

Salt in nature



Salt Deposits
Dead Sea

The major source of salt is seawater, which has a salinity of approximately 3.5%. This means that there are about 35 grams of dissolved salts per kilogram of water. The world's oceans are a virtually inexhaustible source of salt, and this abundance of supply means that reserves have not been calculated.



Salt Flat
Salar de Uyuni, Bolivia

Salar de Uyuni is the world's largest salt flat at 10,582 square kilometers. The Salar was formed as a result of transformations between several prehistoric lakes. It is covered by a few meters of salt crust, which has an extraordinary flatness.

Salt in nature



Salt Crystal Cave
Merkers, Germany

Salt in its natural form as a crystalline mineral is known as rock salt or halite. The formation of this extraordinary halite cubes. Where ever there is free space in a salt mine, the ubiquitous migrating salt brines tends to crystallize on the walls of this space. Mostly these crystals are only small due to the small space available. In this case the available space was large and so the crystals could grow to giant dimensions.



Salt Range
Khewra, Pakistan

The mine is a part of a salt range that originated about 800 million years ago, when evaporation of a shallow sea followed by geological movement formed a salt range that stretched for about 300 kilometres.

Salt production

Salt is produced from salt mines or by the evaporation of seawater or mineral-rich spring water in shallow pools. Some of the earliest evidence of salt processing dates back to around 6,000 years ago, when people living in Romania were boil-

ing spring water to extract the salts; a saltworks in China has been found which dates to approximately the same period. In 2002, total world production (of sodium chloride in general, not just table salt) was estimated at 210 million tonnes



Salt Flat
Salar de Uyuni, Bolivia

Salar de Uyuni is estimated to contain 10 billion tonnes of salt, of which less than 25,000 tonnes is extracted annually.



Salt Basin
Maras, Peru

Since pre-Inca times, salt has been obtained in Maras by evaporating salty water from a local subterranean stream. The highly salty water emerges at a spring, a natural outlet of the underground stream. The flow is directed into an intricate system of tiny channels constructed so that the water runs gradually down onto the several hundred ancient terraced ponds.

Carved Salt

Salt cathedral,
Wieliczka Salt Mine, Poland
The mine, built in the 13th century, produced table salt continuously until 2007. Dozens of statues, three chapels and an entire cathedral has been carved out of the rock salt by the miners.



Khewra Salt Mine, Pakistan



Salt mine, Germany

Salt Blocks

In Salar de Uyuni, Bolivia, salt blocks are cut out of the thick and hard salt crust.

