

Hazards	Safe system of working (control measures)	Tick
Dust	<ul style="list-style-type: none"> A risk assessment should be carried out on dust inhalation at the machine, and LEV/PPE used as required Natural ventilation might be sufficient for the amount of polishing done in school as dust concentrations should not exceed the WEL A nuisance dust mask should be worn in cases of prolonged use or if excessive amounts of dust or lint are being shed from a mop 	<input type="checkbox"/>
Polishing compounds	<ul style="list-style-type: none"> Hands should be washed thoroughly after using any polishing compound 	<input type="checkbox"/>
Lack of space around machine	<ul style="list-style-type: none"> Sufficient space around the machine should prevent the operator being pushed by passers-by 	<input type="checkbox"/>
Slippery floor surface, loose items around machine	<ul style="list-style-type: none"> Floor surface should not be slippery and kept free of loose items See BS 4163:2014 Section 6 Working Area Environment 	<input type="checkbox"/>
Lighting	<ul style="list-style-type: none"> Adequate lighting should be provided See BS 4163:2014 Section 6 Working Area Environment 	<input type="checkbox"/>

Teaching Strategies

- It is essential that risk assessments are completed to cover the use of these machines by learners and colleagues. This will normally involve the adoption and adaptation of model risk assessments, e.g. BS4163: 2014
 - It is essential that a regular maintenance programme is put into operation and that a maintenance log is kept. This should involve daily, weekly and termly checks, covering general maintenance and identifying any faults that require repairs
 - Learners should be aware of the hazards associated with the equipment and precautions that should be taken during use
 - Before using the equipment, learners should be trained and assessed as competent, and a record of their training should be kept
 - Learners should be supervised at all times by a trained, competent person
 - Polishing machine health and safety rules should be available and observed
 - Ensure sufficient space around the machine, with observers outside the safe working zone to prevent operator being pushed by passers by
- Demonstration of the polishing (buffing) machine to learners should include:**
- Position and use of all controls i.e. workshop emergency stop buttons, isolator switch and start and emergency stop buttons on machine
 - The use of LEV (where fitted)
 - Explanation of safety hazards (loose clothing, eye protection, sharp edges, overcrowding etc)
 - The use of eye protection, an apron or work coat and dust mask if required
 - Selection and fitting of appropriate type of polishing mop
 - How to check the condition of the mop/wire brush
 - Recognise that polishing may produce the best surface finish if done in stages i.e. first stage/finishing stage
 - Selection of appropriate polishing compounds and how to load the mop
 - The correct positioning of the work when polishing/wire brushing, i.e. in the lower quadrant
 - Correct stance to be adopted
 - Ensuring learners work on their own and are not distracted or pushed by observers
 - How to hold the work piece i.e. firmly, keeping fingers behind work piece to prevent contact with the mop/brush
 - How to feed the work piece across the surface of the mop/brush for even wear, to prevent over-heating and snatching
 - Ensuring that when work is complete, learners turn off the machine and never walk away until the machine has come to a complete stop

Assessment Task 2
Practical Skills

Machine operation:

Demonstrate practical familiarity with:

- Procedure for isolating the machine, stop/start controls, use of emergency stops
- Checking machine guards are properly positioned and secure, capable of containing debris and dislodged work piece, and preventing entanglement
- Danger points, e.g. never holding the work piece on the top quadrant of the mop/brush
- General environmental health risks and conditions

Demonstrate practical familiarity with:

- Use of correct PPE
- Selection and fitting of appropriate type of polishing mop/wire brush, e.g. how to bore to fit taper spindles
- Ensuring mops are only used to polish specific materials, selection and application of appropriate polish/buffing compound for the material being used
- How to position and adjust all necessary guards
- How to dress the mop/brush when worn unevenly
- How to hold the work piece, i.e. no gloves or cloths
- Correct position of work piece on the mop surface
- Correct pressure to be applied to work piece to avoid snatching and overheating

Undertake a range of polishing and wire brushing operations commonly undertaken in school workshops, to demonstrate correct practice, i.e.:

- Polish the surface and edges of plastics, e.g. acrylic
- Polish the surface and edges of ferrous metals, e.g. BMS and stainless steel
- Polish the surface and edges of non-ferrous metals, e.g. copper, brass, silver
- Wire brush to remove rust, oxides etc

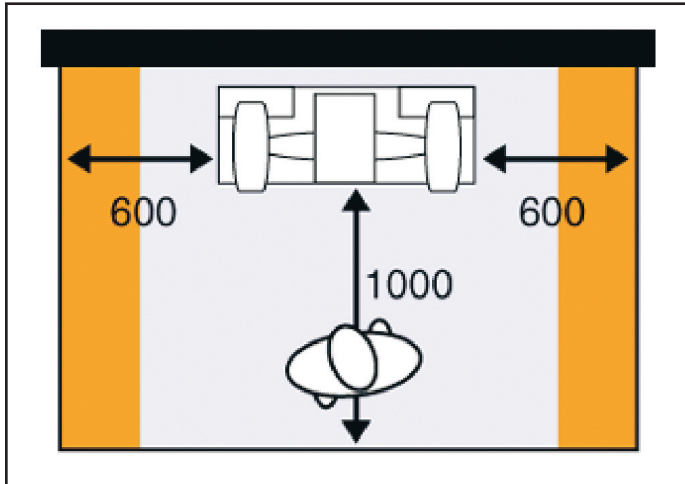
Discuss routine maintenance requirements, i.e.:

- The requirements recommended by the manufacturer
- The identification of defects and reporting procedures

Supplementary materials

The space-allocation diagram indicates the clear working space required on either side of the machine. Where machines are next to one another, dimensions can be overlapped, as indicated by the shaded zone on the diagram. Distances in front of the machine are assumed to adjoin circulation routes. A 200mm space has been allowed at the back of the machine for cleaning and maintenance.

Double buffing machine



- The following references provide additional notes and guidance to support training sessions:

Polishing and finishing compounds

Type	Colour	Use on	Use for	Use with
Abramax	grey	Steel / stainless steel	First stage polishing – minor imperfections	Stiched mop
Tripomax	brown	Non-ferrous / plastics	First stage polishing	Stiched mop
Blumax	Blue	Non-ferrous / ferrous	Final glossing	50 fold loose mop
Chromax	pink	Chrome/ ferrous/non-ferrous	Very fine glossing	50 fold loose mop
Plastimax	buff	Plastics and veneers	Glossing	50 fold loose mop
Starmax	maroon	soft non-ferrous eg silver	Jewellers rouge high glossing	50 fold loose mop
Flexcut	gold	Carving / turning tools	Stropping cutting edge	Leather wheel/strop

http://www.lippert-unipol.co.uk/html/pr_range/compounds.htm

<http://www.axminster.co.uk/find.asp>

http://thepolishingshop.co.uk/acatalog/Polishing_Compounds.html