

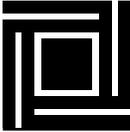
CASWELL

AN INTRODUCTION TO BUFFING AND POLISHING



CASWELL
ELECTROPLATING IN MINIATURE

7696 Route 31, Lyons NY 14489
<http://www.caswellplating.com>
(315) 946-1213

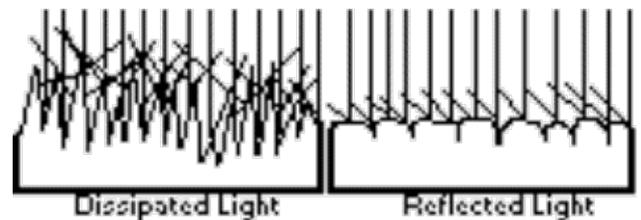


AN INTRODUCTION TO BUFFING & POLISHING

Buffing and polishing using wheels and 'compounds' is somewhat like using wet and dry sanding paper, only much faster. Instead of using 'elbow grease' you will be using the power and speed of an electric motor.

The edge, or face, of the wheel is the 'sanding block', which carries a thin layer of compound which is the sandpaper. Varying types of wheel are available, and the different grades of compound are scaled similar to sandpaper. The compounds are made from a wax substance which has the different abrasive powders added to it. When this hard block is applied to the edge of a spinning buffing wheel, the heat from the friction melts the wax, and both wax and abrasive are applied in a thin slick to the face of the wheel.

The objective of buffing and polishing is to make a rough surface into a smooth one and, of course, each work piece will be in a different condition, so will need different procedures. Imagine the surface magnified thousands of times, it will look like jagged mountains and valleys. By repeated abrasion, you are going to wear down those mountains until they are old, soft, rolling hills! Then they will not dissipate the light, but reflect it. It is the reflection that makes the buffed part appear shiny.

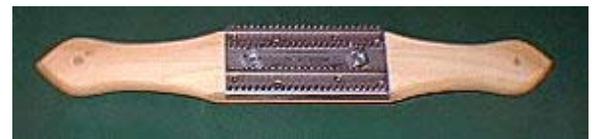


TRICKS OF THE TRADE

Repairing small dents.

Sand the inside of the part with emery paper. This will show you exactly where the dent is. Using a piece of end grain wood as a block, gently beat out the dent with a hammer.

Clean your buffing wheels with a WHEEL RAKE
Offer the jagged blade to the edge of the spinning wheel, and work it across the face until the wheel looks bright and fluffy once more. This action, done periodically, will remove entrapped metal particles, which could scratch a more delicate part.

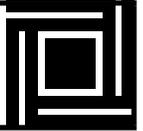


Eliminating 'Swirl' Marks

Swirl marks caused by buffing in the final stages can easily be removed by wetting the part with a damp cloth, then dusting with a powder such as:- Whiting, Talcum Powder or Corn Starch, then buff on your wheel again until the swirls disappear.

One Wheel For One Compound

Applying different compounds to the same wheel only causes problems, because you end up with a mixture of abrasive surfaces, and metal deposits left over from the more abrasive operation. These microscopic particles only scratch the surface, destroying any benefit gained by the finer compound.



To remove excess compound from the work, apply a small amount of talc to the work and the wheel, then rebuff.

Applying Compound

LITTLE & OFTEN is the rule. Too much compound will reduce the effectiveness of the cutting action, because the surface will become TOO greasy and over lubricated. This can often be seen by the presence of a black slick of compound that seems to reveal around the work piece. Apply compound to the wheel for approx 1 second. Any more is wasted.

CHOOSING THE RIGHT WHEEL

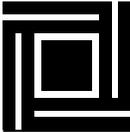
There are different types of wheels and these have different effects on the compound they are used with. For example, the SISAL wheel is a coarse 'rope like' fiber, which frays out to make a sort of brush. These fibers have a very beneficial effect on scratched and rougher surfaces, almost stroking them smooth. When used with a coarse 'EMERY' compound, they 'cut' the metal down very rapidly. You could use this compound on a SPIRAL SEWN wheel and it would work, but the job would take much longer because the softer SPIRAL SEWN wheel is not going to thrash the metal so aggressively.

