

Bosnia and Herzegovina, or generally abbreviated to Bosnia, is a country in southeastern Europe located on the Balkan Peninsula, with a population nearly touching the 3.5 million mark and spread across an area of 51 000 km². Bosnia's independent status emerged from the breakup of Yugoslavia about 25 years ago when the country and its provinces were split into seven independent countries, namely Slovenia, Croatia, Bosnia, Serbia, Montenegro, Kosovo and Macedonia.

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Bosnia still struggles with the remnants of the civil war in the 1990s. This can be seen in the visible signs of a lack of infrastructure, continuous ethnic tensions, as well as struggles in economic growth that is yet to be overcome.

The country's largest city and capital, Sarajevo, is located in the far east, nearing the borders to Serbia and Montenegro. The country shares the majority of its border with Croatia and inhabits only a small strip of about 20 km of coastline accessing the Mediterranean Sea in the town of Neum.

Coal in Bosnia

The annual production of coal in Bosnia is around 12 million tpy, while domestic reserves supply lignite (brown coal) that is mainly used for domestic purposes. The four power plants in the country feed off this supply while a fifth power plant close to the town of Banovici will commence electricity production in 2020.

As opencast mining - currently the predominant mining method in the country - is becoming more difficult due to resources being found in increasingly greater depths, the country is progressively moving towards implementing underground mining methods. The use of shearer loaders from Eickhoff are consequently playing an important role in securing the country's sustainable energy supply from domestic resources.

Turning to mining equipment

When taking a closer look at the country's energy sector, major problems manifest in the fact that a lack of governmental funding is causing delays and production shortages. This process is slowly being overcome as western equipment manufacturers, such as Eickhoff GmbH based in Germany, are able to supply an increasing amount of high-quality mining equipment to the country. This fact closes the gap between now and the time before

the war, when Eickhoff machinery was operating in numerous mines throughout the country and close ties were connecting the local energy producers and the German machine supplier.

This path was continued about five years back when the two coal mines Banovici and Breza, both located in the vicinity of Sarajevo, opted for another approach with the Eickhoff SL 300 shearer loaders.

The city of Breza is both the capital town and administrative centre of the Zenica-Doboj district. The Rudnik mine with its active Sretno and Kamenice pits lies in close vicinity and is at the same time the biggest employer in the region.

In the early 1980s, an Eickhoff EDW-150-2L shearer loader continuously produced at cutting heights of up to 5 m in the Breza mine - a world record at the time.

Currently, the mine produces 0.5 million tpy through longwall mining and currently employs about 1250 people.

Additional mines have shown an interest in new Eickhoff SL-shearers and order negotiations are currently ongoing. Last September, a further contract was signed with the customer Zenica for a SL-shearer to be deployed to the company's Raspotocje mine. This new project will be carried out with Eickhoff's long-term cooperating partner, Becker Warkop of Poland, which is acting as the main project partner.

The neighbouring Kakanj mine also took an interest in Eickhoff's high-power excavating machines due to the success achieved in the Banovice mine which is successfully operating an SL 300. The decision was taken to implement a complete set of mechanised longwall equipment.

In November 2015, the Kakanj mine signed a contract with Becker Warkop for procurement of complete mechanised longwall equipment, and an additional Eickhoff SL-300 shearer will be put into operation.

The city of Kakanj has a little fewer than 40 000 citizens, with the local mine, a local electricity plant and a cement plant being the biggest employers. The Kakanj mine has existed since 1902 and employs around 2000 people at its Haljinci pits, as well as at the neighbouring Vrtliste opencast. Together they are producing around 1.2 million tpy of coal.
More to come

The first tonnes of coal in Bosnia and Herzegovina were excavated in 1884 in the Kreka mine. According to the stored data, the Kreka mine in its first exploitation year, only had 35 miners and in the first week of their exploitation they managed to produce 50 t of coal. Over the past 120 year, the Kreka lignite mine and the city of Tuzla (where the mine is located) have simultaneously grown together. The Kreka mine was a giant that was not only

recognisable in Bosnia and Herzegovina, but also in other countries, such as in former Yugoslavia, by exporting coal.

Subsequently, Tuzla became the centre of the mining industry in Bosnia and Herzegovina. The Mramor mine, which belongs to Kreka, began exploitation in 1958. It is a large underground mine, mining for over 50 years and with reserves and capacity to provide coal mining and employment to the local population in the next 45 years. Lignite, which is exploited in the Mramor mine, is a Pliocene age with high quality and calorific value and has approximately 14.51 million t of coal reserves.

In the 1980s, the Mramor mine implemented completely mechanised longwall equipment with a Eickhoff EDW 150 L shearer with a cutting height of 3.5 m.

Conclusion

The high interest in Eickhoff shearers as well as the recently sold machines in Bosnia, has strengthened Eickhoff's market share, while at the same time going against the global trend of customers increasingly favouring package solutions where an OEM delivers all of the components to a longwall face.

In the near future, Eickhoff is expecting new projects, such as the implementation of a complete set of mechanised longwall equipment, in more Bosnian mines. And with its technical know-how and years of experience, the company will continue to give full support to these projects.

Source: worldcoal