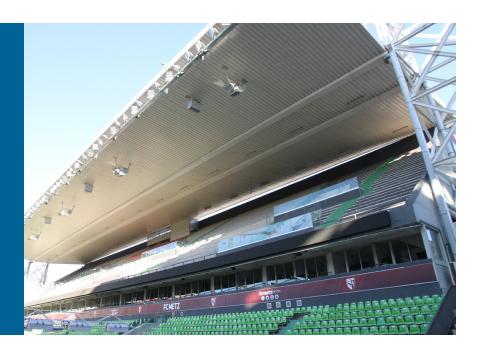
## CASE STUDY



# STADIUMS & ARENAS





### OPPORTUNITY

To provide arena-filling sound with excellent clarity for safety announcements, Stade Saint-Sympohrien required a state-of-the-art, EN 54-24-compliant distributed audio system.



### SOLUTION

I prefer to use JBL speakers

because you don't have to do a

lot of processing to get the right

Produc'son and Freevox collaborated to equip Stade Saint-Symphorien with a range of JBL Professional loudspeakers for complete coverage with a high degree of intelligibility.

### STADE SAINT-SYMPHORIEN, FRANCE

Located in the city of Metz and home to France's top division soccer team, FC Metz, Stade Saint-Symphorien is the largest sports stadium in the region of Lorraine. The stadium, which was originally constructed in 1923, was recently renovated to expand its seating sections and increase the overall capacity to 30,000. To deliver highly intelligible speech for safety and in-game announcements as well as high-energy music playback during matches and other events, Stade Saint-Symphorien required a brand-new sound system with excellent sound quality and coverage for every seat.

French integrator Produc'son selected JBL Professional loudspeakers supplied by Freevox to replace the stadium's aging audio system. In order to meet international EN 54-24 voice alarm safety standards and ensure a world-class experience, Produc'son hired Laurent Delenclos, Technical Director of Freevox, to design the stadium's new audio system.

"For stadium installations like this, it's important that the entire system meets EN 54-24 specifications to guarantee fail-safe operation if important safety announcements need to be made," said Delenclos. "For example, if the stadium needs everybody to evacuate, we need to be certain that not only will the system reliably deliver messages to all areas of the facility, but also that these messages can be understood clearly. Speech intelligibility plays a huge role in EN 54 protocols, and the JBL speakers deliver excellent STI levels so that everyone can follow instructions and reach safety if a dangerous event occurs."

To deliver excellent clarity and balanced coverage in all areas of the stadium, Delenclos selected a range of specialized JBL loudspeakers. Produc'son hung distributed clusters of JBL AWS526-LS and AWS566-LS All Weather speakers to provide the main sound reinforcement for the north, south, east and west seating sections, supplemented by ASB7128 subwoofers for additional low-frequency extension.



sound out of them."











Soundcraft



# "

When the customer first heard the full system in action, they remarked that the sound quality was as good as you would experience at a concert!" "I prefer to use JBL speakers because you don't have to do a lot of processing to get the right sound out of them," said Delenclos. "With other speakers, you have to use specific amplifiers and rely on special speaker tunings and parametric EQ to get them to sound good. I love using JBL speakers because they sound great right out of the box. I only need to adjust the EQ to accommodate for the space the speakers will be used in, but it helps a lot that they don't need to be tuned just to sound natural from the beginning. Because of this, you can use JBL speakers with any amplifier you want and they're still going to sound great. When the customer first heard the full system in action, they remarked that the sound quality was as good as you would experience at a concert!"

Delenclos's design also included separate JBL AWS566-LS speaker arrays to ensure high-quality sound for players and official personnel on the playing field. To provide additional coverage for the corners of the stadium, Produc'son installed JBL PD595-LS and PD566-LS Precision Directivity loudspeakers. In addition to the main arena sound system, Produc'son outfitted the concourse and locker room areas with JBL Control 25AV-LS and 14C-VA ceiling loudspeakers, augmented by custom EN 54-24 compliant enclosures designed by Produc'son.

"The JBL products allowed us to meet the expected specifications," said Daviane Robin, Marketing and Communication Manager, Produc'son. "The safety sound system meets the requirements of the EN54 standard, and the comfort sound system meets the requirements of a large gathering place, including sound pressure, intelligibility, sound coverage and reliability."

"It was a real pleasure to collaborate with JBL on the renovation of the Saint-Symphorien Stadium," said Lionel Ollinger, Managing Director, Saint-Symphorien FC METZ. "As part of our ambitious project, we wanted to equip our sports facilities with state-of-the-art audiovisual equipment to provide optimal sound quality for match nights and other sporting events. Thanks to the JBL equipment and the Produc' son team, we were able to equip ourselves with a high-quality solution that met all our requirements. We are eager to debut the new sound system for future Saint-Symphorien spectators."





## "

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#### **PRODUCTS USED**

JBL AWS526-LS ALL-WEATHER SPEAKERS JBL AWS566-LS ALL-WEATHER SPEAKERS JBL ASB7128 SUBWOOFERS JBL PD595-LS PRECISION DIRECTIVITY LOUDSPEAKERS JBL PD566-LS PRECISION DIRECTIVITY LOUDSPEAKERS JBL CONTROL 25AV-LS LOUDSPEAKERS JBL CONTROL 14C-VA LOUDSPEAKERS



#### CONTACT

For PR Inquiries: David Glaubke Director, Public Relations HARMAN Professional Solutions david.glaubke@harman.com +1 (818) 895-3464 Office +1 (818) 470-7322 Mobile

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