

products + more

# ONTOP

DECATHLETE AND POLYTAN BRAND AMBASSADOR

THE MULTITALENTED  
LUDOVIC BESSON

---

## Green Technology

New products for  
greater sustainability

---

## Ludovic Besson

Rising to the top on  
Polytan surfaces

---

## Recycling

Old plastic is a valuable  
raw material

Edition  
June 2022

**polytan**  
WE MAKE SPORT.





# ATHLETIC. SUSTAINABLE. FULL OF POTENTIAL.



## Dear reader,

Polytan sports surfaces are a meeting point for sports enthusiasts all over the world. For over 50 years, we have had a burning passion for new and sustainable ideas that make the world of sport even better. Innovation is what drives us. We have always developed our running tracks and synthetic turf with the aim of creating the ideal conditions for athletes – for sports at the highest level. Now, sustainability has become at least as high a priority in the development of our products. To achieve this, we pursue various approaches in line with our motto: making old into new.

Alongside our Green Technology, which we are already using to vastly improve the carbon footprint of our products, we plan to make recycling a bigger part of our business. In future, we will offer products containing recycled material, and we are also closing the material cycle with our in-house recycling concept by FormaTurf. For us, old plastics aren't waste, but a valuable raw material. We give our products a second, or even a third, life.

Unfortunately, sustainability isn't free. We all need to be aware of that. However, around 80 % of Germans are prepared to spend more money for an environmentally friendly product – e.g. for a carbon-neutral synthetic turf that will be made into new plastic products at the end of its life: it doesn't get more sustainable than that. We are doing this because we believe it's our responsibility, and because this responsibility is an opportunity to create even better, longer-lasting and more innovative products. "Business as usual" has never been how Polytan operates, and won't ever be.

Behind every idea and every success are our employees. As part of the Sport Group, we are a global player who is always looking for clever thinkers who want to shape the future of sports with us.

We are ready to take on the challenges ahead and want to be a leader in all aspects of sports surfaces – in other words, "on top". We hope you enjoy reading the new issue of "ON TOP".

**The ON TOP Editorial Team**



# TOPICS

## COMPANY

### Sport. People. Future.

A profile of Polytan and its brands

6

### The Multitalented Ludovic Besson

The French decathlete and Polytan brand ambassador has his sights set on the Paris 2024 Olympics

26



### Working at Polytan – more than just a job

30

### WE MAKE SPORT. HUMAN.

We are passionate about good sportsmanship

40

### WE MAKE SPORT. FASHIONABLE.

Take a look at cool shirts, caps and hoodies in our official Polytan Merch online store

64

## SUSTAINABILITY

### Taking responsibility, overcoming challenges

8

Polytan closes the material life cycle and continues to roll out its Green Technology

### Responsibility for the future

10

### The future of plastic is renewable

12

### “There is a lack of knowledge about sustainability”

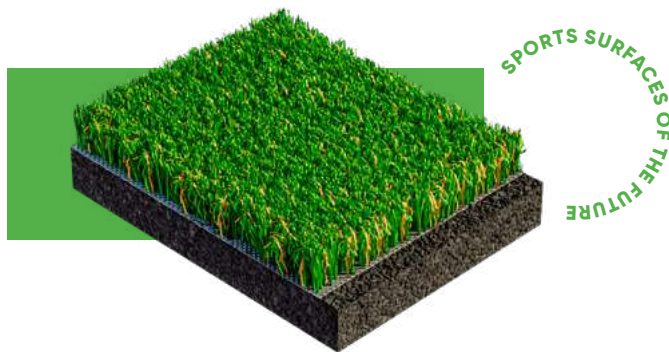
14

Interview with Wolf Ahner

### Polytan’s Green Technology newcomers

16

Six new Green Technology products show where the future of sports surfaces lies



### Old plastic, new life

18

### “Recycling is the highest priority!”

20

Interview with Dr. Beate Kummer

### “Sustainability is increasingly becoming the deciding factor”

28

Interview with Ricardo Lezcano

### The ball is rolling again

36

### Natural infills

48

BrockFILL and cork – our environmentally friendly infill granules



*WE ARE ALWAYS DOING  
SOMETHING NEW!*

With our newsletter, there's no need to wait for the next issue of ON TOP; now you can stay up to date and find out about all the latest innovations from Polytan as they happen.