As you progress through the buffing compounds, you will change your buffing wheel, ending up using the softest polishing wheel, the CANTON FLANNEL with the least abrasive BLUE or RED compound which only polishes, it has no cutting action.

So, depending on the job in hand, you will determine which abrasive compound and wheel you are going to use first, then step down through the stages until YOU are satisfied with the results. Compounds are made from a mixture of fine abrasive fillers and a sort of greasy wax. The compound is melted, by friction heat, as the bar is pressed to the revolving wheel. This applies a thin layer of abrasive, 'glued' onto the cloth wheel, making it similar to an emery paper, only much faster!

Do not apply the compound after the workpiece, or on its own. This wastes material and is much less efficient.

By applying the material before the workpiece, you actually use the workpiece to force the compound into the buff. This is much less wasteful, more efficient and will actually speed up your buffing times.



Apply small quantities of compound, by approx. 1/2 - 1 second applications to the wheel. An old washing machine motor (1/8hp @ 1800 rpm) is ideal as the slower rpm lessens the chance of burning or melting the plastic.

Motor Size	Wheel Diameter				
	4"	6"	8"	10"	12"
1/6 hp	1"	5"	-	-	-
1/4 hp	1.5"	1"	5"	-	-
1/3 hp	2.5"	2"	1"	-	-
1/2 hp	3"	2.5"	2"	1"	-
3/4 hp	4.5"	3.5"	2.5"	2"	1"
2 hp	4.5"	4.5"	4.5"	3"	1.5"

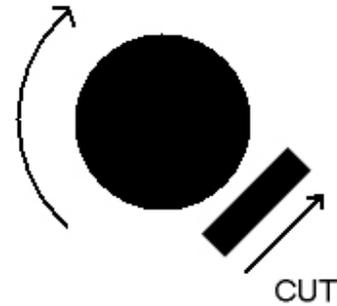
Figures show the THICKNESS of wheels. You may use multiple wheels to make up total permissible width.

CUT AND POLISH MOTIONS

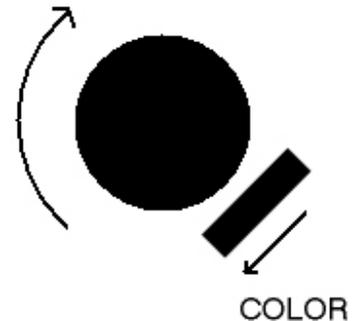
There are two basic buffing motions you should use.

1. CUT MOTION gives you:- SMOOTH SURFACE, SEMI-BRIGHT & UNIFORM.

The workpiece should be moved AGAINST the direction of the wheel, using a MEDIUM to HARD pressure.



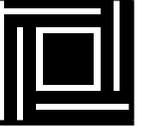
2. COLOR MOTION gives you:- BRIGHT, SHINY & CLEAN SURFACE. The workpiece should be moved TOWARD the direction of the wheel, using a MEDIUM to LIGHT pressure.



BUFFING SPEED AND PRESSURE

The correct pressure must be applied to the workpiece to provide the best finish economically and safely. Inadequate pressure will give NO buffing action.

Excessive pressure will cause the buffing wheel to slow down or actually collapse. This can also result in burn marks on the workpiece.



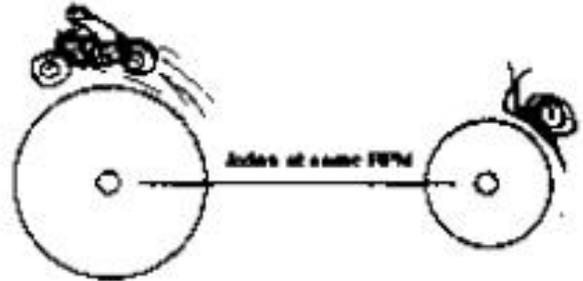
BUFF RUNNING SPEEDS

For best results your wheel should maintain a surface speed of between 3600 & 7500 Surface Feet Per Minute. (SFPM). The higher your speed, the better and quicker your results.

Formula for calculating surface speed of wheel in SFPM.

