



SUSTAINABILITY CASE STUDIES

Big Stadium Hockey





Big Stadium Hockey

Objectives

1. To transform how major elite hockey tournaments and matches are hosted and played, on temporarily laid artificial turf pitches within existing sport stadia
2. Step change the fan experience in line with spectator expectations of major sporting events



Description

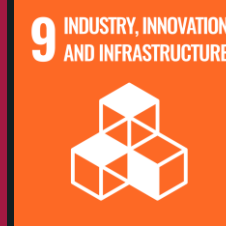
To lay an elite hockey turf within an existing rugby stadium at the Stoop in London, multiple challenges had to be overcome –

- Developing and installing a temporary water pitch to elite standards. The surface had to be suitable for international matches and meet strict certification standards as outlined by the FIH
- Protecting the natural grass. Creation of a system that would allow the natural grass underneath to breathe via adequate airflow
- The ability for the system to be rapidly installed and removed. Tests showed the portable pitch had to be installed, played on and removed within 6-8 days or the grass underneath would die due to lack of sunlight. This speed was also necessary for future stadium utilisation, so that the stadium can be used for rugby and hockey on alternate weekends without compromising either sport
- Needed to be re-usable. A system that could be removed and stored, including rolling up the turf top layer to re-use it multiple times as a portable pitch and ultimately as a legacy surface at a permanent location
- Low environmental impact. To have as low an impact on the environment as possible
- Scalability and flexibility. The solution had to be adaptable for different sized venues in different locations without compromising performance
- It needed to be cost-efficient and economically viable for all partners and stakeholders.

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The approach

1. Collaboration – led by England Hockey and their relationship with the Harlequins Stadium, partners included Polytan, STRI and Polypipe
2. Establishing key performance requirements - With a focus on player welfare and elite hockey performance expectations, Polytan has worked with the project team and the FIH to ensure that the portable system doesn't just take hockey into big stadiums, but enables athletes to perform at their best on world class facilities.
3. Testing and Proof of concept – proof of concept testing and performance testing with various products and system configurations to identify the optimal solution. This process also included critical system validation testing with the GB Hockey squads on a 1,500m² trial area
4. Green Technology – the turf was made from 60% renewable materials, required 65% less water than previous turfs, included recycled materials and the whole system was designed to be recycled and reused.



PROSPERITY



Big Stadium Hockey

Results

- The world's first elite level portable pitch system for hockey
- Permanent installation of pitch surface post Big Stadium Hockey Event. The Tokyo Poligras GT turf surface used at The Stoop, has been successfully and permanently installed at Bisham Abbey, England, meeting all FIH certification requirements. This means not only was the turf surface the most environmentally friendly on the planet, but by being rolled up and re-installed in a new location we can extend the life and legacy of the turf surface as well as continue to reduce our carbon production footprint
- Improved utilisation of existing stadiums for owners and stakeholders. Previously Harlequins only had 16 home matches per season. This new portable pitch technology makes it possible for Harlequins to play rugby one weekend and hockey the next. This is great for everyone
- An environmentally friendly solution. This breakthrough has been designed to be environmentally friendly; the system is reusable, it utilizes existing venues, the turf is made from green technology and recycled materials are used in other elements of the system
- Better fan experience at the venue. Larger stadiums mean more fans can access the venue to watch hockey live. More fans at the game means more noise, more atmosphere and a richer experience than traditional hockey venues. Big Stadium Hockey also gives the sport access to quality corporate facilities which are lacking at small venues
- Better experience for broadcast audience. Larger stadiums offer better facilities for TV broadcast. Larger crowds also add to the televised spectacle, creating a better viewing experience all round.

