Name 1	FÜRST STEAM PISTON MACHINE
Name 2	/
ID number	002.111.Idrija
Manager / Administrator	Idrija Municipal Museum, Prelovčeva 9, SI-5280 Idrija
Ownership	Public
Owner	Municipality of Idrija, Mestni trg 1, SI-5280 Idrija
Local / Original ID Number	510:IDR;RS-12
Type of Object	Mine

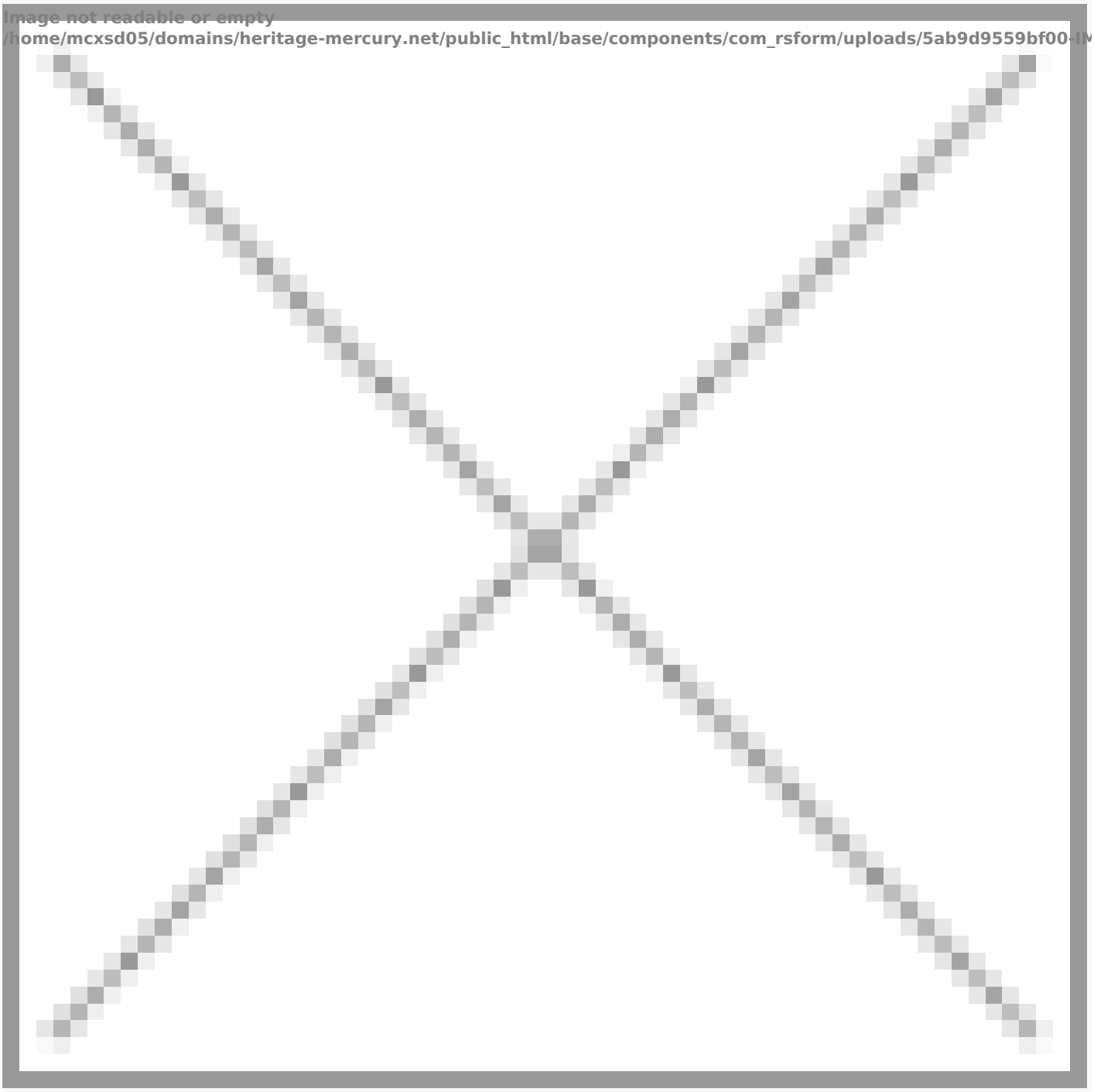
DESCRIPTION

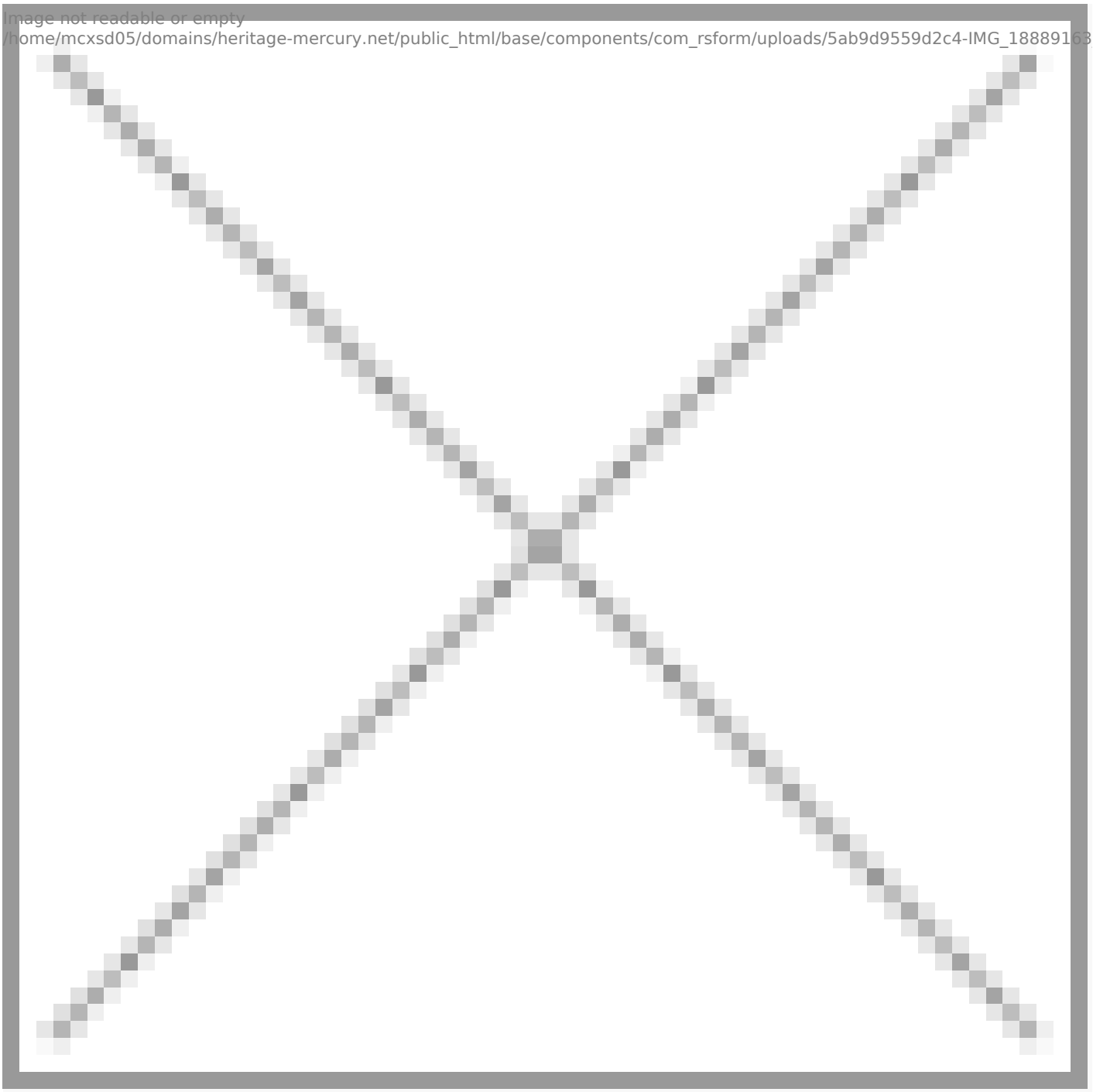
Short description	The single-cylinder horizontal steam piston machine operates on both sides with Rieder sliding control system. The piston machine consists of a cylinder, a piston and a crank mechanism. The latter consists of a piston rod, a cross head, a connecting rod and a handle.
Measures	Length 560 cm, width 190 cm, height 213.5 cm.
Materials	Cast iron, brass, steel.
Dating	1893

