

taly's K-Events—producers of the 2006 Winter Olympics Opening Ceremony, the launch of the Fiat 500, and Cinecittà's 70th anniversary—recently produced a huge show for the inauguration of the 50,000-seat, five-star Donbass Arena in Donetsk, Ukraine, home pitch of Shakhtar soccer team.

Built for approximately \$400 million, the arena was designed by Arup Sport, which also built soccer stadiums in Manchester, Munich, and Sydney. To ensure a spectacle worthy of the immensely futuristic venue, K-Events called in key members of its Olympics team, including executive producer and creative director Marco Balich, production director and technical supervisor Marco Astarita, lighting designer Durham Marenghi, audio designer Daniele Tramontani, and audio and lighting contractor Agorà.

In addition to fielding a 40-strong crew, Agorà supplied the intercom setup (30 hard-wired and 40 wireless custom

units from Riedel), of vital importance considering the size of the venue and the fact that, to keep ground cable runs to a minimum, the audio and lighting control rooms were on the roof's catwalk 120' above the pitch. The company also supplied 180 hoists (from Verlinde Stagemaker and CM Lodestar), used to hang 1,500' of Litec trussing.

Astarita explains just part of the huge logistic undertaking: "K-Events won the international bid in the fall of 2008, but, due to the international financial crisis, the event was put on hold and preproduction activity began when the job was definitively confirmed in March 2009. Our 80-strong production team began moving to the Donetsk offices from mid-June, and, after volunteer casting and training, rehearsals began in July at the local expo centre and later at the old stadium."

As the area didn't have suppliers to meet the necessary standards, all equipment, structures, and crew came from





>> The opening of the arena was an Olympic-style ceremony.

Italy, and the language barrier was overcome thanks to a 40-strong team of interpreters.

"The event was an Olympic-style opening ceremony with a top international artist—Beyoncé—performing a show from her world tour at the end," says Astarita. "This, therefore, involved two completely different production logics, and the latter included getting the artist's 50 tons of production equipment to Donetsk from Japan and on to Australia. Move-in and set-up at the stadium began on August 3 for the show on August 29.

The show, which lasted over two hours, was seen by a capacity crowd, including Ukraine's President Viktor Yushchenko and Prime Minister Yuliya Timoshenko, and followed by millions on TV. The spectacle's mass choreography (concept director Doug Jack) included 500 of the 1,500 volunteers dressed as miners (the area has a long-lasting mining tradition) performing to "We Will Rock You," sung by three of Ukraine's top singers, Natalya Mogilevskaya, Svetlana Loboda, and Aliona Vinnitskaya. As well as the closing show by Beyoncé, and a massive pyro display designed by French wizard Christophe Berthonneau of Groupe F, there was also a short soccer game between aliens and earthlings, more than 50 Italian flag throwers, and 100 Cossacks dancing to some of the ceremony's original score, composed by Michele Centonze.

The audio system, designed by Tramontani, was almost entirely made up of L-Acoustics gear. "As well as the main stage PA, 16+16 V-DOSCs, 24+24 stacked SB28 subs, a 16+16

V-DOSC side system, and a 12+12 Kudo outer side system, there were eight delayed hangs flown around the stadium roof: two with 12 V-DOSCs, three with eight V-DOSCs and six dV-DOSCs, two with six V-DOSCs and six dV-DOSCs, and one with 12 V-DOSCs," says Tramontani. "There were also nine clusters of three Meyer Micas ground-stacked along the front of the stand and a VIP zone system with 9+9 dV-DOSCs and 1+1 dV-SUBs. The entire setup was powered by 120 LA8 amplified controllers."

Chosen from Agorà's large stock, show lighting at the stadium included 48 Clay Paky Alpha Beam 1500s and 50 Alpha Beam 700s, 80 Coemar iSpot eXtremes, 11 Robe ColorWash 1200E AT PCs, 48 Robe ColorWash 1200E AT Wide units, 68 Martin MAC 2000 Wash XBs, and 38 Zap Mini BigLite 3Ks. Lycian followspots (eight 2.5kW and six 4.5kW units) were used to pick out soloists and key personalities. "I used iSpots and ColorWashes at the Winter Olympics," says LD Marenghi. "The MAC 2000 is a great workhorse, and the new Clay Paky Alpha Beams are perfect for stadium shows and very, very bright."

As the stadium is enormous and the production had to work to a realistic budget, Marenghi (assisted by associate lighting designer Nick Jones) planned to turn on the stadium lighting for the mass choreography to ensure sufficient light to illuminate the whole field evenly for HDTV coverage. In order to determine the time it took to turn off this floodlighting, he called "lights out" just before

the show and timed the blackout process on a stopwatch, so that he could backtrack it later at the end of the mass choreography piece.

"This was a critical moment," says Marenghi. "Although I could cover the turning on process by overlaying my own lighting for the protocol prior to Doug Jack's massive footballer, the blackout at the end went straight into a famous Ukraine star magically appearing on stage in the middle of the field with all the audience holding their free LED torches. I timed the first lights out at nearly two minutes, but the stadium guy's battery had gone flat on his mobile...so I had to guess the show event cue point at one minute before the magic dark moment, and it happened bang on 59 seconds—very, very lucky!"

The lighting was directed by Nicola-Manuel Tallino and programmed by Tim Routledge of GrandPA Programming Associates, who also operated the show for the launch section and audience lighting for Beyoncé. "We programmed from an area halfway up the pitch for a good vantage point and ran two MA Lighting grandMA consoles networked to ten Network Signal Processors distributing DMX-over-Ethernet around the stadium," says Routledge.

After the marathon, Astarita says, "Although an extremely complex challenging production, with a wonderful motivated team and a large amount of good vibrations and support from all local staff and crew, it was a greatly rewarding operation, crowned by a perfect artistic and tech show—a huge success!" **LD**