



Surtech

Easy Guide

Polishing, Cleaning and Protecting

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A step by step guide to choosing the best polishing compounds, mops, buffs and cleaning and protecting chemicals.

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POLISHING COMPOSITIONS

INTRODUCTION

Our polishing compositions are made by Schmidt's in Sweden on fully automated lines. Each bar is individually wrapped and weights are kept constant by an automatic filling machine.

The range of compositions below has been popular with British polishers for over 25 years and offers grades for all applications.

Schmidt's will also formulate compositions to individual requirements and in sizes other than the standard ones in this leaflet.

Refer to ratings on greasiness, cutting ability and brightness of finish on page 4.

Most of our polishing compounds are also available in 'bovine free' version, containing no animal fat (on request only).

CUTTING COMPOS

Cutting compos remove surface imperfections like draw marks, light porosity, scratches, etc.

Cutting compos should be used on sisal mops only to allow them to develop their full cutting action.

Cutting compos cannot produce mirror finishes, but they can in some cases produce a finish sufficiently fine for plating.

Cutting compos are usually followed by a second operation with cut and colour or better still with finishing or colouring compo.

2432

Our best cutting compo in 2006. Even better cut but duller finish than 54 H.

FC, Grey

Economical general purpose cutting compound for all ferrous metals. Most aggressive of the cutting compounds. Leaves a matt finish.

Wabo 600, grey

Coarse cutting compound with cutting ability similar to 54 H but leaves a matt finish. Suitable for both stainless and mild steel.

54 H

Very special cutting compo with slightly more cut than Wabo 600. 54 H has one of the best combinations of high cut and bright finish of any compo. Like all good quality cutting compos 54 H is relatively greasy. However, since the grease is of top quality greasiness does not become apparent.

The compo cools well and is long lasting. This is a top grade compo for the discerning polisher and well worth the high price. Suitable for both stainless steel and mild steel.



CUT AND COLOUR COMPO

Refer to ratings on greasiness, cutting ability and brightness of finish on page ??

Tripoli

The ultimate cut and colour compo. It has the ability to cut initially and then as it breaks down to polish. Tripoli is a natural mineral.

Tripoli should only be used for non ferrous metals. The mineral is not hard enough for ferrous metals.

Ferrous metals require more sophisticated compos to perform the same cut and colour operation.

70, grey

Aggressive cut and colour compound, but less aggressive than 54 H and 76. Produces the duldest finish of all cut and colour compos.

Particularly recommended for stainless steel.



76, white

Top grade cut and colour compound. Cut similar to Wabo 600, but leaves bright finish. However finishes produced by 54H, Blue and Green are brighter.

One of the best cut and colour compos for stainless steel and a benchmark for over 10 years. Still the favourite with many polishers in 2005.

Relatively greasy, but the grease is important for the excellent cutting and cooling properties of 76. Greasier than 70 grey, Green and Blue, but not as greasy as 54 H.



76-V

Same as 76 white but without animal fat.

GREEN

Cut and colour compo with good cut and bright finish. Very similar to BLUE, but a touch more greasy.

Very little more cut than BLUE. Less greasy than 76, but more greasy than Blue.

Only sold in UK. Elsewhere replaced by 70 grey or 76 white.

BLUE

Cut and colour compo. Very similar to GREEN but with very little less grease and very little less cut.

Only sold in UK. Elsewhere replaced by 70 grey or 76 white.



TRIPOLI

Radiance CE-SV

Since 2005 considered the best tripoli compo by many polishers.

Radiance fine E

Special grade for brass water fittings.

Radiance CE TG

Alternative cheaper grade to Radiance fine E.



FINISHING COMPOS

Refer to ratings on greasiness, cutting ability and brightness of finish on page 4.

Finishing compos are used to produce a lustrous surface. Finishing compos are limited in their ability to remove surface imperfections.

All finishing compos are recommended for use on cotton mops only.

The finer the compo the more important the correct choice of mop construction and cotton grade.

B26, white

Universally recommended finishing compound with a little cut. B26 is an old established finishing compo which is now largely replaced by NEW BLUE.

The finish is the least brightest of all colouring compos. Try to phase out.



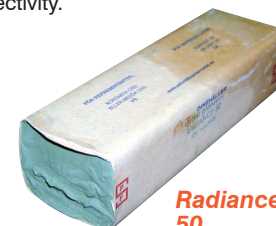
Red AloX , pink

Excellent finishing compound for brass. Medium cut for colouring compo. High lustre. Scratch free finish. Since 2005 and new formulation the best colouring compo with the best reflectivity.

Particularly good on aluminium.

Radiance 50

Since 2005 the best colouring compo with a little bite. Chrome oxide. Excellent on stainless steel.



G 300 A, white

Very fine finishing compound. Specially recommended for precious metals and stainless steel finishing. Grease free finish.

G 300 F, white

Finer than G 300 A. For non ferrous metals. Excellent for plastics.

NEW BLUE

Similar to STEELBRITE, etc. One of the best mirror polishing compos on the market.



SHG - SUPER HIGH GLOSS

Super high gloss. An extraordinary new compo that outshines all the others.

Formulated for super high gloss finishing of precious metals, jewellery, watches, etc., but also excellent on stainless steel for that extra special occasion.

Best colouring compo for aluminium and automotive veneer lacquer. Best colouring compo for acrylics. Supplied in round tubes 40mm dia x 180mm long.



BAR COMPO FOR TITANIUM

T-1

Best special grade bar compo for polishing titanium. Chrome oxide. New 2005 formulation Greasy. Supplied in 500g bars.



BAR COMPO FOR VENEER

G 500 HK

Special grade bar compo for lacquered veneer as used in automotive industry.

GREASE

Talgvax

Low melting grease. Specially suited for aluminium. Formulated for use on abrasive belts and scurf mops.



WHITING

Whiting is chalk used for cleaning off compo after polishing

DIAMOND COMPOUNDS

White

For precious metals, jewellery, watches and other parts requiring superior and extremely bright polishes. Vastly superior to traditional Rouge compounds. Cleaner parts, cleaner environment. Long lasting, fast working. Economical despite high price. Finest of three grades.

Red

Same as white but a little harder. Diamond compounds are supplied in plastic cups weighing approximately 250g each.

WEIGHTS AND CARTON CONTENTS

Schmidt's bar polishing compounds are packed in cardboard boxes weighing between 20 and 30 kg, depending on grade. Each bar is wrapped and labelled.

Schmidt's bar polishing compo is produced and packed on fully automated lines and with automatic metering units.

Weights per bar and per carton are regularly monitored and kept within very small tolerances by the automatic metering units. All weights given are approx. They can vary due to temperature and viscosity during filling.

POLISHING COMPOSITIONS EXPLAINED

MAKE UP OF BAR POLISHING COMPOS

Polishing compos are grease bound grinding and polishing powders moulded into a bar shape for applying to polishing mops and in some special cases to abrasive belts.

The two main constituents of polishing compos are:

1. The mineral, which does the cutting and polishing.
2. The binder, which acts as lubricant.

MINERALS

Tripoli, fused alumina, calcined alumina and silicon carbide are the main minerals used in the manufacture of top grade polishing compo.

TRIPOLI

The original tripoli is mined in Missouri, USA, and widely known as Seneca Tripoli. Tripoli is available in several grades allowing the polishing compo manufacturer to alter his formulations to suit the various tasks the compo is meant for.

In use tripoli breaks down at a controlled rate giving an initial cutting action followed by a finer polishing action. It is important to understand this controlled break down action when using tripoli based polishing compo as it means that it must be applied fresh at the start of each polishing operation.

Tripoli based compos are recommended for non ferrous metals, like brass, zinc, aluminium and copper. Ferrous metals are polished more effectively with alumina or silicon carbide based compos.

Schmidt's Polermedel tripoli compos contain only top grade tripolis without 'stretching' agents like quartz sand.

CALCINED ALUMINA

Alumina (aluminium oxide) is produced from bauxite ore terminating in the heat treatment called calcination. During calcination alumina forms in grades suitable for polishing compos.

The manufacturer of polishing compo can choose from a wide variety of calcined alumina grades. It is therefore possible to tailor a compo for a very specific task.

Calcined alumina based polishing compos are mainly used for cut and colour operations on ferrous metals or in their finer forms as colouring compos for most materials.

FUSED ALUMINA

Fused alumina is available in two main forms: white by fusing calcined alumina and brown by fusing calcined bauxite in electric arc furnaces. Fused alumina is considerably harder than calcined alumina. Unlike tripoli it does not readily break down in use. Because of these properties fused alumina is used mainly for cutting compounds for ferrous metals. These compounds remain sharp for longer.

SILICON CARBIDE

Silicon Carbide is even harder than alumina. It is produced in an electric furnace from silica sand. Unlike alumina silicon carbide fractures easily, exposing new and sharp cutting edges. Silicon Carbide based polishing compos are used for some of the harder materials like carbide, chilled iron, ceramics, stone, glass, etc.

BINDERS

Binders hold together all the ingredients and ensure even mineral distribution throughout the bar. Binders allow the mineral to stick to the polishing mop and act as coolants and lubricants.

Schmidt uses only carefully selected fatty acids, triglycerides and waxes as binders. Fatty acids are of animal or vegetable origin and waxes are petroleum derivatives.

DEGREASING

Apart from its effect on the polishing action the acidity or alkalinity of polishing compos is important for subsequent degreasing, essential for a final colouring operation and prior to plating.

All Schmidt polishing compos are formulated for easy degreasing. The vast majority of degreasing problems we have investigated were due to the use of too much compo or problems with the degreasing solution or the degreasing process. Only a handful of cases did we have to recommend the use of another Schmidt polishing compo grade.

A WORD ABOUT GREASE

Polishers like a polishing compo to cut aggressively, produce a brilliant reflective finish and leave no greasy film. These three requirements are contradictory.

Cutting compos need relatively coarse grained minerals, which need more fat to bind. Polishing produces heat and grease acts as a coolant and lubricant. Compos without grease would be ineffective and burn the material to be polished.

It is the quality and the quantity of grease that are vital to the performance of a top quality polishing compo.

Grease can be formulated to suit. It can be hard and with a high melting point it can be soft and with a low melting point. Both formulations are necessary for specialist compounds recommended for certain metals.

Compositions with soft grease appear to be greasier than those containing hard grease even if the amount is less. In general greasy compos cut better, but take longer to produce a glossy finish, while dry compos cut less but polish in a shorter time.

Polishing compos should be chosen for their designed properties for certain materials. It is advisable to follow the manufacturers advice rather than to use on standard grade for all materials.

