

K1404 Condition Report

Conservation Started: 18/02/2013

Conservation Finished: 22/02/2013

Conservator: Ciarán Lavelle

Time Taken: 1.5 hours

Including digital photography, report, conservation and packing.

Dimensions: Diam. 8mm; H. 3.5mm; Diam. hole 1.5mm; Th. sheet <0.5mm

Weight before: 0.12g

Weight after: 0.11g

Catalogue number: 670

Digital photography:

Taken with a Nikon Coolpix 4500 digital camera, under daylight or bulbs and Meiji Techno RZ Stereo microscope with an Infinity 1 camera (with analyses capture software) and fibre optic lights, 7-75x magnification. Taken before, during and after.

Annotation on any of the storage bags or boxes: K1404, X-Ray: L44

Description: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

Silver-alloy fragments from a boss.

Associated Objects:

Pre-Conservation Condition: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification

The object is made up of two large fragments and 8 smaller fragments of a silver alloy metal. The fragments have visible break edges visible on all sides, with missing material. The surfaces of both the front and reverse have tarnish and corrosion visible, especially the interior surface which is covered in a rough purple/grey powdery corrosion product. The object is covered in a light layer of loose and compact soil, especially the front.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Display / Study / Analysis

Aim: Total cleaning / Stabilisation

Materials: Soft natural/synthetic brushes, thorn in pin vice/holder, IMS on metals, 50:50 water/IMS on metals, cotton wool swabs, cocktail stick, Paraloid B72

The granular soil on the front/back was mechanically removed or reduced where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. IMS or water was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of IMS.

Corrosion products were left in situ; corrosion was not active and can be further cleaned or stabilised at a later date.

The paper K number was adhered to the back with HMG brand Paraloid B72 (ethyl methacrylate copolymer) from the tube, applied with a cocktail stick.

A storage box padded with white polyethylene foam was made for housing the object. A strip of Tyvek (spun bound polyethylene fibres) was used as a cushion for the object and to help lift it out of the foam.

Post-Conservation Condition/Findings:

The object is made up of two large fragments and 8 smaller fragments of a silver alloy metal. The fragments have visible break edges visible on all sides, with missing material. The object appears to be silver with a copper alloy; there is silver tarnish, corrosion products and copper corrosion products visible across the surface, especially on the back of the object. The interior surface which is covered in a rough purple/grey powdery crystalline corrosion product, this was left in-situ for future analysis. The green/black corrosion layer appears to be a combination of corrosion products the silver and the copper content and is prominent on the back. The back is also rough in texture and un-adorned. There are areas of insoluble crustations on the surface, especially on the front. There is visible evidence of gold gilding on the front. As there were no decorative features on the object, some of this corrosion product and insoluble crustation was left in place to prevent the potential loss of further gold gilt. The object required minimal interventive conservation, removal of excess soil.

Key Features:

- Fragments of a silver alloy boss.
- Gilding visible on the front of the object.
- Silver alloy corrosion, purple/grey powdery crystalline corrosion products.

Analysis Undertaken:

XRF analysis of the object was performed. See document 'XXXX XRF Report'.

Samples:

Not enough soil for a sample.

References: