

K1055 Condition Report

Conservation Started: 17/06/11

Conservation Finished: 22/06/11

Conservator: Deborah Magnoler

Time Taken: 10 hours

Including digital photography, report, conservation and packing.

Dimensions: (L) 25.2 mm (Diam) 13.2 mm

Weight before: 20.97 g

Weight after: 20.73g

Catalogue number: 541

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: none noted

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

A cylindrical gold and garnet object. The cylinder features a row of 5 garnets on each side, cut into square and rectangular shapes. Optically, there appears to be a difference in colour between the garnets, with the square ones being of a deep red colour and the rectangular ones of a slightly more orange hue. Each garnet is backed by an apparently square-less stamped foil. One of the ends features a tang protruding from the inside of the object. This tang is surrounded by 4 rivet holes arranged in a square position. A fifth rivet hole appears to be a mistake. The tip of the tang has a rivet hole in the centre with evidence of having contained an iron object, presumably a pin, as indicated by the orange iron corrosion within it. The opposite end of the cylinder features the broken end of a large fixture inserted within the body of the main cylinder. This is of a grey colour and could be an alloy metal high in silver and has a flaring, broken top. This end of the cylinder also features four rivet holes, which are not lined with those at the opposite end. The broken and flaring end of the pin has evidence of four rivet holes.

Associated Objects: K550 and K130.

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

Mostly clean, with deposits of compact soil within some of the garnets cells. Both ends are also partially covered by soil deposits. The object features localised dark staining/ tarnishing on the surface, one area of extended abrasion, multiple minor scratches and one major dent with deformation of the surface metal. The opposite end from the tang features the partial, broken and jagged end of a large fixture.

There are traces of gilding on this end of the fixture, but they are not homogeneous. The tang appears to have been gilded.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Display/ Analysis

Aim: Total cleaning

Materials: Soft natural/synthetic brushes, cotton swab, cocktail stick, thorn in pin vice/holder, water on garnets, IMS on metals

The granular soil on the exterior/interior surface 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.

The paper K number was adhered to the interior surface with HMG brand Paraloid B72 (ethyl methacrylate copolymer) from the tube, applied with a fine paint brush.

A new storage box padded with white polyethylene foam was constructed to house 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 broken off end of K1055, in the form of a roundel with 2 sets of four rivet holes and a ripped centre, was located within the underside of K130. This has now been removed from its original location and is stored in its own box marked K1055/K130 fixture. The matching of this roundel with the ripped end of the cylinder makes K130, K1055 and K 545 associated parts forming an object whose use is still unknown. Like the rest of the fixture, or pin inserted within the cylinder, the roundel is silver gilt, partially bent and bears several marks left by manufacture, such as a series of small dents (see images for full details).

Analysis undertaken

XRF analysis of the object was performed. See document 'K1055 XRF Report'.

Samples:

1. Soil from surface
2. rivet fragment from hole in broken side
3. gold fragment from gilding
4. soil from broken end
5. K1055/k130 roundel: soil from concave side
6. K1055/K130 roundel: gilding fragment
7. K1055/K130 roundel: rivet fragment
8. K1055/K130 roundel: swabs from convex side
9. K1055/K130 roundel: swabs from concave side