

Solution Mining Caverns at Great Depths

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1. Introduction

The construction of salt caverns using solution mining techniques is now standard engineering practice. In Europe caverns for the storage of oil, oil products and natural gas are generally constructed at depths of between 800 and 1,800 m.

In contrast to this, caverns for brine production and/or salt production are constructed in a broader range of depths. For example, some are located only a few hundred metres below surface to produce salt, while others at depths of down to 2,000 metres.

Caverns used for magnesium mining have been constructed at depths of 2,600 m.

This paper reports experience gained from a plant with a cavern sump at a depth of greater than 3,000 m. These caverns are, according to information available, the deepest in the world.

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