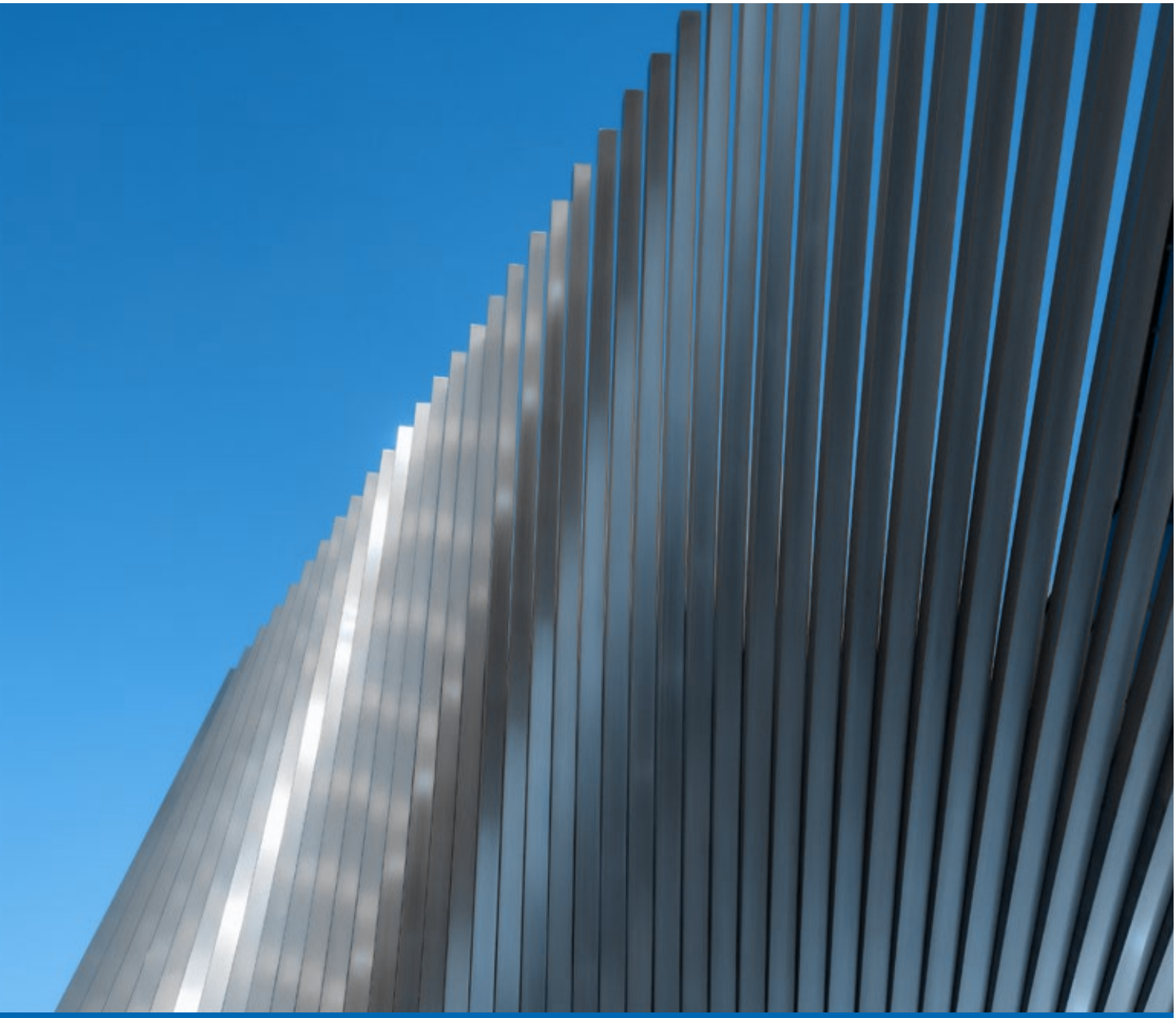


Polishing Steel & Stainless Steel

Finish First with Osborn

Osborn offers the best solutions for your mechanical surface treatment challenges. Our experts are highly trained to serve you with the optimum off-the-shelf or customized tools, when and where you need them. Unlike others, we help you optimize your process, meet the highest quality and safety requirements and reduce your costs.

130 + years

of experience

Local Inventories

Osborn serves 120 countries around the world. North American, European, and Asian manufacturing assures product availability and prompt delivery.