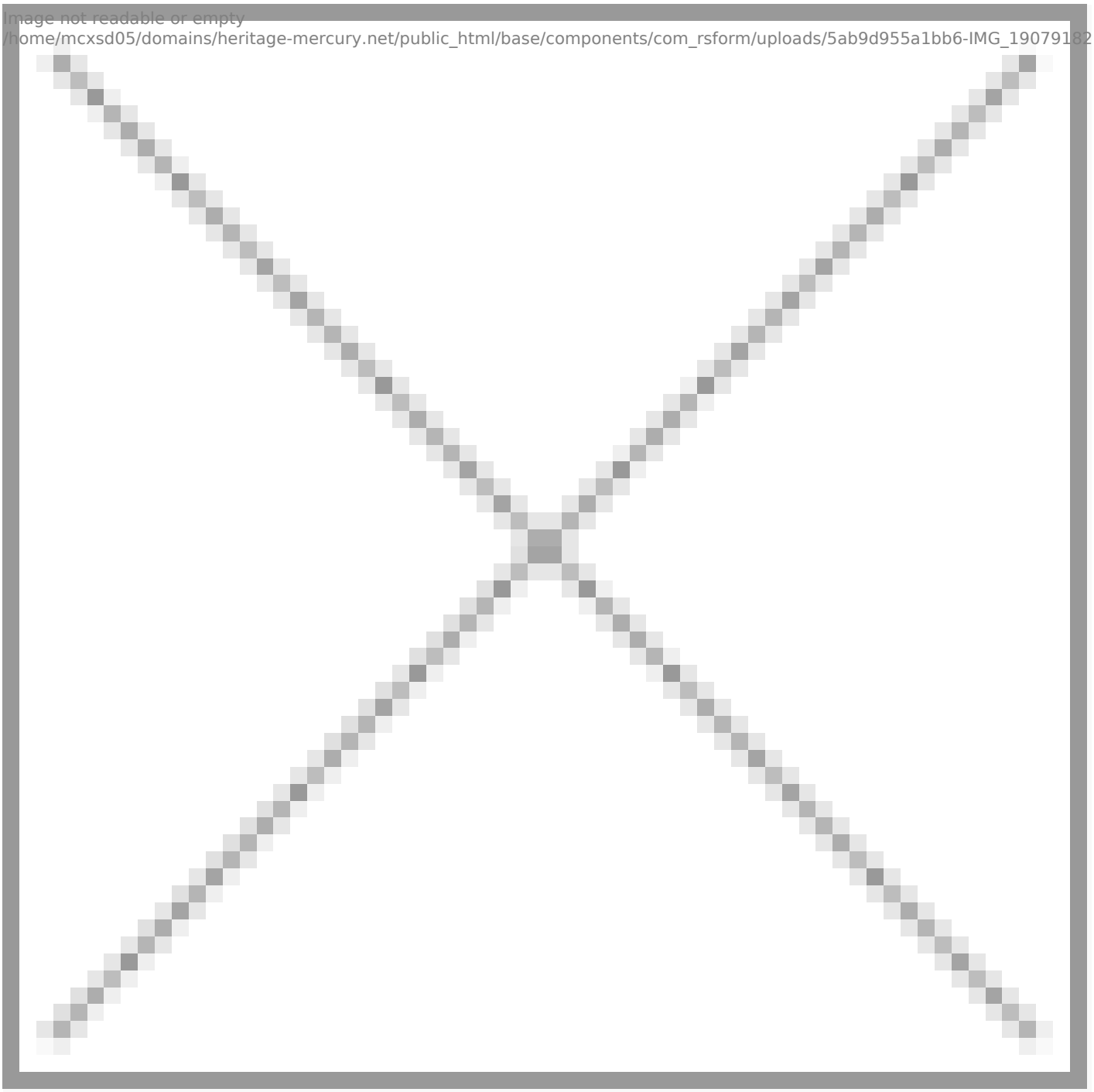
Author / Producer	Fürst Salm`sche Maschinenfabrik Blansko