STORAGE AND AGEING OF POLISHING COMPOS

Polishing compos improve with age as the binder gradually turns into the crystalline structure which improves economy of use.

Schmidts pack their bar compos in specially designed cartons with ventilation holes to enhance this ageing process. Each Schmidt polishing compo bar is wrapped individually.

POLISHING COMPO APPLICATIONS

Polishing compos must be applied sparingly to the polishing mop. Heavy layers of polishing compo do no improve but reduce performance. Polishing compos which do not adhere to the surface of the mop are ineffective and wasteful.

APPLY A LITTLE COMPO OFTEN

FINISHING SEQUENCES

Most finishing operations start with abrasive belts. The first operation is with a grit of the correct size to remove the worst surface imperfection efficiently and fast. Subsequent operations use finer grit belts until the finishing sequence changes to mops and polishing compos.

As a rule of thumb the best sisal mops and the coarsest polishing compo can remove scratch marks left by a grit 280 belt. Since this is however only possible under ideal conditions the advice is to go up to a grit 320 or even grit 400 belt finish before changing to polishing mops.

Cutting compos should be used exclusively with sisal mops. They are not as effective on cotton mops. Cut and colour compos can be used on sisal or cotton mops and finishing compos must only be used on cotton mops.

Mops are available in various degrees of hardness. Make sure you choose the best combination of mop and compo and remember the polishing is done by the compo, the mop acts merely as the compo back up.

Schmidt BAR POLISHING COMPO CHARACTERISTICS

Schmidt polishing compos in order of greasiness

CUTTING GRADES IN ORDER OF GREASINESS STARTING WITH GREASIEST

FC	- 1
Wabo 600	- 2

CUT AND COLOUR GRADES IN ORDER OF GREASINESS STARTING WITH GREASIEST

Ultracut 54 H	- 1
76	- 2
70 grey	- 3
Green	- 4
Blue	- 5

FINISHING/COLOURING GRADES IN ORDER OF GREASINESS STARTING WITH GREASIEST

NEW BLUE	- 1
B26	- 2
Red Alox	- 3
G 300 F	- 4
G 300 A	- 5

TRIPOLI GRADES IN ORDER OF GREASINESS STARTING WITH GREASIEST

Radiance CE	- 1
Radiance fin E	- 2
1947 SV	- 3

Schmidt polishing compos in order of mineral sharpness

CUTTING GRADES IN ORDER OF SHARPNESS STARTING WITH SHARPEST

FC	- 1
Wabo 600	- 2

CUT AND COLOUR GRADES IN ORDER OF SHARPNESS STARTING WITH SHARPEST

Ultracut 54 H	- 1
76	- 2
70 grey	- 3
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TRIPOLI GRADES IN ORDER OF SHARPNESS STARTING WITH SHARPEST

Radiance CE	- 1
Radiance fin E	- 2
1947 SV	- 3

Schmidt polishing compos in order of brightness of finish.

CUTTING GRADES IN ORDER OF BRIGHTNESS OF FINISH STARTING WITH BRIGHTEST

Wabo 600	- 1
FC	- 2

CUT AND COLOUR GRADES IN ORDER OF BRIGHTNESS OF FINISH STARTING WITH BRIGHTEST

Ultracut 54 H	- 1
Blue	- 2
Green	- 3
76	- 4
70 grey	- 5

FINISHING/COLOURING GRADES IN ORDER OF BRIGHTNESS OF FINISH STARTING WITH BRIGHTEST

G 300 A	- 1
G 300 F	- 2
NEW BLUE	- 3
Red Alox	- 4
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TRIPOLI GRADES IN ORDER OF BRIGHTNESS OF FINISH STARTING WITH BRIGHTEST

Radiance CE	- 1
1947 SV	- 2
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RECOMMENDED SPEEDS FOR POLISHING

CUTTING

Carbon and stainless steels 40 - 45 m/sec
Brass, nickel, aluminium, zinc 30 - 45 m/sec
Chrome 25 - 40 m/sec

COLOURING

Carbon and stainless steels 33 - 45 m/sec
Brass, nickel, aluminium, zinc 30 - 35 m/sec
Chrome 30 - 35 m/sec

Speeds in excess of 45 m/sec are neither recommended nor safe for any polishing operation. The most widely used polishing machine in the UK is the standard double ended polishing lathe of 3HP of 5HP capacity with tapered spindle and running at 2800 rpm. A 250 mm dia. mop on this machine runs at 37 m/sec and a 300 mm dia. mop runs at 44m/sec.

HEALTH AND SAFETY INFORMATION

A safety sheet is available on request for each grade of compound. You must have safety sheets for all grades used by you and you must make the information and recommendations known to operators.

Generally Schmidt's bar polishing compounds do not contain hazardous or harmful ingredients. Nevertheless the manufacturers recommend that operators wear protective clothing. Wash affected areas with soapy water if compound comes into contact with skin.

Rinse eyes in running water if compound is accidentally splashed into eyes. If eyes are irritated and symptoms continue seek medical advice. If swallowed induce vomiting and if irritating symptoms continue seek medical advice.

In a fire bar polishing compound will melt. It will not ignite unless in direct contact with a naked flame. No special fire fighting procedures have to be followed.

Bar polishing compound must only be applied to buffs used on machines designed for manual polishing and never on machines designed for automatic polishing. Apply bar compound below centre line of polishing buff to avoid snatching.

Polishing machines must be properly guarded and connected to a proper dust extraction system which conforms to COSHH regulations and guarantees minimum exposure levels. If in doubt wear suitable dust mask.

LIQUID POLISHING COMPOSITIONS SPECIAL GRADE BAR COMPOSITIONS APPLICATION SYSTEMS COMPO GUNS • PUMPS PRESSURE POTS

Surtech no longer supply liquid polishing compounds.
This is just a short description of parts that can be used for liquid polishing compound applications.

1. PACKAGING

Compos are packed in a variety of containers:

- 50 kg cardboard boxes
- 40 kg plastic containers
- Europallet (IBC) containers

Europallet (IBC) containers contain varying weights of liquid compo. Depending on grade and filling between 700 kg and 1200 kg

The cheapest way of buying compo is in Europallet containers. For very large users we can offer containers with over 1000 kg compo.

Not all compo grades are available in all container sizes. See details of available packing under compo grade above.

DELIVERY

All prices are delivered free UK mainland.
We can offer a discount for collection from our Birmingham warehouse.
Please ask for quote.

2. LIQUID POLISHING COMPO APPLICATION SYSTEMS

2.1. Traditional high pressure pots and high pressure guns

Consisting of steel pressure pots from 50 kg to 250 kg capacity, pipes, valves, timers and high pressure metering guns.

50 kg steel pressure pot, complete

2.2 Low pressure containers with special design diaphragm pumps and high pressure guns

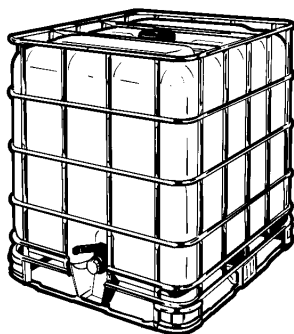
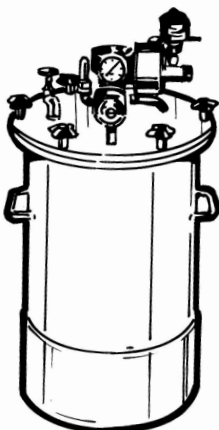
Consisting of plastic storage IBC container with steel frame from 700 kg to 1300 kg capacity, pipes, low pressure diaphragm pump, valves, timers and high pressure metering guns

IBC containers

Plastic containers with metal frame on pallet.
Non returnable.

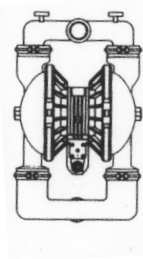
Two sizes of tanks are available. The smaller one contains between 700 kg and 800 kg liquid compo. Depending on grade and filling.
This is the most popular tank and used for all supplies unless otherwise agreed.

The larger tank contains between 1000 kg and 1300 kg liquid compo. Depending on grade and filling.
Both tanks have a Europallet size bottom and can easily be moved by forklift or pallet truck.



Low pressure, oil free, diaphragm pump

Model PM 500 S Diaphragm Low Pressure Pump. Suitable for supplying up to 25 guns at distances up to 40 m. Heavy duty 1" capacity. 0,5 l per stroke. With air service unit. 14 kg. Modified for use with polishing compo.



OIL FREE OPERATION

It is absolutely essential that these pumps are run with air free from oil.

The pumps contains seals which would swell in oil. This would cause the pump to fail.

Compo guns

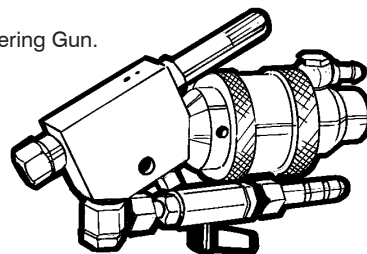
Model HPM/5 High Pressure Metering Gun.

Operates at 5 to 6 bar.

Can be set to meter between

0 and 5 g per shot.

This is our standard compo gun.



Hose connection between tank and pump and between pump and gun

Shut off valve for each gun.

In-line strainer. Incl. all fittings

Solenoid valve

For 24 V operation. One valve per gun. Incl. air pipe

Set of cabling and fittings. For solenoids

Timer, One recommended for each gun, Incl. fittings

Transformer

Only where necessary and where no 24 V supply is available. Incl. fittings

Installation

Model AD 20

Low pressure pump, 3/4" inlet and outlet, 0,11 l per stroke.

Adapted for abrasive materials. Modified for non stop operation.

Must be used with oil free air. With air service unit. 4 kg capacity to supply more than 10 high pressure guns.

or

Model PM 500

Low pressure pump, 1" inlet and outlet, 0,5 l per stroke.

Adapted for abrasive materials.

Must be used with oil free air. Air service unit. 14 kg capacity to supply up to 20 high pressure guns.

Hose connections between tank and pump and between pump and gun.

Shut off valves on each gun. In line Y-strainer. Including all fittings.

