Idrija mercury smelting plant

by Jana Podgornik / 02-03-12 08:53:56 / International / 1681 / EN

Extension + refurbishment

ENERGY CONSUMPTION

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Museum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Year</td>
<td>2014</td>
</tr>
<tr>
<td>Delivery year</td>
<td>2017</td>
</tr>
<tr>
<td>Address 1 - street</td>
<td>Arkova ulica 50 5280 IDRIJA, Slovenia</td>
</tr>
<tr>
<td>Climate zone</td>
<td>[Cfb] Marine Mild Winter, warm summer, no dry season</td>
</tr>
</tbody>
</table>

Construction/refurbishment cost: 2 300 000 €
Cost/m²: INF €/m²

General information

The diverse and unique industrial and technical heritage of Idrija’s 500-year-old mining history was inscribed on UNESCO World Heritage List in 2012. One of the crucial parts of the mercury mine was the smelting plant, which stopped operating in 1995. Its renovation and renewal was a significant challenge in terms of financing and expertise. The energy renovation of the building was carried out in accordance with the possibilities and specifications of the building, which belongs to the technical cultural heritage. The project comprised the reconstruction and extension of the existing ore separation facility and construction of a new building intended for reception of visitors and hosting a permanent exhibition ‘From ore to mercury drops’. Two investment phases were planned - the first one is finished, the second one will focus on the furnace, extraction and packaging of mercury in cylinders. In 2020 the refurbished Idrija mercury smelting plant won the 2nd prize of the ‘Destination of Sustainable Cultural Tourism’ award under category of industrial heritage.


Photo credit

Posoški razvojni center
R. Bizjak

Stakeholders
Contractor

Name : Idrija Mercury Heritage Management Centre (CUDHg Idrija)
Contact : Bazoviška 2, Idrija, info@cudhg-idrija.si
http://www.cudhg-idrija.si/predstavitev/

Construction Manager

Name : Gea consult
Contact : Alen Hafner, univ.dipl.inž.arh. - Gea Consult Mestni trg 5, 4220 Škofja Loka
http://www.gea-consult.si/

Stakeholders

Function : Others
Institute for the protection of cultural heritage of Slovenia
Delpinova 16, 5000 Nova Gorica, tajnistvo.ng@zvkds.si
https://www.zvkds.si/en

Function : Others
Ministry of Culture
Maistrova ulica 10, 1000 Ljubljana

Contracting method

Other methods

Energy

Envelope performance

More information :
In the reconstructed part of the building, there are concrete frame structures with masonry walls in between. All walls, except in the basement, were additionally thermally insulated with EPS panels on the inside of the building, and a cement spray performed over them.
The window openings remained the same, windows were replaced with ALU windows with double-layer thermopane glazing.
The roof is made of reinforced concrete beams, to which a wooden substructure is attached. The asbestos roofing has been replaced with a new suitable corrugated roofing. The roof is thermally insulated with soft mineral wool 25 cm thick, and the inside is lined with OSB panels, which are treated with cement spray over galvanized welded metal mesh.
Existing window U-value Glass [W/m²K]: 0.0
New window U-value Glass[W/m²K]: 1.1

Renewables & systems

Systems

Heating system :
- Wood boiler
Hot water system :
- Wood boiler
Renewable systems :
- Wood boiler
Urban environment

The building is situated within the industrial area of Idrija. Part of the larger area was sold to another company after the mine stopped its operations. This changed significantly the former visual identity of the town.

Costs

Construction and exploitation costs

Total cost of the building : 2 300 000 €
Subsidies : 2 000 000 €

Additional information on costs :
The CUDHg Idrija successfully applied to a call for proposals to co-finance the project “Idrija – smelting plant area, of the Idrija mercury mine – 1st phase of reconstruction” under the EEA Financial Mechanism Programme 2009-2014 – B.3. Cultural Heritage, for the amount of EUR 2 million.

Contest

Reasons for participating in the competition(s)
The goal of retrofitting was to preserve the endangered cultural monument and enrich it with new content, enhance its modernity and attractiveness, revive its heritage with educational content, raise awareness of the importance of preserving cultural heritage, and enhance tourism opportunities in the area.

Building candidate in the category

Low Carbon