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Turf Organisation

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QUARTERLY

YOUR GUIDE TO ALL THE DEVELOPMENTS IN SYNTHETIC TURF

**CAN INSTALLING
SYNTHETIC TURF INCREASE
SPORT PARTICIPATION?**

**SYNTHETIC TURF
LANDSCAPE: FORMULA 1**

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...AND MUCH MORE



CAN INSTALLING SYNTHETIC TURF INCREASE SPORT PARTICIPATION?

BONAR YARNS

Have you ever thought about how to increase sport participation for your local club or community? Well it looks like installing synthetic turf is the answer.

Statistics have revealed that the London 2012 Olympics had a massive impact on the popularity of hockey among young people, with participation in the sports junior section increasing by 40% since the Olympics, according to reports from governing body England Hockey, and synthetic turf is at the forefront of this charge.

“Synthetic surfaces have created and support a fast-paced, highly skilled game,” states industry consultant Dr. Martin Schlegel, “this type of surface provides truly unbiased ball roll, encouraging the development of finer skills.”

Although Britain haven't laid as many synthetic hockey pitches as Holland and Germany, we are catching up. Hockey lends itself to both elite clubs and the community; however England Hockey are focusing its efforts to stimulate even greater sport participation at club level, as the placement of such pitches can have a huge impact on the growth and sustainability for clubs.

There is a currently an approx. total of 120,000 that play hockey in England Hockey's 842 affiliated clubs, with the number of teams and players per club rising year after year – which is incredible for a sport which is played purely on synthetic turf.

The 2015 Women's World Cup has also increased participation in football – particularly for young girls. The tournament, which was played entirely on synthetic turf, has inspired young women across the nation and has had a massive impact on the perception of the game at grassroots level – further encouraging participation and involvement in the sport.

Women's football has developed enormously since the first FIFA WWC in China (1991), with a total of 29 million women worldwide playing football – further highlighting that football is now one of the most popular team sports amongst young girls and women.

Bryn lee, Industry Authority and former Global Business Director of Bonar Yarns, states “Throughout the World Cup we saw fast, safe and entertaining football. The tournament has shown that synthetic turf is the future, not just for football but for various sports.”

Even when World Rugby announced its venues for its 2015 World Cup matches, it was interesting to note how many of these grounds had an essential 3G element.

Rosslyn Park, one of the oldest National League One rugby club's with more heritage than you can imagine, had recently opted for a new 3G pitch. As home to one of the biggest school tournaments in the sport, installing an advanced turf pitch is a huge development not only for the club, but for the young players who could be the next generation of rugby greats.

As you can imagine once again participation in the sport has not only increased, but made children genuinely excited about the opportunity to play on a surface that has far more advantages than natural grass.

Although sport participation is thriving, due to various campaigns and high profile tournaments/events, there is still a huge opportunity to increase this participation through the installation of synthetic turf. More pitches result in more involvement and encouragement to become part of the sport – the availability of state-of-the-art facilities is a massive driver towards participation and can help inspire players.

Some of the best surfaces in the world are now synthetic – eventually new systems and innovations must be incorporated into sport to see players and tournaments flourish. The facts and increased support for artificial pitches only further highlight its ability to develop and increase sport participation in the future.

Don't let the opportunity pass you by, and consider installing synthetic turf for your club or community – you won't regret it.



FC PORTO'S YOUTH ACADEMY TRAINING CENTRE

Portuguese Liga Sagres team FC Porto is widely seen as one of the best clubs in Europe, maintaining their high standards supported mainly by a huge scouting network all over the world and a high performing youth academy.

Regarding the latter, FC Porto has invested in renovating their former stadium, the Campo da Constituição, into a brand new training centre dedicated to their youth academy. The stadium, which served as home to FC Porto from 1913 to 1952, gave place in 2008 to a complex of high-level modern infrastructure, named the “Vitalis Park”. This youth centre serves as anchor for the club's project “Dragon Force”, a youth development project based on football schools and trials for children aged from 4 to 14 years old. It is designed to help produce players for the first team, with an identification to the FC Porto Culture, the development of players abilities and life skills.

