

K1050 Condition Report

Conservation Started: 19/07/2012

17/07/2013

Conservation Finished: 2/08/2012

18/07/2013

Conservator: Arianna Carini

Chi Chun, Lin

Time Taken: 14 days

8 hours

Including digital photography, report, conservation and packing.

Dimensions: (L) 65 mm (W) 23 mm (D) 13 mm

Weight before: 17.25g

Weight after: 16.87g

16.31 g (18/07/2013)

Catalogue number: 549

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

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

Hefty gold and cherry red garnet cloisonné strip with mushroom, stair step and geometric cell shapes. Plain waffle foils under garnets. Entire strip gently curved. Two wires (one thin, one thick) of beaded filigree border the long edges of the strip. On one short edge the thin beaded wire continues from the long edge. A thin gold sheet extends out from the filigree on both long edges. Other short edge is finished plain gold. Back plain gold. A total of 97 cells.

Associated Objects: K447? (Similar strip shape and design, cloisonné pattern, filigree design)

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

Strip is twisted and slightly bent. Decorated side around 40 to 50% thinly covered in sandy soil with some plant material. All other surfaces around 60 to 70% covered in sandy soil and large rootlets. Most cells are intact, with only a few cell wall joins disrupted or broken, though there are many spots of orange tarnish all over the front. Most of the visible 77 garnets are just below the top of the wall or have slightly fallen in the cells; some are fractured or have conchoidal chipping. Some garnets have corners popping out or are deeply recessed; others are clearly missing or are possibly obscured by soil. A few instances of general abrasion evident on gold. Some filigree beaded wire is missing from both ends of one long edge and there is uneven black tarnish where filigree should be. Thin gold sheet under filigree is ripped, bent and folded from unknown original position.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Display

Aim: Partial cleaning (front and sides)

Total cleaning (18/07/2013)

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

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

The paper K1050 number was adhered to a cleaned area of the reverse 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:

After conservation, 80 garnets are visible, a few of which are fragmented and many of which are chipped. One garnet is so fragmented its colour is a red-brown and not deep cherry red like the others due to soil underneath thin sheet of garnet fragments. One small 'X' layout mark is on the front gold border, underneath the second garnet in from the plain short edge. Two possible metal fragments were found embedded in soil on the front and have been left in situ.

Small spots of orange tarnish are present on the gold on the front surface, and there is heavy black tarnish on the filigree and thin gold sheet extending from the sides. The black/grey tarnish is so extensive that it's possible the filigree is silver gilt (See K1050 XRF Report - Mistral 1). Eleven rivet holes (circles or half-circle in shape) line the thin gold sheet. One area has been left uncleaned along the filigree/gold sheet edge due to a high concentration of dark material in the soil. The dark material is unidentified, but might be metal/rivet fragments or dark tarnish that has detached and flaked into the surrounding soil.

It was suggested that this strip might piece together with K447, which are similar in size and design. Rough measurements were taken of this strip and the deliberate-looking gaps in the filigree edging. The narrower gap is 11mm in length and the wider gap is 19mm; the original width of the strip box of k1050 is 10mm, but with one side of filigree added is also 11mm. To confirm this theory, the filigree borders on K447 are the opposite of K1050, which would allow it to slide in to the narrower gap uninhibited by the filigree border.

After conservation (on 18/07/2013), the soil which covered on the front surface is totally cleaned. Other garnets appear when the soil was removed. The garnets are just recessed deeply staying in the cells and were obscured by thick lump of soil. Most of them are complete however only one garnet is broken as a small chip and loose from the cell. As a

result, this garnet chip is kept in the plastic sample vial. There is not any garnet in this cell but the gold waffle foil under garnet is still complete in the bottle of cell.

Key Features:

- Gold and garnet cloisonné strip with all edges finished
- Border on long edges of thin and thick beaded filigree wires
- Thin gold sheet with rivet holes extends from filigree border
- 97 cells; 80 visible garnets after treatment
- Wire border and gold sheeting has thick black/grey tarnish; may have high silver content in alloy or be silver gilt
- May relate to K447

Analysis Undertaken:

XRF analysis of the object was performed. See document 'K1050 XRF Report'.

Samples:

1. rootlets **DISPOSED**
2. soil from front and sides
3. possible garnet chip (miniscule) **DISPOSED**
4. rootlets **DISPOSED**
5. rootlets **DISPOSED**
6. unknown, metal fragment? **DISPOSED**
7. rootlet **DISPOSED**
8. rootlets **DISPOSED**
9. metal fragment? **DISPOSED**
10. gold flake **DISPOSED**
11. gold flake
12. rootlets **DISPOSED**
13. rootlets and organic **DISPOSED**
14. soil and orange corrosion from filigree edges **ADDED TO SAMPLE 2**
15. rootlet cluster on filigree edge **DISPOSED**
16. rootlets on filigree edge **DISPOSED**

18/07/2013:

17. soil from the back side
18. rootlets from the back side
19. garnet chip