Polishing Luxury Industry

Polishing Solutions for Premium Surfaces

osborn.com

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.

Stainless Steel

Stainless steel is not only valued for its strength and durability — it also has an important role in the luxury industry. High-quality stainless steel serves as the base material for premium accessories and timepieces.

Finishing Stainless Steel Parts

Osborn abrasive tools, polishing tools and compounds are applied after grinding, to achieve a whole range of different finishes. 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.

Brass

Brass parts serve as the base for a wide variety of components such as chandeliers and decorative elements used in luxury interiors. Luxury elements are often made from brass that must be polished prior to a subsequent plating process.

Finishing Brass Parts

The range of polishing compounds and polishing tools are specially tailored for brass parts, to ensure a finish of the highest level and absolute reproducibility. Depending on current trends and customer requirements, the final surface can be polished or finished to a high-gloss shine.

Precious Metals

Precious metals are made from naturally occurring metals. Due to the rarity of these metals, they are generally high in value. The most common precious metals include: gold, silver, platinum, palladium and titanium. Due to their natural lustre, these metals differ from other base metals and are therefore the material of choice for jewelry.

Finishing Precious Metals

Precious metals, by their very nature and cost, are used in the production of luxury items. The polishing process therefore brings a strong added value to these products. Watchmaking, jewelry, luxury parts, high end electronic parts and medical implants all depend on the special characteristics of precious metals. Polishing processes are especially selected to achieve a perfect gloss without any aggressive action that could remove too much material or damage the contours of parts that are often very small.



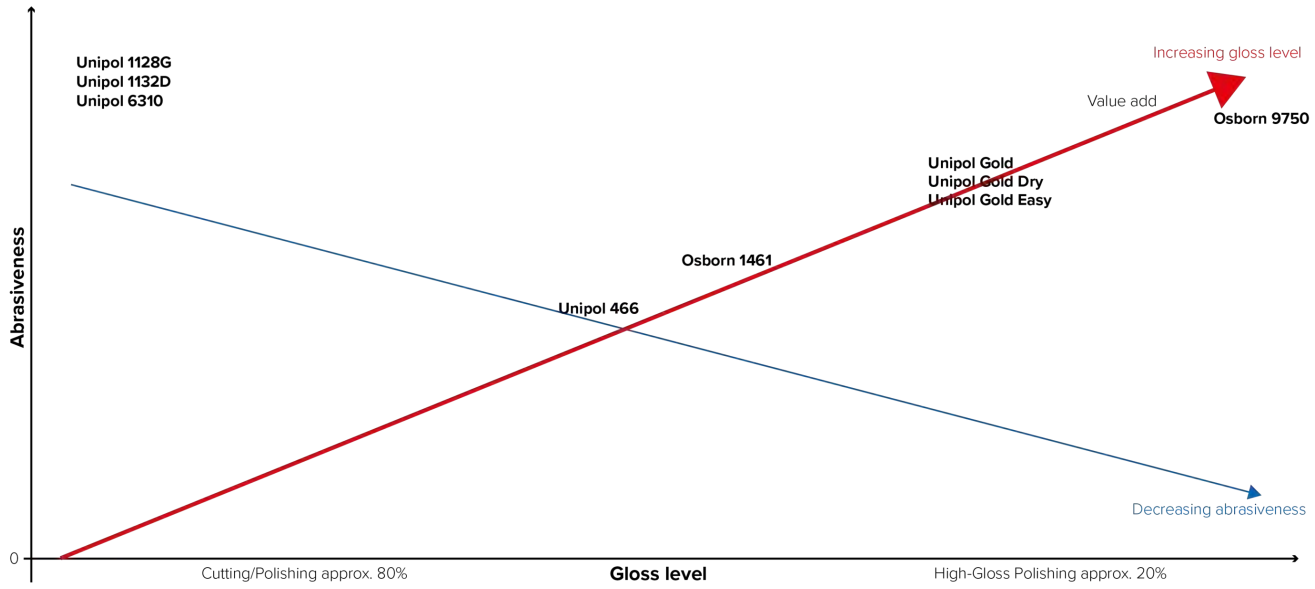


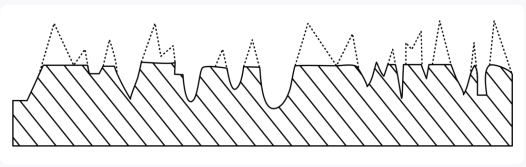

Polishing Steps

When it comes to finishing of luxury parts like buckles, accessories or watches, achieving a flawless surface is an art that requires precision, experience, and the right process.