Solenoid valve for 24 V operation, 1 per gun, incl. air pipe

or

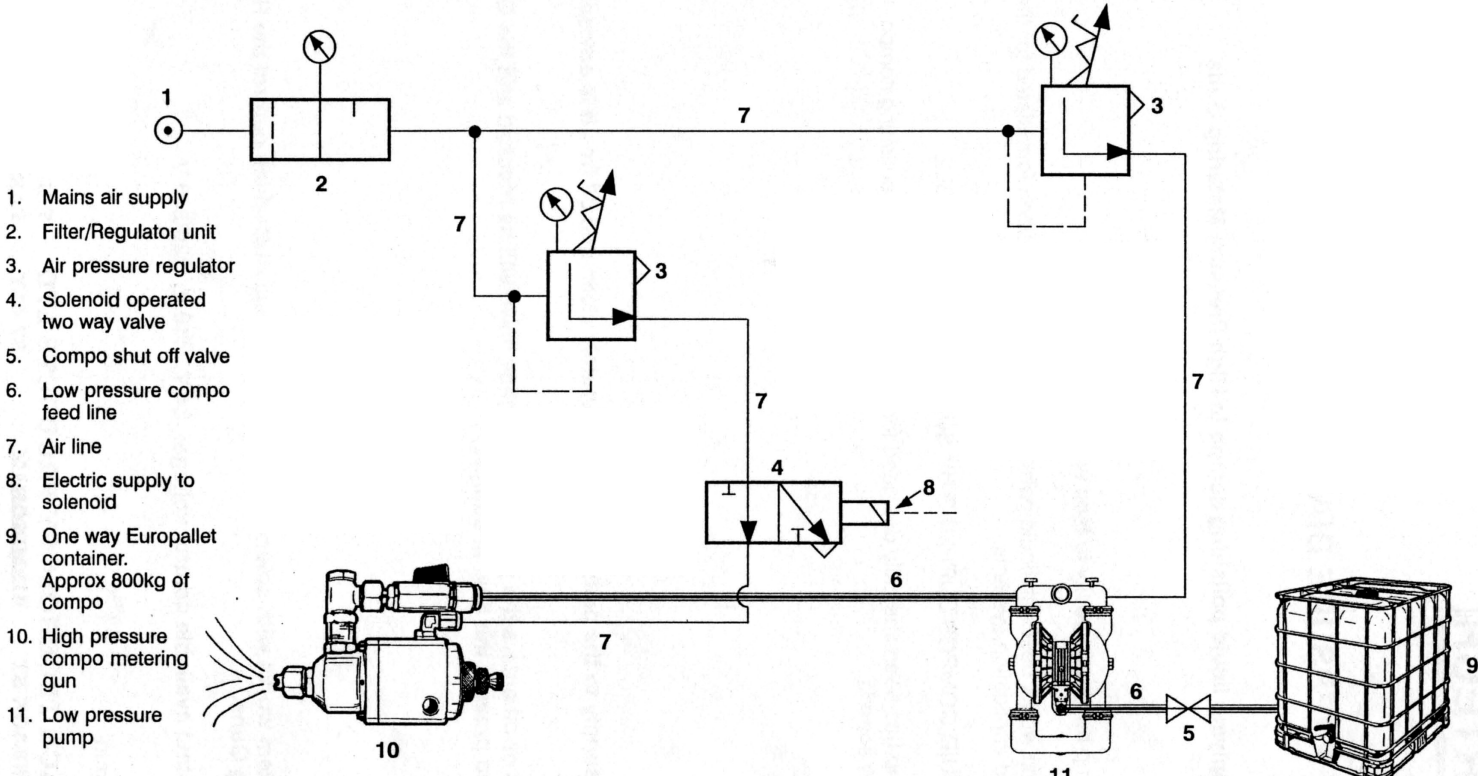
Solenoid valve for 110 V or 240 V operation, 1 per gun, incl. air pipe.

1 set of cabling and fittings for solenoids.

Timer, 1 recommended for each gun, incl. fittings.

Transformer (where necessary) incl. fittings.

Diagram of low pressure Compo system with high pressure Metering Gun

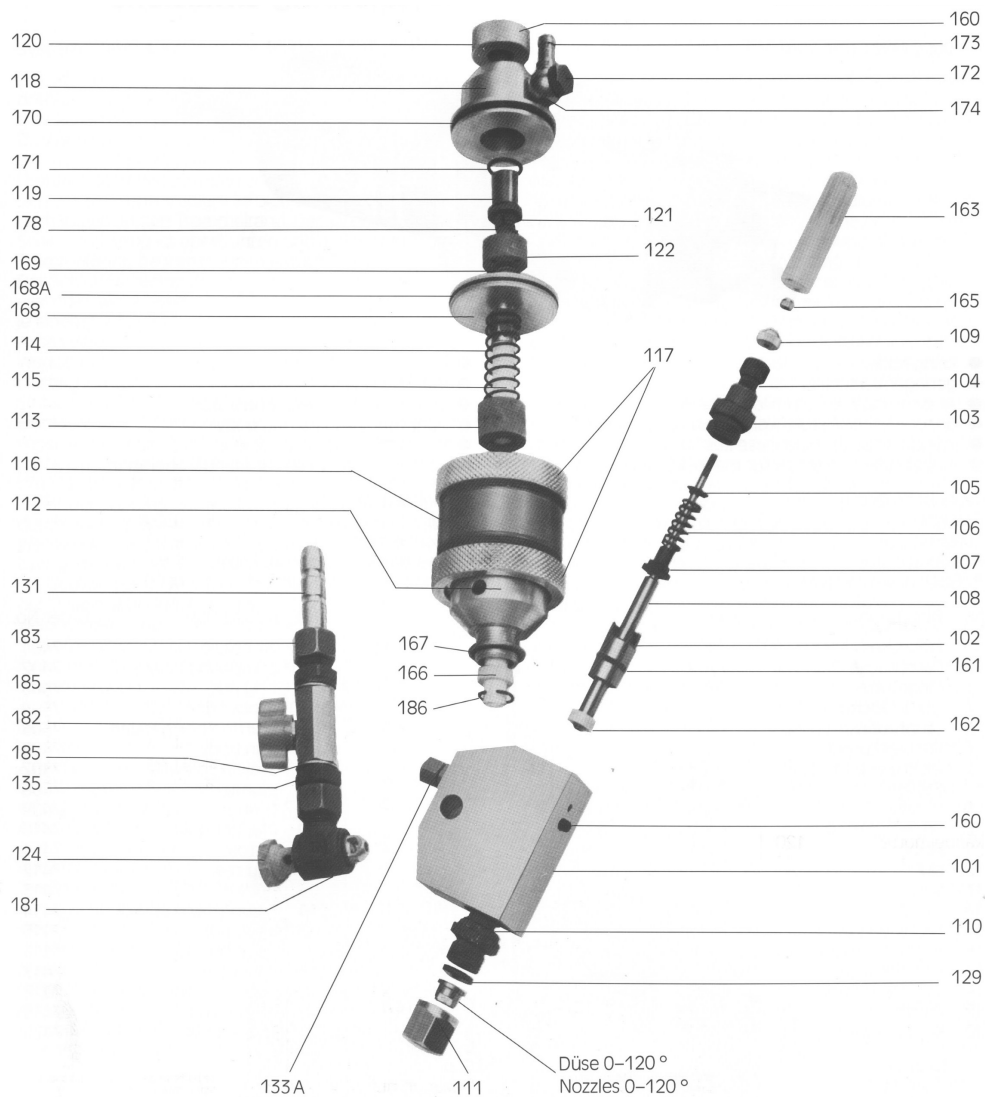


LIQUID POLISHING COMPO APPLICATION SYSTEM

Consisting of Eurotank, low pressure pump, high pressure metering gun, plus all necessary fittings.

Model HPMG COMPO GUN

High Pressure Liquid Polishing Compo application Gun



POLISHING MOPS AND BUFFS

INTRODUCTION

We refer to mops for sisal and cotton polishing tools made for manual operations on traditional polishing lathes with tapered spindles.

Mops are made entirely by hand from part or full discs of cotton fabric laid out in layers 13mm thick and the stitched together.

The stitching can be open for a soft mop, close for a medium density mop or very close stitched for a hard density.

The 13mm thick sections are then washered and nailed together to make up the required width.

The centre bore is tapered to fit the tapered spindle on the polishing lathe.

Bufs are made entirely on special automatic machines. They are designed mainly for automatic polishing operations. Only loom state cotton grades are used and before they are made into bufes on automatic machines the cotton is bias cut.

This means that individual threads cannot be pulled out. Unlike mops bufes do not have to be trimmed before use and they last considerably longer than mops.

There are around around a dozen different cloth grades and half a dozen different sisal grades.

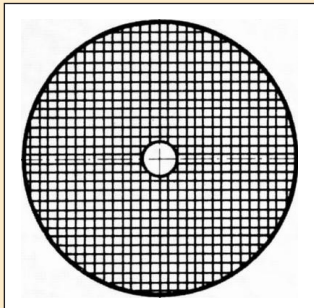
These are made into around 25 different constructions: folded, pleated, corrugated, open faced, solid stitched, etc.

Both cotton and sisal bufes can be impregnated in at least half a dozen different ways to make the buf perform better and last longer.

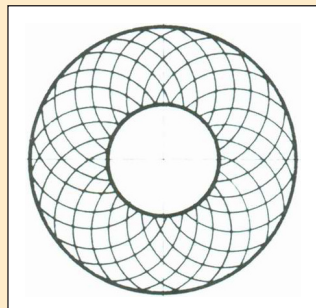
The result is a buf that has been designed for a particular polishing operation and a particular part.

Bufes are only economical when used at least with 350 mm dia. They have a parallel bore instead of a tapered bore. This means they cannot be used on polishing lathes but must be used on Continental style polishing machines.

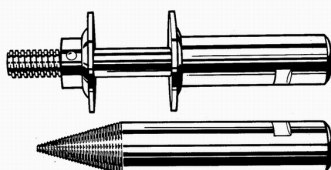
One of the most effective and most economical polishing operation can be achieved with 960 mm dia bufes and special polishing machines with variable speed controls.



A cotton disc as used in the manufacture of mops. With warp and weft clearly visible. Threads can easily be pulled out.



Bias cut cotton as used in the manufacture of bufes. Threads cannot be pulled out.



A parallel and a tapered spindle which can be screwed on to the motor shaft of polishing lathes.

COLOURED & WHITE STITCHED MOPS



Economic, general purpose mop, made from best quality cotton and used for polishing all materials.

Available in Diameters:
8" (203mm) up to 12" (305mm)
by:
1 section, 2 section, 3 section and 4 section (Side widths).
(1 section = 1/2")

OPEN MOP 'F'



"F" best grade white non-fraying fast cutting mop.

Available in Diameters:
4" (102mm) up to 12" (305mm)
by:
1/2" (13mm) up to 2" (51mm) Side widths.