To sustain an ambitious model of youth development, top quality facilities are required to better train youth teams. The ultra-modern Vitalis Park consequently also comprises a synthetic turf 11-a-side pitch and a covered synthetic 7-a-side pitch, both of FIFA 2 star rank for football turf fields. Such installations provides young players with a playing surface that offer safe and the most predictable conditions possible under any circumstance and in any weather condition. This helps for optimal players' tactical and technical skills development, so that they can come up with better solutions to every game-related situation. It also contributes to form more complete and creative players, who are then also trained to produce a more technical style of football, based in a general manner on playing the ball on the ground, with rapid sequences of short passes and ball possession.

Like several professional football clubs in Europe now, FC Porto is setting the example to follow in terms of youth player development in using technologically advanced synthetic turf pitches to guarantee optimal training conditions for the evolution of players in the academy.



SYNTHETIC TURF DEVELOPMENT IN SCOTTISH FOOTBALL CLUBS

In Scotland, too many games get postponed during the winter season, as the pitches are not practicable due to the poor weather conditions (wind, heavy rainfalls and hail). Postponing games has a big impact on the club's financial health, as crowd attendance is a lot bigger when games are played on the weekend rather than in mid-week. Researchers found that clubs incur extra costs and decreased attendances if games are postponed in the winter. Many matches are re-arranged as a mid-week fixture where attendances are lower on average. This presents an issue for Scottish clubs in particular since match attendances make up a greater proportion of revenue for Scottish clubs compared to other countries. Therefore having a synthetic pitch makes it less likely that teams training sessions or matches will be postponed due to the weather conditions.

Although the topic of synthetic turf has provoked much discussion within football circles in recent years, season 2014/15 saw the use of synthetic pitches in the top tier of Scottish football for the first time since 2005. Clubs such as Alloa, Airdrionians and Forfar have been using them in the lower leagues for several years now.

Synthetic turf was first trialled in English football in the 1980s. However these trials proved unsuccessful and the use of synthetic pitches was banned in England in 1995. In Scotland the first team to install a synthetic pitch was Stirling Albion, who played on one between 1987-1992 (SPFL, 2014). The next team to subsequently install one was Dunfermline Athletic in 2003, who at the time were playing in the Scottish Premier League – now Scottish Premiership. However in 2005, following a vote by the rest of the league, Dunfermline were made to remove their pitch and go back to playing on a natural grass surface following complaints from players and fears over an increased injury risk.

Since then there has been an increase both in the quality of synthetic pitch and the number of teams that have adopted them in Scotland. Hamilton Academical installed a synthetic surface in 2004. Stenhousemuir followed in season 2006/07, with Alloa Athletic installing one the season after. It should be noted that at the time all these teams were playing in either the Championship or below. Season 2014/15 saw artificial pitches return to the Premiership for the first time since Dunfermline in 2004/05. With the promotion of Hamilton Academical from the Championship and the decision by established Premiership team Kilmarnock to install a synthetic surface there are now two Premiership teams using them and 12 teams out of the total 42 professional football league clubs (SPFL, 2014):

Scottish Premiership:

- Hamilton Accies – New Douglas Park
- Kilmarnock – Rugby Park

Scottish Championship:

- Alloa Athletic – Recreation Park
- Falkirk – Falkirk Stadium
- Queen of the South – Palmerston

Scottish League 1:

- Airdrieonians – Excelsior Stadium
- Forfar Athletic – Station Park
- Stenhousemuir – Ochilview

Scottish League 2:

- Annan Athletic – Galabank
- Clyde – Broadwood
- East Stirlingshire – Ochilview
- Montrose – Links Park



THE HOCKEY WORLD LEAGUE FINAL ON THE FIELDTURF BRAND NEW PITCH FIELDTURF TARKETT SAS

FieldTurf Hockey Gold system hosts the FIH competition's final at the International Hockey Stadium in Raipur, India.

From November 27 through December 6, the FIH Hockey World League Final is held at the new world-class facility inaugurated in November by the Chief Minister of Raipur. Leading international teams including Olympic champions Germany and host nation India enjoy the superb FieldTurf Hockey Gold pitch of the International Hockey Stadium named after Sardar Vallabhai Patel.