**Register now:** [www.polytan.com/newsletter](http://www.polytan.com/newsletter)

## REFERENCES

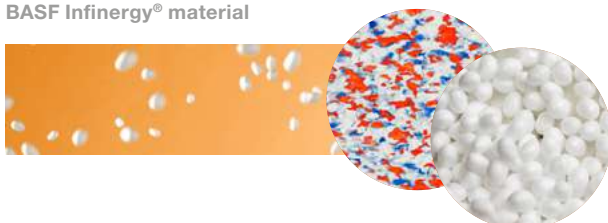
<b>The wonder of Sittensen</b>	<b>22</b>
<b>Setting a green example</b>	<b>24</b>
<b>Good vibes – New build at Fitzalan High School</b>	<b>32</b>
<b>The legacy of Heinz Nixdorf</b>	<b>34</b>

## SYNTHETIC TURF

<b>Synthetic turf systems</b>	<b>42</b>
<b>Synthetic turf systems – Structure and technology</b>	<b>44</b>
<b>EL, ET and PolyBase GT</b>	<b>46</b>
Perfect playing properties and long-lasting protective function for players	

## SYNTHETIC SURFACES

<b>Synthetic surfaces</b>	<b>50</b>
<b>Synthetic surfaces systems – Structure and technology</b>	<b>52</b>
<b>PolyPlay FSI GT sets new standards</b>	<b>54</b>
Interview with Jens Dierssen	
Long-lasting elasticity – Polytan's new fall protection surface with innovative BASF Infinergy® material	



## SERVICE

<b>WE MAKE SPORT. DURABLE.</b>	<b>56</b>
Polytan Service GmbH – Your professional partner for all maintenance work	



<b>How to take care of synthetic turf</b>	<b>58</b>
<b>How to take care of synthetic surfaces</b>	<b>60</b>
<b>ClearTurf M2 – reliable protection against algae</b>	<b>62</b>
<b>The water washers</b>	<b>63</b>
Innovative filtration of dirty cleaning water from sports surfaces	

## EXTRAS

<b>PolyPlay Arena miniature playing fields</b>	<b>38</b>
Versatile courts with modern board systems	
<b>What else can we do for you?</b>	<b>66</b>

# SPORT. PEOPLE. FUTURE.

## WE MAKE SPORT. HUMAN.

Polytan sports surfaces are a meeting point for sports enthusiasts all over the world. For over 50 years, we have been developing and producing floors that lay the foundation for unforgettable sporting moments. With our high-quality sports surfaces and the Polytan service promise, we create the ideal conditions for outstanding player safety and top-level sports. That leaves more time for what really matters on the pitch: sportsmanship and tangible emotion.

## WE MAKE SPORT. GREENER.

At Polytan, the challenges of the future shape the actions of the present. We use eco-friendly and safe processes in everything from product development and the selection of raw materials, to the production, installation, usage and, ultimately, the recycling of our sports surfaces. In the long term, this is also evident in the lifespan of our surfaces: as a service partner, we are here for our customers throughout the entire product life cycle and support them in optimally maintaining their product.

## OUR VALUES

Sustainability is one of the cornerstones of our company philosophy. It is enshrined in Polytan's code of values alongside holistic thinking. Polytan customers can depend on a reliable partner throughout the life cycle of their synthetic turf pitch or running track.

### ATHLETIC

Polytan is aware of the vast social significance and integrative power of sport. This awareness influences the way we develop our sports surfaces and how they are eventually disposed of.

### HIGH-QUALITY

Only the best is good enough for an athlete. And because standing still means falling behind, here at Polytan we are already thinking about the sports of tomorrow. Mutual trust between us, our colleagues and our customers is equally important to Polytan as authentic, respectful and transparent actions.





## OUR BRAND WORLD

The Polytan brands are as varied as the people who play sports. But one thing is true of them all: Polytan offers the right solution for every requirement, always with the goal of providing athletes with the best possible surface for success.



### **Selected for the FIFA Headquarters**

LigaTurf is the official playing surface in first-division stadiums like the Wankdorf Stadium in Switzerland and elite training facilities like that of Bayern Munich and St. George's Park (UK). A new milestone is the world's first carbon-neutral synthetic turf, LigaTurf Cross GT Zero.



### **The favourite of amateur clubs and schools**

LigaGrass was selected as the official playing surface for the DFB campaign "1,000 Mini Pitches for Germany" in 2007 and continues to be used in modern PolyPlay Arena miniature playing fields. LigaGrass Pro Garn is the first textured filament made from organic raw materials.



### **Hockey pitches for eight Olympic Games**

Poligras is the number one hockey turf. 74 % of FIH Hockey Pro League games are played on Poligras, and more than 25 % of FIH-certified synthetic hockey pitches are Poligras. Our Poligras Tokyo GT is the first synthetic hockey turf made of renewable raw materials and was the official playing surface for the Olympic Games in Tokyo.