SFPM = $1/4 \times$ diameter of Wheel \times RPM (revs of spindle per min.)

Therefore an 8" wheel @ 3600 RPM = $2 \times 3600 = 7200$ SFPM.



Spindle speeds can be increased by a step pulley on a motor shaft.

For the workshop where only the occasional piece of work needs to be buffed, an economic alternative to purchasing a special machine is to simply adapt a bench grinder. Whilst this does not have the extended shaft, it can still do a formidable job.

All the guards need to be taken off and the grinder mounted on the edge of a workbench. This will allow access to the wheel from many angles. Alternatively, a small used washing machine motor can be used. With access to a lathe, a simple pointed taper can be made to fit over the shaft. Then the buffing wheels can be aimed on to the point. On smaller pieces, an electric drill with one of our shank mounted buffs will do an excellent job.

Some of our customers have even placed a large hand grinder in a vice, then changed the grinding wheel for a buff. These machines usually have very high speeds with good power, so they should be considered as another option.

Whenever you are making up something to do a buffing job, your prime consideration should be your safety.

If the buff pulls the piece from your hands, you should consider where it is likely to go. Remember it will be traveling at a fair speed, so no one should be in its way!

Is the machine mounted safely? It will have to stand a fair amount of abuse, so make sure it is WELL fastened down.

DISCLAIMER - Buffing machines can be dangerous. We accept no liability for their use/misuse or for accidents caused by the removal of guards.

SAFETY FIRST

There are two distinct areas on a buffing wheel -

THE UNSAFE AREA which is rotating towards the workpiece.

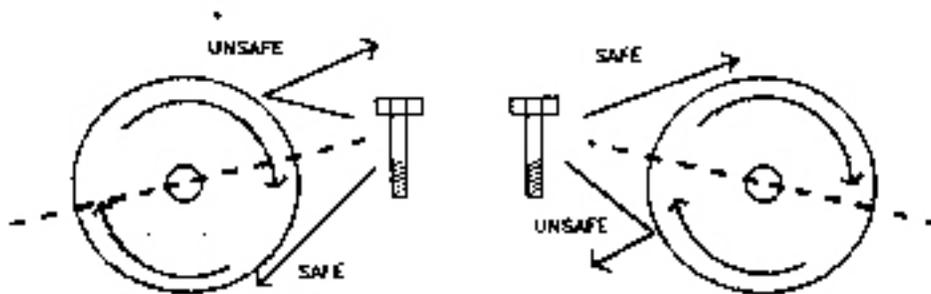
THE SAFE AREA which is rotating away from the workpiece.

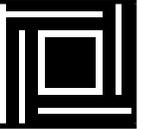
The division of these two areas is marked with the dotted line on the above drawings. The workpiece must only be applied to the area of the buff that is rotating AWAY from the workpiece.

You should ensure that you are completely aware which area is which, otherwise you could have a serious accident. Objects being thrown away from a buffing wheel can be traveling at very high speeds, which can result in some very unpleasant and potentially deadly accidents!

When buffing parts have sharp corners, edges or hooks, they should be offered to the wheel with the edge flowing away from the buff, so the part does not catch.

Operators should ALWAYS wear SAFETY GOGGLES, APRON, GLOVES and DUST MASK.





DETERMINING GRIT SIZES of SANDPAPERS and BUFFING COMPOUNDS

We often get asked, ‘Which grit should I use first?’ Unfortunately, there is no cut and dried answer to this, because it really depends on the condition of the part. So, let's discuss some examples:

1) Aluminum Side Cover with one deep scratch.

To successfully remove the scratch, ALL of the material around the scratch has to be disposed of. In our example, this means a lot of aluminum! Initially, we are concerned with getting as much aluminum sanded off as quickly as possible, so we would use the coarsest abrasive available, say a 40 grit sandpaper on a flat block. It would be of NO USE to try to buff out this deep scratch with a buffing wheel, because the wheel would remove more material from the hole, as well as the surrounding areas. By keeping the abrasive on a flat block, no further material can be removed from the hole.



Surface removed to:

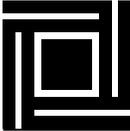


As the scratch is lessened, the grit size of paper is reduced from 40, to 80, 120, 240, 320 and finally 600. Once the surrounding material is removed, then the actual polishing can be started.

