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PANSTADIA & ARENA MANAGEMENT

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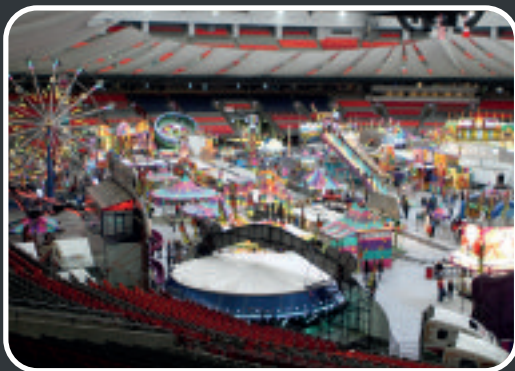
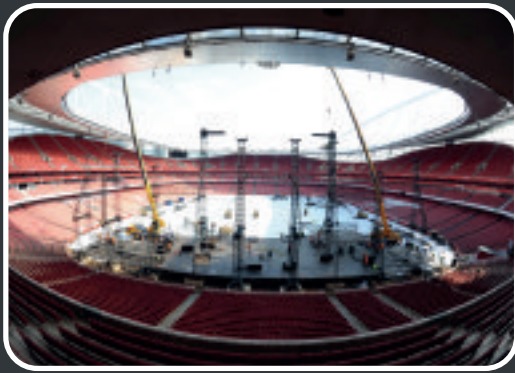
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A new report just released by the scientific body that advises the UN on rising temperatures makes for stark reading.

The Intergovernmental Panel on Climate Change say that there is very little chance of keeping the world from warming by more than 1.5C.

In response, UN secretary general Antonio Guterres says that all countries should bring forward their net zero plans, designed to reduce greenhouse gas emissions, by a decade.

He warned that 'There is a rapidly closing window of opportunity to secure a liveable and sustainable future for all.'

In this issue, experts from Populous and ME Engineers discuss how stadium and arena architects and engineers can play their part in the fight against climate change.

They examine how sustainable venues can be designed and delivered, and how waste in construction can be mitigated.

Manchester City's Director of Sustainability talks to PS&AM about the club's goal to reach net zero by 2030 and how much they have achieved so far at the Etihad Campus.

We also take a look at Estadio de la Cerámica, the home of Villarreal Fc – the Yellow Submarine. A renovation project has been carried out to improve the fan experience and link the stadium to the city.

In the U.S., Acrisure Arena has opened as the new home of the AHL's Coachella Valley Firebirds. This multipurpose venue has been designed not only for sports, but very much with music in mind. With a concert capacity of 11,000 and just over 10,000 for hockey, the venue is looking to attract artists beginning major tours along the West Coast.

This issue also features an in depth look into the world of venue audio and a round-up of the action from ISE in Barcelona.

Enjoy reading and don't forget to keep us up to date with all your venue news.



John Sheehan
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VILLARREAL READY TO ROLL AT ESTADIO DE LA CERÁMICA

A major renovation project has been designed to improve the fan experience at the home of Villarreal CF.

The newly renovated **Estadio de la Cerámica** has been officially opened in the Spanish city of Villarreal.

LaLiga club **Villarreal CF**, which is nicknamed the Yellow Submarine because of its yellow kit, has completed an impressive makeover to turn the Estadio de la Cerámica into one of the best stadiums in Europe.

The transformation project has been spearheaded by international engineering and architecture company **IDOM**, which already has an impressive roll-call of projects to its name, including the construction of Athletic Club's **Nuevo San Mamés**, the remodelling of River Plate's **Estadio Monumental**, and the design and construction of the new roof of the **Ciutat de València**.

Local construction company **Alviben** carried out the work on the 23,000-capacity stadium. The renovation project includes a roof which now covers the entire grandstand, new

seats throughout the stands and the creation of new interior spaces. The work has been carried out with a commitment to renewable energies and includes several technological innovations.

Work on the renovation began in May 2022, just a day after the penultimate LaLiga fixture, which was the Yellow Submarine's last match at the Estadio de la Cerámica. The turf was taken up and the €50 million renovation process began.

The club was able to take advantage of a break in the LaLiga fixture schedule at the end of 2022, due to the World Cup in Qatar, to carry out some of the work.

The refurbishment is an important step forward for the club, but also for the town of Villarreal and province of Castellón, which is well known for its ceramics industry which the club is keen to promote.



© Villarreal CF



ARCHITECTURAL UNITY

The transformation of the Estadio de la Cerámica gives the stadium architectural unity and improves the fan experience.

The most up-to-date infrastructure for television broadcasting has been installed, an incomparable football atmosphere has been created, while the stadium integrates in a more sustainable and friendly way with the urban environment it sits in.

The façade of the Estadio de la Cerámica has been completed with yellow tiling, while the stadium has now been completely enclosed with the construction of a new stand in the corner between the Preferencia and Fondo Sur stands. All the seats in the stadium have been upgraded, two giant videoboards have been installed (300 m² of screen) along with a spectacular sound system, as well as new LED sports and architectural lighting.

The stadium now features two stunning LG displays measuring 21x7 meters. The displays use LED Outdoor Ultralight technology and can show images at a brightness of 7,000 nits, making them ideal for viewing on even the brightest days.