### **The official playing surface of world-class tennis competitions**

Laykold is the official playing surface for four of the world's six biggest hardcourt tournaments: the US Open, the Miami Open, the Cincinnati Open and the Canadian Open. Laykold is also a popular sports surface for basketball courts in urban areas.



### **25 % of all World-Athletics-certified running tracks**

Rekortan is the official running track surface for four Diamond League stadiums and the Asian Games 2018, and the most-used surface in World-Athletics-certified athletics stadiums. The new Rekortan GEL GT running track system is made of up to 60 % renewable materials.



### **Safe play, safe surfaces**

PolyPlay ensures safe play on playgrounds and at parkour and calisthenics facilities, and has provided the perfect properties for ball sports since 1969. PolyPlay fall protection surfaces reduce CO<sub>2</sub> emissions by up to 20 %, thanks to cardyon® technology.

# TAKING RESPONSIBILITY, OVERCOMING CHALLENGES

**The climate crisis, scarcity of resources, CO<sub>2</sub> and greenhouse gases: these are the big challenges of the upcoming decades. Overcoming these challenges is everyone's business.**

## OPENING SALVO FOR GREEN TECHNOLOGY

Every journey starts with the first step. In 2016, Polytan started its Green Technology programme. A lot has happened since then. Polytan has considerably reduced the use of plastics in its synthetic turfs through various measures, resulting in less consumption of fossil fuels. For example, new synthetic turf systems have reduced the amount of rubber granules needed from 4 - 5 kg to 1.7 kg per m<sup>2</sup>. Meanwhile, our developers have been researching the use of renewable raw materials. In Germany, rubber granules have now been replaced by natural infill varieties such as wood and cork. In other European regions, natural infill is increasingly being used as well.

Polytan went one step further by cooperating with the Brazilian chemical company Braskem (see page 12/13). The South American company produces polyethylene from the by-product of sugar cane pressing, which is processed into synthetic turf in Germany. The first specimen of this new turf generation was Poligras Tokyo GT, a hockey turf that has been on the market since 2017 and is made partially from renewable raw materials. This turf was used in the Olympic hockey stadium in Tokyo. Polytan has steadily developed this technology with LigaTurf Cross GT Zero. The football turf is the first synthetic turf of its kind worldwide to be certified carbon-neutral.

# #1

**We are ranked number one in terms of ESG performance in the construction products category.**

Sustainability is multi-layered. On top of conserving resources, nature and the climate, social aspects also play a role. That's why Polytan is active in many areas. Using renewable raw materials and recycled materials, reducing CO<sub>2</sub> emissions, closing the material cycle and exercising social responsibility are only some of the facets that have a permanent place in our company strategy. Polytan sees itself as a pioneer in the industry and proves it daily. The Sport Group's ESG rating confirms: Polytan's parent company is already ranked number one in the industry. Since 2018, the Sport Group has successfully reduced its carbon emissions by 22 % (more on page 11).





## CLOSING THE MATERIAL CYCLE

From the outset, we have not only focused on reducing our carbon footprint; we also want to close the material cycle. Recycling old synthetic turf is the last, logical step in doing so. We consider the environment in the development of new sports surfaces: we produce our products using green electricity, and at the end of the product lifespan, we offer customers a recycling option so they can be sure that their old turf will be fully recycled into new products. If they like, customers can even track the progress of their old turf and reinstall it in the form of the resulting new product (see page 18/19).

For Polytan, old plastic is a raw material. That's why many Polytan products, such as the elastic base layer, already contain a high percentage of recycled material. Here too, Polytan goes the extra mile: in future, our synthetic turf systems will be at least partially made of post-consumer recycled (PCR) material. This is recycled plastic that has been used in industrial operations or private households and disposed of via the dual system. For example, a single-use packaging film can be recycled into a synthetic turf that lasts for 12 to 15 years and can be recycled into yet more new products at the end of its life.