Buffing compounds will be determined by the size of the scratches. If you have used a 600 grit paper, you may like to proceed directly to a white buffing compound. If fine scratches are visible, then you'll need to ‘back off’ and go to the black compound before retrying the white.

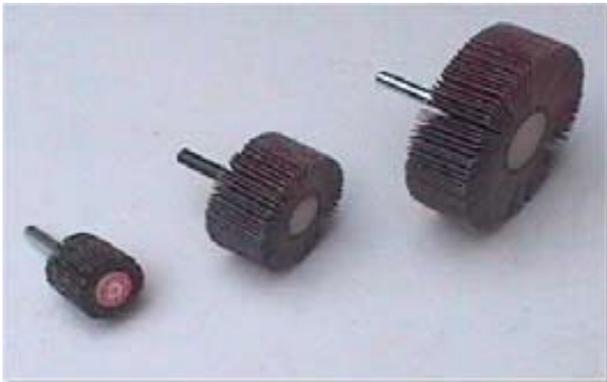
2. Aluminum Side Cover - just dull.

Obviously, it would be a step backwards to start treating this piece by using the technique in our first example. As there is no large metal content to be removed, you could virtually dispense with the sandpapers and move directly to the polishing aspect of the part. The Brown buffing compound with a spiral sewn wheel could be employed to see if the shine is good enough. If not, then use a black compound, and then rework the part using the brown compound.



3. Aluminum Wheel Casting.

Many wheels are prepainted, directly over a rough sand casting. Remove the paint using VHT Stripfast, to expose the aluminum. The 'pimples' caused by the sand cast have to be removed to flatten the metal ready for polishing. Because of the difficult contours of the wheel, it is virtually impossible to sand with a flat block, so this is where Greaseless Compound comes in. Start off with the 80 grit, using a spiral sewn wheel or, for the awkward areas, a felt bob. Then proceed through the various grit sizes of Greaseless, until the metal is smooth, all 'pimples' are removed and an even 'flat' finish is achieved. The polishing should only begin once all traces of 'pimples' are gone. Use Black Compound for most of the polishing work, and finally, on a fresh or cleaned wheel, buff lightly with the Brown compound.



FLAP WHEELS

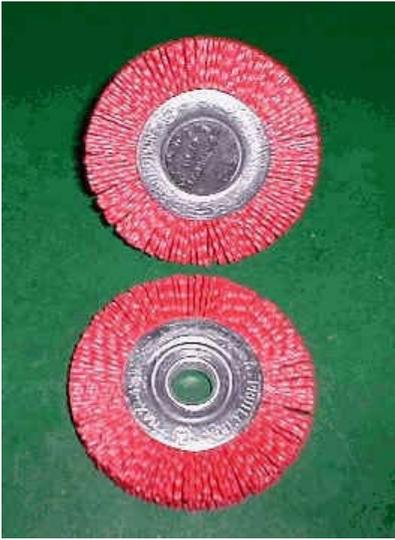
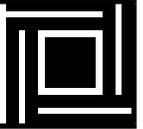
These tightly packed and bonded sheets of resin bonded aluminum oxide are great for sanding, shaping and polishing all types of materials.

Especially good for removing paint and rust. Best used on an electric drill or the Flexible Shaft.



SANDING DRUMS

Sanding drums are self expanding rubber spindles with hardened metal arbors and nuts. Precision manufactured to close tolerance, providing smooth and even performance. Use for: sanding, shaping, grinding, finishing, polishing. Use on: wood, metal, plastic, fiberglass, rubber, glass or stone. Use with: portable drill or grinder, drill press, lather, flexible shaft, bench grinder. Especially useful for surfaces that are curved or irregularly shaped.



ABRASIVE NYLON WHEELS

Strands of nylon impregnated with a tough aluminum oxide abrasive. Removes old paint, rust, weld scale and burns. Cleans and polishes. Is ideal for wood because it cleans without gouging. It never loses its abrasive power, or its shape. Safe on skin! Max 2500 rpm

Generally speaking, you will start off with a course abrasive compound, then change to a medium compound and finally a fine compound, just as you would using sandpaper.

