

Name 1	DRILLING HAMMER (COLLECTION)
Name 2	/
ID number	002.161.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;RZ-397, RZ-402–RZ-411, RZ-413, RZ-415, RZ-416, RZ-609, RZ-695–RZ-698, RZ-704, RZ-705, RZ-718–RZ-726.
Type of Object	Mine

DESCRIPTION

Short description	The collection of 30 drilling hammers includes objects powered by compressed air. The hammers are composed of the housing with a handle (some are even coated with rubber), the opening for the entry of compressed air – there is a disc valve inside, two valves for redirection of air and pistons. Especially with larger hammers, the support leg is also preserved. According to the drilling hammer weight, they can be divided into: light – up to 18 kg, medium – between 18 and 27 kg, heavy – between 27 to 100 kg. Differences between individual models of drilling hammers also depend on their production time and capacity – which can be used to determine the level of Idrija Mine development in the specific period and also in clamps and thus in drill diameter.
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Measures	30 drilling hammers of different dimensions.
Materials	Steel
Dating	End of the 19th century
Author / Producer	Different models of manufacturers: Flottmann; Ravne; Ingersol – Rand; Westfalia; Shank Length Holman; Climax; Chicago Pneumatic, Tampella.

**Picture
attachments**

Original use

Machine drilling was introduced in the Idrija Mine in 1874. Drilling hammers were used for drilling wells in harder rocks for ore excavation in the Idrija Mercury Mine. In a drilling hammer, a piston was hitting, in regular intervals, the drill with a blade, just like the hammer on the chisel. While returning, the piston rotated in a specific angle and the drill also rotated. This rotation allowed the blade to gradually hit the entire surface of the well. In 1914, the mining administration decided to set the compressor station on the IV. horizon (183m under the surface), which, among other things, powered 15 drilling machines on compressed air. Drilling caused a lot of fine dust, which settled in the lungs of the miners and caused an illness called silicosis. In the 1960s, they started using the so-called wet drilling procedure. Using water in the drilling process decreased the amount of dust. In the 1960s, 75 drilling machines were operating at once on a big shift in a pit, or 65 on the small shift, and 15 defeat drilling machines. Between 1967 and 1980, they produced an average of 9,000 m of wells and 8,000 m of tunnels annually.

Present use

The collection of 30 drilling machines is being preserved, secured and presented as important mining heritage of Idrija with exceptional universal values. They are a part of the mine collection of the Idrija Municipal Museum. The preserved specimens are light, medium and heavy machines powered by compressed air. Among them, there are some exceptional specimens, such as medium drilling hammer Flottmann from 1914 (RZ-415). Visitors can view most of them within the permanent exhibition of the Idrija Municipal Museum “Five Centuries of the Mercury Mine and the Town of Idrija”. Some of them are stored in the depot and can be used for occasional museum exhibitions. All drilling machines can be used for different types of mercury heritage promotions.

Original location

Idrija Mercury Mine.

Present location	Idrija Municipal Museum, Gewerkenegg Castle (showroom 1); Depot Prelovčeva 2.
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STATE OF CONSERVATION

History of conservation:	All drilling machines are properly conserved. More than half of drilling machines are fully preserved with all parts, and others have some minor components missing. Additional interventions are not necessary. Security of the premises is taken care of.
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Present state	good
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Necessary activities:	Regular seasonal maintenance.
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DOCUMENTATION

Addresses / collections / links etc. where further in-depth information is accessible:	- Inventory Book of the Idrija Municipal Museum.
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Submitted	Mestni muzej Idrija
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Submitted by	Miha Kosmač
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Date Submitted	5. 3. 2018
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Date Edited	Never
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