## HOLISTIC, SUSTAINABLE

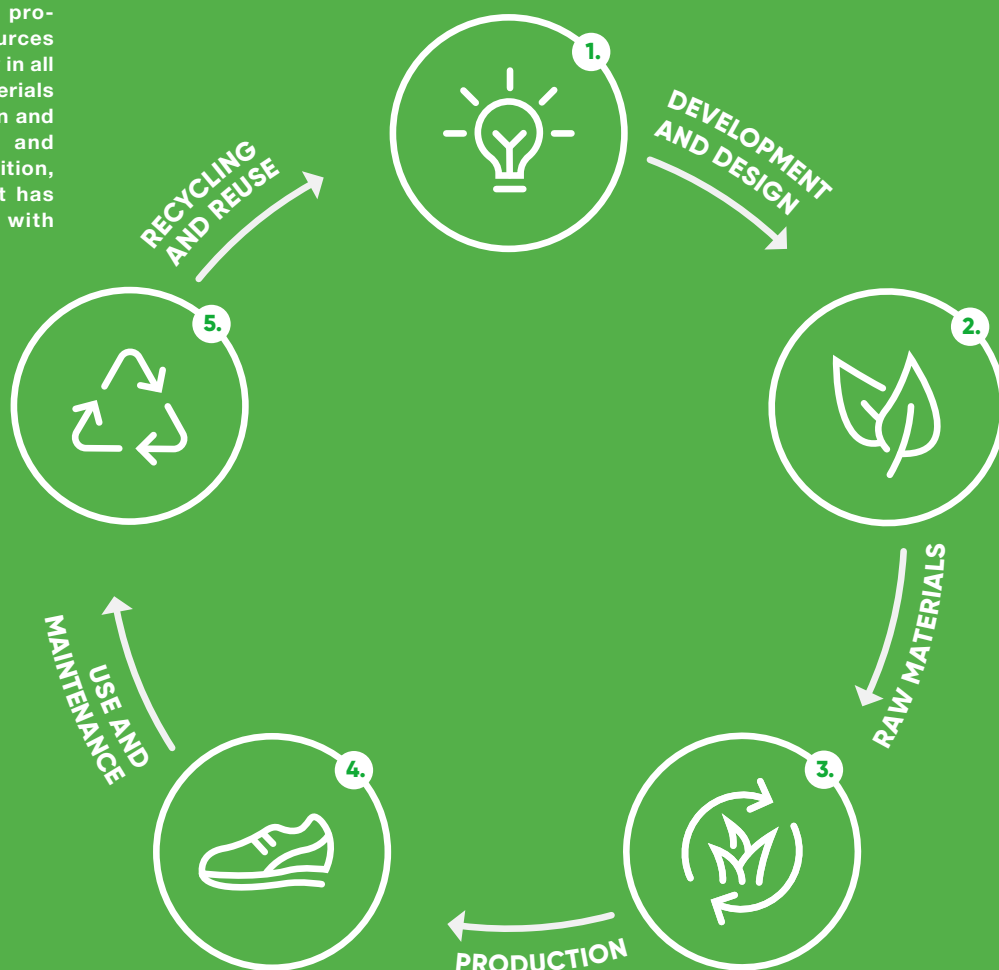
In the construction of new sports facilities, Polytan also favours a holistic approach. Together with our partners, we build facilities that are revolutionary in their overall environmental impact: for example, with a modern waste concept, efficient LED technology or compensation areas, such as orchard meadows on the grounds.

However, sustainability not only means handling resources responsibly; it also has a social component. Polytan is working in many areas, be it supporting sports clubs, funding sports facilities for disadvantaged people or running a customer programme for the regeneration of forests.

Polytan's sustainability strategy rests on many pillars. Every new product must be developed and produced with these in mind. There is not just one solution, e.g. carbon-neutral turf, but many. Sustainability must amount to more than just green-washing. For Polytan, it is clear that despite all that has been achieved, there is still a long way to go. That's why every one of the company's activities is clearly oriented towards sustainability.

## THE PRODUCT LIFE CYCLE

As a responsible full-service provider, Polytan aims to use resources appropriately and conscientiously in all life cycle phases – from raw materials selection, production, installation and use, to maintenance, disposal and recycling. In pursuit of this ambition, our environmental management has been certified in accordance with ISO 14001 since 2015.







# RESPONSIBILITY FOR THE FUTURE

**At the 2021 United Nations Climate Change Conference in Glasgow, Scotland, the nations of the world established a set of rules for implementing the Paris Agreement regarding global warming. However, the agreed targets can only be achieved if all those responsible for emitting hazardous substances work together. The same is true of industrial companies, who must adapt their production processes to become climate-neutral. Polytan is already well on our way.**



According to the World Meteorological Organization in Geneva, last year was the seventh year in a row with temperatures more than one degree above pre-industrial levels, and one of the seven hottest years since records began more than 100 years ago. Permanent global warming comes with droughts and rising seawater levels.

