

The Story of the Sword – Part 2

The Cleaning

Our precious iron sword's securing process came to another phase – now its cleaning began. It's obvious we do not mean by this term washing it simply under tap water in a sink and wiping the blade by a towel. The cleaning procedure is being run by the staff of the Archaeological Institute in Prague and it's a complex treatment where they do not only purify the object but they study it in detail. In other words, the person who conserves the sword aims not only "to save" it for the future but he/she also provides crucial information about the object and gives us the basic gems to the mosaic picture of the object's story.

Considering this long-time and complex process of cleaning, we do need several scientific expressions in the following text, nevertheless we'll try to be comprehensible for the readers.

At the beginning, the object is rinsed in distilled water. Then drying in the drying chamber follows and afterwards, the sword is put into an air-permeable bed made of polyethylene foam with antirust paper and humidity indicator. After the dirt is removed from its surface by ethanol and cotton pads, the responsible people take samples of organic residue that have been conserved on the sword over the centuries. The blade is cleaned mechanically by a micro jet, the hilt is cleaned by a scalpel. The remaining corrosive products stacked

to the **inlay** (a decoration technique when metal surfaces are usually inlaid with other colour metals such as gold, silver, or copper alloys) are removed by rubber bits under a microscope. Samples taken from the inlay undergo a precise elementary analysis due to the need of an accurate identification of material and technologies used at the decoration making. Also the drops of the molten metal detected on the top of the pommel will be examined this way...

Thus the cleaned weapon is documented and prepared for **desalinisation**, removal of salts that could be still present on its surface. In this process, protection of the organic material and plated decoration is ensured by a thick layer of a 50% solution of acryl resin in acetone. The next steps are desalinisation itself, washing and drying it in the drying chamber after the protective lacquer is removed. In the end, acryl resin and micro crystalline wax is applied on the surface of the conserved item and the result is photo-documented.

Now, the sword is purified and secured and the next step is...

Well, we'll tell you more about it in the third part of The Story of the Sword!

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Photos: Photo archive of the Municipal Museum in Celakovice
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