This major project, comprising supply and installation of the artificial turf and a sub-base, has been completed by Great Sports Infra, India's leading sports infrastructure solutions provider. Great Sports Infra, having introduced the FieldTurf 3G systems, now possess a portfolio of over 5,500 installations in South Asia.

The Sardar Vallabhai Patel International Hockey Stadium boasts a spectacular Hockey Gold field in blue colour; with the green Hockey Gold surroundings the playing area makes 6388.2 m². FieldTurf's Hockey Gold product is created with a unique texturized monofilament yarn, which offers the highest level of sporting performance with a fast, smooth ball roll and unique "spring" necessary for the competitions of this level. The latest R&D developments allow FieldTurf to minimize skin friction and abrasion to ensure the genuine comfort of players.

The FieldTurf hockey field has been certified by FIH, and Great Sports Infra has been awarded a certificate of excellence by the local government for this impressive professional sports facility.

About FieldTurf

FieldTurf is the inventor and global leader in 3G artificial turf with over 10,000 installations worldwide. FieldTurf is part of Tarkett Sports, the sports division of the Tarkett Group. FieldTurf established its range of synthetic turf products designed for football, rugby and hockey at all levels of the game, and has a complete range for tennis, golf and landscaping.

FieldTurf is a partner of FIFA, World Rugby, FIH, ITF and FFF, and a member of ESTO. Over 200 FieldTurf football pitches are certified by FIFA. World's leading clubs and training centres have selected FieldTurf, including PSG FC, FC Barcelona, FC Groningen, Newtown AFC, AFC Ajax, US Oyonnax, Cardiff Blues and Clairefontaine French national training centre.



FIRST CRUYFF COURT IN LIVERPOOL INSTALLED WITH TENCATE ECOCEPT™ TEN CATE THIOLON

GreenFields and the Cruyff Foundation are proud to announce the official opening of the new court in Anfield-Liverpool.

The new court is part of a £260 million regeneration of Anfield, courtesy of funding partners Liverpool City Council, Liverpool Football Club and Your Housing Group, working together to improve housing and sporting facilities in the area. There are currently only two existing Courts in the UK, both of which reside in London: Cruyff Court Dennis Bergkamp and Cruyff Court Tottenham Hotspur – the Anfield Sports and Community Centre Cruyff Court will be the first outside of the UK's capital, and the first which GreenFields have installed.

This particular Cruyff court is very special as it is the first court where the new TenCate Ecocept™ performance sports base is used. TenCate Ecocept™ is a new innovative sports base specifically developed for synthetic turf athletic playing surfaces. It integrates seamlessly with the synthetic turf product. This product is a new sports base which utilises a 50/50 mix of recycled rubber and plastic, and saves roughly 140 tonnes of materials from landfill for every full size pitch. This system gives an improved shock absorbency for players, due to the stability of the base, and provides several functions in a single layer.

In the meanwhile the Cruyff Foundation, founded in 2003, has installed more than worldwide - including Argentina, South Africa, and Brazil. The foundation supports various projects that encourage young people to exercise in a safe environment.



HATKO INSTALLS SECOND FIFA TWO STAR ARTIFICIAL GRASS PITCH WITH TENCATE GRASS FIBRES TEN CATE THIOLON

Early May 2015, Hatko installed a second FIFA** pitch in Cyprus using TenCate Grass artificial grass fibres as its base. The pitch is located in Gazimağusa, a town on the country's east coast, and measures 106 by 76 meters. It is named after the Turkish-Cypriot politician, Rauf Denктаş, who passed away in 2012.

Hatko Dokuma Tekstil inşaat Taahhut Ve Ticaret Ltd Sti. is TenCate Grass' partner in Turkey. The customer opted for the Omega Turf - Hatko's top of the range pitch. TenCate Grass Middle East Ltd. engineered and produced the synthetic turf fibres within the space of a single week. The entire installation process took just three weeks to complete.

According to Hatko, the Omega Turf is renowned for its unique, curved shape and three 'spines', which create a bouncy grass fibre offering excellent flexibility and durability. Testing and analysis performed by Hatko engineers showed that the system's durability remained uncompromised after as many as 40,000 Lisport Test cycles.

