



## CONSTRUCTION REPORT

More than 300 projects in almost 250 cities from over 80 countries on 6 continents.

### INTRO

#### 6 The next era of top stadiums is here

A look at various new top stadiums around the globe.

#### 8 American Glory: New Arenas on the horizon

The arena landscape of North America is shaped by the two top leagues NBA and NHL.

#### 10 Experts' opinions on stadium architecture

What are trends and upcoming issues in modern venue architecture? How huge are the impacts of the pandemic?

#### 12 Stadia & Arenas: Roadmap to Reopening

With the sports and live entertainment sector left in limbo across the globe due to COVID-19, we hear from a range of industry experts on their preparations ahead of reopening.

#### 19 Smart Stadium? Not without a digital strategy!

Arne Sebastian Fritz, Head of Sports and Entertainment at Drees & Sommer and Dr. Markus Sass, Expert for the safety of sports grounds and event venues at Drees & Sommer.

### OPERATION

#### 24 "Multifunctionality is our great motto"

The O<sub>2</sub> arena in Prague is one of the largest multifunctional arenas in Europe. STADIAWORLD spoke to Robert Schaffer, Chairman of the Board and CEO of Bestsport.

#### 26 Let us entertain you

The race for the title of the largest arena in the UK has long since begun. Numerous new building and conversion projects are vying for the top spot.

#### 32 "Nobody had attempted this before"

George Vaughan, Head of Technology, Ascot Racecourse, about challenges of the current climate, utilising existing NFC technology and what the future holds.

#### 34 Naming Rights: SoFi Stadium is setting new standards

While operators are focussing on the additional revenue, sponsors are forcing the image boost.

#### 36 Hospitality Concepts: Creativity is Key

VIP areas are a lucrative source of income in terms of marketing. Correspondingly large and diverse are the relevant offerings.

#### 38 "It's all about providing a choice"

James Bisgrove, Commercial & Marketing Director at Rangers Football Club, about the Project 2022 and what it means for the evolution of Ibrox Stadium and the club.

#### 42 ALSD International: Powering ahead

Europe's leading event for the Premium Seat & Sports Hospitality sector is being held at the Anfield Stadium on October 12-13.

#### 46 "Data analytics is one of our key objectives"

Matt Roberts, Director of Research and Analytics at Formula 1, discusses how the company is evolving and utilising the latest technologies.

#### 50 The future is virtual

Stadium tours are a must for all top stadiums. With the help of virtual reality visitors can now benefit from an extraordinary experience. But stadiums have even more to offer.

#### 52 "Having our own facility is necessary"

FC Cincinnati has been playing in the Major League Soccer (MLS) since 2019 — the club is currently building a new stadium. STADIAWORLD spoke to President Jeff Berding.

#### 54 MLB: A season for the history books

This year the Major League Baseball (MLB) embarks on its 119th season. It is already obvious that this season will enter the history books.

#### 58 Dutch Powerhouse

For 24 years now the Johan Cruyff ArenA has been the flagship stadium of the Netherlands. Top events like the postponed UEFA EURO 2020 push to peak performances.

#### 62 Let there be light

The Estádio da Luz, which translates as Stadium of Light, radiates far beyond the borders of Portugal.

#### 66 The stadium of stadiums

Sustainability, digitisation and events galore: The Allianz Arena is a figurehead of the German venue landscape — in 2020 the stadium celebrated its 15-year anniversary.

#### 70 City portrait Barcelona: An exceptional venue portfolio

The largest stadium in Europe, an Olympic stadium, an elite stadium with more than 40,000 seats, several arenas and a Formula 1 track: Barcelona has much to offer.

### CONSTRUCTION

#### 74 SPORTS VENUES 2020/21: Construction Report

The report by STADIAWORLD provides the most comprehensive overview about the construction of sports facilities worldwide.

#### 85 Athletics track renewal in the largest active holiday resort in the world

The Swiss company Conica is carrying out an impressive project at the Club La Santa on the Canary Island of Lanzarote.

#### 86 "Bring events to LA that wouldn't be here"

It is the most expensive stadium ever to be built. STADIAWORLD spoke to Jason Gannon, Managing Director, SoFi Stadium and Hollywood Park, about the gigantic project.

#### 88 Between tradition and modernity

The Major Leagues in the US rank among the most popular sports leagues in the world and offer a diverse portfolio of sports venues.

#### 90 More than just a desert dream

Saudi Arabia will be the location of yet another athletic hub setting new standards. Qiddiya is an entire city that is completely dedicated to entertainment.

#### 92 Multi-tenancies: The future of Sporting Venues

COX Director, Alastair Richardson, discusses the impact having more than one home team has on venue utilisation, revenue maximisation and the quality of the fan experience.



## ROADMAP TO REOPENING

Venue experts share their thoughts and approaches in regard of reopening the venues after COVID-19.



## OPERATION

Concepts of leading venues and special views on topics like hospitality, naming rights and more.