THE SCRUBBER WHEEL

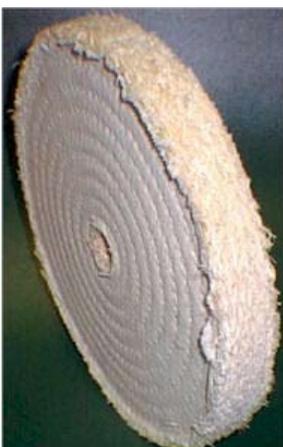


SCRUBBER wheels are constructed from a type of material, impregnated with a fine abrasive powder. The resulting combination being very flexible, yet very aggressive.

SCRUBBER wheels remove rust, paint, scratches, minor blemishes and old paint.

A 'featherlite' touch is required with these wheels, unlike an ordinary buffing wheel. Heavy pressure will result in premature wear of the wheel.

THE SISAL BUFFING WHEEL



Sisal is a slender, hard, cellular strand of fiber that has demonstrated its great strength and tough resiliency in the form of binder twine, cord & rope for many years. These qualities, along with its natural abrading and grease absorbing characteristics, provide an ideal buffing wheel fabric. Sisal buffing wheels will provide both polishing and cutting action. They will remove stretcher strains, orange peel, polishing wheel grit lines, light die marks, etc. To effect a fast cut, use a sisal wheel with the Black Emery compound or any of the greaseless compounds.



THE SPIRAL SEWN WHEEL

Spiral sewn wheels are the workhorse of most buffing and polishing jobs. Because the plies of cotton cloth are sewn together spirally, the wheel becomes much harder and more pressure can be exerted on it. This is especially useful when 'cutting' the metal. The faces of these wheels are pre-raked to accept compound immediately.



THE LOOSE COTTON WHEEL

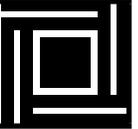
The main purpose of a loose cotton wheel is to polish and cut in a similar manner to the Spiral sewn wheel, except that this wheel, not being tightly stitched together, will 'mush' or collapse, allowing the cotton to get into awkward places more easily. If you have an object with fine details and awkward crevices, then this is the wheel to use.



THE FINGER BUFF

An aggressive wheel, designed to buff irregular contoured metals, especially useful for buffing of checker plate. The treated sewn cloth fingers penetrate into crevices etc. and at the same time reduce friction eat buildup, so reduces the possibility of distorting thin metal panels etc. Use with Greaseless or black emery

compounds The wheel comes with a 5/8" hole in the metal center. 1/2" inserts are available. Fits the Makita type Buffer/Polishers for ultra fast buffing of large surface areas, such as RV's, boats, trailers, trucks, etc.



SISAL ROPE BUFF

With a thickness of 2", this long lasting wheel is an economic alternative to stacking sisal wheels on a shaft.

The fibers are treated and stiff, giving an excellent hard surface for the initial cut to de-burr etc.

Use with Greaseless compounds or Black Emery



MUSHROOM BUFF

Diameters are 2.5, 3.5 & 4.5 inches.
Ideal for buffing contoured shapes such as wheels. Use with any compound on a drill or flexible shaft.



FACER BUFF

Diameters are 2.5, 3.5 & 4.5 inches.
Ideal for buffing the flatter areas, especially wheels. Use with any compound.
Good for using greaseless for removing cast casting marks in aluminum.



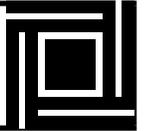
TREATED VENTED BUFFS

These buffs are specially treated to give longer life than standard buffs. They cut and color faster and are vented to keep the workpiece cooler. Hard center allows fast mounting to tapered spindle for quick change. Use with any compound.



UNTREATED VENTED BUFFS

The folded pleats hold more compound and keep the part cooler, resulting in a being twice as fast as a Spiral Sewn wheel. 10" wheels require 3" washers. These wheels are softer than their yellow cousins.



SCRUBBING MUSHROOM BUFFS



Ideal for buffing contoured shapes such as wheels. Scrubber wheels remove rust, scratches, minor blemishes, old paint, and plating.