Hatko Sports has been using TenCate synthetic grass yarns for a number of years. The company has successfully completed many sports and landscaping projects throughout Turkey and the Middle East using TenCate technology.



FIFA TWO STAR INSTALLATION FOR TOP VIETNAM SPORTS UNIVERSITY

BONAR YARNS

A new quality benchmark for synthetic turf has entered the Asian sporting market, with the latest FIFA Certified pitch from Act Global at Ho Chi Minh University of Sport – featuring Bonar Yarns MN Global fibres.

As players set foot on the new pitch at Ho Chi Minh City University of Sport, they are the first in Asia to enjoy the latest in 3G football turf technology. Featuring the latest synthetic turf technology from Bonar Yarns, the prestigious training academy has set new benchmarks in quality, durability and performance for the region's top playing surfaces.

The sports turf, Xtreme Turf DX, is manufactured by Act Global at their USA facility under ISO 9001 quality standards featuring an exclusive MN Global yarn blend from Bonar Yarns – a fibre that was developed in collaboration with Act Global.

The university chose FIFA preferred producer, Act Global, and Bonar Yarns high performing MN Global fibres due to its unrivalled durability, safety and performance features - ensuring the highest quality for such a prestigious university.

The pitch was completed with exclusive regional partner Hoang Nguyen Company, a leading installer for top-end football fields in Vietnam. The synthetic turf was finished with performance infill imported

from Genan in Denmark, before passing stringent field testing to be certified to elite FIFA Two Star level. This is the second pitch in Vietnam which features Bonar Yarns fibres.

“Some of the best surfaces in the world are now synthetic, as they offer a unique balance of durability, resilience and skin friendliness” said Bryn Lee, Global Business Director of Bonar Yarns. “This is an incredibly exciting project both for Bonar Yarns and Act Global.”

The system will greatly exceed the needs of a top international stadium, and has already been featured in several notable facilities, including Canada's Montreal Olympic Stadium and CSV Apeldoorn in Netherlands.

“We are pleased to offer Ho Chi Minh City University our latest and most advanced synthetic turf, suitable for top talent at this important training facility,” said Daniel Clapham, regional sales manager for Act Global. “We are constantly researching, testing and refining our systems to ensure players receive the best in class technology and playing surfaces.”

The new pitch will be used more than 50 hours per week by some of the country's top athletes for training and matches. The dual-fibre system offers an ideal balance of player comfort and resilience, with durability testing exceeding FIFA's standards by more than six times.



DEVELOPMENT OF SYNTHETIC TURF IN THE AVIVA PREMIERSHIP RUGBY

Recently promoted back in the English Premiership (in 2013), the Newcastle Falcons' decision to install a hi-tech synthetic pitch at Kingston Park makes them the second club in England's top division to ditch a traditional grass playing surface after Saracens' ground-breaking and headline-grabbing switch in 2013 – with both understood to have cost in the region of £500,000.

But the Falcons were not the first elite club in the UK to follow Saracens' lead with PRO12 side Cardiff Blues even quicker to rip up their troublesome turf for a synthetic turf pitch now in place at their BT Sport Arms Park home. The use of synthetic pitches in Rugby is not something new since World Rugby (previously IRB) have approved their use back in 2003 – part of their efforts to boost global participation in the sport while also ensuring that the pitches offered the same performance qualities as natural grass. More recently, World Rugby moved to redefine the use of synthetic turf with the 'highest possible player welfare standards' also at the forefront of their thinking.

A lot of people doubted when Saracens quite literally rolled out their new playing surface but initial feedback from players, coaches,

commentators, supporters and the community were overwhelmingly positive. The synthetic pitch turned out to reach the Saracens' direction and staff expectation, encouraging a running game that has helped to sell out the Allianz Park through the whole season. Clearly proud of their investment, Saracens also opened the door to all their Premiership rivals in terms of the technology and the pitch itself with teams given an open invite to train on it. The use of synthetic turf in Rugby is believed to offer a more attractive game and therefore attracts more people to watch it. Newcastle boss Dean Richard stated “The new surface will undoubtedly produce a more free-flowing entertaining style.” The increase in crowd-pleasing rugby along with the boost to the grassroots game in terms of access to top-class facilities will only be applauded by a governing body.