High Performance

Finest quality cloths and construction techniques for buffing solutions. Superior buff treatments for repeatability and performance.

Unique and Reputable Capabilities

Honest experts providing trusted solutions.

Since 1887, we have grown to become the world's largest surface treatment and finishing provider. We're dedicated to offering the very best – a standard to which we hold ourselves and the aspiration we reserve for our diverse customer base. Osborn helps you Finish. First

Products for every application.

Osborn has the broadest selection of buffs and compounds in the industry. Osborn will develop custom solutions for particular applications when standard products cannot meet the demands

Continued innovation.

Product development focused upon customer applications. This applies to new products, continuous improvement, and process control.

Leading combination.

The combination of long lasting Osborn buffs and economical compounds provide excellent results and fewer rejects. Our liquid compounds are the most stable in the business due to unique methods of manufacturing. Our compounds are made using the highest quality minerals, sized within a very limited range, to ensure no unexpected lines or scratches on a given surface. They adhere perfectly to Osborn buffs for a clean and economical process. Let our experts show you how to achieve the lowest cost per part!

The Right Solution for Every Application and Every Workpiece

Steel or Stainless Steel Parts

Stainless steel is rolled into sheets, plates, bars, wire and tubing to be used in cookware, cutlery, surgical instruments and construction material. More industrial applications include chemical and water treatment plants or storage tanks for chemicals and food products. Stainless steel is commonly found in commercial kitchens or food processing sites.

The parts may be finished for aesthetic or technical reasons, the results depending on whether the demand is for a certain appearance or a defined surface roughness

Finishing Steel and Stainless Steel Parts

Osborn abrasive tools, polishing tools and compounds are applied after grinding, to achieve a whole range of different finishes, from a matt satin finish to a high gloss mirror finish.

Osborn tools and compounds are made for automated processes demanding the highest level of reproducibility, with the best price: performance ratio. Tools and compounds for flatbed and robotic equipment are complemented by alternative products for manual applications.

Finest Quality C

Mill-treated cloth manufact
Osborn specific

Consistency Eve

All cloths used by Osborn are
quality control procedures to
same quality every time (part
robotic operations run

Highest Quality

Tightest standards and controls for compound formulations providing consistency and repeatability.

Cloths

ured to the exact cation.

Perfect Balance

Osborn buffs are balanced for perfect concentricity.

Designed for All Applications

Osborn perfectly attuned buffs and compounds for manual and automatic operations.

ery Time

subject to stringent ensure exactly the ticular important for nning 24/7).

Available in Multiple Sizes

Osborn buffs are available in metric and imperial sizes.

Trusted Solutions for Polishing Steel and Stainless Steel

There is no one size fits all, Osborn prides itself on recommending the best, most efficient solution for every application. Recommendations on these pages are just examples. Our experts are happy to advise you.

Liquid Polishing Compounds

Osborn liquid compounds can be dispensed through a central system or with pressure pots. They are suitable for both high and low pressure spray guns.

Type		Characteristics	Fat	Cut	Colour
ATHOS RT5	dark grey	Brushing emulsion for sinks	3	9	3
Unipol 6771	grey	Brushing emulsion to remove blue glow on steel strip	1	9	1
Langsol 1067	brown-grey	Very abrasive cutting compound for satin finishing sinks	5	9	2
Autolin SAT	cream	Cutting compound more cut, very greasy and abrasive	7	8	3
Autolin 741	cream	Cutting compound for Knife blades and stainless steel sinks	5	7	3
UNIPOL 8660	white	Cutting compound, Dry with medium cut	5	6	5
Unipol 6772	cream	Brushing emulsion for steel strip	1	5	2
Langsol P120	light grey	Cut and colour (quite greasy but good colour)	6	5	6
UNIPOL 6968	white	Cut and colour compound for stainless steel plate	2	3	8
Langsol 6147/3	white	Finishing with dark gloss especially on cookware and flatware	3	3	9
Unipol 0001	white	Top dry colouring compound, easy to clean	2	3	8

Scale from 1 = low to 10 = high

Special Animal-Fat-Free Liquid Compounds

Animal-fat free emulsions, perfect for attaining the finest surfaces required on orthopedic implants and other medical devices. Specially developed for robotic and other automatic applications.