>>

>> *"It has been an extraordinary experience for LG to work with Villarreal to put the best technology at the service of all Yellow fans,"* says Francisco Ramírez, director of LG Business Solutions Spain. *"All spectators will now be able to enjoy a superior image from any corner of the stadium, the result of many years of innovation and work."*

The digital display project, integrated in collaboration with the digital transformation specialist LaLiga, places the venue among the leading stadiums in Spain in terms of image experience.

New interior spaces have also been built in the stadium, including a multi-purpose room at the top of the Fondo Sur with views of the pitch and the square.

The Entrelíneas Restaurant has undergone a complete refurbishment and a new space for the Villarreal CF Museum has been incorporated.

The club has also reaffirmed its commitment to renewable energies, with the installation of photovoltaic panels on the roof. Electricity from these will be used to power the stadium.

FAN EXPERIENCE

César Azcárate, Architect and Director of Sports & Events at IDOM, told PS&AM that the revamp aimed to bring unity to the stadium.

He said: *"The main aim of the project has been to create a more unified stadium, which will substantially improve the fan experience through a series of architectural strategies. These consist mainly of seeking a coherent image of the entire stadium and a greater and more consistent integration with the city."*

"The main challenge was to complete the project and the work in just 11

months so that Villarreal could once again play in its stadium at the end of the World Cup in Qatar. The other major challenge was to build the large metal beam that supports the north stand where opposing fans are housed, the highest stand in the stadium, which will be integrated into the new architecture of the complex."

Azcárate said the exterior architecture is achieved through the use of ceramics on the façade, which is the material that most identifies the largest industry in the region, as well as the use of yellow as the club's corporate colour, which gives it its unique identity.

He added: *"Although the Villarreal CF team has been playing at the Estadio de la Cerámica since last December 31, the works are continuing until their completion scheduled for April."*

"The southeast corner of the stands, where there were houses before, has been completed, the south stand has been enlarged, creating new spaces in it, and the new facade of the entire stadium is being completed. In addition, two new large video scoreboards integrated into the roof structure have been installed, new seating has been installed throughout the stadium, the sports lighting has been renewed and a sky-cam has been incorporated."

The renovation has not, however, added any more capacity to the venue as Azcárate explained: *"Although new rows have been added in the southeast corner of the stadium, it has been decided to provide greater comfort in certain areas of the stadium in order to maintain the same seating capacity as at the beginning of the works."*

"The club had several objectives in mind with this major renovation of the stadium. Firstly, to improve the general fan experience, achieve greater comfort, better acoustics, new services (museum, restaurants, new events area). Secondly, to achieve a unified image of the stadium, as it has been evolving over the years without an established guiding criterion, with



different phases being addressed with very different results. Finally, the aim was to achieve a better integration with the city, better open spaces around the stadium to improve the flow in and out of the stadium.”

ONGOING IMPROVEMENTS

Since Villarreal CF president Fernando Roig took over the presidency of the club in 1997, Villarreal CF have carried out a variety of work to refurbish the stadium, which was then called the **Estadio El Madrigal**, meeting the venue’s different needs.

Roig said: *“When we had our first promotion to the top division, we expanded the stands. In 2005, when we qualified for the Champions League, UEFA told us that we couldn’t play at our stadium if it stayed as it was, so we carried out work on the dressing rooms, made the stands even larger and changed the entire pitch in just three months.”*

The work on the stadium didn’t stop there, however, and there have been other projects over the years.

Roig added: *“In 2009, we built up the away stand, making it its own space with its own access. Then, in 2017, as well as changing the entire façade and constructing some new interior spaces, we applied a conceptual change to the stadium, renaming it Estadio de la Cerámica to promote an industry that is an engine of the local economy, which in turn became a new source of income for the club through collaboration with local tile companies.”*

Azcárate explained how the latest developments have helped bring the stadium and the city closer.

“First, the residential buildings occupying the southeast corner have been removed. With this removal, the grandstand has been completed and it has been possible to create a continuous façade on all the stands that gives character and unity to the external image of the stadium.

“In addition, hundreds of square meters of public space have been gained both in this corner and on the east façade, providing better visibility of the entire stadium and better circulation of people both at the entrances and exits. The new south façade opens up to the city through a large window in the event space area on the top floor. From this location, there is a fantastic view of both the playing field and the city.

“Finally, in the south stand itself, several hundred square meters have been gained, which will be dedicated to a future museum, two restaurants that join the existing one, thus creating a 365-day activity on that south façade, which is the most important one as it overlooks the large public space of the square.”

All this has led to an improved fan experience. Azcárate added: *“The fact that all the stands of all the grandstands are now covered means not only greater comfort with respect to the weather, but also greater acoustics and with a greater sense of pressure on the pitch for all spectators.*

“In addition, all new seating has been installed, with higher quality and more surface area for each spectator, increasing spectator comfort. The new areas created for the museum, catering and events area will provide a more intense experience not only on match days, but also on non-match days.

“The football atmosphere will be spectacular. Communion between the team and the fans will be achieved with this ambitious remodelling of the Estadio de la Cerámica.” ■