Given the lower maintenance costs and the apparent increase in revenue available from bigger crowds, attracted by a more entertaining game, and a facility that can be rented out at any time without fear of damage, could more Premiership clubs follow the lead of Saracens and Newcastle? The prospect of an entirely synthetic Premiership playing field does not appear that remote – despite what traditionalists may argue – especially given the economic pressure that even the most successful clubs are constantly under.





SYNTHETIC TURF LANDSCAPE: FORMULA 1

For many years already, synthetic turf has not only been a smart solution for playing fields but also for landscape areas that have become unsafe and unsightly from overuse or severe climatic conditions. A natural grass field simply cannot remain intact if it is used more than three to four days a week, or in the rain, or during the months when grass doesn't grow. Synthetic grass for landscape and other recreation applications is the fastest growing segment of the synthetic turf market. In 2012, over 10 million square meters of synthetic grass was installed for landscape and recreation use.

How is synthetic turf being used for landscape?

Thousands of homes, businesses, municipalities and tourist attractions or resorts have turned to synthetic grass to provide a lush, attractive landscape solution that requires minimal resources and maintenance while saving millions of litres of water each year. It is also a smart way to beautify public spaces such as gardens, parks, highway medians and airport landing strips that would otherwise be difficult and expensive to maintain. Synthetic grass reduces city maintenance costs, freeing tax dollars for other purposes. Synthetic turf also promotes greater utilization of land, as you can do more with the same space surface than with natural grass. Rooftops once deemed unusable for high rises and residential buildings can now feature inviting green area. Hotels that had to restrict the use of lawns for parties and events can now schedule as many functions as they can book.

Therefore, there are a number of different ways in which synthetic turf can be used and recently the use of it for landscape has been increasing at sport events.

Synthetic Turf Landscape in Formula 1

Nowadays you can find synthetic turf installed around many of the most prestigious Formula 1 racetracks. This is not something new. Already back in 2009, in Abu Dhabi they used synthetic turf around the racing track. The purpose of having synthetic turf around the circuit is not only to make it look nicer but also because it slows cars down when they veer off course and helps drivers regain control. And it does all this without the debris and damage associated with sand or gravel.

In Bahrain, due to problems with sand blowing onto the track and more importantly into the cars, the decision was made to replace some of the sand in the most problematic areas with artificial turf made especially to match the colour of the sand around the Bahrain racetrack. The sand was removed and the area was tarmac and concreted, then the grass was bonded down to ensure it would not tear or damage a car.

Back in the day, Michael Schumacher stated:

"It is what we want. It is better than grass or gravel. This is at least pretty consistent, flat, you can control the car. It's the best solution we have found. We are happy to listen to any further good suggestions you may have but we haven't found anything better."

At Silverstone, host of the British Grand Prix, the organisers made sure to renew the track by re-surfacing the ground's concourse, circuit-side and break-out areas using 450 square metres of synthetic turf. Artificial grass was also used throughout Silverstone's new Pit and Paddock complex.

Similar examples of the above mentioned have also been used around the following Formula 1 race tracks:

Spa Francorchamps (Belgium)

Monza (Italy)

Hungaroring (Hungary)

Barcelona (Spain)

Interlagos (Brazil)

Hockenheim (Germany)



RECOGNITION FOR BONAR YARNS AT 2015 ESTO AWARD CEREMONY

SYNTHETIC TURF SPECIALISTS REAP REWARDS AT INTERNATIONAL EVENT

BONAR YARNS

On Wednesday (28th October) the European Synthetic Turf Organisation (ESTO) awards took place to celebrate the very best of the synthetic turf industry, where it was announced that Bryn Lee, Global Business Director of Bonar Yarns, had won the industry's Lifetime Achievement award. A prestigious honour which was the result of many years hard work, determination and dedication to the synthetic turf industry.