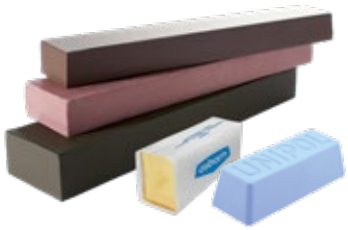
Type		Characteristics	Fat	Cut	Colour
Unipol 018crs	Blue	Efficient cutting compound ideal for implants	5	6	4
Unipol 018med	White	All round cut and colour compound	4	4	6
Unipol 018fn	White	Top finishing compound for the perfect gloss on implants	3	2	8

Scale from 1 = low to 10 = high

Unipol Metal Polish

- Applied manually with microfibre cloth
- Eliminates light damage from wear and tear
- Removes light oxidisation
- Achieves perfect mirror finish
- Available in 125ml tubes or 1000ml tins

Solid Polishing Compounds



Osborn has a complete range of solid compounds for manual polishing.
Most types can also be supplied as sized bars for robotic applications.

Type		Characteristics	Fat	Cut	Colour
Langsol 39.038.1	grey	Greasy, abrasive general brushing compound for deburring and satin finishing	7	8	2
Unipol 5333	white	All-pupose cutting compound best results achieved with sisal buffs	5	6	4
Langsol 2043 JF	green	All-purpose cutting compound used with cotton buffs	5	5	6
Hyfin	white	Dry, economical compound with good gloss.	2	2	7
Unipol 462	blue	The famous "UNIPOL blue" bar, colouring compound.	2	2	8
Unipol SA 175	yellow	High end colouring compound achieves a dark shine	2	1	9
Unipol Gold easy	orange	Top colouring compound for a deep line-free gloss	1	1	10

Scale from 1 = low to 10 = high

Special Animal-Fat free Solid Compounds

Animal-fat free compounds excelling in the medical and food industry.

Type		Characteristics	Fat	Cut	Colour
Unipol 6310	Grey	Brushing compound	3	7	5
Unipol 1128G	Bordeaux	Cutting compound	7	8	3
Unipol 466	White	Good cut and colour compound	4	5	6
Langsol 39.106.9	Yellow	Good cut and colour compound	4	5	7
Glacier	White	Mild cutting compound, quite greasy with good gloss	4	4	7
Langsol 1003A	Pink	Universal colouring compound	3	3	8
Unipol 17	Green	Top colouring compound for perfect gloss	2	3	9
Unipol Gold	Gold	Perfect top of the range gloss	1	1	10

Scale from 1 = low to 10 = high

Sisal and Sisal Cloth Buffs

Sisal is a natural material, perfect for the polishing process due its excellent compound retention properties. Sisal buffs are aggressive and usually follow a Coated Abrasive grinding process.

Waved Sisal Cloth Buff

The combination of dense sisal web and cotton cloth, folded in regular waves, results in a very hard cutting buff, ideal for removing oxidisation or other first steps in the polishing process. Optional dip treatments extend service life and increase the hardness. A particularly useful tool if there is little or no oscillation.

Together with Osborn cutting compounds, Autolin SAT or Unipol 8660, this is the tool of choice on rotary table and flatbed polishing machines, especially when processing pots & pans.

Pleated Sisal Cloth Buff

Regular folds with a sandwich of sisal web and cotton cloth, make the Osborn Pleated Sisal Cloth Buffs, an aggressive tool with good compound retention. For greater hardness and rigidity, Osborn dip treatments are available.

Manufactured in diameters up to 960mm, they are perfect for robotic polishing of builder's hardware and cutting or polishing knives using Osborn Autolin 741 compound.

Airflow Sisal Cloth Buff

A flexible and economical cutting tool with irregular folds of sandwiched sisal and cotton cloth. Buffs can be mounted together to form a wider surface when polishing larger surfaces, particularly on flatbed machines. For extended life and less flexibility, Osborn dip treatments are available.

Suitable for a wide range of applications including builder's hardware and car parts.

Airflow Mini Sisal Cloth Buff: a smaller 100mm version is also available.

Airflow Sisal Buff

A compact buff, purely made of sisal web. Lacking in flexibility it is a hard and aggressive tool with or without the Osborn dip treatments.

Together with Osborn cutting compounds, Sisal Buffs are perfect for centreless polishing of tubes or for pots & pans.

Airflow Sisal Cord Buff

The most flexible tools in the sisal range. Individual plaited cords wrap around contours, retaining sufficient cut in a cool process. Osborn dip treatments can be added to extend service life.

