ARCEN GENERATOR Life Goes On...

STAMFORD® MINING

Case history

Reliable standby power for uninterrupted operations

Where: Zonguldak, Turkey

Specified: STAMFORD S7

Prime Mover: Baudouin 12M33G1650/5

Purpose:

Reliable and efficient power for critical mine equipment

Established in 2012, Arken Jenerator set out with the motto "Life Goes On" with 100% Turkish capital. Operating from their facility in Arnavutköy, Istanbul, Arken has the capacity to produce 5,000 generator sets per year ranging from 2 to 2,750 kVA.

In addition to its central factory, Arken creates energy solutions with its service network spread throughout the country with established distributorships from the Middle East to the Turkish Republics from Europe to Africa.

Arken's customer, Erdemir Maden based in Divrigi, accounts for 34% of Turkey's iron ore output and meets 12% of the country's iron ore demand. Listed among Turkey's 500 Largest Industrial Enterprises for a long time, Erdemir Maden continues to play a key role in meeting OYAK Mining Metallurgy's domestic raw material requirements.





STAMFORD S7

"The collaboration further strengthened our trust and partnership in STAMFORD | AvK as a reliable and efficient power solutions provider"

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Erdemir Maden needed to meet the requirements of Alacaağzı Coal Enterprise and supply a Diesel Electrogen Group and Synchronisation System at the Ermaden Coal Mine in Zonguldak, ensuring uninterrupted operations.

Technical requirements for the project consisted of 2 main water pumps with 345kW power, working at 3.3kV, which are of critical importance, and other auxiliary water discharge pumps, with a 315kW air compressor which they use in sudden floods in the galleries in the coal mine, with a total power of 1.480kW to feed the workshops. The generator set was sized for operations at +35 oC temperature, 1000 metres altitude, 90% humidity.

As a result of this, Arken specified 2 x STAMFORD S7 alternators to couple with their 1750kVA prime mover with an increase to 15.8kV voltage value with a step-up transformer including relevant accessories at the generator set level to meet the specific power requirements of the project. Like all alternators in the STAMFORD[®] S-Range, it benefits from the 3-year warranty and a CoreCooling[™] high-efficiency air flow system, which achieves improved thermal performance alongside increased power density.

The installation at the Ermaden Coal Mine presented specific challenges, including access, the environment, and altitude. Arken successfully overcame these challenges to ensure the seamless implementation of their power solutions. The project required bespoke work, such as designing a special coupling to meet the unique needs of the customer.

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P[⊗]WERING TOMORROW, TOGETHER

The key performance features that attracted Arken to STAMFORD | AvK were reliability, proven worldwide performance, and the rotor motor starting curve. These features ensure that Arken Jenerator's are dependable and efficient, leading to lower fuel consumption and maintenance costs. STAMFORD | AvK's products have a reputation for delivering consistent performance, which was a significant factor in Arken Jenerator's power solution decision.

Arken Jenerator's trust in STAMFORD | AvK, as a dependable partner for over 10 years is reinforced by its crucial role in the successful implementation of the project. Their technical expertise and comprehensive support made a significant difference for Arken Jenerator. The customer was impressed with the role played by STAMFORD | AvK and the level of professionalism demonstrated throughout the project. This positive experience further strengthened their partnership and solidified Arken Jenerator's trust in STAMFORD | AvK as a reliable power solutions provider.



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