Bryn Lee, Global Business Director, said, "It was a surprise to be recognised by the industry I have been part of for so long. With over 30 years' experience in the synthetic turf industry, I've been involved with various turf companies and as a result have seen a lot of change. ESTO represents so many leading European companies so to receive the award from its members is a huge honour."

With over 300 people in attendance at the Hyatt Hotel on Wednesday 28th October, the annual event provided an opportunity for ESTO members to share innovative ideas and best practice, and celebrate the many successful projects throughout the synthetic turf industry over the last 12 months.

Alongside this significant award win it was announced that colleague Stefan Diderich, Sales Director of Bonar Yarns, had been added to the ESTO awards hall of fame in recognition of his services to the synthetic industry. Again another notable achievement for both Bonar Yarns and the respective individuals.

"It's incredible to achieve recognition within the ESTO hall of fame for my services to the synthetic turf industry, and I'm extremely flattered," said Stefan Diderich Sales Director of Bonar Yarns. "After 10 years' experience within the industry I've been involved with various turf developments and I'm grateful to be recognised for my work, from an organisation such as ESTO."

Bonar Yarns triumphed alongside a strong group of winners including Polytan, Schmitz Foam, Sport Technik Bohemia, Hatko, and FIH - Congratulations!



ESTO CELEBRATES ANOTHER FANTASTIC YEAR WITH 2015 AWARDS

Last week representatives from all sectors of the turf industry came together in Cologne, Germany for the 2015 ESTO Awards and the Big Turf Networking Party.

[Click here](#) to view the highlights video
[Click here](#) to view photos from the event

With over 300 people in attendance at the Hyatt Hotel on Wednesday 28th October, the annual event provided an opportunity for ESTO members to share innovative ideas and best practice, and celebrate the many successful projects throughout the synthetic turf industry over the last 12 months.

As part of the evening, three sector leaders were added to the ESTO Awards Hall of Fame; Stefan Diderich of Bonar Yarns, Frans Harmeling of Tencate and Alastair Cox of Alastair Cox Associates were inducted in recognition for their services to the industry.

FIH won the Sports Governing Body Lifetime Achievement award and next year will celebrate 40 years since synthetic turf was introduced at the first Olympic Games for Hockey.

Sports awards were awarded to Polytan, Schmitz Foam, Sport Technik Bohemia and the Landscape award was awarded to Hatko.

ESTO Vice President Bryn Lee of Bonar Yarns was also honoured with the Lifetime Achievement award, with a career spanning more than thirty years in the synthetic turf industry.

Commenting on Bryn's achievements, Nigel Fletcher, ESTO chairman, said, "On behalf of everyone at ESTO, I would like to congratulate Bryn on his well-deserved Lifetime Achievement award. Alongside his tireless work in raising awareness of the benefits of synthetic turf, Bryn has been a highly active contributor to the trade associations over the years, and continues to lead on synthetic turf matters through his role as ESTO Vice President.

"This year's awards and Big Turf Networking Party have been very well-received, with success stories celebrated and ideas shared that will undoubtedly help move the industry forward."





CAN GOLF SHIFT TO SYNTHETIC TURF IN THE FUTURE?

With golf under economic pressure in most of its important markets, developers, operators and architects are constantly looking for ways to improve the financial prospects of courses. Any innovation that might result in reduced maintenance costs (while, of course, retaining high quality playing conditions), or the ability to push more rounds through a facility is being seized on.

One idea that might push the envelope a little further than most is the widespread use of synthetic turf in place of 'real' grass. Already, to be sure, many practice facilities have been built with synthetic surfaces, and on golf courses themselves, relief tees are often constructed with synthetic turf. 'Mats', as they are often referred to, have been in use for winter tees for decades, in the UK and elsewhere, but the synthetic turf available today is a different beast from that of ten or twenty years ago. And with practice putting greens now commonly built without real grass, could playable greens on full-sized golf courses soon follow?

Such a suggestion might sound outlandish. But consider the alternatives. The locations in which the game is growing, especially those aimed at holiday golfers, are generally hot and dry; good weather is central to the appeal of tourist golf. Hot and dry, though, isn't necessarily ideal conditions for growing fine natural grass. Availability of water for irrigation is one of the greatest barriers to the growth of golf in many parts of the world; turf companies are investing large sums of

money in breeding new grass strains that can tolerate heat, drought and irrigation with poor quality water.

