



**Synthetic pitch technology hits the headlines as Saracens become the UK's first professional rugby union club to make the switch to artificial turf. Tom James reports.**

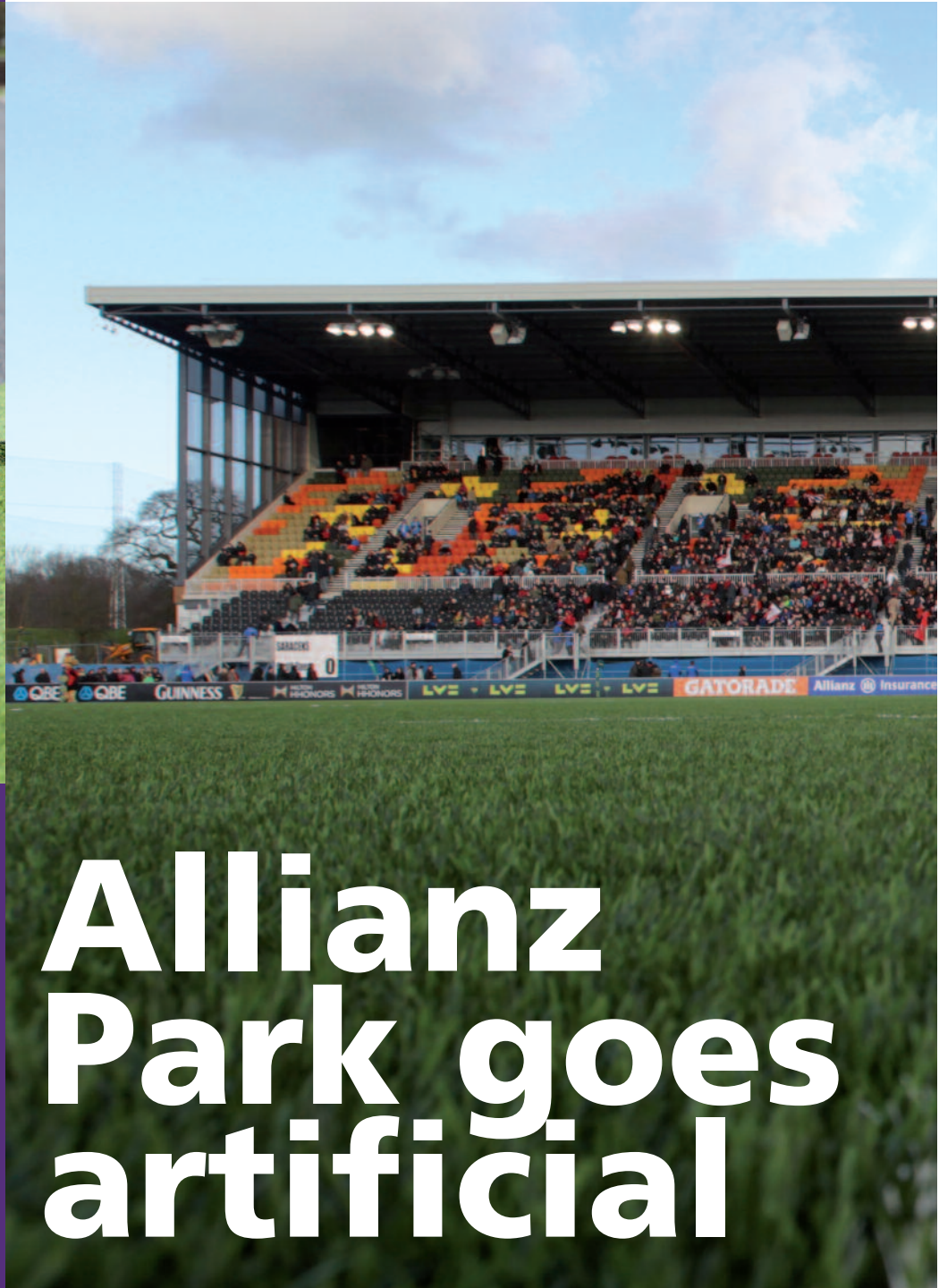
IN JANUARY, Aviva Premiership trendsetters Saracens unveiled the 3G synthetic pitch at their new Allianz Park Stadium home, heralding a landmark moment in rugby union and synthetic pitch technology.

The move to the north London venue, in partnership with Barnet Council, prompted the club to set out their stall and potentially change the nature of the sport forever in the UK, by putting faith in a surface that has never witnessed a premier level competitive fixture since the early days of synthetic pitches in football, which tarnished the image of the technology until recently.

Spectators and TV cameras were in attendance for Saracens' LV Cup tie with Cardiff Blues, which was used as a test event before the official opening of the 10,000-seat stadium on 16 February, when the north London outfit hosted Exeter in the Allianz Park Stadium's debut Premiership fixture.

Regarded as the sport's innovators, it's little surprise to the rugby fraternity that Saracens are the first club to take the plunge into synthetic waters, but the sceptics will be fixing their gaze on the pitch over the course of the season to ensure the issues associated with synthetics in the past are consigned to history.

Questions concerning how scrums and line-outs will play, the likelihood



# Allianz Park goes artificial

of burns and how the carpet will hold out when faced with the rigours of the game, are just some of those being banded about.