Use a light touch. No compound is required, as the abrasive is already impregnated in the wheel. Gives metal a “satin” appearance.

1/4” Shaft.

DENIM BUFFING WHEELS

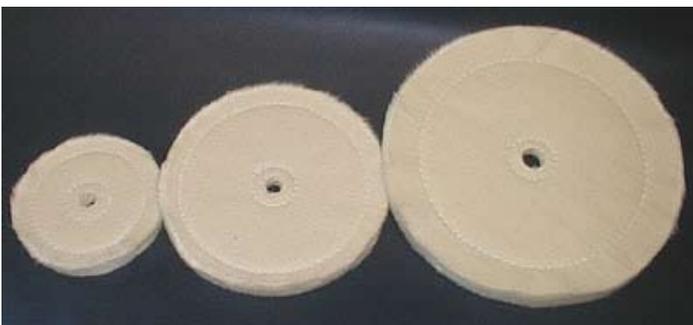


Our newest buffing wheel, the denim buffing wheel, is soft enough for any buffing application that calls for cotton wheels, but, because of the sturdy denim construction, it lasts much, much longer than a cotton buff.

The faces of these wheels are pre-raked to accept compound immediately.

Use With Any Compound

CUSHION BUFFS



These buffs are sewn with two rows to slightly stiffen the buff.

This improves the speed of the final coloring operation, giving you performance somewhere between a spiral sewn and a loose wheel.



TREATED SPIRAL SEWN WHEELS

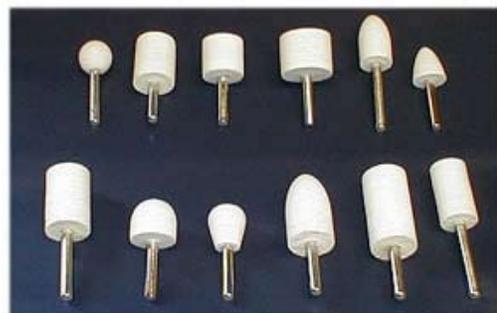
These buffs are specially treated to give longer life than standard buffs. This treatment makes them much harder than regular cotton buffs, which allows the user to exert more pressure onto the wheel and gets the job done faster. Use with any compound just like standard spiral sewn wheels.



STRING BUFF

Thousands of thin cotton string strands will buff all types of plastics, including bacolite, to a shiny surface. The buff is specially designed to keep the plastic cool.

Bring side markers, turn signals, tail light lenses to shiny, like-new condition. Thousands of 1-3/4" long cotton strands reach deep into details to gently polish and shine without overheating and melting plastic. Use in conjunction with our Plastic Glo Compound.



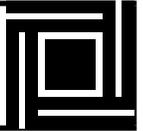
FELT BOBS

Felt Bobs come in a multitude of shapes for all those difficult places to buff and polish. Ideal for polishing carbs, wheels, and heads. Made of a medium hardness felt, these bobs are ideal for use in die grinders, electric drills and air drills. Use with greaseless, or standard buffing compounds, or even convert the bob into a tough Sander by treating it with the Abrasive Wheel Cement system.



CHUCK ADAPTER

This handy accessory turns an ordinary motor into a bench mounted drill. Just attach this adapter any 1/2" right threaded shaft or one of our shaft extenders. The Chuck Adapter is seen here fitted to a shaft extender.



EXPANDER SANDING WHEEL

Cleverly designed to accommodate a sanding belt, the Expander Sanding Wheel allows the user to sand large areas quickly and uniformly. Ideal for sanding engine castings to remove the sand mold marks prior to polishing. The center of this wheel has special adapters to fit shafts of 1/2", 5/8", 3/4" & 1" diameter.

The wheel comes with:

- 2 x 40 Grit Belts
- 2 x 80 Grit Belts
- 2 x 120 Grit Belts

The wheel has a 6 inch diameter, with a 1.25 inch face.



THE ABRASIVE WHEEL SYSTEM



Comprises of a special adhesive, and a tough 80 grit aluminum oxide powder.

Once the adhesive has hardened on the wheel of your choice, (usually a spiral sewn buffing wheel) the wheel is transformed into a tough, yet somewhat flexible grinding wheel, capable of grinding of plating, paint, rust, and smoothing out all metals.