At the 2015 UN Climate Change Conference, it was therefore decided that global warming must be limited to 1.5 degrees. The international community was far from this goal at the meeting in Glasgow 2021, but once again confirmed its commitment. To achieve it, emissions must be massively reduced by the end of the century.



Whether the plan turns out to be a paper tiger depends on the actions of politicians, industry and society. The latter has been putting increased pressure on the former for years. Even the business world has changed its mindset. This mega-trend is known as “neo-ecology”. According to the prognosis of the Future Institute in Frankfurt, it means: “innovative ideas that conserve resources and intelligently organise energies will increasingly be brought to the fore in future”. Polytan shares this point of view and is aligning its strategy accordingly.

The company’s ESG rating shows that this is more than just lip service. At the Sport Group – the parent company of Polytan – the sustainability of products and services, waste and waste water, resource consumption, health and safety in the workplace, and corporate governance were placed under the microscope. Emissions were also examined. The result: carbon emissions have been reduced by 22 % since 2018. The certificate verifies the Group’s position among the top 3 % of companies worldwide. “Our ESG commitment is about the future, and that is a never-ending process,” says COO Dr. Klaus Hauschulte.

After careful examination by Sustainalytics an arm of ratings agency Morningstar, the Sport Group was awarded the ESG risk rating “Low”.

“ESG” represents a holistic approach: “These three letters describe the sustainability-related areas of responsibility that businesses have: ‘E’ for Environment covers environmental pollution or harm, greenhouse gas emissions or energy efficiency. Social, ‘S’, encompasses aspects like work safety and occupational health, diversity or social engagement (Corporate Social Responsibility). Governance, ‘G’, refers to sustainable company management.

It includes aspects such as company values or management and control processes (Corporate Governance),” explains Prof. Dr. Philipp Haberstock from the International School of Management (ISM) in Hamburg. The neutral assessment that Sustainalytics conducted is a valuable orientation tool for planners and funding organisations in their increasingly sustainably oriented investment decisions. This is joined by studies, such as that of the Zurich University of Applied Science, which investigated the environmental footprint of synthetic turf pitches in the city of Zurich in 2020.

Certifications and studies aside, Polytan is committed to transitioning to seamless, sustainable processes. One step in the right direction is Polytan’s growing range of sustainable products and services. Here, Polytan offers a wide selection of products under the Green Technology (GT) brand.

The GT product palette is just one module of Polytan’s strategy for a carbon-neutral future. To achieve this, Polytan is currently turning a lot of screws. One of them is our intensive research on the use of organic and CO<sub>2</sub>-based plastics. In addition, we are shining a light on every step in the production process to determine how it can be made more environmentally friendly. Not only that, but our actions outside the company, such as the “Treedom” project, will show that the agreed climate targets are achievable and not a mere paper tiger.



## TREEDOM

Polytan has long accepted the challenges of a climate-neutral future. Conserving resources and the climate is the core goal of the Polytan innovation programme, the products of which can be found in the “Green Technology” (GT) line. It focuses on making organic and CO<sub>2</sub>-based plastics viable. What’s more, Polytan is planting trees in its very own forest for every sports facility equipped with one of our environmentally friendly GT products. Together with all its participants, the Treedom campaign will help achieve the climate-friendly future of sport, under the slogan “You Play. We Plant.”



# THE FUTURE OF PLASTIC IS RENEWABLE

For almost a century, plastic has been made from oil. However, oil is a finite resource, just like every other non-renewable raw material. That's why the industry has been looking for alternatives for some time. Alongside recycling plastics, the use of renewable raw materials to manufacture plastics is one possible solution. Polytan has already used these natural materials in the production of its synthetic turf since the middle of the last decade, thereby making a vital contribution to reducing CO<sub>2</sub> emissions and conserving resources.





The I'm green™ polyethylene used by Polytan is sourced from sugar cane. In terms of application areas and performance, it has the same properties as polyethylene made of petrochemical raw materials. In the search for sustainable solutions, I'm green™ polyethylene presented itself as a material with a negative carbon footprint that will help achieve a low-emission economy. Polytan is working closely with the Brazilian chemical company Braskem, the world's biggest manufacturer of organic plastics, including environmentally friendly polyethylene. I'm green™ polyethylene has been used to create the first synthetic turf with a neutral carbon footprint, the LigaTurf Cross GT zero. The hockey turf used in the Tokyo Olympics, Poligras Tokyo GT, also contains I'm green™. The organic polyethylene will be used in more and more products.

