

K1140 Condition Report

Conservation Started:04/07/13

Conservation Finished: 05/07/13

Conservator: Cristina Mazzola

Time Taken: 7 hrs

Including digital photography, report, conservation and packing.

Dimensions: (L) 35mm (W) 5.5 mm (D) 6 mm (T) ca 1 mm (varies)

Weight before: 2.14 g

Weight after: 1.68 g

Weight with K1022: 3.17g

X-ray: L88, L117

Catalogue number: 123

Digital photography:

Taken with a Canon EOS digital camera under daylight or bulbs and a Keyence VHX-1000 3D digital microscope with LED and/or fibre optic lights (20-200x magnification). Taken before and after.

Annotation on any of the storage bags or boxes:

n/a

Description: Visual and microscopic examination using Meiji stereo microscope 7-75x magnification
Fragment of a golden strip with filigree ornament made of beaded wires on front. Pattern: True intertwine consisting of a thicker central wire framed by two thinner wires and two wires running along each long side. The end of the intertwine pattern is indicated by a slight variation in the slopes. On the one end 3 vertical wires (a twisted one framed by 2 beaded ones) close the ornament. Both ends curve backwards, but in different degrees.

Associated Objects: K1022

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

Object is heavily covered in soil and on the back a label has been attached to the soil. Both short sides end in torn edges, at one of which one of the thicker rim wires sticks out. The object is bent – it is unclear, if this is the original shape.

On the lower rim side in the middle of the front a plant / wooden fragment is embedded in the soil.

Treatment: Carried out using a Meiji stereo microscope

Purpose: Study

Aim: Total cleaning

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

The granular soil on the front and 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 was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a brush and a small cotton swab with IMS (front) or only a cotton swab with IMS (back).

A tiny fragment of protruding wire-goldsheet on the bent end broke off during cleaning. It was collected as sample 5. A bit of protruding wire is still left on the edge.

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.

20/05/2015

Reboxed with K671+ K965 +K1022

Post-Conservation Condition/Findings:

In the area between the middle and the less bent end some larger pieces plant matter (probably root fibres) were embedded in the soil on the back. They were collected as sample 4.

The gold has a brass colour and looks slightly tarnished. An XRF showed an almost 1:1 mixture of gold and silver in the sheet metal, whereas at least the outer rim wire has a slightly higher gold content (see XRF reports).

The less bent end shows the beginning of a curve, so is likely to have a similar bent and pattern as the other end.

Within the intertwine pattern sometimes the preliminary marking for the pattern is still visible (see eg. photomicrograph K1140 AT front x50 central area.JPG).

The object seems still mostly in its original shape – except from the protruding rim wire

Key Features:

- Fragment of a golden strip with filigree pattern made from beaded wires
- Filigree pattern: True intertwine with rim wires
- Probably fragment of a hilt ornament

Analysis Undertaken:

XRF analysis of the object was performed. See folder 'K1140 XRF Reports'.

Samples:

1. Soil from back
2. Soil from front
3. Plant / wooden fragment from soil in middle of front
4. Plant matter (roots?) from soil in the back (middle to less bent end)
5. Golden fragment of wire and base sheet – broke off bent end

References