Airflow Sisal Cord Buffs are used primarily in the polishing of cutlery, door handles and other shaped parts. Best results are achieved with Unipol 8660, Autolin SAT or Langsol P120.

Sisal Web

Sisal Cloth (Sandwich)

Sisal Cord

Sisal Types

Sisal is available as a woven fabric, sandwiched with cloth or plaited in to cord.

Type		Characteristics	Grade
Sisal Web	Type 82B	dense structure thin yarn	light/medium
	Type JB	heavy dense structure thick yarn	heavy
	LU28L	treated sisal JB (as above), slightly sticky	very heavy
Sisal Cloth	82B/101B	suitable for Wave, Pleated and Airway Buffs	light/medium
	JB/101B	suitable for Pleated and Airway Buffs	heavy
	LU28L/301J	suitable for Pleated Buffs	very heavy
Sisal Cord	Type 32	two cords twisted	light
	Type 48	eight cords braided	heavy

Tampico Fibre

Tampico fibre is a natural product mainly grown in Africa. Due to its compound retention properties it is perfect for polishing. It may also be used dry for dusting sensitive surfaces.

Roller Brush Tampico

Natural Tampico fibres are available as spiral rollers in various widths. The soft fibres make this a highly flexible tool, useful on profiled surfaces. The compound is caught in the fine Tampico hairs making it particularly effective. Osborn has a special dip treatment to increase service life.

Used together with Osborn polishing compound Athos RT5 or Langsol 1067, a matt finishing effect can be achieved on sinks and other profiled parts.

Cup Brush Tampico

Cup Brushes made of Tampico, often complement the Roller brushes made of Tampico. Here the Tampico fibre is punched around a plastic core and trimmed to various shapes, depending on the shape to be polished.

Used together with Osborn polishing compound Athos RT5 or Langsol 1067, a matt finishing effect can be achieved on sinks and other profiled parts.

Pressed Brush Tampico

For a very compact roller, Tampico fibre is pressed in to a core. This brush is available in various widths and is often used to achieve a matt finish on serving trays. It is also a good tool for manual finishing of profiled parts or for processing cutlery.

Osborn polishing compounds Athos RT5 or Langsol 1067 perfectly complement these brushes.

Treatments

Osborn cloths are often mill-treated (at source) according to our specific demands, to make them stiffer or more flexible, longer wearing or to perfectly suit the Osborn polishing compounds. Alternatively finished buffs made from cloth or combinations of cloth and sisal web, are dip-treated for extended service life, greater hardness or flexibility. Check out the various options.

Dip Treatments

Specially developed in the Osborn labs, dip treatments extend service life, make the buffs harder or increase compound retention.

All dip treatments are water based and therefore environmentally friendly, Osborn does not use solvent treatments. Using high pressure vacuum equipment, the treatment is equally and thoroughly distributed through the buff and then allowed to dry for several hours.

Type	Colour	Hardness	Sisal cord	Sisal cloth	Sisal web	Tampico fibre	Cotton cloth
VI4	Dark green	10	X	X	X		
H5	Yellow	6	X	X	X		
H5A	Blue	3	X	X	X		
8S	Dark yellow	2	X	X	X	X	X

Cloth Buffs

An extensive range of different cloths in natural or mill-treated form have been developed to meet the demands of the polishing industry.

Waved Cloth Buff

The most resilient Osborn cloth buff. The regular waves fixed around a core, offer stability and a long service life. Despite the high density of the material, the construction still offers a cooling effect. Waved buffs are the tool of choice when there is little or no possibility of oscillation.

Waved Cloth Buffs with Unipol 8660 or Langsol P120 compounds are popular for polishing flat parts and pots & pans.

Pleated Cloth Buff

The flat, regular pleats offer an excellent surface for retention of Osborn liquid and solid compounds. The hardness and flexibility of this buff depends on whether a mill-treated cloth, a standard cloth or a raised cloth is selected, this plus the choice of Osborn compound determines the polishing results.

Pots & pans require softer cloths plus Unipol 6147/3 or Unipol 0001 for that perfect final finish. Pleated Cloth Buffs are particularly suitable for robotic operations and also for manual polishing.

Airflow Cloth Buff

The standard ventilated buff, suitable for almost every step in the polishing process. Various qualities of mill-treated or grey cloth can be selected depending on the results required. The irregular folds fixed to a metal clinch ring, form a flexible and economical buff. Buffs can be used individually or mounted on a wide shaft, depending on the equipment available. All grades of material can be matched to the Osborn polishing compounds.