Our polishing process ensures exceptional surface refinement, enhancing the elegance and character of each object:

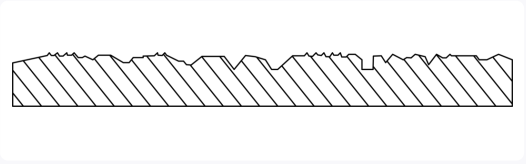
Value add Process





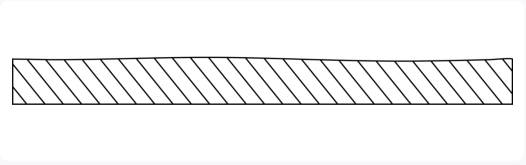
Cutting (Pre-Polishing)

Cutting is the first step in a three-step polishing process.
Defects and deep scratches on the surface of the workpiece are removed.



Polishing

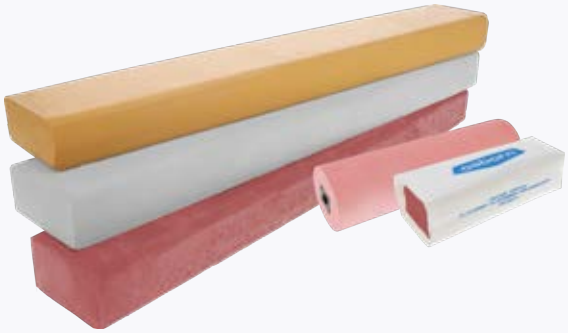
Polishing is the second step in a 3-step polishing process.
Here, cut marks and traces from the cutting process are removed and the surface is levelled.



Colouring/High-Gloss Polishing

Creating a high-gloss surface, colouring is the third and final step in a 3-step polishing process.

Solid Polishing Compounds



Ingredients:

- Free of animal fat and animal tissue
- Free of contamination or odour
- No hydro carbons
- No solvents or silicia
- Non-hazardous

Storage Recommendations:

- Store the compound in cool and dry conditions at approx. 20°C (for shorter periods at 5°C-30°C)
- Storage area should be well-ventilated to avoid temperature fluctuations
- Boxes should remain closed to prevent contamination and the absorption of humidity
- Observe shelf life and check our guidelines mentioned on our compound labels

Do not store together with:

- Explosive or hazardous substances
- Oxidizing substances
- Radioactive substances
- Food or feeding substances

Protect from:

- Frost
- Heat
- Sunlight or UV radiation
- Humidity
- Rainwater
- Damage

Recipe	Manual Polishing	Automatic Polishing	
	S-Box	Sized Bars	Round Bars
	(approx. 400 gr.)	(approx. 900 - 4.500 gr.)	(approx. 900 gr.)
6310	•	•	•
1128G	•	•	•
1132D	•	•	•
466	•	•	•
1461	•	•	•
OURO	•	•	•
Unipol Gold	•	•	
9510 Gold Easy	•	•	•
9495 Gold Dry	•	•	
Eclat	•	•	•
Osborn 9750	•	•	

Additional compound types are available upon request.

Trusted Compounds.

Luxury products are finished in a manual or automatic operation by experts. Osborn recommends the following solid compounds for this process. Since non-ferrous metals or stainless steel may form the basis of high-end products, suitable compound recommendations are included.

