Overview

CASE STUDY:
Baudouin | Zenessis | Stadium | Romania

PRODUCT:
2 x Baudouin 16M33G2000/5 PowerKit Engines 2000 kVA

DISPLACEMENT:
16M33 = 52.3 litres

TOTAL POWER OUTPUT:
4000 kVA

DUTY:
ESP Emergency Standby

APPLICATION:
Stadium

PARTNERS:
OEM : Zenessis
CLIENT : Municipality of Bucharest

National Arena Stadium Bucharest

Baudouin continues to set new benchmarks in power generation with its cutting-edge engine solutions. Recently, Baudouin partnered with Zenessis to modernize the standby power system of the National Arena (Arena Națională) in Bucharest, Romania's largest stadium. This iconic venue, which hosts the Romanian national football team and major events such as the 2012 UEFA Europa League Final and UEFA Euro 2020 matches, has a seating capacity of over 55,000 for football and up to 70,000 for concerts. After 13 years of operation, the arena required an upgrade to its outdated emergency power system to meet modern energy demands and ensure uninterrupted operations during events.

Specialists at Zenessis conducted a detailed assessment of the arena's power requirements and determined that a total standby capacity of 4000 kVA was needed. To meet this demand, two high-performance generators were installed—each powered by a Baudouin 16M33G2000 PowerKit engine. Designed for Emergency Standby (ESP) duty, these engines deliver reliable power under critical conditions, ensuring that the arena's systems continue to operate seamlessly during power outages. The generators are synchronized for optimal efficiency and are supported by a robust fuel supply system that guarantees uninterrupted power for extended periods.

Baudouin's PowerKit engines, spanning a comprehensive range from 18 to 4125 kVA, are engineered with over 100 years of expertise in design, manufacturing, and support. The 16M33 series, with its 52.3-litre displacement, is renowned for its high performance, fuel efficiency, ease of maintenance, and durability. Featuring high-pressure electronic fuel injection for optimized combustion and SCR technology to minimize NOx emissions, these engines deliver exceptional performance while reducing operational costs and environmental impact. Their extended overhaul intervals and European quality build provide excellent total cost of ownership, making them the preferred solution for demanding standby power applications.

The successful upgrade of the National Arena's power system not only modernizes its emergency backup but also ensures that the venue can continue hosting major events without disruption. This project highlights Zenessis' expertise in delivering tailored power solutions for large-scale infrastructure and underscores Baudouin's commitment to sustainable, high-performance power generation.

Client Testimonial

"It was an honour to be part of such an important project for Romania and Romanian sports. This achievement wouldn't have been possible without the unwavering support of Baudouin, whose reliable engines and expertise played a key role. We're grateful for their partnership and their dedication to supporting us in our bold endeavours."
– David Filip, Head Of Commercial Operations, Zenessis