

FLOODED BUNKERS ARE **WATER UNDER** THE BRIDGE

Contrary to popular belief, golf is one of the most widely played and followed sports in the world. We just need to think about the Ryder Cup, one of the most important tournaments played every two years between teams made up of the best players from the United States and Europe, which is the third most followed televised event in the world after the Olympics and the FIFA World Cup.

Recently the R&A, or the Royal & Ancient, the ruling authority on the game of golf

around the world (apart from the United States and Mexico), in cooperation with 110 National Federations, published the result of a study that had been carried out on the spread of the game of golf and new golf courses around the world; at the beginning of 2017 there were 33,161 golf courses distributed throughout 208 of the 245 countries in the world (around 85% of the countries).

Even though it is a very popular sport it is mainly concentrated in certain areas, with 74% of all golf clubs located in just 10% of countries: Canada, United States, Japan, England, Australia, Germany,



Topgolf Katy, Houston.

France, Scotland, Sweden and South Africa. This figure then rises to 89% if we consider the top 20% of countries, with the majority of courses located in the western hemisphere. The United States alone accounts for 45% of the world's total, with Europe in second place with 22%, followed by Asia (14%) and Oceania (6%).

Even though this sport has been traditionally associated with private clubs, where play is essentially restricted to members only, the trend now spreading around the world is for public courses: Without being a member of a club you



Topgolf Katy: the side overlooking the driving range.

can use the course through offers such as "pay and play".

Another development is connected to the fact that nowadays golf is not only a sport or hobby, it is also, above all, a way of promoting and attracting tourism. The United States in particular took advantage of the boom in the number of new golf courses during the 1990's and, in an attempt to hold on to their members and bring a fresh new look to the game, a number of clubs started to remodel their structures by introducing activities that required less playing time but increased the level of gratification, making it possible to achieve results more quickly on the course.

This led to driving ranges being extended, par-3 courses with 9 holes or less were built, informal courses for putting practice were introduced, 18-hole courses with 3-hole and 6-hole circuits were built and practice areas to improve your short game were introduced.

Then, at the beginning of the 2000's, while practicing on the driving range to improve their swing, the Jolliffe brothers from England came up with a genial idea: to improve the playing experience even more by including other forms of entertainment. This idea took form by uniting the presence of a driving range for golfers with other forms of amusement and entertainment: which is how TEG, or Topgolf Entertainment Group, was founded.

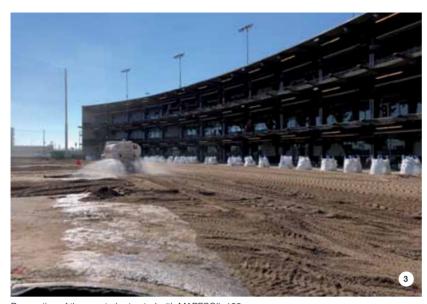
Topgolf is now a global sports entertainments company with headquarters in Dallas and other branches in North America, Australia, UAE and the United Kingdom, where it was founded. Since opening its first branch in the United States in 2005, Topgolf has grown and now has 52 branches in the USA, 4 in the United Kingdom, 1 in Australia and 1 under construction in the United Arab Emirates. Topgolf has 15,000 employees, an estimated 13 million visitors each year, and an average turnover of 30 million dollars for each location.

Every Topgolf branch is generally built on three levels, with one side over-looking a synthetic grass driving range (Photo 1) averaging around 20,000 m<sup>2</sup> (the equivalent of almost three 11-a-side football pitches). The driving range has more than 300 individual teeing mats that can be rented by the hour and, behind the driving range, there are restaurants, game rooms, meeting rooms, fitness rooms and convention suites. Bear in mind that, in 2017, each branch had an average of 35,000 visitors every day and only 8% of the visitors were there to practice their golf swing!

#### **MAPESOIL 100 IN HOUSTON**

In Texas alone, Topgolf has 12 facilities including Topgolf Katy in Houston: for this location (Photo 1) upgrading works were scheduled for January, the time of year with the lowest turnover. The struc-

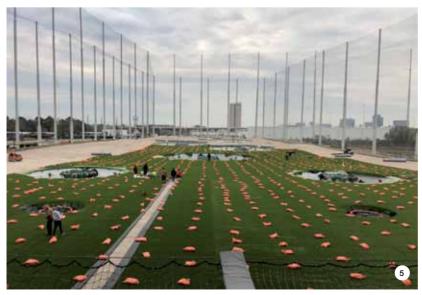
### SPECIAL FOCUS USA PROJECTS



Preparation of the area to be treated with MAPESOIL 100.



Stabilisation of the practice area with MAPESOIL 100 (notice the height of the fences).



Bonding the artificial grass with ULTRABOND TURF PU 1K high performance polyurethane adhesive.



### **IN THE SPOTLIGHT**

# **MAPESOIL 100**

It is a hydraulic, high-performance, fibrereinforced powdered stabilising agent. It is used for stabilising sub-bases for synthetic grass football pitches; for cold-recycling old sub-bases from existing sports surfaces made from bitumen conglomerate; for creating sub-bases for playing surfaces by recycling old, worn out synthetic playing surfaces; for stabilising existing clay courts and converting them into artificial grass pitches, etc.. Sub-bases constructed using MAPESOIL 100 are particularly suitable for installing the latest generation of synthetic grass (such as "FIFA PRO"), as well as for installing top level playing surfaces for other disciplines.



Teeing mats with golf balls with GPS tracking.

ture was temporarily closed so that the practice area, the teeing areas and some of the indoor areas could be upgraded. After severe flooding damage caused by a hurricane, Topgolf chose MAPE-SOIL technology to upgrade the subbase of the synthetic grass driving range (Photos 3 and 4).

Even though this area is used by very few vehicles or people, there is a lot of technology and equipment in the subbase that is used in combination with Toptracer, special software that collects the trajectory, speed and position of the balls after they have been hit.

There is also a network of small tunnels in the sub-base with an automated system to recover the more than 10,000 golf balls used in the driving range.

In order for the Toptracer programme to

work correctly the sub-base for the synthetic grass must be volumetrically stable, it must remain durable over the vears and, more importantly, it must keep its initial characteristics, as the sensors and software for the Toptracer programme make reference to the surface of the driving range. By treating the existing soil with MAPESOIL 100, the sub-base was fully functional extremely quickly (in just 3 days!), with no need for disposal, ready for installation of the new synthetic grass with ULTRABOND TURF PU 1K high-performance polyurethane adhesive (Photo 5) and the reopening of the structure.

Elisa Portigliatti. Corporate Product Manager Sport Line, Mapei Group.

#### TECHNICAL DATA

Topgolf Katy, Houston (Texas, USA)

Year of the intervention: 2018 Intervention by Mapei: supplying products for upgrading the sub-base of the driving range and installing artificial grass

Client: Topgolf Entertainment Group Mapei coordinator: Elisa Portigliatti and Alberto Cosmelli, Mapei SpA (Italy); Anthony Graham and Bruno Boulanger, Mapei Corp. (USA)

# **MAPEI PRODUCTS**

Mapesoil 100, Ultrabond Turf PU 1K

For further information see www.mapei.com and www.mapei.us