Stainless Steel								
Recipe	Colour	Free of animal fat	Cutting	Polishing	Colouring	Fat	Cut	Colour
6310	Grey	✓	•			3	7	5
1128G	Dark pink	✓	•			5	6	3
1132D	Dark pink	✓	•			5	6	3
466	Red	✓		•		4	5	6
1461	White	✓			•	2	3	8
OURO	Pink	✓			•	2	2	9
Unipol Gold	Gold	✓			•	1	1	10
9510 Gold Easy	Cream	✓			•	1	2	10
9495 Gold Dry	Yellow	✓			•	1	2	10
Eclat	Yellow	✓			•	1	1	11
Osborn 9750	White	✓			•	1	2	12

Brass								
Recipe	Colour	Free of animal fat	Cutting	Polishing	Colouring	Fat	Cut	Colour
6310	Grey	✓	•			5	8	5
1128G	Dark pink	✓	•			5	7	3
1132D	Dark pink	✓	•			5	7	3
466	Red	✓		•		6	7	5
1461	White	✓			•	3	4	8
OURO	Pink	✓			•	3	3	8
Unipol Gold	Gold	✓			•	3	2	9
9510 Gold Easy	Cream	✓			•	2	2	10
9495 Gold Dry	Yellow	✓			•	1	3	10
Eclat	Yellow	✓			•	1	3	10
Osborn 9750	White	✓			•	1	3	11

Precious Metals								
Recipe	Colour	Free of animal fat	Cutting	Polishing	Colouring	Fat	Cut	Colour
1461	White	✓		•		3	4	7
OURO	Pink	✓			•	3	3	8
Unipol Gold	Gold	✓			•	3	2	9
9510 Gold Easy	Cream	✓			•	2	2	10
9495 Gold Dry	Yellow	✓			•	1	2	10
Eclat	Yellow	✓			•	1	2	10
Osborn 9750	White	✓			•	1	2	12

Performance 1 = low / 12 = high

Sisal and Sisal Cloth Buffs

Sisal is a natural material, perfect for the first steps in the polishing process. Sisal buffs are aggressive and often follow a grinding step with coated abrasive or non-woven tools.

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.

Used together with Osborn cutting compounds, these buffs are an excellent cutting tool for contoured parts.

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 small rotary table machines.

A special soft treatment: extends service life and results in a more uniform finish. 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.

Together with Osborn cutting compounds, Sisal buffs may be used in the cutting process of stainless steel or brass, which form the base of buckles, clasps and even screws required for luxury products.

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.

Airflow Sisal Cord Buffs are used primarily in the polishing of shaped parts.

Sisal Cloth Mop

Discs of treated or gray cloth are twisted and layered with sisal web to form an economical and low cost cutting tool.

Mops are the product of choice when there are limitations on diameter used.

Sisal Types

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

Type		Characteristics	Grade
Sisal Web	82B	dense structure, thin yarn	light/medium
Sisal Cloth	82B/301J	suitable for Pleated Buffs	medium/hard
	82B/101B	suitable for Pleated and Airway Buffs	light/medium
Sisal Cord	32	two cords twisted	light
	48	eight cords braided	heavy

Sisal Web

Sisal Cloth (Sandwich)

Sisal Cord

Cloth Buffs

All Osborn buffs are made with top quality based cloth, ensuring their resilience and long service life.

Pleated Cloth Buff

The flat, regular pleats offer an excellent surface for retention of Osborn 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.

Pleated Cloth Buffs are particularly suitable for manual polishing.

Airflow Cloth Buff

The standard ventilated buff which is suitable for almost every step in the polishing process.
Various qualities of mill-treated, grey or light 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 shaft, depending on the available equipment. All grades of material can be matched to the Osborn polishing compounds.

Harder cloths for cutting with Unipol 1128G or lighter cloths for polishing with 466.
Airflow Mini Cloth Buffs in diameters of just 100mm are available, a perfect finishing tool small parts.

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 used in manual finishing processes on small parts like buckles or clasps.

Loose Discs

Loose discs are available in all cloth types indicated on the next page. They are supplied in all diameters required for standard equipment.
Loose discs adjust to different shapes and contours. Each single layer is flexible and able to fit into the narrowest of parts.

Loose discs can be mounted together to form whatever width is required. They are also suitable for tapered shafts.