The system is ideal for making felt bobs more abrasive. Using a knife or spatula, the thixotropic adhesive is spread evenly around the face of your wheel. Finally, (see picture) roll the wheel into the abrasive using light pressure, ensuring a heavy pickup of the adhesive



HOURGLASS BUFF

We developed a special buffing wheel that fits straight into a drill chuck. The unique shape allows the buff to rest on the pipe without spinning off.

By simply rotating the drill, all angles of the pipe can be buffed rapidly. The tapered end allows you to get into difficult corners. This buff is ideal for almost any tubing, such as handrails on boats, handlebars, tail pipes etc.

Use with almost any buffing compound, but is especially useful with Blue Begone liquid polish.



INDUSTRIAL FLEXIBLE SHAFTS

The “Ferrari” of the Flexible Shaft. These shafts are crafted to exacting standards by a team of engineers. Turns a bench grinder or buffing machine into a high powered rotary tool. These industrial strength flexible shafts will perform the toughest of jobs. Ideal for buffing aluminum vehicle wheels.



VIBRATORY TUMBLERS

Vibratory tumbling is an economical mass finishing technique which gives you a more uniform finish on large quantities of parts in much less time than standard hand finishing, without the mess. It holds the overall shape of the pieces better and allows you to check the progress of the work without stopping the unit. Compact, yet durable, these vibratory tumblers are donut shaped for uniform polishing & maximum coverage. The heavy polyethylene bowls remove easily and quickly for emptying.

This method of finishing gives a virtual full automation to the buffing process. It is ideal for numerous small items. There are various types of media available, depending on the job required.



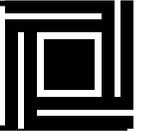
BUFFING MACHINES

Buffing machines used for larger items should ideally be mounted on a stand and bolted to the floor. Long shafts extending out from the motor casing give greater access to the buffing wheels.

If these motors are bench mounted, consider the overall diameter of the wheels, so they do not touch the bench top.

Wear GLOVES, GOGGLES, DUST MASK and NO LOOSE CLOTHING.

REMOVE ALL JEWELRY such as RINGS & WATCHES



SHAFT ADAPTERS



Designed especially for larger buffing & polishing units. The wide shoulder provides plenty of clearance plus ample space for easy movement & positioning of work pieces. Great for mounting larger sized wheels. 6- 1/2" Long. Fits 1/2" Wheel Hole.

These units can be mounted on almost any electric motor, turning it into a buffing machine. Some wheels need to run slowly, at 1800 rpm, so an old washing machine motor and one of these adapters would make an ideal setup, for say, a string buffing unit.



GRINDER BUFFER ADAPTER

This handy accessory fits a 5/8" shaft to extend the stubby shaft out 3" further from the motor body. Shaft size = 1/2" diam. Ideal for Makita machines.

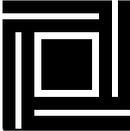
Use for buffing large surface areas such as RV's boats etc.

BENCH MANDREL



Attach these mandrels to an electric motor with a V Belt to make a HIGH QUALITY, low cost work station for various sanding, polishing and buffing operations. Will run wheels up to 1" thick. Features high quality precision grade die cast ball bearing pillow blocks, permanently sealed and lubricated. Threaded shaft ends L/H & R/H

2" diam V pulley (for 1/2 belts) & hex nuts with flanged washers for shaft ends.



BUFFING COMPOUNDS AND THEIR USES

BLACK/EMERY BAR

An emery filled compound which has excellent cutting qualities. Ideal for removing scratches, small pits, thin plate, paint, lacquer etc. We recommend you start almost every job with this material, it will save you hours of work rather than using the less abrasive materials first. It will produce a fair shine. Use with a SISAL wheel for best results.

BROWN/TRIPOLI BAR

A tripoli compound, known well for its general purpose use for buffing and polishing on soft metals such as, brass, copper, aluminum, pot metal.

WHITE ROUGE BAR

This compound will cut lightly, bringing most harder metals to a brilliant shine. Designed for polishing chrome and nickel plate, stainless steel and ordinary steels.

