

<b>Name 1</b>	AUTOMATIC MERCURY SWITCH 2
<b>Name 2</b>	/
<b>ID number</b>	002.391.Idrija
<b>Manager / Administrator</b>	Idrija Mercury Heritage Management Center, Bazoviška 2, SI-5280 Idrija
<b>Ownership</b>	Public
<b>Owner</b>	Republic of Slovenia
<b>Local / Original ID Number</b>	/
<b>Type of Object</b>	Daily life

## DESCRIPTION

<b>Short description</b>	The main components of the automatic switch are: housing, tube with mercury, metal clamps (4 in total) and a wire conductor. The closed glass tube has a U shape and is attached to the plastic housing with a clamp. The upper parts of the tube are wider. The lower part has the shape of a narrow channel with two fused parts, which are extended through the conductor in two metal clamps, which are mounted on a plastic housing. On the top part of the tube, an electrical resistance and a fused, pointed coil are installed. At the same time, the lower part of the resistance is immersed in mercury and the upper part is extended through a small, completely sealed hole outside the glass part on the wire conductor. Their contact is protected with a red plastic isolator.
<b>Measures</b>	Length 9 cm, width 5 cm, height 13 cm.
<b>Materials</b>	Glass, mercury, copper, plastic, aluminium.
<b>Dating</b>	1960s
<b>Author / Producer</b>	SLAPO, Ljubljana.

## Picture attachments

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**Original use**

The mercury automatic switch was used for the connection/interruption of the electrical circuit of the lights in multi-storey buildings. By pressing the switch anywhere on the staircase, the electric current flowed through the resistance, which caused the heating and vaporisation of mercury and the increased pressure spilled mercury in the right leg. This caused the contact in the wiring and the lights on the staircase turned on. When the switch was released and the electrical resistance was interrupted, the heating stopped and mercury started to cool. The pressure in the left part of the tube lowered and the mercury spilled from the right to the left leg. The staircase lighting was turned off. Cooling the tube and condensation of mercury lasted from 1 to 4 minutes. During that time the lights in the staircase were lit.

**Present use**

The automatic mercury switch is being preserved, secured and presented as important mining heritage of Idrija with exceptional universal values. It is a part of the CUDHg Smelting Collection. Visitors can view it within the permanent museum display "From Ore to Mercury Drops" in the Hg Smelting Plant, which represents the characteristics and the versatile use of mercury in science, technology, medicine, culture and every day life. Within the exhibition the object is placed in the density segment and it represents the usefulness of mercury for technical devices.

**Original location**

Private use.

**Present location**

Hg Smelting Plant (From Ore to Mercury Drops), Arkova 50, SI-5280 Idrija

**STATE OF CONSERVATION****History of conservation:**

The automatic mercury switch is well preserved. Additional interventions are not necessary. Security of the premise is

taken care off.

**Present state** good

**Necessary activities:** Regular seasonal maintenance.

## DOCUMENTATION

**Addresses / collections / links etc. where further in-depth information is accessible:** - CUDHg Inventory Book.

**Submitted** Mestni muzej Idrija

**Submitted by** Miha Kosmač

**Date Submitted** 17. 3. 2018

**Date Edited** Never

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