'B' QUALITY MOPS



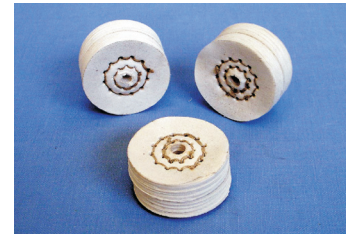
The best all-round mops for finishing steel and pressed brassware, nickel-silver, copper, etc., and for finishing nickel and chrome deposits. They are also available stitched in convenient 1/2" (13mm) sections
* Ideal general purpose Mop
* Use on brass, silver, copper, aluminium, chrome and plastics.

Ideal for general work - medium hardness.

Open and stitched. Loose discs available.

Available in Diameters:
4" (102mm) up to 12" (305mm)
by:
1/2" (13mm) up to 2" (51mm) Side widths.

SMALL WHITE POLISHING MOPS (Dolly Mops)



Also available with sewn centres for fast cutting.

Available in Diameters:
1 1/2" (38mm) up to 3" (76mm)
by:
1/2" (13mm) up to 1" (25mm) Side widths.

Other sizes available on request.

'G' POLISHING MOPS (Soft)



Soft mop for finishing silver, plastics and brassware.

Used also for colouring off brass, copper and pewter after polishing. Loose discs also available.

Smaller diameters available with sewn centres.

Available in Diameters:
4" (102mm) up to 12" (305mm)
by:
1/2" (13mm) up to 2" (51mm) Side widths.

Other sizes available on request.

SWANSDOWN MOPS



For finishing gold and silver, brassware and other high class work with rouge.

Available in Diameters:
4" (102mm) up to 10" (254mm)
by:
1/2" (13mm) up to 2" (51mm) Side widths.

Other sizes available on request.

CLOTH BOTTOM MOPS



For internal polishing of bottoms of saucepans, metal cups, etc.

Made in White fast cutting and Brown finishing materials

Also available in Satinising Web for satin finishing operation.

Available in 2½" (76mm) Diameter.

****Only this size available****

SISAL MOPS CLOSE STITCHED



Mops are close stitched, i.e., ¼" apart.

They are particularly useful for the following operations:

- For first stage heavy duty mopping operations on steel and non- Ferrous metals.
- For removing grinding marks left from previous abrasive operations when processing stainless steel.

Available in Diameters:
6" (152mm) up to 12" (305mm)
by:

1, 2, 3, 4 and 5 section
(Side widths).

½" = 1 section.

SISAL BOTTOM MOPS



For the internal polishing of stainless steel utensils.

Available in one size:
2" (50mm) by 2½" (64mm) Side width.

SATINISING & SATINISING/FABRIC MOPS (Lap Mops)



An economy mop for general purpose cleaning and satin finishing.

Made from pure satinising material or alternative layers of satinising and cloth in stitched sections, each approximately ½" (13mm) width.

Available in **Very Fine, Fine, Medium** and **Course** material.

Available in Diameters:
4" (102mm) up to 8" (203mm)

by:
1, 2, 3, 4 and 5 section (Side widths). ½" = 1 section.

Other sizes available on request.

SATINFLEX WHEELS



These are constructed on the well-known 'flap' wheel principle and are excellent for flat and seemingly flat surfaces.

Available for use on taper or parallel spindles and may be used on metallic and non-metallic surfaces.

They can be employed for surface cleaning, rust and oxide removal, in addition to satin finishing and many applications for wood finishing.

Available in **Very Fine, Fine, Medium** and **Course** material.

Available in Diameters:
8" (203mm) up to 10" (254mm)

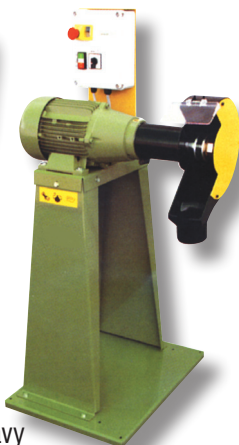
by:
2" (51mm) Side width.

Other sizes available on request.

Bench, Pedestal & Portable Polishing Machines



Models **603, 606, 663, 666**
Double and single ended for heavy
duty industrial non stop work



Model **616**
Light to
medium duty
industrial
work



Model **DSM 200**
For light to
medium
industrial
use



Models **LBP7 & LBP9**
For light to medium
industrial use



Model **AE 5000**
Light to
medium duty
industrial work.
Variable speed.



Model **AE 14000**
Light to medium duty
industrial work. Variable
speed.

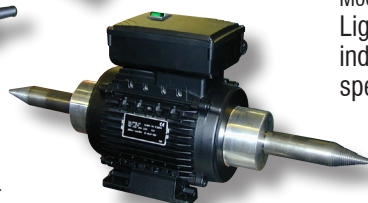
Model **Roto-Buffer SU**
Heavy duty
portable polisher



Model **Roto-Buffer R**
Heavy duty portable polisher



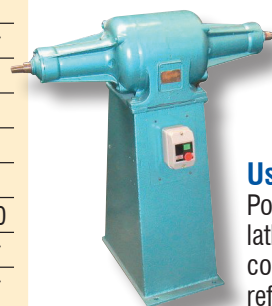
Model **Roto-Buffer AG**
Heavy duty portable polisher



Model **PS 150**
For light intermittent use



Model **AE 10000**
Light duty industrial work.
Variable speed.



Used
Polishing
lathes in many
configurations,
refurbished

MODEL S = Single Ended D = Double Ended P = Portable	Motor Size	Motor Speed	Voltage	Max. Mop Size x Width in mm	B = Bench Bench P = Pedestal	T = Tapered P = Parallel	Guard and Extraction Spigot dia in mm
603 - S	2.3HP	1400/2800	400	250 x 50	P	T/P	Yes / 100
663 - D	2.3HP	1400/2800	400	250 x 50	P	T/P	Yes / 100
606 - S	4HP	1400/2800	400	250 x 50	P	T/P	Yes / 100
666 - D	4HP	1400/2800	400	250 x 50	P	T/P	Yes / 100
616 - D	1.1HP	1400/2800	400	200 x 25	P	P	Yes / 100
LBP7 - D	1HP	2800	230	175 x 25	B/P	P	Yes / 100
LBP9 - D	1HP	2800	230	230 x 25	B/P	P	Yes / 100
DSM200 - D	1.2HP	2900	230	200 x 30	B/P	P	Yes / 40
LAF - D	2HP	2800	230	200 x 50	B/P	T	To order
PS150 - D	0.5KW	2950	230	150 x 20	B	P/T	No
Roto-Buffer R - P	2HP	6800	230	125 x 50	n/a	T	No
Roto-Buffer AG - P	2HP	4800	110/230	150 x 50	n/a	T	No
Roto-Buffer SU - P	2HP	2800-5800	110/230	150 x 50	n/a	T	No
AE 5000 - D	2HP	400-5000	230	200 x 50	B/P	T/P	Yes / 100
AE 14000 - S	2HP	800-14000	230	100 x 40	B/P	T/P	To order
AE 10000 - S	0.6HP	800-10000	230	50 x 25	B	T/P	To order

POLISHING BUFFS

INTRODUCTION

Unlike other countries in Europe the British polishing Companies still use imperial sized buffs, based on pre war American designs.

The imperial size buffs are on average 12 mm thick, the metric buffs are around 20 mm thick.

The imperial buffs have imperial size clenchring diameters and centreplates. The European buffs have metric clenchrings and metric size centre plates.

Imperial and metric sized centre plates cannot be interchanged.

How buffs are mounted

This drawing shows how buffs with metal clenchrings can be ganged up to the required width.

A centre plate with the correct bore for the machine shaft is inserted into each buff.

On each side of the buff 'pack' a clamping plate is fitted.

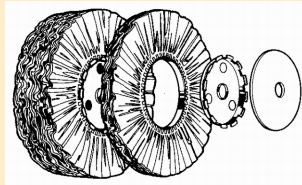
The clamping plate must be of a size to sit on the metal clench ring not on the buff itself.

Once the clamping plates and the buff "pack" are fitted to the machine shaft the nut on the end of the shaft will tighten the whole assembly.

If it does not you must fit spacers.

If the "pack" is not sufficiently tightened it may rotate on the shaft, create very high temperatures through friction and eventually can set the buffs on fire.

Over the years there have been several polishing shops that have burnt down for this reason.



Imperial size Polishing Buffs

Imperial size Airflow Cotton Buffs

The most popular polishing buff in the UK but not necessarily the most efficient and most economical.

Made from 2 standard cloth grades:

No.1

A closely woven material produced from long staple cotton. The accepted top standard for imperial size buffs for polishing operations with cutting and cut and colour compos.

No.6

A heavier cloth than No. 1 but more openly woven. The standard material for colouring

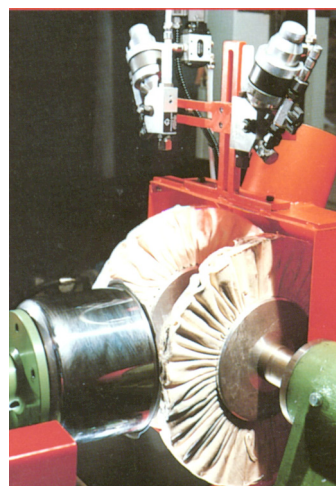
Made in 4 densities

- 0 = Soft, with the least amount of pleating. Drum size same as buff.
- 1 = Standard pleating. Drum size 50 mm larger than buff dia.
- 2 = Medium. Drum size 100mm larger than buff dia.
- 4 = Hard, heavy pleating for more aggressive cutting action and longer life.

Drum size 150mm larger than buff dia.

Imperial airflow cotton buffs are approx. 12mm wide

Clench ring sizes: 3", 5", 7", 9", depending on OD.



Metric size Polishing Buffs

Cotton

For all polishing mops and buffs cotton fabric must be used. Man made fabric would melt, harden and damage the polished surface.

The difference between UK made mops and European buffs is that mops are made from cotton fents and buffs from loomstate cotton.

Cotton fents are remnants of printed cotton dress, curtain, etc. fabric of an assorted quality and density. To check whether the fabric is cotton or man made set light to a small sample. Cotton will smoulder but stay soft, man made fibre will melt leaving hard blobs.

Loomstate cotton is woven from natural cotton of various grades, distinguished by the warp and weft specification. Leading buff manufacturers offer more than 10 cotton grades from extra hard for aggressive polishing to very soft for mirror polishing of precious metals. To prolong life some cotton grades can be impregnated.

Cotton fents are cut into discs from which warp and weft threads can easily pulled out.

Loomstate cotton for buffs is bias cut which means it is impossible to pull warp or weft threads out.