## TECHNOLOGY

Pitch technologies, display developments, floodlight innovations and more technological updates.



## EVENTS

UEFA EURO, FIFA World Cup and more: A view on the upcoming events around the globe.

### 93 "Tailored to a personal experience"

Alastair Richardson speaks about current trends in sports venue architecture, the impact of the coronavirus pandemic as well as individuality of stadiums and arenas.

### 94 Infrastructure of European Club Football: A Closer Look

Insights into construction projects, investments, ownership, partnerships and more in European football.

### 96 "A new kind of stadium that could inform future design"

Feyenoord Rotterdam could soon be playing in the country's largest stadium. STADIAWORLD spoke with the architect, David Gianotten, Managing Partner – Architect, OMA.

### 100 Worth the wait

Despite being delayed by a year, the New National Stadium of Japan in Tokyo will attract attention during the Summer Olympics.

### 116 Tech Talk: Snooping and Hardware Endpoints

As a flexible system the EZ TV solution from VITEC is able to control and play media contents on smart TV screens and also covers any other display in current sports and event venues.

### 118 FC St. Pauli: The perfect digital information and advertising mix

An end-to-end Digital Signage & IPTV system integrated at Millerntor stadium step by step – with the digitization concept introduced by PMS Perfect Media Solutions GmbH.

### 120 Colosseo Single Media Platform is the uncrowned king of control software for arenas

Many will recognize this. Great combination and goal! Horn, players celebrate, and all eyes look upwards to a large multimedia video cube hanging under the ceiling.

### 122 The floor made of glass by ASB GlassFloor conquers the world of sports

Whether for athletes, event managers or building contractors: the innovative sports floor made of glass combines technology, sports and sustainability in an entirely new way.

### 124 Rising standards for floodlights

Associations and leagues are simultaneously working on the requirements for pitch lighting. The overall trend to brighter lights and increased light quality is clear.

### 128 Floodlight of the Future for the Olympiastadion Berlin

The Olympiastadion Berlin has been equipped with completely new lighting. LANZ Manufaktur was established as the partner for the conversion of the lighting.

### 130 Raising the Standard

When fans return to the biggest and best sports venues in Europe, they'll find a new standard for live entertainment.

### 132 Pitch technologies: Enhancing grass growth

Greenkeeping in professional stadiums gets ever more support by innovative industries.

### 134 "Make stadiums more profitable with StadiaPitch"

Matthias Mehling explains the benefits of the system StadiaPitch – powered by Bosch Rexroth. The system is turning stadiums into true multipurpose arenas.

### 136 "Without Data, it's just an opinion"

Karl Standley, Grounds Manager of Wembley Stadium, spoke to STADIAWORLD about the work of him and his team.

### 138 Ice hockey: Focussing on flexible boards

The venues of professional ice hockey are introducing new technical standards these days. The process is not concluded with the implementation of flex boards.

### 142 "Cost-effective alternative to a conversion"

The board manufacturer engo has developed a flexible installation system for ice stadiums that have to temporarily adjust their ice surfaces to smaller playing field sizes.

### 143 Synthetic Ice Hockey Field for the Berliner Eisbären

The CONTERION SPORT SYSTEMS GmbH delivered the board systems and the panels of the synthetic ice surface in the Sportforum Berlin.

## TECHNOLOGY

### 102 Tech Report: Trends and what's behind them

Digital displays, lighting, turf and many other features: Leading venues have to be state of the art and sometimes even ahead of time. They are always driven by many demands.

### 105 Make the right decisions for tomorrow today

Image quality = Data quality: How video analysis and AI applications meet the challenges of the future.

### 106 A smart future for Los Angeles FC

Access is trendsetter when it comes to new technologies in the field of ticketing and access systems. The Los Angeles FC is first to receive customized gates for the Banc of California Stadium.

### 107 "Technology without human knowledge is not enough"

Marina Tranchitella, General Manager at the 50,000-seat Beira-Rio Stadium for Sport Club Internacional in Porto Alegre, Brazil, provides her professional insights.

### 110 Digital displays: Information management at the highest level

Media technology installations are becoming more and more important in all venues. Besides fitting more screens there is an increasing trend to installing special control systems.

## EVENTS

### 144 Outlook: Events 2020 & 2021

Many large events will take place in the next twelve months, all subject to change due to the Corona pandemic. Many of them should have been in 2020, anyway.

### 147 Eden Park embraces to deliver multiple World Cup events in three years

With Eden Park set to host three World Cup events in the next three years, the stadium is embracing the New Zealand Government's funding announcement for sport recovery.

### 148 All Problems solved – almost

Following the postponement of the UEFA EURO 2020 to next year it was initially unclear whether all venues would still be part of the event. This has since become clear.

### 150 Creative stadiums – at heavy costs

It is a little more than two years before the 2022 FIFA World Cup in Qatar kicks off. Several aspects will make the tournament special.