



DE ROMA



ANTWERP, BELGIUM
EUROPE, MIDDLE EAST & AFRICA

Originally built as a cinema and theatre, De Roma has stood in Antwerp since 1928. The venue has become an iconic symbol for the area, with much of that owed to its history of hosting huge gigs between 1966 and 1982. A whole host of acts performed on the stage at De Roma, including Paul McCartney, The Kinks, James Brown, Lou Reed, Iggy Pop, Iron Maiden and many more - highlighting its immense popularity.

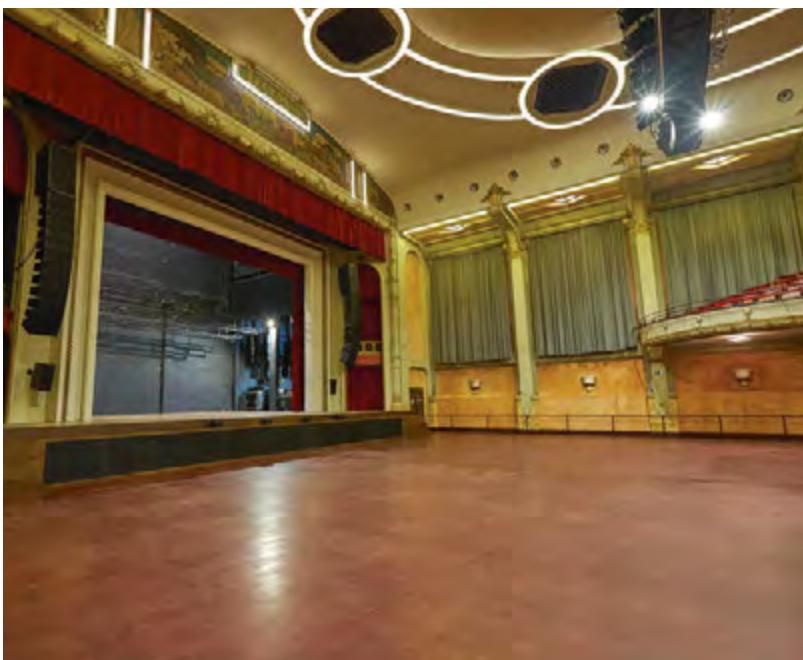


Much to the dismay of the community, De Roma closed its doors in 1982. Twenty years later, in 2002, local volunteers recognised what an incredible monument De Roma was and set about renovating the venue before its reopening in 2003. It wasn't until 2006 that the basic renovations were complete and, since then, work has continued, with the latest project seeing the balcony rebuilt, the outside walls renewed and the original house lights restored in 2015. The amazing work has been an incredible success in attracting visitors to the venue, though there was still one piece of the jigsaw missing - the sound. De Roma needed a new, state-of-the-art sound system and total acoustic makeover to help improve the year-round cultural events, festivals, gigs and dance nights.

To help with this issue, the team at De Roma sought the advice of Amptec, an audiovisual installer based in Belgium. The task was extremely difficult with De Roma being a classified building. This meant that acoustic results needed to be attained, all while maintaining minimal visual impact on the venue to respect the architectural heritage.

To achieve this, Bart Willems, CEO of Amptec, introduced De Roma's team to Acoustic Designer, Eddy Bøgh Brixen, who first recommended ShowTex after completing his measuring report on the venue.

After meeting with De Roma, ShowTex went through the report and began working on solutions for the venue. These were ➤



then presented to Programme Director, Toon Van Deuren and Sound Engineer, Wim Van den Heuvel. This is where ShowTex presented the idea of using Inflatable Wool to adapt the shape of the concave ceiling.

Koen van Kerkhoven, Managing Partner of ShowTex, takes up the story: "We have been following the De Roma project since day one. With Eddy Bøgh Brixen's report on the table, we started brainstorming on the acoustics in this majestic venue - bearing in mind the building's heritage value interior."

"The concave curvature of the ceiling produced strong reflections on the audience area, so we had to be very creative in inserting acoustic elements. That's when we came up with the idea to invert the curvature to avoid this central reflection." De Roma's concrete roof structure couldn't fly any extra weight, so ShowTex offered a solution by designing and developing two huge, lightweight acoustic inflatable shells that could be placed under the ceiling.

"We've been using inflatables for ages, from giant projection spheres up to smaller LED lit versions and, over the past year, we had been playing around with the idea of using this technique for

acoustic purposes. This was the ideal moment to introduce our inflatable wool to the public," said Koen.