BLUE ROUGE BAR

This compound is a drier, less greasy version, of what is commonly known as jeweler's rouge. It had no cutting action, and can therefore be used on thin gold and silver plates without damage. It is ideal for bringing up an extremely high quality polish on you finest pieces. It is also the perfect compound for polishing Bakelite. Ideal for use after the white bar.

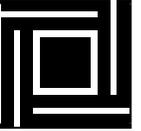
STAINLESS STEEL BAR

Use this compound exclusively to bring stainless steel to a high quality shine.

JEWELER'S ROUGE

High quality coloring rouge for treating gold, silver, pewter, nickel and almost all precious metals. Use with a Canton Flannel Wheel to bring out the true colors of your metals.





SPECIALIZED BUFFING COMPOUNDS

Once the basics of buffing have been mastered, using the standard buffing compounds, consideration should be given to using more specialized compounds for particular applications. The Caswell catalog and webpage show details of some 20 specialized compounds, from buffing plastics to stainless.

If you are doing the same job over and over, then you should experiment with different wheels and compounds to tailor make your own system. What suits one person's application, won't suit another.



Greaseless Compound

Produces a semi-dull/bright appearance commonly referred to as satin, silk, butler or scratch finish. Use for burring, polishing, trimming, blending, breaking edges and removing machine marks, pits and surface imperfections. Excellent for cleaning rusty surfaces and welding burns. The descriptive word “greaseless” is applied to this type of polishing compound because it is made completely free of grease, oil or wax. The formulations are composed of abrasive grits blended into a mixture of animal hide glue and water, which serves as the adhesive binder. When the solid stick compound is applied to a revolving buffing wheel, frictional heat softens the compound - transferring a coating to the wheel face. The coating dries immediately, forming a flexible and resilient abrasive cutting surface that is ready for instant use. When the abrasive head is worn down, polishing action is renewed by again applying compound over the worn head. The work surface is left dry - requiring no cleaning should a subsequent painting or plating operation follow.

Greaseless Buffing compounds may be applied to almost any cloth buffing wheel, (sisal, spiral sewn cotton & loose cotton) turning it into a tough flexible grinding wheel. The roughest casting edges can quickly removed. These materials do an excellent job of leveling highly contoured surfaces quickly.

Currently, Greaseless Compounds come in 5 grit sizes: 80, 120, 180, 240, 400.

Ideal for removing sand casting marks from manifold, wheels, etc.

For storage, the compound should be sealed in its plastic sleeve, or in a Ziplock bag, and stored in a cool location. If the compound has hardened, place 1/4 cup of water with it in the bag, and leave it for 24-48 hours to re-absorb the water.

Wheel & Compound Chart

Buff Type	Plastics			Silver, gold & thin plates			Nickel and Chrome Plate			Copper, Brass, Aluminum, Pot Metal & Other Soft Metals			Steel and Iron			Stainless Steel		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Sisal										X			X			X		
Spiral Sewn								X			X			X			X	
Loose												X			X			X
Canton Flannel						X			X									
String	X	X	X															
Compound	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Black										X			X			X		
Brown											X							
White								X				X		X				
Blue	X	X	X			X			X						X			
Green																	X	X
Red						X			X						X			

BLACK = Emery Compound, a course abrasive material for removal of scratches, pits, paint, rust etc.

BROWN = Tripoli compound used for general purpose cut and color on most soft metals.

WHITE = Blizzard compound, used for color and final finish of harder metals, has a cutting action.

RED = Jeweller's Rouge, designed to polish without any cutting action. Safe on thin plates. Use on its own wheel.

BLUE = A dryer, almost greaseless wheel - designed to polish without any cutting action. Safe on thin plates. Use on its own wheel.

GREEN = Used exclusively for Stainless Steel.

THE THREE BUFFING STAGES

A = Rough Cut To Remove Scratches B = Final Cut & Initial Polish* C = Final Polish (or luster)

* - At Stage B, you should first use your wheel with a cutting action, then finish with a color action. See the page on Cut & Color.



7696 Route 31, Lyons NY 14489

<http://www.caswellplating.com>

(315) 946-1213