Conservation of brass



This helpsheet aims to explain some of the common problems with brass memorials and how they can be cared for. Some work such as cleaning is relatively simple to undertake but War Memorials Trust would recommend consulting a professional for anything more complicated.

What is brass?

Brass is a metal alloy made from roughly 2/3 copper and 1/3 zinc. The proportions of copper and zinc vary slightly depending on what the brass is used for and the desired colour. Brass can sometimes be confused with bronze but has different properties.

Conservation overview

The most common problems with brass war memorials are corrosion, dents and over-cleaning. Corrosion may appear as pale green powdery deposits on the surface. Over-cleaning leaves the surface of the brass looking uneven where some of the surface layers of metal have rubbed off.

- Corrosion can be limited by making sure the brass is kept in ambient conditions i.e. not too damp, cold or hot.
- Dents may have occurred due to poor care being taken of the memorial and careful handling should prevent further problems.
- Over-cleaning has to be managed by using appropriate techniques, as discussed below.

Brass needs to be handled with care as salt and oil from hands can cause it to tarnish. Therefore, it is recommended plastic gloves are worn whenever handling or treating the brass.

The appearance and finish of brass surfaces will be down to individual choice. Basic cleaning can enhance the appearance by removing dirt and corrosion and reducing fingerprints. Any form of polishing is an abrasive process which removes tarnishing but will bring back shine by revealing fresh metal underneath. Care must be taken not to over-polish so decorative details and surfaces are not lost.

Cleaning

Below are three basic processes to clean brass surfaces depending on what substances are present. These could be used by the custodian as part of their regular maintenance programme.

- To remove dust, use a soft dry cloth and an old nylon toothbrush to get into all crevices. Do not use household sprays.
- To remove surface dirt, use a soft cloth with distilled water and pH neutral detergent (e.g. Vulpex). Rinse with the distilled water afterwards.

• To remove greasy smears, white spirit can be wiped over the surface with a lint free cotton rag (e.g made from an old shirt or dishcloth). Rinse with the distilled water afterwards.

Finishing

Cleaning can be followed by polishing the surface with very fine abrasive cloth such as Micro-Mesh. It is not recommended to use more abrasive liquid or paste products as these can remove too much metal from the surface.

After cleaning, lacquers or waxes can be applied as a protective coat to prevent corrosion and the choice will depend on whether you want a high or dull shine. A professional can provide advice on this to enable you to integrate finishing into your regular maintenance programme.

If treating a whole plaque, old lacquer needs to be removed with acetone and a new layer applied with a spray so it is best to consult a professional about this. Just touching up small areas of lost lacquer can be done by using a brush and applying a product such as Incralac (an acrylic lacquer).

Microcrystalline waxes (e.g. Renaissance wax) can be applied on top of old lacquers or on their own provided the surface has been de-greased first following the cleaning advice above. A soft cloth should be used to evenly apply the wax and then buff it off with a lint free cotton rag.

Further information on products

Please note that whilst these products have been known to have been used successfully on war memorials, there are other products available. In addition, War Memorials Trust has had no direct contact with these suppliers and they are mentioned for information purposes only rather than as a specific recommendation.

Vulpex Liquid Soap and Renaissance wax

• Conservation by Design

Timecare Works, 5 Singer Way, Woburn Rd Ind. Estate, Kempston, Bedford MK42 7AW T: 01234 853555 E: info@conservation-by-design.co.uk

W: www.conservation-by-design.co.uk

Picreator

44 Park View Gardens, Hendon, London NW4 2PN

T: 0208 202 8972 E: info@picreator.co.uk

W: www.picreator.co.uk

Incralac

Indestructible Paint Limited,

19-25 Pentos Drive, Sparkhill, Birmingham, B11 3TA

T: 0121 702 2485 E: sales@indestructible.co.uk

W: www.indestructible.co.uk/rylard/datasheets/Incralac.htm

Micro-Mesh

Svlmasta

T: 01444 831459 E: sales@sylmasta.com

W: www.sylmasta.com/acatalog/Online_Catalogue_Micro_Mesh_Finishing_Cloths_35.html