But how does I'm green™ compare to high-quality polyethylene oil-based plastics in terms of quality? Martin Clemesha, Product Manager at Braskem, says: "The mechanical properties and finish of I'm green™ polyethylene are identical to those of products made from petrochemical resins." He names yet another positive feature: "I'm green™ can be recycled, just like conventional polyethylene." This makes it suitable for Polytan's closed material cycle strategy.

Polytan has examined the growing conditions of the sugar cane extremely closely. The majority of Brazilian sugar cane grows in the north of the country where the climate is optimal, 2,000 km away from the Amazon. Only 0.02 % of the country's acreage is used in the production of I'm green™.

Clemesha: "The use of arable land to grow products other than food should only occupy a small portion of the available land – even if you bank on the optimistic scenario that chemicals will increasingly be made from renewable raw materials."

Friedemann Söll, Managing Director of Polytan, believes there is a lot of potential in this area. "We will keep using renewable raw materials in more and more products and try to reduce the percentage of non-renewable materials in our products even further." This not only applies to synthetic turf, but to running tracks and fall protection surfaces as well.

Martin Clemesha has identified potential here too: "Demand for organic plastics that are scientifically proven to have a reduced carbon footprint and strong performance will certainly continue to grow."

## ABOUT BRASKEM

Organic plastics have been produced for over 100 years. The most well-known example is cellophane, which was invented and patented in 1908. However, it was only in the 1990s that several companies, such as Novamont and NatureWorks, began marketing organic plastics as the sustainable alternative to petrochemical plastics. With I'm green™ polyethylene, launched in 2010, Braskem became the world's biggest manufacturer of organic plastics. Today, the Brazilian company with approx. 8,000 employees offers over 30 types of organic polyethylene.



Read the complete interview with Martin Clemesha, Product Manager at Braskem, online at: [lead.me/sustainable-future](https://lead.me/sustainable-future)





# "THERE IS A LACK OF KNOWLEDGE ABOUT SUSTAINABILITY"

ON TOP talked to landscape architect Wolf Ahner about the challenges of sustainable construction and the sports facility of the future.



**Mr. Ahner, everyone is talking about sustainability in the construction of sports facilities, but that is not always easy to implement, is it?**

That's true, because all the parties involved in such a project need to agree: i.e. the client, the executing company and, of course, the planner. Only when they all pull together is it possible to implement a project with environmental aspects in mind.

**You planned and implemented an exemplary sports facility in Ahrensfelde, just outside Berlin. What makes the facility special?**

In Ahrensfelde, we did just that. Everyone sat around a table and designed the project together. For example, we used a lot of recycled material. While doing so, we took an innovative approach and used gravel containing demolished concrete as the base material, and sand as the fine material. This is a technical innovation that we are gaining experience in. The synthetic turf is carbon-neutral. We have also established a waste sorting concept. I could go on but that would take all day. One pleasant surprise was that we stayed under-budget with the construction because we found lots of intelligent solutions without neglecting the issue of sustainability.

**Is the facility in Ahrensfelde an example that others could emulate?**

Yes and no. Of course, you could imitate individual aspects, but every sports facility is different in terms of locally available raw materials, user groups and local conditions, and should be planned individually with sustainability in mind. There is no one-size-fits-all solution.





**In practice, when building a new sports facility, it is often the cheapest offer that wins the contract. What do you think of that?**

I became a landscape architect because I wanted to do something for the environment. However, I find that especially when it comes to invitations to tender in the public sector, there is little awareness about environmental policies and it is still the price that takes priority. However, the public client is obligated to consider sustainability aspects. Many municipalities have started to do so, but others don't.

**You are working at the Institute for Municipal Sport Development Planning in Potsdam. There, you advise municipalities and sports clubs, and work on the challenges of the future. What developments have you seen?**

There are lots of areas where we have identified a need for action. For example, the investment backlog for sports facilities is 31 billion euros. We have a lot of catching up to do. Then there is yet another development to consider: by 2050, 85 % of people will live in urban areas. The amount of space available for sports for facilities is shrinking in the face of growing demand. That poses particular challenges for us, as planners. Too little exercise costs our health insurance funds billions of euros per year. We must find solutions for sports facilities that allow people to exercise and play all year round.

**For football pitches, that means synthetic turf.**

Yes. An unfilled synthetic turf is a sustainable solution. If you consider the usable hours per year, it's even more sustainable than natural grass. This was discovered in a study by the University of Zurich. Theoretically, a synthetic turf pitch provides up to 2,400 playing hours per year. In reality, 1,800 of these are actually used, which is three times as much as natural grass. In urban areas, there is no alternative to sustainably designed synthetic turf. If we want to maintain or even expand sports provision, there is no getting around synthetic turf.