Cloth Types

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

Type	Reference	Colour	Characteristics	Application
Treated Cloth	301J	Yellow	Thin but dense weave	Cutting
	TT	Orange	Hard dry cloth	Cutting & Polishing
	BSKY	Blue	Flexible and resilient	Cutting & Polishing
	3260	Grey	Medium heavy, slightly elastic cloth	Polishing
Grey Cloth	298	Grey	Hard, quite flexible cloth	Cutting & Polishing
	290	Grey	Medium, quite dense cloth	Cutting & Polishing
	101A	Grey	Soft, standard cloth	Polishing
	202	Grey	Soft medium high quality cloth	Polishing
	101B	Grey	Soft, open end cloth	Polishing
	264E	Grey	Medium, densely woven cloth	Polishing
	5300	Grey	Very light, densely woven cloth	Polishing
Raised Cloth	MO4	Grey	Hard-soft cloth, one side brushed	Polishing
	MO5	Grey	Standard double brushed cloth	Colouring
	206SG	Grey	Very soft molton	Colouring
	M310	White	Fine and soft cotton	Colouring
Light Cloth	1120	White	Soft cotton	Polishing
	5310	White	Light cloth	Polishing
	6420	White	Light cloth	Colouring
	6450	Grey	Very fine cotton	Colouring
	6570	Grey	Very fine cotton	Colouring

Did you know that the different types of cloth not only vary in colour, but that the most important factor is how the cloth has been treated? There is a solution for every possible application.

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. It achives 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 wheel 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 or a visual surface can be achieved. Lipprite® Wheels are extremely versatile in satin finishing operations.

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 are required.

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.

Did you know that LIPPRITE® wheels in special A medium material can replace up to two belt steps in the grinding process? This offers the advantage of a long-lasting tool with a reduced cycle time.

Abrasives Non Woven Types

A selection of the most standard non woven types.

Osborn		FEPA
Type	**Grade**	**Norm**
A2	A Coarse	AL_2O_3 80
A4	A Medium	AL_2O_3 120
A6	A Fine	AL_2O_3 180
A7	A Very Fine	AL_2O_3 240/320
S4	S Medium	SiC 120
S6	S Fine	SiC 180
S7	S Very Fine	SiC 240-320
S8	S Super Fine	SiC 500
S9	S Ultra Fine	SiC 800
S10	S Ultra Fine	SiC 1000

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 and tubes benefit from this product, with its long life and ability to continually reproduce the same surface.

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

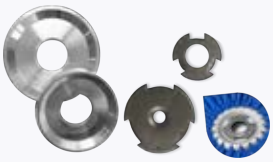
Grit	40	60	80	120	150	240	320
Standard	•	•	•	•	•	•	•

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.

Mandrel

Mandrels 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. Mandrels are intended for repeated use.

The Right Combination for Each Step of the Process

No two customers are alike. Osborn experts are always keen to talk and identify tools, compounds and parameters that will achieve the best possible result on a given part. For now, we should just like to present some examples.

Brass

	Cutting	Polishing	Colouring
Buff	Cloth Mop TT	Pleated LM EK 6420	Loose discs M310
Compound	1132D	1461	Ouro

Stainless Steel

	Cutting	Polishing	Colouring
Buff	Sisal cotton Stiched Mop	Lose discs 6420	Loose discs M310
Compound	1128G	1461	Eclat

Recommended Cutting Speeds (m/s)

Material	Cutting	Polishing	Colouring
Stainless Steel	25-30	20-25	15-20
Brass	25	16-22	13-18
Precious Metals	-	16-22	13-18

Finish. First.

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General

The tools shown in this catalogue, and the information on delivery scopes, appearances, performances and dimensions, correspond to information available at the time of print. We are enhancing our products continually. We reserve the right to make changes to products and prices.

In the event prices are printed in the catalogue, all previous price lists are rendered void on publication of this catalogue. All prices are recommended retail prices in Euro per piece. VAT, packaging, transport/postal charges and insurance are extra. Our general terms and conditions apply for all orders.

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