Yet, if Saracens can show the rugby world that the 3G surface has addressed such matters, this first installation could well prove a game-changer – and early feedback from players across the Premiership, who came to try out the pitch, suggest that it will be.

Saracens' move to a new home is in part due to a desire to offer the pitch for wider community use. The refurbished Barnet Copthall Stadium is owned by the council and leased by the club, and it was the mission of both to marry elite level sport

with community use.

The new RUGGER 65 pitch was specifically developed for rugby union and has passed the most rigorous field tests to ensure optimum playing safety and lifetime. In fact, the standards for synthetic surfaces are now more stringent than natural turf. With less variation in firmness, a hard natural pitch, for example in summer, could pose a greater injury risk to players than synthetic.

The Saracens application is the first for the new polyethylene fibre, which is designed to be extremely durable yet soft, says George Mullan, CEO of Support in Sport (SIS) Group, who manufactured and installed the Allianz Park Stadium pitch as





well as the first artificial playing surface for rugby at Newcastle RC seven years ago.

"We usually test artificial carpets to 20,000 cycles, but this surface has been tested to 50,000 cycles under extremely stringent conditions, designed to replicate performance characteristics."

It's the performance parameters that are drawing warm praise from the club and players. Blues fly half Ceri Sweeney commented on the speed of the new surface, noting that the "scrum was good", that there was "little moisture" and that there were "not many re-set scrummages".

And top fitness coaches believe synthetic has the ability to quicken the pace of the game.

"It's a fast surface, which plays like a summer pitch all year round," says Scott Murphy, high performance director at Saracens.

"We'll adapt our training and strength and conditioning programme to work with the faster surface. It's a potentially game-changing addition, which could put our guys on the front foot."

Early reaction following the Cardiff Blues fixture suggests the installation has been a

success. There's even talk that the Welsh Rugby Union are looking at a similar installation for the Millennium Stadium following a number of reported issues with their current natural pitch.

Perhaps 3G's greatest virtue is its consistency, and it's this characteristic that could bode so well for the future of the game, both for players and spectators.

"A consistent playing surface will mean that we won't need to adapt what we do to the changing conditions, so we'll never have to worry about playing on a bog again," says Murphy.





“Of course, we’ll still play half of our fixtures on natural turf. Our training will need to be done on a mix of synthetic and natural, so we’ll split our time between Allianz and our St Albans site,” he adds.

The bespoke RUGGER 65 carpet is built on a foundation of a stone base, including field drainage, topped with a dynamic blinding layer made up of a fine grit mix. A 25mm in-situ rubber shock pad, designed to absorb the force exerted on it, is laid on top before the 65mm pile synthetic grass carpet is rolled out in strips, glued together along the common edges, then filled with kiln dried silica sand, to ensure the surface is not too soft. It is finished off with a rubber crumb infill of between 0.8mm-1.8mm to accommodate a stud and allow desired traction levels. The two-tone green surface is surrounded with a perimeter carpet in blue to represent the stadium sponsor Allianz.

The standard of installation and playing condition must meet the stringent International Rugby Board regulations, so a thorough maintenance regime is vital to keeping the infill levels right and the grass blades standing tall.

Danny Holding, who moved from a lifelong career in football at Tottenham Hotspur FC to take up the position of maintenance manager at Allianz Park Stadium in late November, is responsible for the long-term maintenance of the pitch.

The community dimension means the pitch and the eight-lane athletics track surrounding it are well utilised, even when

the country was in the grip of ice and snow.

The increase in footfall on the pitch has helped to bed-in the rubber crumb, which is key to ensuring it remains at a 5mm depth below the tips of the grass blades.

“Before anyone steps out, I walk the course, making sure there’s no snags or tears in the carpet, no rubbish or any rubber crumb build-up,” says Holding. “Depending on usage, we’ll brush with the tractor-mounted attachment once a week.

## the usage we wanted would simply not be possible with a natural construction

The club has also just invested in a snow plough and vacuum salt spreader to clear snow and combat frost and ice, so along with standard maintenance requirements, we’ve covered all bases to ensure that the playing characteristics don’t change as the weather does.”

Murphy anticipates that the softer 3G pile will be more forgiving on the body, but he says that research needs to be amassed before any concrete judgments can be made.

The feedback from players so far will please SIS, who are anxious to ensure that the tide has truly turned on misconceptions

over the quality of synthetic surfaces.

“All the evidence so far shows that a player is no more likely to suffer injury on synthetic as they are on natural turf,” says Phil Blackwell, SIS director and contracts manager for the Saracens project.

And the players have been pleasantly surprised by the surface too, he says. “They hadn’t expected it to be so soft or to play as well as it does. This consistent standard will prove to be a benefit for the duration of the season.”

Murphy, a former Brisbane Lions and Bath Rugby employee, was a key player in the decision to opt for 3G and to look for the best solution to fuse elite with community use. The feeling is that the right balance has been struck with synthetic.

“Our aim was to engage with the whole community, and the only way we could do it was to build artificial. It was my job to see whether it was feasible based on existing research. The usage we wanted would simply not be possible with a natural construction,” he says.

“A real benefit of using synthetic technology is that it complies to standards that have player welfare at the forefront. The surface has to meet strict guidelines for things such as the head impact criteria, so in many ways it’s more quantifiable and certainly more consistent than natural turf.

“Saracens are confident that time will show artificial turf is a safe and reliable surface for professional rugby”.