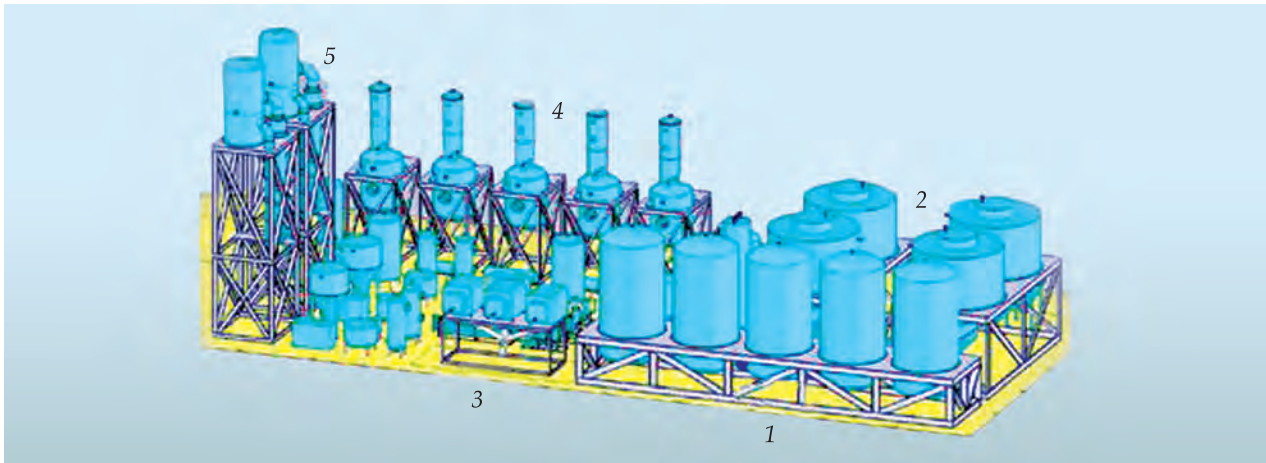


CLOSED-CIRCUIT WATER TREATMENT PLANT



Closed-circuit mine water treatment plant with a capacity of 150 m³/h: 1 – storage tanks; 2 – water pretreatment facilities; 3 – reverse osmosis plant; 4 – evaporation on film evaporators; 5 – evaporation-crystallization plant



Purified water

Advantages

The main impurities are removed from water in the form of products suitable for further use; significant reduction in energy consumption (up to 40%); extension of membrane service life up to 5–10 years (instead of 2 years on average); use of organic additives for fuel production

Areas of Application

The plant is designed for wastewater treatment in order to get the quality suitable for its use for drinking and for various technical purposes

Specification

The technical specifications depend on required plant capacity, chemical composition of effluents, and requirements for purified water quality. In particular, the possible options are as follows: mine water treatment; water treatment for power engineering; purification of electroplating wastes; treatment of hydraulic fracturing wastewater; treatment of spent-soap lye; and recycling of used chromate muds and solutions

Stage of Development.

Suggestions for Commercialization

IRL5, TRL6

Upon request, the technology and plant are developed, warranty and post-warranty service is provided

IPR Protection

IPR1, IPR3

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