**At your institute, you don't just examine sustainability and accessibility to sport for many users, but also have ideas for the sports facilities of the future. What will they look like?**

New sports facilities must follow trends and not adhere strictly to a defined set of standards. We must ask ourselves whether we are building a new sports facility for a lot of people, or only for a small group of competitive athletes. We need a design that is tailored to the users' requirements. In sport, the trend is increasingly leaning towards play, fun, fitness and health. A modern sports facility has to motivate and create new incentives. Does a 400m running circuit do that? I envision multi-purpose, versatile facilities that are accessible and inclusive. We take these aspects into account in our consulting activities for municipalities. We pose the questions: What do you need and what do you have? And then we give recommendations on what to do.



**WOLF AHNER – LANDSCAPE ARCHITECT**

Ahner's company of more than 30 employees is the biggest planning firm for landscape architecture in Brandenburg, Germany. It designs almost every kind of sports venue, from school sports facilities to Olympic training facilities. Ahner also works at the Institute for Municipal Sport Development Planning at the College for Sport and Management Potsdam, which, among other activities, advises municipalities and sports clubs.

# POLYTAN'S GREEN TECHNOLOGY NEWCOMERS

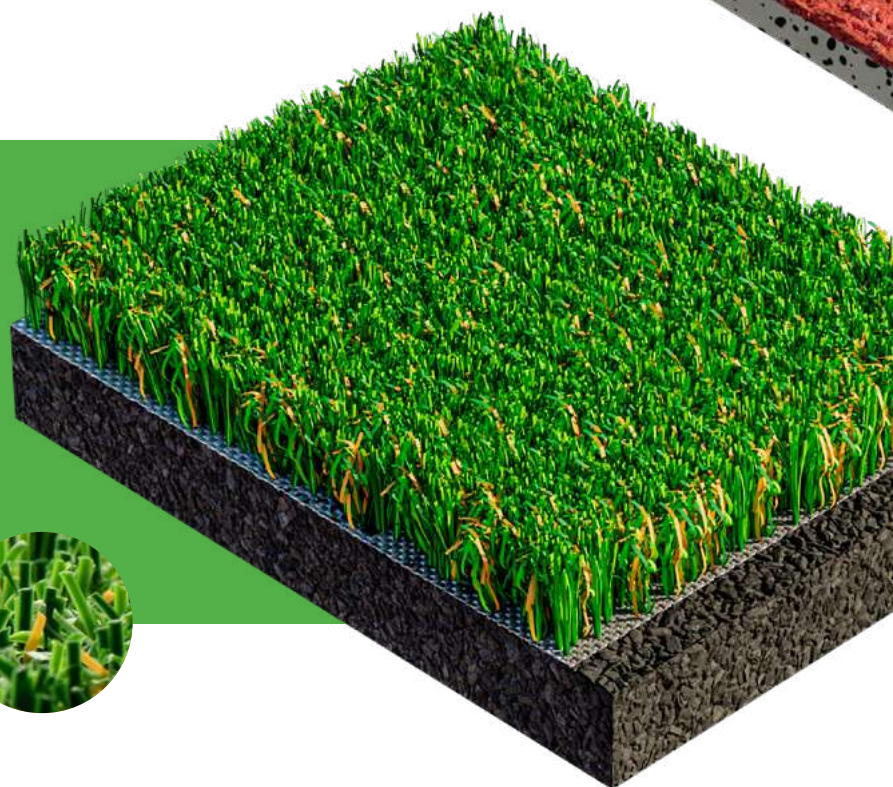
## LIGATURF CROSS GTR

The LigaTurf Cross GTR is a true world-first: it combines materials made from renewable (GT) and recycled (R) raw materials. The system of smooth and textured grass filaments not only meets the highest sustainability standards, but also fulfills the needs of professionals and amateurs alike. It is used as a filled football turf system.



## LIGATURF TRION GT

New in the product range is the unfilled synthetic turf system LigaTurf Trion GT, which is partially produced using renewable raw materials. The newly developed X-Tuft tufting technology provides good grip and a comfortable feel.





Polytan is demonstrating the future of sports flooring with its numerous innovations. Be it synthetic turf, running tracks or fall protection surfaces: every new surface is developed with sustainability in mind. The result: Polytan is starting a green product campaign and resolutely continuing on its chosen path.

All products based on renewable raw materials can be recognised by the abbreviation GT (Green Technology) in their name. Now, Polytan is taking the next step in the development of its synthetic turf and using both recycled plastics and renewable raw materials. This new generation of synthetic turf, which is also part of the Green Technology series, can be identified by the R in the product name.