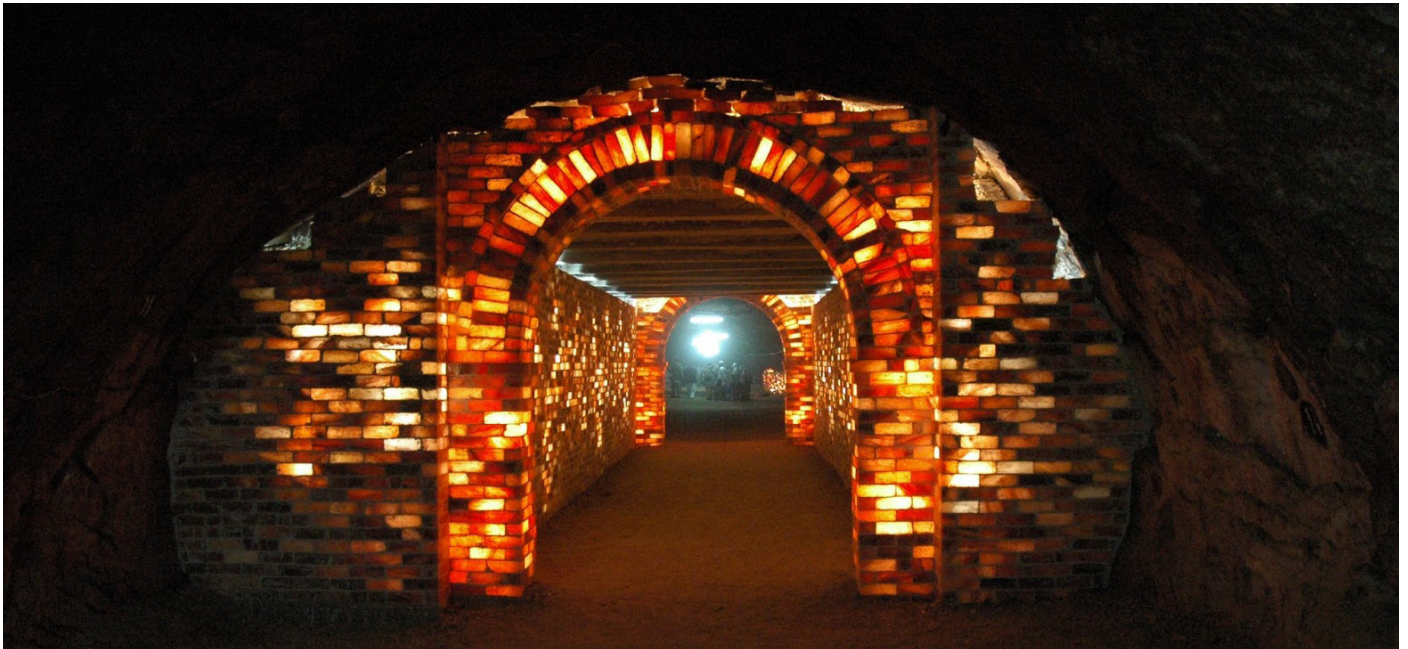


The Palacio de Sal is located on the edge of the Salar. The building is constructed of about 1 million 35 cm salt blocks, which are used for the floor, walls, ceiling and furniture, including beds, tables, chairs and sculptures

Salt Blocks

Himalayan salt is a term for rock salt from Pakistan. It is mined in the Khewra Salt Mine, The salt sometimes occurs in a reddish or pink colour, with some crystals having an off-white to transparent colour.

In the depths of the Khewra Salt Mine you'll find this illuminated salt mosque built entirely out of salt blocks.



Cast Salt

Restaurant
Shiraz, Iran
Emtiaz Designing Group

Emtiaz Designing Group, due to the location of natural salt mines and the Salt Lake used for salt extraction which were close to the project location decided to build the restaurant with the use of powder, rock, and compact layers of salt. The project design started with conducting studies on appropriate type of local salt and its combination with natural gums and following that, the design of the walls, roof, and stairs was performed in order to represent a modern view of salt caves.



3D Printed Salt

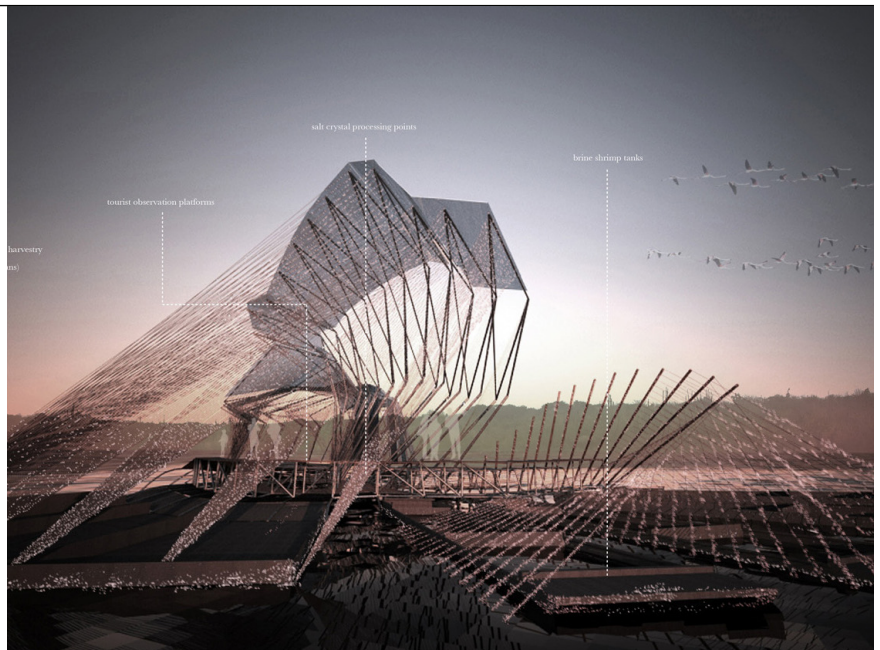
A combination of salt and glue has been developed as 3D printing material to make a "strong, waterproof, lightweight, translucent and inexpensive" material by Emerging Objects, a 3D Printing MAKE-tank specialising in innovations in 3D printing architecture and building components.



The Saltygloo is an experiment using locally harvested salt from the San Francisco Bay to produce a large-scale, lightweight, additive manufactured structures. 336 translucent panels were randomly rotated and aggregated to create a larger structure.



Salt Crystal Growth



Wen Ying Teh
Architectural Association
RIBA President's Medal 2009

Formed from fine webs of nylon fibers held in an aluminum frame, this string instrument allows the salt farming process. Using just capillary action, salt water from the lake crystallizes on the tension strings forming glistening, translucent enclosures. It encrusts the infrastructure of a flamingo observation hide and solidifies into a harvestable field ready to be scraped clean by miners.