So what role does synthetic have to play in golf's future?

Researchers say the answer lays in consistency and quality. It is about guaranteeing a year-round performance. Top golf professionals choose synthetic grass over natural grass because they get consistent high performance throughout the year – which they couldn't possibly get from natural surfaces. A high proportion of the top professionals practice at home on synthetic surfaces because they say they are better than grass for their purposes. Similarly, a large number of top courses have synthetic somewhere on the course, because they want to provide the best surfaces all year round. But this generally concerns practice facilities (putting greens, ranges and short game areas) and relief tees on golf courses themselves.

Therefore it is fair to say that synthetic is probably not the future of golf in hot climates; not in the immediate future at least. But there seems little doubt that the use of artificial turf in golf will grow fairly dramatically. As the scale and complexity of practice facilities continues to increase, and the demand of 'realistic' practice environments grows there will be a lot of golf projects where, without the use of synthetic turf, the cost of maintenance will be impossible to justify. Although it might not be the future, synthetic turf has a big role to play in golf. It will help make golf more available, in city areas for example.

LIGUE 1 WAS THE FIRST EUROPEAN LEAGUE TO HAVE CLUBS WITH SYNTHETIC TURF IN THEIR STADIUMS

Back in 2010, Nancy and Lorient became the first two clubs in the history of the French first division to play home matches on synthetic turf, which also made them the only clubs in Europe's five leading professional leagues — the English Premier League, the Spanish Liga, the Italian Serie A, the German Bundesliga and the French Ligue 1 — to play at home on a fully synthetic surface.

It is a bold move, inspired, despite the approximately €1.5 million installation cost in Nancy, by long-range savings, by the desire to stage concerts and other events in the stadium and by the need for a solution to the annual challenge of trying to produce a high-quality field in a difficult climate. Professional clubs in Russia, Northern Europe and Alpine nations like Switzerland and Austria have already widely adopted artificial turf to improve cold-weather playing conditions. Nancy is hardly Siberia but can get chilly and rainy.

Apparently, when the winter comes in Nancy, they have to heat the field for nearly three months using fuel. In addition to synthetic turf the club also plans to renovate the stadium and add a retractable roof that will also help for the harsh weather conditions.

Turf's arrival in Ligue 1 also reflects broader trends in sports at the recreational and developmental levels, where new-generation turf fields — many of them with infills composed of sand mixed with crumb rubber or thermoplastic granules that

mimic dirt — are a growth business in schools and training grounds worldwide. There are more than 5,500 synthetic turf fields in North America alone.

It has taken nearly half a century for synthetic turf to make it to Ligue 1 since the original brand was installed in the Houston Astrodome in 1966 after the natural grass baseball field being used indoors died. By 1974 synthetic turf was being used widely, even in the N.F.L. Super Bowl. But a backlash was soon under way, with the new Chicago White Sox baseball team owner, Bill Veeck, ripping out what he called the "phony" infield in 1975 and replacing it with grass. Today all but two Major League Baseball parks in North America use natural grass, although synthetic turf does remain the dominant surface in Japanese professional baseball.

Turf today clearly bears little resemblance to the close-cropped carpets of yore with their unforgiving surfaces and fast-fading colours. Nancy's turf, from the first row of the stands, could pass for natural grass, in part because the infill material has been coloured brown to pass for dirt.





DIFFERENT LANDSCAPE APPLICATION OF SYNTHETIC TURF IN HOUSEHOLDS

The biggest obvious benefit of synthetic lawn is the price. When it comes to this, cost is a one-time expense. Once a synthetic lawn is installed, there are no additional expenses in order to maintain its appearance. With a synthetic lawn, it is maintenance free. You do not need to cut it, water it, or fertilize it. You save unlimited amounts of water. In addition, untold amounts of money are saved since the normal costs of maintaining the “natural appearance” of grass is no longer a requirement.

Synthetic lawn will not scorch in the summer or freeze during the winter. While owners of living grass lawns are replacing and repairing their yards each spring, synthetic lawn owners have the luxury of deciding what to do with their maintenance-free time...

