaluru - 560 049. Karnataka. Tel: 080-30978487,
 Email: coatedindia.helpdesk@saint-gobain.com

The Norton logo, featuring the word "NORTON" in white capital letters inside a blue parallelogram.

GRINDWELL NORTON LTD.

Manufactured by:

Devanahalli Road,
Off Old Madras Road,
Bangalore - 560 049.
Phone: 080-30978888

G-51, M.I.D.C., Butibori
Industrial Area, Village
Tembhari, Tal. Hingna,
Dist. Nagpur - 441122.

Haripur Road, Village Bated,
Barotiwala, Tehsil - Baddi,
Dist. Solan, H.P. - 174 103.
Phone: 09805025304

Abrasive Marketing Group,

Leela Business Park, 5th Level, Andheri-Kurla Road, Andheri (E), Mumbai - 400059.
Tel: +91-22-40212121, 40212168

Field Offices Phone Numbers:

Ahmedabad 66052564-65

Bangalore 25587248, 25091145, 25585737

Chennai 28252370/ 0336/ 0797

Jamshedpur 2228432, 2227337

Kolkata 40037837/38/40

Ludhiana 2423650, 2425851

Mumbai 40132578-97

Noida 0120-4061800-99

Pune 25510891-2-4, 25510876

Secunderabad 27713040

