

Press Release

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Deposit supplies for many decades to come 100 years of Bernburg salt

The Bernburg salt plant can look back on a century of salt production - while also looking to the future. Since 1921, generations of miners have been extracting the white gold to the surface, a total of around 115 million tonnes to date. The deposits will last for many decades to come.

“Within the K+S Group, the Bernburg salt plant is an important pillar of salt production,” says Dorothee Telaar, who has managed the plant since 2020. “The excellent conditions of the deposit and a motivated team underground and above ground provide for our continued supply of valuable rock and evaporated salt products to the markets in Germany and other European countries for generations to come, contributing to the well-being of people.”

In 1912m, the mine was actually set up for the extraction of potash. At the time, this was a booming raw material promising good returns. Rock salt, on the contrary, which had long been processed in the many salt works in the region, was not as interesting. Nevertheless, it proved to be the life insurance of today's salt works in the long run, because potash production was often exposed to strong economic uncertainties and the deposit also offered only limited opportunities.

One of the best deposits in Europe

Rock salt, by contrast, was a different story: The Bernburg deposit is known as one of the most productive and highest-quality salt deposits in Europe. With a usable



thickness of up to 50 meters and a purity of at least 98.5 percent sodium chloride (NaCl), it offers the best conditions for the production of a wide range of quality products.

The prime piece of the deposit, the younger rock salt of the so-called Leine series, is mined. This is where the particularly pure salt crystals are found, for the extraction of which impressive mining chambers around 40 meters high and up to 400 meters long are excavated.

Motors and machines replace muscle power

In 1921, however, with the start of scheduled rock salt mining, these dimensions were not yet apparent. The annual production from the first mining chambers near the Gröna shaft only amounted to a few thousand tonnes and was stopped after four years. In 1939, rock salt mining was resumed and has continued uninterrupted ever since.

The rapid technical development during this time was decisive for the increase in productivity. While the blast holes were initially drilled with manually operated machines weighing up to 100 kilograms and the blasted salt had to be shoveled into the mine cars, the introduction of scraper technology in the 1930s considerably simplified work. From then on, steel boxes (scrapers) pulled by wire ropes, instead of the muscle power of miners, provided for the transport of the salt out of the mine.

Rail-based haulage was only replaced three decades later, however, when the first mobile haulage machines became popular. Their dimensions were initially still quite modest and could not be compared with the concentrated power of modern loading vehicles. Today, the salt that used to be mined by a dozen miners per shift is transported by a Sandvik loader with a single shovel load: 21 tonnes.

Increase in production volumes

The technical change can also be seen in the development of extraction volumes: While annual extraction fluctuated between 100,000 and 300,000 tonnes until the mid-1960s, it increased sharply to over 600,000 tonnes in 1967 with the introduction of



high-performance extraction technology. As early as 1968, the one-million-tonne mark was passed, and two years later this output had already doubled! At this point, the projected rock salt plant was in continuous operation and took over the supply of industrial and food-grade salt for the entire GDR, but also delivered to Czechoslovakia and Scandinavia.

German reunification was accompanied by major changes in Bernburg. The formerly nationally owned company was privatized and two thirds of the 1,500 jobs were lost. Shortly before Christmas 1993, the salt plant became part of Kali und Salz GmbH, today's K+S AG, as part of the potash merger. The aim was to concentrate salt production at the Bernburg and Braunschweig-Lüneburg sites. During the 1990s, an ambitious modernization program was launched in Bernburg aimed at achieving the required productivity. With success: within a decade, productivity rose from 28 to 76 tonnes of salt mined per man and shift.

Evaporated salt production complements classic rock salt mining

The core of the modernization was the establishment of its own evaporated salt production to meet the increasing demand for these high-quality and profitable food grade salt products on the market. The plant had already been operating its own brine field for some time with sufficient capacity for its own evaporated salt processing. The new modern evaporated salt production facility was commissioned in the summer of 1996 after a two-year construction period.

Investments in the post-reunification period also included the construction of a new combined heat and power plant fired with oil and gas, which significantly reduced emissions from the former lignite-fired power plant. The processing of rock salt was also modernized adapting to the requirements of the open market. Finally, the share of the formerly dominant salt for chemical use business has declined sharply, whereas sales of de-icing, industrial and food grade salt have grown, in some cases substantially. The Bernburg plant no longer only supplies the national market, but competes with its products on the Western and Northern European markets, especially the Scandinavian countries. By the end of the 1990s, the entire packaging and loading



process at the plant had also been completely revamped to respond more rapidly to customer requirements.

With its two business pillars of rock salt and evaporated salt, the Bernburg plant today offers products for virtually all areas of application with the exception of the pharmaceutical sector. The range of articles offered includes a wide variety of rock salt and evaporated salt products - from food grade salt in household packaging to truckloads of de-icing salt. Therefore, even 100 years after the start of salt mining, the Bernburg plant is well equipped for the future.

About K+S and the Bernburg salt plant

K+S considers itself a customer-focused, independent supplier of mineral products for the Agriculture, Industry, Consumers, and Communities segments. We enable farmers securing the world's food supply, provide solutions that keep industries running, enrich consumers' daily lives, and ensure safety in winter. From production sites in Europe, North America, as well as through a global distribution network, we serve the ever-increasing demand for mineral products. We strive for sustainability because we are deeply committed to our responsibilities towards people, the environment, communities, and the economy in the regions in which we operate. Learn more about K+S at www.kpluss.com.

The Bernburg salt plant belongs to K+S Minerals and Agriculture GmbH and is part of the K+S Group, an internationally operating raw materials company with extensive experience in salt and potash mining.

The Bernburg plant initially operated as a potash mine in 1913 and has been processing high-quality rock salt mined at depths of up to 700 meters since 1921. Additionally, brine is produced in the Gnetsch brine field and caverns are used for gas storage. The product range of the Bernburg plant ranges from various evaporated salt products and food grade salt to rock salt products for trade and industry as well as de-icing salt to ensure road safety in winter. Around 500 people are employed at the Bernburg salt plant. The plant is also an important customer for numerous service providers, craft enterprises and suppliers in the regional environment.



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