Sisal

Sisal is a natural fibre from the agave plant of South Africa and South America.

It's robustness makes it suitable as an effective and economical polishing media.

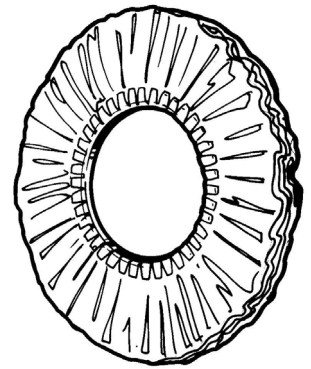
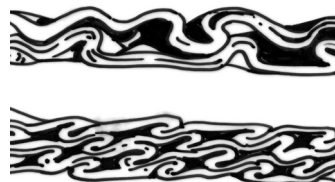
Sisal matting woven from long fibre sisal is the raw material for buffs.

Sisal should be used with cutting and cut and colour compos only. It is capable of polishing a surface that has previously been finished with grit 280 to grit 400 abrasive belts.

Run at between 35 and 45 m/sec

Tampico

Tampico is made from a plant growing in Mexico. Tampico fibre can hold and release a great amount of water, unlike plastic fibres, and it is therefore unique and unsurpassed for applications requiring liquid retention and surface finishing. It is perfect for polishing with bar or liquid polishing compounds, particularly for satin finishing of stainless steel sink bowls and cutlery and flatware.



Metric size cotton polishing buffs

Made from one of over a dozen standard cotton grades from very soft with raised pile to very hard and impregnated.

Metric size Airflow Cotton Buff

Made in 4 densities

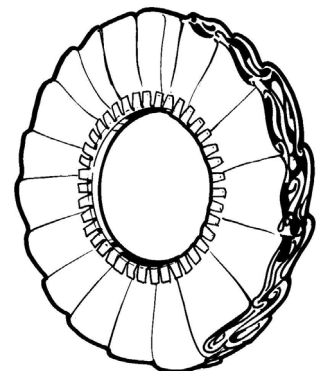
Metric airflow cotton buffs are approx. 20mm wide.

Clenchring sizes: 76mm, 130mm, 150mm, 180mm, 230mm.

Available from 200mm to 600mm dia.

For general purpose polishing of all materials. Basically the same as the imperial size airflow buff.

Often used when a different metric size buff could be more effective and more economical.



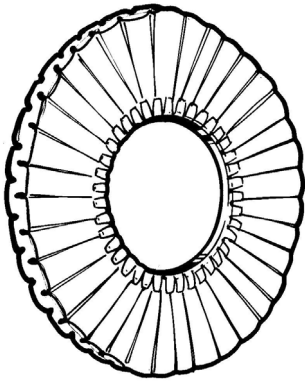
Metric size Pleated Cotton Buffs

More regular and more distinct pleats than airflows. Allround better performance and better value for money than the ubiquitous airflow.

Pleated cotton buffs contain more material, polish more effectively and last longer.

Available from 250mm to 960mm dia. With 5" and 7" centre. From 12 mm to 30 mm wide. Standard 16 ply.

A general purpose cotton polishing buff for mirror finishing. Very popular for brass sanitary fittings.



Metric size wave cotton buffs

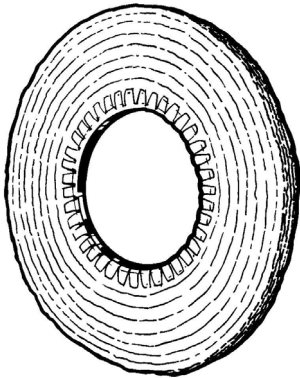
Cotton folded densely into corrugations for the hardest and most aggressive cotton buff available.

Contains more cotton than any other buff. Lasts longer than any other cotton buff. But is only suitable for relatively flat surfaces.

The ideal buff for polishing stainless steel holloware.

Wave cotton buffs are ideal for polishing edges. Unlike all other buffs they do not split but sit on the edge.

Available from 300mm to 450mm dia. With 5" and 7" centres. Approx. 25mm wide. 16 ply.

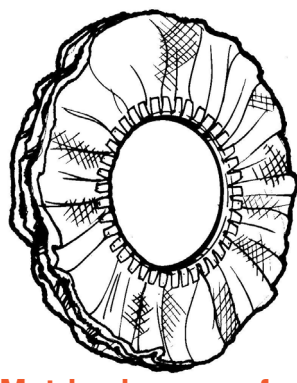


Metric size stitched bias sisal buffs

The standard sisal buff for heavy duty polishing operation requiring a good cut. No cotton added.

Hardness is controlled by stitching patterns and by impregnations. Suitable for flat surfaces only. Available from 150mm to 500mm dia. 6 - 12 ply. 10 - 25mm wide.

For general polishing of mild steel and stainless steel parts with a relatively flat surface. Wave sisal buffs are often more effective and more economical despite their higher price.



Metric size open face sisal/cotton buffs

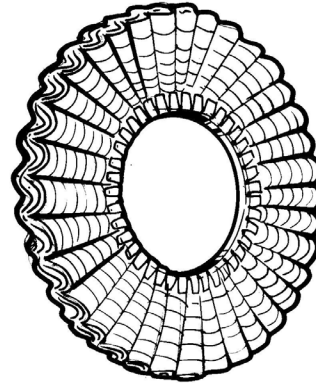
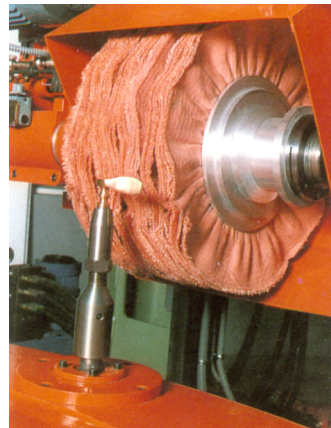
For an optimum balance of cut and colour and suitable for slightly contoured parts. Bias cut woven sisal interleaved with cotton. The cotton content improves compo retention.

A flexible buff with good ventilation.

Available natural or in a range of impregnations.

From 100mm OD to 600mm OD. Approx. 20mm wide.

For pre-polishing of mild steel and stainless steel. Use with cutting or cut and colour compo.



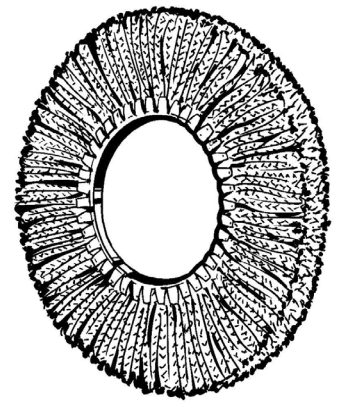
Metric size wave sisal buffs

Bias cut sisal interleaved with cotton and tightly folded into corrugations to give the most powerful polishing action of all sisal buffs.

Available in natural and a variety of impregnations from soft to hard.

From 300 mm to 450 mm OD. Approx. 25 mm wide.

For pre-polishing of mild steel and stainless steel parts with a relatively flat surface. Best buff for pre-polishing holloware.



Metric size cord sisal buffs

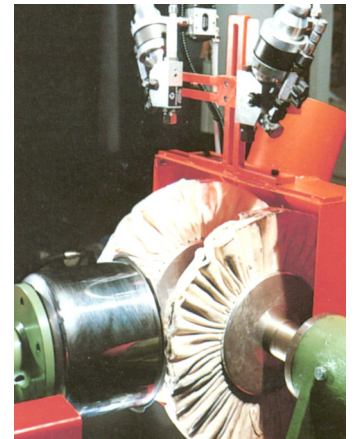
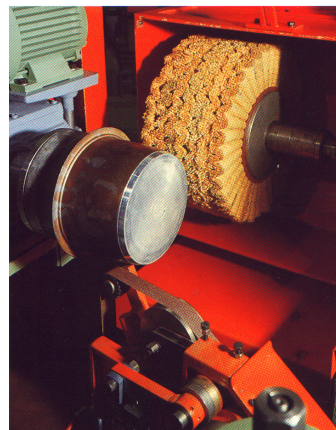
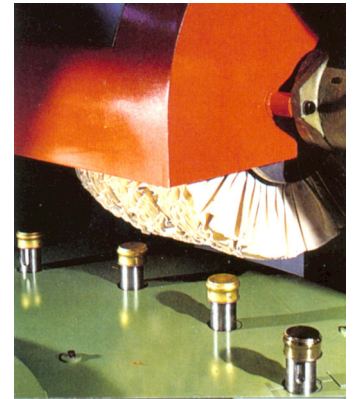
Made from braided cord sisal. Very flexible yet with an aggressive polishing action.

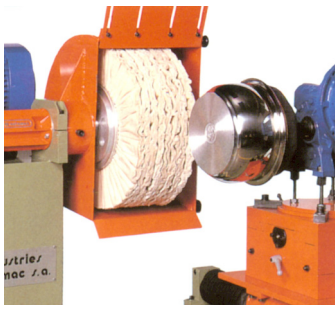
Available natural or impregnated for longer life.

From 200 mm to 500 mm dia. From 20 mm to 25 mm wide.

For pre-polishing of mild steel and stainless steel. Suitable for both flat and contoured surfaces. Use with cutting compo.

In some cases very effective for polishing non ferrous parts.





IMPREGNATIONS



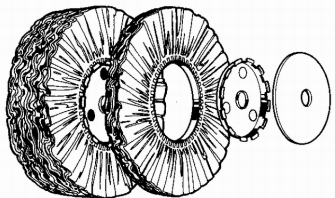
Colour identifies the impregnation. Impregnation considerably improves the polishing action and extends the life of the buff by between 30% and 100%.

There are solvent based and water based impregnations.

Imperial size buffs are available with approx. 3 different types of impregnations.

Metric size buffs are available with approx. 12 different types of impregnations.

How buffs are assembled on the drive shaft



This drawing shows how buffs with metal clenchrings can be ganged up to the required width. A centre plate with the correct bore for the machine drive shaft is inserted into each buff and on each side of the "pack" a clamping plate, again with the correct bore, is placed to prevent the centre plates from coming loose and to hold the "pack" together.

Clench rings on imperial and metric buffs are of different sizes and centreplates for imperial buffs are much thinner than those for metric buffs.

Do not mix imperial and metric sizes.

How to choose the best buff for a given operation.

The harder the buff the higher the polishing effect but the less suitable for contoured surfaces. The more flexible the buff the finer the polishing effect but the better the conformity to contoured surfaces.

