



Comfort in mind

Seat designs to meet venue needs

Sports facilities call for a variety of seating types. From the cheaper seats to their corporate cousins, versatile designs can do much to increase spectator satisfaction and save on maintenance costs

Aurelio Ferreira, DEM2, Portugal

Stadiums are places of shared entertainment and emotions. When people attend a sports event, they want to be able to focus their attention and enjoy what is going on in comfort. Those responsible for organising sports events around the world are aware of this and are increasing their efforts to incorporate high levels of comfort into stadia.

Organisations such as FIFA and UEFA, the world and European football governing bodies respectively, have long recommended that stadia are designed in this way to enhance the game day experience for fans. Stadium managers aiming to achieve capacity for their venues recognise that it will boost the loyalty of support for their tenant team(s) and also keep their sponsors satisfied.

Comfort zone

Perhaps the most important aspect of comfort in a stadium is the seating. Spectator enjoyment can be affected by whether fans are standing or sitting in an all-seater stadium. The installation of the right type of seating can also make all the difference. 'Cold' looking, grey concrete benches can impact on the atmosphere but seating that has 'warmth' and colour is more likely to encourage fans to return.

The challenge of providing good stadium seating has been taken up by DEM2, a Portuguese company. Based in Marinha Grande, one of the biggest tool-making centres in the world, and catering for customers from as far afield as the UK, Sweden, Israel and Brazil, it is mainly concerned with the engineering and development of seating moulds.



The 3D-designed seating styles conform to FIFA and UEFA regulations and meet the needs of spectators, stadia owners, sports organisers and architects

The seats are designed using a 3D design system, with adjustments being made during engineering and production. All work that has been carried out by the company is based on the advice and recommendations of sports authorities such as FIFA and UEFA. The development of seating has also been carefully considered with five different sectors in mind:

- Spectators – high quality sports events can only exist if they are to attract large audiences, investors and sponsors. The sports audience is fundamental to the concept of ergonomic seating;
- Stadia owners – the entities who own sports facilities demand seating to suit the needs of the sport. Seats must be both aesthetically pleasing to the venue and also functional in terms of the comfort factor, durability and flexibility to prevent cracking of the plastic due to changes in weather conditions. Meanwhile, if a supporter manages to tear out a seat, the possibility of injury to someone else from that seat must also be reduced. They must be designed to minimise the risk of them being broken into pieces and used as weapons. Research for the best plastic material has been carried out between the company and various European plastics suppliers aimed at lowering the maintenance costs for stadium management for replacing seats after events. The result is a seat with a triple point mounting to the concrete that can make it difficult for supporters to vandalise the stadium and also allows seats to be easily replaced should they fail;
- Sports organisers – the Olympic Games or the World Cup are the biggest events in the world, with millions of viewers world-wide. For these events, it is important that nothing goes wrong and that they are staged under the best conditions in stadiums or arenas. The success of the event often depends on the quality of the venue in which security is also key. Any seats in these venues should be installed with spectator safety in mind, the goal being to aid, rather than impede, evacuation times;
- Designers and architects – designers and architects place great importance on seating as it acts as the 'face' of the stadium. It can be one of the most distinctive areas of a venue from a purely

aesthetic point of view. The company works in conjunction with designers and architects to make sure that the aesthetics are considered alongside the safety and comfort factors when a new seat is developed. When the design calls for a specific type of seat, DEM2 can carry out every operation from the initial 3D designs to moulding and construction. Such co-operation has led to the creation of the Mondego tip-up seat.

- Media – it is not just the spectators in the stadium who see the seats but also TV viewers watching from their homes around the world. The media endeavours to create a good show and the colour and design of seats can enhance, rather than detract, from the TV spectacle in broadcasts.

Versatile seat designs

The seats provided by DEM2 are suitable for use in a variety of sports facilities –

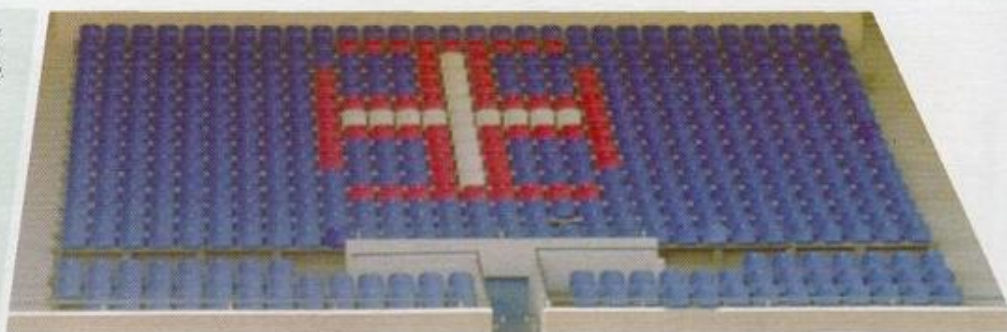
Sporting Lisbon FC has benefited from seating that enhances comfort and sightlines



"Seating acts as the 'face' of the stadium. It can be one of the most distinctive areas of a venue from a purely aesthetic point of view"

seating

The installation of the right type of seating can make all the difference. It can provide warmth and colour to any venue, boosting the atmosphere and encouraging fans to return time and again



from football and rugby stadiums to athletic venues and tennis facilities. Numerous different styles of seats are used by venues all around the world, chosen because they meet each venue's specific needs.

In Antwerp's Olympic Stadium in Belgium and the Teddy Stadium in Israel, the company's monobloc, floor-fixed, tip-up style seat is used. One of the most widely used seats in Europe, it features a backrest and is designed to allow water to drain from the seat.

DEM2's best-known seat is called Tejo. This features a 33cm backrest, double-walled back that is totally closed. Based on sound ergonomics, it has a triple point fixing and has been installed at sports venues

throughout Europe. Sado, meanwhile, is a tip-up seat featuring an anatomical design. It is very extremely versatile – fixed on the floor or on a riser, with or without arm-rests, in plastic only or upholstered in vinyl or fabric. This design includes a rounded-seat shape to aid comfort.

Tip-up seats such as the Sado are well suited for restricted-space venues and can ease the evacuation of spectators should the need arise.

An example of this particular seat can be seen in Boavista FC's new Bessa Stadium in Portugal, one of the venues for the Euro 2004 football championships. The stadium is very similar in style to British football stadi-

ums, with the crowd in close proximity to the pitch, while the steep incline of the stands is well-suited to the tip-up seat style.

The Sado design installed at this venue can also be modified so that it can be used as both a basic seat for spectators with an upholstered version with an arm-rest for corporate boxes and luxury suites. The Mondego seat, meanwhile, is initially designed as a metallic structure using round instead of square or metallic tubing to give a slightly more elegant appearance. The company is working alongside the Euro 2004 organisers to provide seating for new or improved venues that will add to the fan experience of this footballing extravaganza. ■



Is your stadium comfortable?



Before



After

DEM 2, Comfort in sports.

Seating Solutions



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