Harder cloths for cutting with Unipol 8660 or lighter cloths for polishing with Unipol 6968.

Airflow Mini Cloth Buffs in diameters of just 100mm are available, a perfect finishing tool for cutlery together with Langsol 6147/3 or Unipol 0001.

Cloth Mop

Discs of material are layered and stitched to a required width. Layers are arranged such that any fraying is minimal. By varying the grade of cloth and the stitching, different hardness's can be determined.

Cloth mops are often used for robotic and manual finishing processes on car components and other stainless-steel parts with uneven surfaces. In this case solid compounds are used either in the form of sized bars for robots or smaller hand size bars.

Cloth Types

Allow our experts to advise you on the most suitable cloth types for your specific polishing process.

Type		Characteristics	Application
Treated Cloth	301J	Treated yellow cloth, thin but dense weave	Cutting
	TT	Treated orange cloth hard dry	Cut & Colour
	BSKY	Treated blue cloth, flexible and resilient	Cut & Colour
Grey Cloth	308	harder cloth - high warp & weft count	Cutting
	298	hard cloth - quite flexible	Polishing and cutting
	293	medium -hard cloth - quite dense	Polishing and cutting
	290	medium cloth - quite dense	polishing
	215	soft - medium cloth	Polishing
	202	soft - medium high quality cloth	High end finishing
	101A	soft, standard cloth	Finishing
	101B	soft, open end cloth	Finishing
Raised Cloth	206SG	dense double brushed cloth	Colouring
	MO5	standard double brushed	Colouring
	MO4	hard-soft cloth - one side brushed	Polishing
	FLANELA	economical brushed cloth	Colouring

Abrasive Non wovens

Abrasive non wovens consist of tangled nylon and/or polyester web with different types of abrasive grit particles resin bonded to the fibres. The material has an open and flexible structure, as it wears new abrasive is exposed to create a uniform and consistent finish, whether on a flat or slightly profiled surface. Abrasive grit particles are usually Silicon Carbide or Aluminium Oxide. The material can be used in both wet and dry operations.

LIPPROX® Wheel

Non woven abrasive web is wound around a core and specially treated, resulting in a consistent hardness and level of abrasion over the life of the product. This convolute product is perfect for light deburring. An arrow indicates the direction in which the Lipprox® Wheels must be used.

LIPPRITE® Wheel

Non woven abrasive flaps are bonded radially to a phenolic tube. Hardness can be varied by increasing or decreasing the number of flaps. The three-dimensional open web ensures a self-cleaning action, for easy removal of surface contamination. Depending on the process, a technically defined surface result can be achieved or a visual surface. Lipprite® Wheels are extremely versatile in satin finishing operations.

LIPPRITE® Roller

Lipprite® Rollers are perfect to create a defined satin finish on stainless steel sheet. Rollers are available up to 2000 mm wide and can be supplied with dynamic balancing. Suitable flatbed equipment is required to mount these large rollers.

Waved Non Woven Buff

The waved construction allows for a high-density buff with minimal flexibility, an advantage when good cutting action and a uniform surface is required. This buff is suitable for all satin finishing operations, especially when equipment does not allow for oscillation.

Airflow Non Woven Buff

Usually 4 layers of non woven are fixed to a metal clinch ring. The irregular folds offer a versatile satinising tool that performs best when minimal pressure is applied, this in turn increases the surface life of the Airflow. This is a highly economical buff.

Rolls, Discs and Handpads

For manual operations, Osborn offers a selection of rolls that can be cut to width as required. Alternatively, stamped discs and standard hand-pads are available.

Abrasives Non Woven Types

A selection of the most standard non woven types for the steel and stainless-steel industry.

Osborn		FEPA	St. 1.4542	
Type	**Grade**	**Norm**	**Rz µm**	**Ra µm**
A2	A Coarse	AL_2O_3 80	4.5-6.5	0.60-0.66
A4	A Medium	AL_2O_3 120	3.0-4.8	0.40-0.64
A6	A Fine	AL_2O_3 180	1.8-3.0	0.24-0.40
A7	A Very Fine	AL_2O_3 240/320	1.2-2.0	0.15-0.25
S4	S Medium	SiC 120	3.0-4.8	0.40-0.64
S6	S Fine	SiC 180	1.8-3.0	0.24-0.40
S7	S Very Fine	SiC 240-320	1.2-2.0	0.15-0.25
S8	S Super Fine	SiC 500	0.8-1.5	0.13-0.20
S9	S Ultra Fine	SiC 800	0.4-0.7	0.06-0.10

Coated Abrasives

Osborn offers a range of coated abrasive tools, making the most of the best materials on the market and our manufacturing expertise.