Polishing Buffs and Brushes for Robots



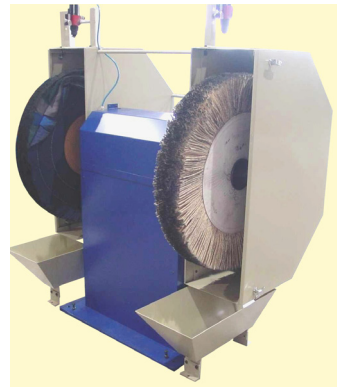
For most robot polishing operations the robot holds the part.

Polishing buffs and brushes are basically of the same construction and grade as those used on other automatic polishing machines, but up to 960mm dia., instead of the more common 400mm.

Jumbo Cotton and Sisal Buffs are available from 500 mm dia to 960mm dia.

Their construction is virtually the same as that of buffs for automatic polishing from 350mm to 500mm dia.

Jumbo Cotton Buffs



Made from whole or segmented cotton sheets, stitched in various ways to increase density and to prolong life.

Jumbo buffs run on machines with considerably lower rpm, however, due to their large size the cutting speed is the same.

Example:
400mm dia buff on a typical automatic machine running at _____ rpm, equals a cutting speed of _____ m/sec.

960mm dia buff on a robot cell polishing head running at _____ rpm, equals a cutting speed of _____ m/sec.

Important is the cutting speed, not the diameter of the buff or the rpm of the drive motor.

Available from 500mm to 960mm dia. With cardboard centre. from 10mm to 25mm wide.

Polishing tools for robot arms



There are some robot polishing operations where it is necessary or advantageous that the robot holds the polishing tool and can change it quickly and safely.

For such robot systems we can offer a patented quick fit tool change system for a wide range of buffs and brushes. A 20 degree turn suffices for secure holding.

Available as:

Abrasive flap wheel, 110, 150 165mm dia, 30mm and 50mm wide.

Nylon flap wheel, 110, 160mm dia, 30mm and 50mm wide.

Nylon filament brush, 120 and 150mm dia, 50mm wide.

Cup brushes 132mm dia.

Cord sisal brushes, 100, 125, 150 200 and 250mm dia, 30 and 50mm wide.

Cotton buff, 100, 125, 150mm dia, 30 and 50mm wide.

Nylon/Abrasive Cloth Interleaved Deburring Brushes



Tampico/Abrasive Cloth Interleaved Deburring Brushes



POLISHING BUFFS FOR CUTLERY AND FLATWARE



Cutlery (knives) and flatware (spoons, forks) are polished on automatic machines, often 20 or more parts at the same time.

A setup for knives consists of a bottom and a top row of buffs, approx. 270 mm dia. A setup for spoons consists of a bottom row of concave shaped buffs and a top row of convex shaped buffs.

Each buff is of a size and shaped to perfectly fit the shape of the spoon, outside and inside bowl.

POLISHING BUFFS FOR KNIVES

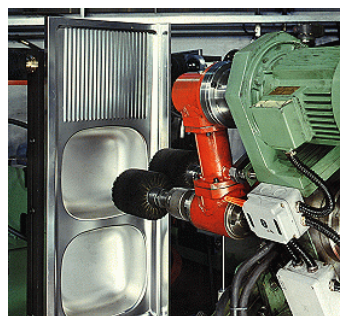


POLISHING BUFFS FOR SPOONS AND FORKS



Available with flat face or shaped to the contour of the spoon. Normally with 19mm hexagonal bore but also available with other bores.

POLISHING BUFFS FOR STAINLESS STEEL SINKS



CLEANING AND PROTECTING STAINLESS STEEL

The name Stainless Steel applies to a group of iron based alloys containing a minimum of 11 % chromium and other alloys. Recent research has shown that chromium contents below 15% can lead to corrosion and pitting.

Although there are over 50 recognised stainless steel grades, for the purpose of cleaning and protecting the grade makes no difference.

Which cleaning or protecting agent to use will depend on the degree of contamination that has to be removed and the weathering the part is subjected to. It is for these reasons that there are so many different cleaning and protecting products available.

Stainless steel bus shelters, shop fronts, hotel entrances, street furniture, telephone kiosks, ornaments, balustrades, handrails, yacht fittings, etc. all need slightly varying attention.

The explanations below are meant to help you with choosing the right product.

By all means read the manufacturers claims and instructions of use but you probably will not be able to choose the right products for your requirements until after you have carried out some tests.

Passive chromium oxide film

By cleaning stainless steel you enhance its aesthetic appeal and preserve corrosion resistance.

A thin layer of chromium oxide protects stainless steel from corrosion. The chromium in the steel combines with the oxygen in the air to form the passive chromium oxide film that protects from corrosion.

Contamination of the stainless steel surface by dirt, airborne pollutants or other materials upsets the passivation process and reduces corrosion protection.

Regular maintenance will restore the passivation process and preserve the appearance of stainless steel surfaces. Properly carried out cleaning cannot be overdone or wear out the stainless steel surface.

There are many pollutants that can cause problems. Dirt, soil, dust, etc. all contain contaminants that can greatly effect stainless steel surfaces. If iron particles settle on stainless steel it will look as if it was rusting. Some contaminants are easily removed, others are more stubborn and require specific cleaners.

Water

Although water with various additives is often sufficient to remove minor blemishes, water can contain mineral solids which leave water spots. It is therefore advisable to use a professional grade, properly formulated product in the first place.

Fingerprints and Stains

Fingerprints and mild stains affect appearance but not the corrosion resistance.

Most mild cleaners, available in aerosols or spray bottles will remove them, some faster, some slower.

The test of the better such products, however, is their ability to apply a protection layer that reduces the amount of future marking. Organic solvents will remove fresh fingerprints. Choose one that does not contain chlorine, such as acetone, methyl alcohol and mineral spirits.

Commercial cleaners are more effective on old, stubborn and severe stains. They often contain phosphates, synthetic detergents and alkalis

Since fingerprints are most annoying on highly polished stainless steel the quality cleaner will remove them and leave the surface brilliant and streak free.

Oil and Grease

Oils used in factories can contain grease and other pollutants like metal dust, etc. If any get on to the stainless steel surface their corrosiveness itself can cause problems but at the same time the stainless steel's passivity can be damaged.

In a parts washing line non-halogenated solvents like acetone, methyl alcohol, ethyl alcohol, methyl ethyl ketone, benzene, isopropyl alcohol, toluene, mineral spirits and turpentine work well but for fabricated stainless steel items a cleaner in an aerosol or spray bottle is far more convenient and effective and they may well contain a blend of many of the aforementioned chemicals.

Organic solvents will remove oil and grease. Choose one that does not contain chlorine, such as acetone, methyl alcohol and mineral spirits.

Commercial cleaners are more effective on old and stubborn oil and grease contamination. They often contain phosphates, synthetic detergents and alkalis.

Check descriptions and safety sheets.

After cleaning

RECOMMENDATIONS

JOB	CLEANING AGENT	COMMENTS
Routine cleaning	Warm water, soap, or Final Touch	Apply with sponge or detergent soft cloth
Fingerprints and light stains	MCT 800	Provides barrier for future fingerprints
Stubborn stains and discolouration	Inox Care	Rub in direction of finish
Greased and Oil	MCT 800	Apply with sponge or soft cloth

DICTIONARY

Stainless steel

Chromium (Cr)

A steel grey, lustrous, hard, brittle and very corrosion resistant metal with chromite as its main ore. Chromite occurs naturally in countries like Russia, Zimbabwe, Transvaal, Turkey, Iran, etc. Chromium is used to harden steel, to make steel corrosion resistant and for chrome plating. Inhaled chromium is a human carcinogen, resulting in increased risk of lung cancer. Check on safety levels.

Organic solvents

Solvents can be broadly classified into aqueous (water based) or organic (hydrocarbon based). Solvents are capable of dissolving substances like dirt, grease, fats, oils, etc.

The term solvent is used to describe a group of organic chemicals. organic chemicals are carbon based and possess the same physical structure a living organisms. Organic solvents are petrol based. Organic solvents do not dissolve in water.

Solvents evaporate quickly at room temperature and pass freely into the bloodstream through the skin.

Solvents can be classified by chemical groups or families. Some of the more common ones are:

Alcohols, glycols, esters, ethers, aromatic hydrocarbons, aliphatic hydrocarbons, chlorinated hydrocarbons, ketones.

Solvents can dissolve solids, liquids and gases. Water is a solvent. Solvents possess a wide variety of chemical and physical properties.

There are many health risks with overexposure. Most irritate skin, eyes, nose and throat. Some cause nausea, vomiting and dizziness. Long term exposure can damage kidneys, liver, the nervous and the respiratory system. Some organic solvents are even suspect carcinogens.

Most solvents are a potential fire hazard. Solvents with a flash point between 38 degrees C and 94 degrees C are considered flammable and must never be used near a flame or near sparks. These flammable solvents must be stored in a proper flammable storage facility. Organic solvents are not corrosive.

Organic solvents can enter the body through the skin. Always wear solvent proof protective clothing.

Check safety sheets and follow manufacturers instructions.

The following chemicals are just a few belonging to solvents: alcohol, aromatic, hydrocarbons, chlorinated hydrocarbons, glycols, esters, ethers, ketones (acetone, methyl ethyl ketone) and many more. There are many hundreds organic solvents, a list of the most common ones covers more than 500.

Acetone

Acetone is a colourless, highly flammable liquid. Its best known use is as an ingredient in nail varnish removers. Acetone is a member of the ketone bodies

Chlorine (Cl)

Chlorine is a greenish yellow gas that combines readily with most other elements. Chlorine is an important chemical in water purification and in disinfectants. Chlorine is manufactured by electrolysis of an aqueous solution of sodium chloride. In nature it is only found combined with other elements, ie in the form of salt. Human health effects associated with breathing small amounts of chlorine are not known, although it can irritate the respiratory system and the skin.

Chlorine is a halogen. As chlorine gas it is extremely poisonous.

Halogen

Halogens are a chemical series. They are highly reactive and can be harmful or lethal in sufficient quantities.

Methyl alcohol (CH₃OH)

Simplest of the alcohols. It can be made by the dry distillation of wood but is usually made from coal or natural gas. Methyl alcohol is highly poisonous.

Methyl alcohol is the simplest aliphatic alcohol. In impure form also known as wood spirit.

Methyl alcohol, also called methanol, affects the nervous system and can lead to serious damage to the optic nerve or even blindness. Methyl alcohol is made from natural gas.

Mineral spirits

A mineral spirit is a petroleum distillate with properties similar to turpentine.

