Case Study
PROFESSIONAL SPORTS ARENA

KOHLER® POWER EQUIPMENT

3250-kW Diesel Generator

200-kW Gas Generator

80-kW Gas Generator

Four – 800A ATS

Four – 1600A ATS

HIGH-PROFILE PROFESSIONAL SPORTS AND ENTERTAINMENT VENUE TURNS TO KOHLER POWER

Professional sports arenas are incredible. Gigantic scoreboards, well-appointed luxury boxes, spacious locker rooms and comfortable seating for tens of thousands of spectators. Few construction projects are as visible or as high profile in their respective communities as these modern-day marvels. As a result, the organizations selected to design and build these massive new structures are typically the best and brightest in their fields. All subcontractors, material suppliers and other project participants need to execute with speed, accuracy, and the utmost attention to detail. Nothing but the best is accepted.

This is certainly the case with a new sports arena currently being constructed. It's a transformational project–a shining new jewel and a point of pride for sports fans and more casual observers alike. The 714,000-square-foot facility will anchor a world-class sports and entertainment district, which is anticipated to include hotels, restaurants, public plazas and other large-scale gathering spaces. Many people believe it will set an exciting new course for the entire metropolitan area upon its completion in 2018.

Of course, any project of this magnitude requires power–and lots of it. That's why the developers turned to Kohler. Several generator sets were needed to deliver clean and reliable backup power to the expansive new complex.

In total, there were four new structures within the initial phase of this project that required backup power: an office building, a parking structure, a state-of-the art training center and the main arena, which–in addition to hosting home games for a professional sports franchise and a Division 1 college program–will also serve as a venue for major musical acts and other year-round special events. After a competitive bidding process, KOHLER was selected to power all four buildings in the project, with the arena being the highest-profile and most challenging assignment.

Kohler Power Systems manufactures complete power systems, including generators up to 3250 kW, automatic transfer switches, switchgear, monitoring controls and accessories, for emergency, prime power and energy-management applications. Kohler Power Systems has delivered energy solutions for markets worldwide since 1920. For more information, visit KohlerPower.com.

As with many urban developments, land around the new arena site is at a premium, so space is very limited. One of the primary challenges with integrating a generator into the new arena was power density. There simply wasn't enough room available for multiple generators; a single unit would need to be utilized. The project would require an advanced generator with both a compact footprint and enough muscle to deliver the specified 3000 kW.

Enter the KOHLER® 3250REOZD. This diesel-powered workhorse delivers a 3000- to 3250-kW standby rating and features a brushless, permanent-magnet (PM) alternator for superior short-circuit capability. For the arena project, the unit was fitted with a remote radiator to conserve space. The radiator was positioned on the ground approximately eight feet from the generator. A permanent load bank was also integrated, which will give operators the flexibility to exercise the system without a rental unit. To help minimize noise, a sound-attenuated enclosure was also utilized. Like with all KOHLER enclosures, the arena unit features multiple personnel doors and removable panels for fast-and-easy access to key parts and controls. A textured, automotive-grade finish also provides advanced corrosion protection.

The new KOHLER 3250REOZD diesel industrial generator at the arena will deliver the power needed to keep critical circuits up and running and help to ensure the safety and comfort of patrons, in the event of a utility outage for many years to come. "Due to space constraints, we definitely had to get a little creative," said Alan Grzywacz, generator systems specialist with Total Energy Systems LLC, the authorized KOHLER power distributor working on the sports arena project. "In addition to accounting for the radiator and the load bank, we also had to squeeze the system next to chillers for the building, which were already in place when the unit was installed. Fortunately, our team pulled together and engineered a rock-solid solution that suited the project perfectly. I'm really proud of how we all came together to deliver for this high-profile venue."

The general contractor for the project was Mortenson, and the primary electrician was Staff Electric. Total Energy Systems worked closely with both organizations as well as Kohler Power Systems to design and install the backup solution for the new arena. The power system delivered right on schedule will provide the facility owners with additional peace of mind in the form of slightly more amperage output than the specified 3000 kW.

"Being involved in a project of this magnitude is always rewarding," Grzywacz continued. "Plus, this arena isn't far from home for me, so I'll be able to attend games here for decades with my family and friends. It will definitely be reassuring to know that our KOHLER unit is out there, ready to go when it's needed." ■

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