Sustainability of fieldturf and astroturf



What is an Artificial Turf?

Artificial turf is a surface of synthetic fibers made to look like natural grass. It is most often used in arenas for sports that were originally or are normally played on grass. However, it is now being used on residential lawns and commercial applications as well. The main reason is maintenance—artificial turf stands up to heavy use, such as in sports, and requires no irrigation or trimming. Domed, covered, and partially covered stadiums may require artificial turf because of the difficulty of getting grass enough sunlight to stay healthy.(Wikipedia, 2019)

Artificial turf first gained substantial attention 53 years ago in 1966, when it was installed in the year-old Astrodome. The specific product used was "ChemGrass", developed by Monsanto and rebranded as AstroTurf; this term since then became a generic trademark for any artificial turf throughout the late 20th century. AstroTurf remains a registered trademark but is no longer owned by Monsanto. (Wikipedia)

Today with a growing population and needs, we need to be more respectful of the environment and search for new ecological solutions that will allow us to continue our development without destructing our planet. Sports Grass pitches have always been part of our life since more than 1 century and it was more and more famous over the years thanks to many sports that became really trendy like Football, American Football or Rugby.

Unfortunately using a real grass pitch seemed to be more and more complicated depending of the region, sometimes because all the meteorological conditions were not sufficient for the grass so it couldn't

really last and be used over the years, sometimes because a real Grass pitch need a lot of maintenance and need to be treated with attention and finally the most known problem, a natural pitch have several big costs that not anyone can carry.

Now with the apparition of artificial grass, those 3 main problems are resolved, this technology can be installed anywhere in the world without no problem, cost a lot cheaper than natural ones and don't require that much maintenance.

After years and years of research, Artificial grass has changed a lot, it is becoming more ecologically friendly, except the fact they have a better life cycle and recycling, Turfs have now Label of Certifications they need to respect in order to be used, mostly because raw materials used for the grass comes from different places, the most important part being those small black granules that are the central material of the pitches. As they are made from used tires, people were really septic about their effects, many studies showed that they were responsible of cancers and other sickness.

To meet global demand needs these countries have started using certificated artificial(synthetic) turfs as opposed to the natural grass or the firsts generation of artificial turfs that is causing problems like cancers and many other problems.

Sustainability focuses on meeting the needs of the present without compromising the ability of future generations and both of the brand's FieldTurf and AstroTurf possess factors and third-party certifications that make their products or brand sustainable.

<u>Shared characteristic and Marketing of FieldTurf and AstroTurf:</u>

Both of the brands have respected a minimum in term of sustainability, they are 100% naturals and organic, in term of security, the grass is fire resistant, heat power effects reduction.

FieldTurf pitches are 100% recyclable, AstroTurf pitches are not as the first brand because only a part is recyclable.

Nowadays people encourage the existence of those artificial surface because of their fast implantation in the big cities, because of how they push people to pratique more sport but also because of their reduced cost compared to natural pitches that are really expensive in certain regions and need a maintenance.

Big institutions are equipped by those companies like FieldTurf, of course not for their main playing ground but for their young teams and training centers.

In the website we can see that they have listed their famous customers.

Types of third-party certification:

Both AstroTurf and FieldTurf have respected the most important certification that is the FIFA Preferred Program, but the second one is also certificated by the Rugby International Association.

The FIFA Preferred Producer initiative is part of the FIFA Quality Concept for Football Turf. The aim of the initiative is to increase the quality of football turf at all levels world- wide and to protect end consumers when they buy an artificial pitch (FIFA Report)

To become a FIFA certified seller, those companies need to respect a number of requirements, an history of all the pitches they made, an installation and a maintenance of quality and the respect of the environment.

Through performing the points mentioned above the two artificial turfs producers help to meet six of the seventeen sustainable development goals

1: no poverty, everyone in the world can finally play with good condition, not on a sand and rocks made pitch

3: good health/wellbeing, In comparison with the low quality pitches, the certified don't cause cancer and other illness

8: decent work and economic growth, Footballers in poor countries can finally play in normal conditions, people are used to see European pitches but in Africa and Asia, some professional players are still working in very very poor conditions

9: industry and innovation, This technology allow any region, without taking in count the bad meteorological conditions, to have perfect and useable pitches

12: responsible consumption, Artificial pitches require 63 times less water per year than Natural Grass pitches.

13: climate action, When they become old, the pitches are removed and recycled with removing all the plastic to respect the environment and so the climate action.

<u>Artificial Grass Turf Life Cycle Analysis (LCA)</u>

1. Material FieldTurf

and

AstroTurf

are both

certified by

the FIFA

Preferred

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only the

first brand

is certified

by Rugby

Internation

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sold.

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2. During the

<u>Production</u> manufacturi

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three

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turf

constructio

n – Fibre

Production,

Tufting, and

Coating.

We control

all three

aspects of

the value

chain.

Nothing is

left to a

third party. Nothing is left to chance. This provides you with a level of quality assurance that simply cannot be matched. (FieldTurf) Many company preferred to produce the grass in big plantations in main Europe and USA.

3. There is

<u>Transportat</u> two ways,

either they

choose to install a preinstalled grass ready to be fixed, or they can create one and so they only bring <u>ion</u> raw materials and equipment Both solutions are transported by boats, plains, vans and trains. <u>4.</u> FieldTurf Marketing and and Sales AstroTurf

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opportunity
they have
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market that
is why they
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good
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with a lot of
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company
and how
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American
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important
leagues
decided to
trust
AstroTurf,
and
European
Football
Teams
have their
Training
Center
Pitches
made by
FieldTurf,
the British

provider.

Once ready

to be used,

those

pitches give

the chance

to many

people and

<u>5. Use</u>

young kids

to practice

a sport they

like or to

train often

with a

team.

6. Disposal The two

companies

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recycling

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after a 8 -

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and other
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black
granule
need to be
removed as
their made
of car tires.
I
recommend
the first
Brand
FieldTurf
because
they are
certified by
more
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institutions	
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the method	
created for	
installation	
and	
disposal,	
one other	
point is that	
AstroTurf	
should give	
more	
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concerning	

the

sustainabilit

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they are

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precise on

the

marketing

of their

products.

In conclusion

Those 2 rival manufacturers are proposing products of high quality, made of organic and respectful of the environment, they are always searching for new opportunities and innovations to make their technology better, they are both certified by International Labels, and became suppliers for some important Institutions as Universities or Professional Teams.

Their Marketing is very good and allow them to be very close to their customers via very well detailed websites with all their products and how they are different.

But for providing more certifications and more details about the sustainability of their products on their website comparing to their rival, also for being supplier of professional English Teams of Football and Rugby,

FieldTurf is chosen as a superior Brand to AstroTurf and even though they are the first creator of this technology 60 years ago.

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