Picture attachments

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Original use	The Fürst steam piston machine’s power was 18.39 kW (25 KM), the shaft’s rotation speed was 120 PRM. Initially, the machine was placed in the cinnabar factory’s engine room on the right bank of the Idrijca River. Dry saturated steam, produced by the steam boiler in the next room, was used to power the machine. The crank mechanism converted the straight piston movement into the rotation of the shaft and vice versa. The flywheel on the machine’s shaft ensured the even operation of the machine. The machine powered the transmission through three ropes. It was used for powering different machines for cinnabar acquisition. Due to the extra transmission, the steam piston machine served as a spare machine for powering the dynamo of the Francis water turbine. The extension rod held the piston pump together. The machine was moved from the cinnabar factory to the metallurgical plant – the smelting plant in 1909.
Present use	The Fürst steam machine is being preserved, secured and presented as important monument of Idrija technical mining heritage with exceptional universal values. It is a part of the Idrija Municipal Museum collection “Mining machines and devices”. The latter demonstrates the middle-European machine manufacturing at the end of the 19th and in the beginning of the 20th century. The collections contains the restored mining machines and devices, tools and equipment, which were necessary for working in a pit or in outdoor plants. For this reason it represents technical heritage which greatly exceeds the Idrija Mercury Mine framework and is therefore of a larger, global importance.
Original location	The engine rooms of the cinnabar factory on the right bank of the Idrijca River, the metallurgical plant – the smelting plant (after 1909).
Present location	Francis’ Shaft building (showroom 2).

STATE OF CONSERVATION

History of conservation:	The steam engine was restored between 1990 and 1992. It was completely disassembled, surfaces of individual parts were cleaned with sandblasting process, reassembled and painted with foundation and top paint. All the steam piston machine’s components are original, with the exception of some smaller parts. Additional interventions are not necessary. Security of the premises is ensured.
Present state	good
Necessary activities:	Regular seasonal maintenance.

DOCUMENTATION

Addresses / collections / links etc. where further in-depth information is accessible:	- Inventory Book of the Idrija Municipal Museum; - Historical Archives of Ljubljana, Unit in Idrija, plan collection, drawer no. B2, B3; - Zelenc, Anton. In vendar se giblje: katalog rudniških strojev in naprav. Idrija, Idrija Municipal Museum, 2001; - Zelenc, Anton. Restavrirani stroji in naprave Rudnika živega srebra Idrija. Ruda: revija Združenja za ohranjanje rudarske dediščine Slovenije, 1-2/2013, p. 16–20; - Zelenc, Anton. Idrija Municipal Museum: restored mine machines and devices of the Idrija Mercury Mine. Patrimoine de l´industrie, 2004, p. 17–19.
Submitted	Mestni muzej Idrija
Submitted by	Miha Kosmač

Date Submitted	3. 3. 2018
Date Edited	Never