There were no - or only very old and outdated - blueprints of the original building, so the ceiling had to be measured from the ground up. The acoustic inflatable shells needed to be assembled on ground level, then specially rigged until the right height. ShowTex used fine and discreet steel cables all around the inflatable shells to secure and level out the final suspension of the structure.

"It's the first time ever we manufactured and implemented these inflatables, and an absolute world premiere for De Roma," said Koen. "Its acoustic qualities are excellent; the inflatable is both sound absorbing and partially sound diffusing due to its shape. The big hollow dome became a spherical dome which resolved the prominent flutter of the past while bearing in mind the building's heritage value interior." On the back wall of the balcony and the wall against the old projector room, ShowTex installed a sound-absorbing material made of cotton and woollen textile remnants, which are recycled, shredded and compressed in sound-absorbing

baffles of various densities. These panels improve the acoustic climate on stage, ensuring the artist can perform without any echo distraction from the back walls. A second and really important demand from the De Roma team was to safeguard the original wall decoration, which ShowTex succeeded in doing through photographic reproduction.

"Covering the two walls opposite the stage was one thing - safeguarding the original wall decoration was something else. We decided to print a photographic reproduction of the wall on the textiles covering the baffles," explained Koen. "The original walls were photographed with great detail and then digitally printed on a huge seamless canvas of 18-metres by three-metres, to wrap the walls with a natural looking replica. An almost invisible solution with crucial impact on the venue's acoustics."

When it came to the new audio system, different manufacturers came up with plans according to the acoustics at De Roma, though, after demos and various tests, it was quickly decided that a d&b audiotechnik system would be installed. For the main FOH system, there is a 14-unit line array, with 10 d&b audiotechnik Vi8



loudspeakers, two Vi12 loudspeakers and two Vi-SUB subwoofers, which are positioned either side of the stage. There are also eight d&b V-SUB subwoofers used in an array that is hidden under the stage within a structure that was custom built by Amptec.

De Roma's stage is also equipped with two d&b V7P loudspeakers and four E6 loudspeakers that cover the first rows of seating. There are another two E6 loudspeakers, as well as 14 M4 wedge monitors from d&b, too.

Elsewhere, there are three d&b 10AL two-way line array modules used as a cinema sound system for the balcony seats, while the 350-capacity lobby has a d&b Vi-SUB and a

Vi10P loudspeaker either side of the stage. De Roma is the first live music venue in Belgium to use d&b's ArrayProcessing control technology, with the main FOH system optimised to deliver the perfect balance for the audience.

For the control, there is also a DiGiCo SD10, an Avid VENUE | SC48 and a Midas XL3 console, which can be used as FOH or monitor desks. The entire system - both on the main stage and in the cinema – are powered using a combination of nine d&b 30D and one 10D amplifiers, with two D12 amplifiers providing the power for the lobby.

The project at De Roma was certainly a challenging one, as Koen explained: "The most

important thing was to come up with acoustic solutions that would not hamper the romantic elements of the hall. De Roma is a classified building, so all implementations had to be carried out with the greatest respect for the hall's original style.

"ShowTex developed a unique and fully made-to-measure solution, an absolute world first. So we had to be very creative, but luckily that's what we love to do and what we're good at."

The work of Amptec and ShowTex has seen De Roma confirm its place at the very top of venues in Belgium, with the d&b audio system offering a truly exceptional sound quality that matches the history and presence of the historic theatre. [dr](#)

TECHNICAL INFORMATION

SOUND

ShowTex Inflatable Wool; ShowTex Universal 250 Print; 10 x d&b audiotechnik Vi8 loudspeaker; 2 x d&b audiotechnik Vi12 loudspeaker; 4 x d&b audiotechnik Vi-SUB subwoofer; 8 x d&b audiotechnik V-SUB subwoofer; 2 x d&b audiotechnik V7P loudspeaker; 6 x d&b audiotechnik E6 loudspeaker; 14 x d&b audiotechnik M4 wedge monitor; 3 x d&b audiotechnik 10AL two-way loudspeaker; 2 x d&b audiotechnik Vi10P loudspeaker; 9 x d&b audiotechnik 30D amplifier; 1 x d&b audiotechnik 10D amplifier; 2 x d&b audiotechnik D12 amplifier; 1 x DiGiCo SD10 console; 1 x Avid VENUE | SC48 console; 1 x Midas XL3 console

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