Synthetic grass turf surfaces are a highly customizable addition to any landscape project whether residential or commercial. Synthetic grass is great for landscaping because there are so many turf products now available, which can be used for an array of landscape projects regardless of size, shape, or surface. Due to the fact that synthetic turf can blend well with any other landscape surface, including sand, stone, brick, tile, it is a wonderfully revolutionary surface for the landscaping industry. Aside from its versatility, there are many benefits that make synthetic grass ideal for landscape projects.

Not only are water bills reduced, but time and effort is saved by having synthetic grass. It stays healthy, lush, and green throughout the entire year – a trait that is desired by many with harsh environmental elements, seasonal changes, or other troublesome issues concerning the look and health of natural grass. It does not dry out or die out with extreme weather conditions, such as scorching heat or rain and flooding. With its state-of-the-art drainage system that allows liquids and

water to easily permeate through the turf, draining is completely manual and effective. With its ability to drain horizontally and vertically, the growth of bacteria and spores is prevented. This adds up to profound savings for both residential owners and commercial businesses.

With no dirt or mud, synthetic grass is a very clean surface. A special infill system is used to both cushion and help the grass remain natural and healthy in appearance. The small particles that make up the infill help create a softness and comfort for both low to high traffic areas. New synthetic grass products are impressively designed for durability and function. With intricate yarn composition and strong backings, modern turf is engineered to withstand a good amount of traffic as well as sports and recreational activities. Its durability can be beneficial for playground landscaping as well as for home landscaping for households with pets. Even rough play and digging do not harm synthetic grass because of its unique design. Since it is also non-toxic and free of harmful chemicals, synthetic grass products are completely friendly for both children and pets making it ideal for virtually all households.

From its multi-functional versatility to its eco-friendly benefits, there are many ways in which synthetic grass is promoted to consumers. With such an array of positive selling points, learning the basic foundation of how synthetic grass works is important to any interested consumer. It is in the basic science of turf that allows for its many usages as well as the countless benefits that contribute to its growing popularity and use. Synthetic grass is engineered to completely replace and even outshine a traditional natural grass lawn.

Much of its popularity and growth in the landscaping field can be attributed to technological progression. Throughout the decades, the materials used to manufacture synthetic grass have vastly improved and changed to be more durable as well as mimicking the aesthetic and texture of real grass. The uses of polyurethane, polyethylene, and sometimes nylon fibers have made such technological improvements possible. These different polymers are sometimes combined together for different fiber textures. The combinations depend on manufacturing processes as well as product line budgets. Nylon tends to be the most expensive with polypropylene usually being the least in cost.

With the new wave of modern synthetic grass products on the market, many products have adopted special characteristics to add to their versatility including UV protection. With such construction, modern synthetic grass can be used in different outdoor areas with different climatic conditions making it ideal for all households.

JURY FINDS ASTROTURF GUILTY OF VIOLATING FIELDTURF PATENT FIELDTURF TARKETT SAS

FieldTurf, a Tarkett Sports company and a global market leader in artificial turf, announces that on October 9th it was awarded \$30 million in damages in its patent infringement case against AstroTurf, LLC.

The case was filed in June of 2010 in the United States District Court for the Eastern District of Michigan. After a month long trial, the jury found AstroTurf infringed FieldTurf U.S. Patent No. 6,723,412. The jury determined AstroTurf's infringement was “willful,” which allows for a trebling of damages. The jury also ruled in FieldTurf's favor on AstroTurf's counterclaim.

“We are grateful for the jury's efforts and their attention to the evidence. While litigation was a last resort, the process confirmed the validity of our ‘412 patent’ and the significant damages awarded confirm the importance of this technology in delivering innovative artificial turf systems that provide optimum playability and safety” said Eric Dalieri, President of Tarkett Sports. “This victory reinforces our commitment to protect our intellectual property and innovation,” added Marie-France Nantel, Tarkett Sports General Counsel.

Additional issues remain for the court to rule upon that could impact the amount of the award, and any final ruling and award in the case is subject to appeal.

FieldTurf was represented by Winston & Strawn LLP in this matter.



 **TENCATE**



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