Phosphates

A phosphate is a polyatomic ion consisting of one phosphorous atom and four oxygen atoms. Synthetic detergents

Synthetic Detergents

Alkalis

Alkalis are the opposite of acids. They have very low concentrations of hydrogen ions when dissolved in water. Their pH value is above 7. pH 7 is neutral. Below pH are acids, above pH 7 are alkalis. Alkalis will turn litmus paper blue. Bile in the human body is an alkali. Alkaline solutions are caustic, causing chemical burns. Caustic soda, potash, calcium carbonate are alkalis.

Non-halogenated solvents

Ethyl alcohol (C₂H₅OH)

Also known as ethanol or grain alcohol. A flammable, colourless chemical compound.

One of the alcohols most commonly used in alcoholic drinks, in which case it is produced by fermentation.

Ethyl alcohol for industrial use is mainly made from petroleum feedstock. A blood level of 0.5% is commonly fatal. 0.08 % or 0.05 % are widely agreed limits for driving.

Methyl ethyl ketone

A colourless liquid with an acetone-like odour. used as a solvent, for pesticide formulations and to sterilize surgical instruments.

Methyl ethyl ketone is soluble in water, alcohol, ether, acetone and benzene.

Exposure to methyl ethyl ketone can irritate eyes, nose and head. prolonged exposure can cause central nervous system depression.

Benzene

A colourless liquid with a sweet odour. Evaporates quickly and dissolves slightly in water. Highly flammable.

Breathing very high levels can result in death. Breathing high levels can cause drowsiness and rapid heart rate.

Long term effects of benzene are on the blood. Benzene is a carcinogen.

Benzene is usually synthesized from compounds in petroleum.

Isopropyl alcohol (C₃H₈O)

Commonly used as a cleaner and solvent in industry. Isopropyl alcohol is a main ingredient of rubbing alcohol.

Turpentine

Yellow to brown semi-fluid resin from sapwood of conifers.

Colourless liquid with paint-like odour. Turpentine is a traditional chemical for diluting oil paints. Pure gum turpentine is manufactured from pine tree resin. Industrial grade turpentine is manufactured from wood. Turpentine is flammable. Skin contact and inhalation risks are moderate, but ingestion risks are high.

Can irritate respiratory system and eyes.

Citrus thinners

A citrus thinner is a citrus distillate and a by-product of the manufacture of citrus peel liquor. It is best used as a substitute for turpentine but it is not as strong and is classified as an extra mild thinner.

Citrus thinners are more environmentally friendly and particularly recommended for people with chemical sensitivities.

CHEMICALS FOR CLEANING AND PROTECTING STAINLESS STEEL

THERMAL CHEMICAL CLEANING OF STAINLESS STEEL WELDS

MCT 201 T PASTE

Swiss made - This paste has no equal

Heavy duty, aggressive cleaner for weathered and heavily soiled stainless steel

**FAST ACTION - SAFE IF USED AS INSTRUCTED
SIMPLE TO USE - LEAVES POLISHED SURFACES
BRILLIANTLY CLEAN**

Highly effective fast action. Simple and safe if used as instructed. Will leave polished surfaces brilliantly clean. Ideal for cleaning badly corroded and rust infested stainless steel surfaces that are subjected to the weather, ie bus shelters, shop and hotel entrances, street furniture, external stainless steel sculptures, etc.

Particularly effective on TIG welds which are badly discoloured and have burn marks. Also suitable for removing graffiti.

APPLICATIONS

Welds on polished stainless steel Apply pickling paste MCT 201 T to a felt pad and rub surface clean.

Do not apply with brush. MCT 201 T needs the rubbing action to work. After cleaning apply MCT 800 protection spray.

Welds on grained stainless steel. Apply MCT 201 T to weld using the spatula. Leave for a few minutes and wash off with water. Protect surface with MCT 800 spray.

To preserve a passivated surface MCT 201 T must be washed off with water, ideally with some soap added.

Read HSE 652/1 document and Material Safety Data Sheet before use.

How to clean and protect heavily contaminated and rust infested stainless steel surfaces - in the factory and on site

Wear impenetrable gloves and safety glasses.. Impregnate the felt pad supplied with MCT 201 T paste.

Wipe over the contaminated surface, leave for a while (depending on degree of contamination), wash off with soapy water.

You now have a metallic clean surface. Apply MCT 800 stainless steel spray. Do not wash off. You now have a clean and protected surface.

We recommend that you wear surgical gloves and safety glasses. Read HSE 652/1 document and Material Safety Sheet before use.

Available as: 330 g plastic container, 1 pair of surgical gloves, 2 spatulas, 1 block of felt (safety glasses not supplied)

MCT 201 T paste contains less than 1% hydrofluoric acid and max. 2.5% nitric acid, making it one of the safest heavy duty pickling pastes. According to European recommendations no special license is needed for the use of pickling paste containing less than 1% hydrofluoric acid

Hydrofluoric acid is one of the most aggressive and most hazardous acids known. Hydrofluoric acid in concentrated form . attacks glass, concrete, all silica based materials, some metals and organic compounds. It causes very severe burns and pain. Hydrofluoric acid in a solution of 1% is still considered hazardous. However in MCT 201 T the acid is mixed with aluminium powder and other substances it is less harmful when accidentally coming into contact with the skin. In our experience it can cause yellow stains on the skin, without pain, and the stains disappear after a few days. Nevertheless you must treat MCT 201 T with respect and at all times follow recommended procedures of protection and for accidental contact.

The less harmful characteristic of MCT 201 T is shown by the fact that it does not have to display the skull and bone logo for very hazardous materials, as recommended by European regulations, nor does it need a special license to use.

Keep only in the plastic container in which MCT 201 T is supplied. Wear gloves made of PVC or neoprene. Check gloves for pin holes. Ideally use new gloves each time. Always wash hands after use.. Wear goggles with allround eye protection.



MCT 800 Best stainless steel cleaner and protector fluid on the market, specially formulated for stainless steel fabricators

PROTECTS AGAINST CORROSION. PREVENTS RUST AND OTHER SURFACE CONTAMINATION FROM AIRBORNE POLLUTION. BOTH IN THE FACTORY AND ON SITE. CLEANS THOROUGHLY AND WITH ANTIBACTERIA ACTION. LEAVES PROTECTIVE FILM TO PREVENT FINGER MARKS. LEAVES PLEASANT SMELL

VERY ECONOMICAL, NON HAZARDOUS AND ANTICORROSIVE. REFINED TO MEDICAL STANDARDS. CONTAINS NO SOLVENTS. MANY OTHER SPRAYS CONTAIN UP TO 30% SOLVENTS. MCT 800 S IS THEREFORE MORE CONCENTRATED AND MORE ECONOMICAL DOES NOT LEAVE A RAINBOW COLOURED FILM LIKE MANY OTHER SPRAYS

MCT 800 was developed for fabricators to remove cross contamination from ferrous steels that were fabricated next to the stainless steel fabrication department. The protective qualities make it ideal for cleaning stainless steel on site and the natural, safe ingredients extend its use to kitchens and food processing plants.

Leaves protective film that prevents finger prints and protects against environmental pollution and renewed attack from airborne pollutants.. Very economical. 1 litre will cover at least 50 sq m. Pleasant smell. Particularly suited for stainless steel surfaces that are exposed to the weather. Cannot be compared with cheaper fluids which contain fats and oil, give off an unpleasant smell and do not clean as thoroughly as MCT 800 S.

More concentrated because it contains no solvents. (Many other sprays contain up to 30% solvents) Does not leave rainbow coloured film like some sprays.

For all stainless steel surfaces that need to be grease-free, hygienically clean, streak free and must look fresh and attractive, ie hand rails, internal claddings of lifts, stainless steel in kitchens, external stainless steel sculptures, etc Non toxic. refined to medical standards.

A short explanation why we think MCT 800 is the best stainless steel cleaner and protector for average contamination on the market

Most products have a watery base in which solvents are mixed with soaps. MCT 800 uses real orange oil which is natural and a more effective cleaning agent. With most cleaners all you get is the cleaning effect. These products leave rainbow coloured films on mirror polished stainless steel surfaces which are very susceptible to finger prints and renewed pollution. To overcome this unwanted film some cleaners use fats, waxes and polymers in a solvent which evaporates leaving a film. These films are relatively resistant against further pollution attack but tend to create spots which are difficult to remove during the next cleaning operation.

MCT 800 will also form a thin film after cleaning, but this film is formed without solvents and is easily removed during subsequent cleaning operations, in fact all that is needed to remove the film is some soapy water. Because MCT 800 contains no solvents it gives up to 30% more yield.

INOX CLEAN - Top grade stainless steel cleaner and protector gel German made

Highly concentrated water based cleaner for stainless steel, aluminium and non ferrous metals.

A clean, bright gel to revitalise the appearance of stainless steel surfaces. Removes surface corrosion, mineral deposits and contaminations. Dissolves grease, oil and dirt without damaging the base material.

Gel adheres well to vertical surfaces. After cleaning, passivation occurs naturally, producing a new and complete corrosion resistance layer. Recommended to be used either concentrated or in various dilutions. Apply with brush and leave to soak for a short while. Rinse off with water. Repeat for stubborn stains.

Biodegradable. Contains no nitric acid or fluorspar acid. PH concentrated: 1,5. Non flammable INOX CLEAN is classed as hazardous. It contains Phosphoric acid and Glycol ether. Irritating to eyes



and skin. Wear suitable eye and hand protection.. Wear breathing mask if used undiluted. Wash hands after use. READ SAFETY SHEET.

INOX CARE - Cleaner and protector for external use German made

A highly refined pure oil for the care and protection of stainless steel, aluminium and non ferrous metals. Leaves a softly gleaming protective film. Fingerprints can be removed by wiping off with a soft cloth. Protects against new fingerprints. Replaces humidity and protects from the influences of the weather.

Application: By brush or soft cloth. Apply sparingly.

INOX CARE is classed as hazardous. It contains Glycol ether. It is irritating to eyes and skin. Wear eye and hand protection and wear a breathing mask. Wash hands after use. Read Safety Sheet before use.

FINAL TOUCH - Perfect internal stainless steel cleaner

German made

Cleans stainless surfaces leaving a residue free finish. Does not leave a protective film. Also recommended for glass, lacquered surfaces, plastics, aluminium, non ferrous metals, etc. Removes light oil contamination, dust, felt tip pen marks, finger prints, etc. from stainless steel. glass, ceramics, etc.

Fast drying. Ideal for cleaning exhibition stands, prior to painting, coating, glueing, etc.

Application: Spray surface. Clean with soft cotton rag. Polish. Non flammable.