Coated Abrasive Flap Wheels

Tightly packed coated abrasive flaps arranged around a core, make an effective grinding tool prior to polishing. Round parts, tubes, pots & pans or even the sole of an iron benefit from this product, with its long life and ability to continually reproduce the same surface when compared to coated abrasive belts.

Small Abrasive Flap Wheels with Shank

Small abrasive flap wheels on a 6 mm shank are available in non-woven, coated abrasive or a combination of both. They are suitable for use on power drills and high speed machines.

These wheels reach areas that are difficult to access. They adapt well to contours and produce a smooth uniform satin finish.

Type and Grit

Grit	40	60	80	120	150	180	220	240	280	320	400
X - standard	X	X	X	X	X	X	X	X		X	
J - flexible				X	X	X	X	X		X	X

Don't forget that you will find a huge range of Abrasive Cutting Discs, Abrasive and Wire Brushes in the Osborn range. See www.osborn.com.

Accessories

Metal Centreplates, Nylon and Aluminium accessories can be used to reduce the inside diameter of Buffs.

Centreplates

Centreplates with ventilation holes are required to reduce the inside diameter of buffs to a bore size that suits the shaft on to which they are to be mounted. Metal centreplates are re-usable.

Interchangeable Metal Adapters

Small centreplates are specifically to reduce the buff inside diameter of 31.75 mm to a smaller size.

Nylon Centreplates and Spacer

Nylon centreplates are used to reduce the inside diameter of the buff, they can also be supplied as a combination of centreplate and spacer for quick and efficient mounting.

Mandrill

Mandrills in 6 mm are available to clamp polishing or satin finishing buffs with an inside diameter of 10 mm to 100 mm. Parts can then be used on a power drill. Mandrills are intended for repeated use.

The Right Combination for Each Step of the Process

Osborn knows that every set-up is different, whether finishing in one step or more, Osborn tools and compounds complement each other throughout the process.

Pots and Pans

	Grinding	Cutting	Polishing	Colouring	Satin Finish
Buffs	Coated Abrasive Flap Wheel	Waved Sisal Cloth Buff	Waved Cloth Buff	Pleated Cloth Buff	LIPPRITE®
			Airflow Cloth Buff	Waved Cloth Buff	LIPPROX®
		Sisal Buff	Airflow Cloth Buff	Waved Cloth Buff	
Compounds		Autolin SAT	Unipol 8660	Langsol 6147/3	
		Unipol 8660	Langsol P120	Unipol 001	

Cutlery

	Grinding	Cutting	Polishing	Colouring	Satin Finish
Buffs		Airflow Sisal Cord Buff	Airflow Sisal Cord Buff	Airflow Mini Cloth Buff	LIPPRITE®
		Airflow Mini Sisal Buff	Airflow Mini Cloth Buff		LIPPROX®
			LIPPRITE®		
			LIPPROX®		
Compounds		Autolin SAT	Unipol 8660	Langsol 6147/3	
		Unipol 8660	Langsol P120	Unipol 001	

Sinks

	Grinding	Cutting	Polishing	Colouring	Satin Finish
Buffs		Cup Brush Tampico	Cup Brush Tampico		
		Roller Brush Tampico	Roller Brush Tampico		
Compounds		ATHOS RT5	Langsol 1067		

Knives

	Grinding	Cutting	Polishing	Colouring	Satin Finish
Buffs		Pleated Sisal Cloth Buff	Pleated Sisal Cloth Buff		
Compounds			Autolin 741		

Stainless Steel Sheet

	Cutting/Polishing	Polishing/Colouring	Satin Finish
Buffs	**Airflow Cloth Buff**	**Airflow Cloth Buff**	**LIPPRITE®**
Compounds	**UNIPOL 8660**	**UNIPOL 6968**	
	UNIPOL 6772	**UNIPOL 0001**	

Recommended Cutting Speeds

Material	Grinding	Cutting	Polishing	Colouring	Satin Finish
stainless	25-35	35-40	30-35	15-25	13-18
steel	20-30	35-45	30-35	15-25	13-18

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