FINAL TOUCH is classed as non hazardous. Nevertheless the manufacturer recommends the use of eye and hand protection. Wash hands after use. Read the safety sheet before use.

PASSIVATION

The unique properties of stainless steel are obtained by chromium combining with oxygen to produce a very fine impenetrable film of chromium oxide which protects the underlying material.

When this chromium oxide film is present the stainless steel is corrosion resistant and the metal is called passive.

The chromium oxide film can be damaged by iron, paint and grease during welding, grinding, heat treatment, etc. Where the chromium oxide layer is damaged corrosion can get a foothold.

Pickling will remove the pollutants and restore the corrosion resistance by stripping the damaged chromium oxide layer and allowing a new layer to be formed, called passivation.

Pickled surfaces should be thoroughly rinsed with water. After 24 hours surfaces will be completely passivated, ie full corrosion properties will be restored.

FUN@WELDING anti spatter spray

Our most popular anti spatter spray at very competitive prices

A high performance separating agent that protects workpiece and welding equipment.

Prevents welding spatter adhering to metal surfaces. Its cooling effect reduces heat discolouration. Removes light oil stains and temporarily protects surface from corrosion.

Effective wet and dry. Can be painted or zinc sprayed. Biodegradable. Non flammable. Contains no chlorinated hydrocarbons

Fun@Welding is classed as non hazardous. Avoid contact with eyes. Wash hands after use. Read Safety Sheet.

PURE ZINC IN AN AEROSOL FOR LONG TERM PROTECTION OF METAL AND FOR REPAIR OF GALVANISED SURFACES

ZINK-ON-SPRAY - Swiss made

Zinc spray. 96% pure zinc. Suitable for all metal surfaces. Lasting corrosion protection.

Adheres well to all metal surfaces. Fast drying after 20 - 30 min. Can be painted.

Can be spot welded. Weatherproof. Protects freshly drilled holes, welds or threads. Matt silver finish. Shake vigorously for about 30 seconds. Clean surface and remove rust before spraying with Zinc Spray. Wait 5 to 8 minutes before applying second coat. Keeps for a min of 2 years.

Highly inflammable. Use in well ventilated rooms only. Keep away from



children. Do not inhale. Keep cool. Do not smoke. Do not open can, even when empty Non toxic. Contains no ingredients that have to be declared as hazardous.

400 ml spray can. The 400 ml spray can is sufficient to cover between 2 to 4 sq m.

Available as spray can only because zinc will dry immediately after being exposed to oxygen.

ISO-TEC-GLANZ-ZINK-SPRAY - Swiss made

Long term corrosion protection for all metal surfaces. 98,5 % pure zinc and 96% zinc/aluminium content. Lasting corrosion protection. Adheres well to all metal surfaces.

Fast drying in 20 to 30 min. Can be painted. Can be spot welded. Withstands temperatures up to 500 degrees C.

Can be used to repair damaged zinc plated surfaces and damaged painted surfaces.

Protects welds and freshly drilled holes. Licensed for use within drinking water environment. Shiny, silver colour.

Before use shake vigorously for about 30 seconds. Spray distance 250 to 300mm. Wait 5 - 8 minutes before applying second coat. Use in well ventilated rooms only. Keep away from children. Do not inhale. Keep cool. Do not smoke. Do not open can, even when empty. Non toxic.

Contains no ingredients that have to be declared as hazardous, however highly inflammable

The 400 ml spray can will cover approx. 2 to 4 sq m. Available as spray only because exposure to oxygen will dry it immediately.

RUBOIL - A generation old natural trade secret that costs next to nothing

RUBOIL is a refined natural product that has been used by generations of European polishers to cool and lubricate abrasive belts, wheels and discs.

RUBOIL functions as a lubricant which attaches to the surface of abrasive belts forming a monomolecular layer. The protection against premature wear is thought to be due to the layer's ability to absorb the contact pressure thus maintaining the cutting ability of the abrasive belt and reducing the wear rate of the abrasive mineral.

Reduction of friction reduces heat, prevents damage to the metal and prolongs belt life. RUBOIL also prevents abrasive belt clogging and improves the cutting action with lower contact pressures.

RUBOIL is very economical. very small amounts are necessary to maintain a lubricating film. No benefits are gained by applying large amounts of RUBOIL. In most cases an application every 10 to 15 minutes is sufficient.

For manual applications a hand held spray bottle suffices. For automatic applications timer controlled spray guns are available.

KOOLMAX NF ABRASIVE BELT LUBRICANT

**PREVENTS PREMATURE CLOGGING OF ABRASIVE BELTS, DISCS AND WHEELS PROLONGS BELT LIFE UP TO 200%
NON STAINING, SILICON AND SULPHUR FREE.
VERY ECONOMICAL**



THERMO-CHEMICAL CLEANING OF WELD SEAMS

ISOJET CLEANER

MAGIC CLEANING

The welding and other heat treatment of stainless steels creates unsightly oxide layers. In addition to mechanical processes such as grinding or sand-blasting, and chemical processes such as pickling, these blooms can also be removed by electro-chemical means.

The Isojet III cleaning apparatus manufactured by Swiss manufacturer

ISO operates on electro-chemical principles. In contrast to other cleaning processes, with Isojet III – thanks to the special streamlined curved shape and the electrolytes, specially selected for this process – only the oxide layers generated by the heat treatment are removed.

This guarantees that the optical surface smoothness is fully preserved.

The cleaned work piece merely has to be rinsed with clean water.

A further advantage is that the passive layer required for the corrosion resistance of the steel is preserved by Isojet III (corrosion tests as per DIN 50921). No subsequent

passivation is needed, and one step in the operation can be omitted.

The Isojet III can very easily be attached to a 230-V supply, and has an adjustable constant current and an integrated electrolyte feed. This guarantees efficient and economical cleaning. The standard options for short circuit breaking and excess temperature guarantee process reliability.

Magic printing – its no conjuring trick

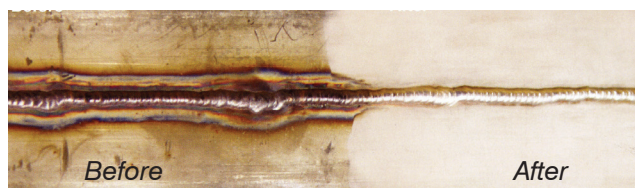
The Isojet III also offers a “Magic Printing” function. This refers to the electro-chemical marking of chrome nickel materials. Company logos, scales, trade marks or other data can be applied without any problem, creating a permanent and corrosion-resistant effect. Areas of application are balustrades, sculptures, railings and architectural metalwork of all kinds.

“Magic Printing” is simplicity itself to use. Set the unit to “Print”, place the film on the work piece, moisten the printing felt and the film with electrolyte, pass the electrode over two or three times, and the printing operation is complete.

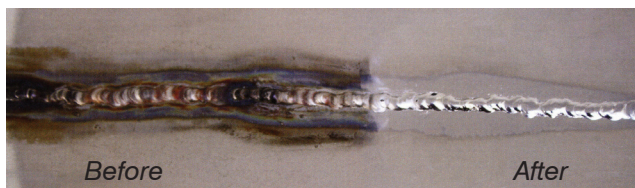




Latest Thermochemical Weld Cleaning, Polishing, Passivating & Etching Systems



Thermochemical Cleaning



Thermochemical Weld Polishing

The Systems

Our thermochemical weld cleaning systems are based on the Elsyier process by which the discolouration is removed by electrolysis and the effect of a phosphoric acid electrolyte.



Brush wand for Surfox models



Brush wand for Isojet models

Carbon brush for weld cleaning, polishing and passivating difficult to reach areas.



Tungsten head for Surfox models

Tungsten and/or stainless steel pads covered in special fabric for fast weld cleaning, polishing and passivating easily accessible areas



Optional marking and etching kits available for all Surfox models

The Cleaners - Top of the range models



Model SURFOX 204

- Available in 230V or 110V
- Cleaning, polishing, etching
- Brush and pad heads
- Adjustable current
- Automatic or manual fluid pump
- Built in fume extraction



Model SURFOX 104

- Available in 230V or 110V
- Cleaning, polishing, etching
- Brush and pad heads
- Adjustable current
- Automatic or manual fluid pump

All Surfox models are Certified by: CE, NSF, ASTM-A967 and ASTM-A380

CE = Conformity marking for products in the EEC
NSF = covers standards for food, water & consumer goods
ASTM-A967 = covers passivation of stainless steel
ASTM-A380 = covers cleaning, descaling and passivation



Model SURFOX MINI

- Available in 230V or 110V
- Cleaning, polishing, etching
- Brush and pad heads
- Adjustable current
- Manual fluid dispenser

The Cleaners - Budget Models - Ideal for jobbing shop



Model ISOJET 4 Kit

- 110V or 230V
- Carbon Brush Head only
- Preset Current

Certified by: CE

CE = Conformity marking for products in the EEC



Model ISOJET 3 Kit

- 230V only
- Stainless Steel & Glass Fibre Pad only
- Preset Current

Certified by: CE CE = Conformity marking for products in the EEC

The Optional Extras - for Surfox models



Carbon Brush Kit

For cleaning intricate areas



Marking Kit

For marking and etching



Stainless Steel Kit

For identifying stainless steel grades



Passivation Kit

To ensure proper passivation

The Consumables



Surfox H

Cleaning Fluid

Surfox N

Neutralizing Fluid

Surfox T

Heavy Duty Fluid

Isol N

Cleaning Fluid

MCT 800

Stainless Steel Protection Spray

Other fluids for cleaning and protecting available - ask for details

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Traditional wide belt machines
from 600 - 1500mm working widths



Newly designed dedicated machines for deburring,
corner rounding and oxide removal



Narrow belt throughfeed
machines



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finishing machines



Single belt finishing
machines



Sheet polishing
machines

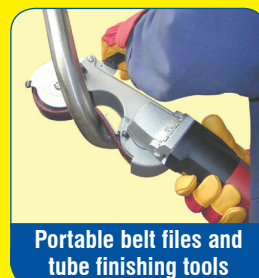


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Weld Cleaning tools



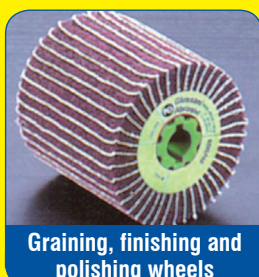
Manual sheet Deburrers



Pneumatic, expanding &
standard contact wheels



Polishing mops
and compo



Graining, finishing and
polishing wheels



Narrow and wide abrasive belts for all applications