### REKORTAN GEL GT

Sustainability also plays a huge role in the development of Polytan's plastic products. The new running surface Rekortan GEL GT is made from over 60 % renewable raw materials. It is a double-layered full PU system with optimal athletic advantages. The surface is certified by World Athletics.



### POLYPLAY FSI GT

A new generation in the field of fall protection flooring is the PolyPlay FSI GT. The Infinergy® material, developed by BASF, enables excellent fall protection features and low material usage (read more about this on page 54/55).

### REKORTAN AS GT

For the first time, Rekortan AS GT features a water-based PUR spray coating in combination with a GT binder, manufactured using Covestro's innovative cardyon® product, among other materials. As well as excellent physical athletic properties, there is also a visual component: Rekortan AS GT offers high colour stability, even for sensitive colours, without the additional top coat that was previously necessary.



# OLD PLASTIC. NEW LIFE

**Sustainability encompasses many facets. One of the most important is recycling, with which Polytan is taking a two-pronged approach. One is the responsible disposal of old synthetic turf and the other is the production of new synthetic turf from old plastics.**

Plastic is a raw material. Based on this belief, Polytan and the Sport Group are taking a two-pronged approach to give old plastic a new life. The latest example are the new products containing recycled materials. The opening salvo for the new series of products is LigaTurf Cross GTR, which combines the best of two worlds. It contains polyethylene made of renewable raw materials and recycled material. For the latter, Polytan exclusively used post-consumer recycled (PCR) material that was collected in Germany, e.g. via the dual waste disposal system, and recycled to the greatest extent possible. In future, Polytan will also help recycle old plastics, as LigaTurf Cross GTR is only the first in an extensive series of planned products containing PCR materials – signalling yet another step away from mineral raw materials. Like all other Polytan turf, the new products will be produced using green electricity.

With this combination of plastics made of renewable raw materials and PCR material, Polytan is offering a world-first in the synthetic turf segment. LigaTurf Cross GT zero, the first carbon-neutral synthetic turf, was the first milestone. With the Cross GTR (the R stands for Recycling and identifies all Polytan products containing recycled material), the company continues to push the envelope in terms of sustainability.



## THE RECYCLING PROCESS

FormaTurf and its partners have developed several new methods for its recycling process. Mixed materials can be recycled without extensive sorting and made into new products.





However, recycling is too broad a topic to focus on only a single aspect. In recent years, several hundred synthetic turf pitches per year have been replaced in Germany alone. Here, Polytan offers an innovative and sustainable disposal concept via its sister company, which is also part of the Sport Group. On the one hand, the synthetic turf is fully recycled (filaments, base layer and infill), while old pitches are recycled into new products, which can be used in the construction of new synthetic turf pitches or sports facilities. These include items such as edging stones.

The question of why an old synthetic turf cannot be recycled into a new one is valid. It is feasible, but from Polytan's and many other experts' point of view, it makes little sense. The energy and financial costs are so high that the carbon footprint and economic balance would be negative.

Recycling is a broad field with many different facets. However, it also offers numerous opportunities to make plastic sports surfaces even more sustainable, whether it's by producing new synthetic turf from old plastic waste or new products from old synthetic turf.



**The International Sustainability & Carbon Certification (ISCC) has authenticated the use of recycled materials in our products, awarded based on the mass balance approach.**



# "RECYCLING IS THE HIGHEST PRIORITY!"

---

**ON TOP spoke to environmental expert and entrepreneur Dr. Beate Kummer about the recycling of plastics, priorities for the future, and environmental policies, which have not yet been acknowledged in many areas of the public sector.**



**Dr. Kummer, plastic waste is a huge challenge for society. As an expert, how do you think we should handle it?**

The first step is to prevent plastic waste. We must ask ourselves where the use of plastic makes sense, and where we might find other solutions. That would already make a big difference. We should also consider what to do with our plastic waste. If we can make old plastics into new products, that is a good first step.

**There are multiple ways to reuse plastics. Do you have a favourite?**

I would like to answer the opposite question. I think thermal recycling, or incineration of plastic waste, is the worst solution of all for the environment. The only thing that's worse is sending it to landfill, which unfortunately still takes place in several EU member states. We should therefore prioritise material recycling. For alternative chemical and mechanical/material recycling methods, we need to look carefully at energy consumption and costs. While doing so, current knowledge indicates we should focus on mechanical recycling.

**FormaTurf is forging a new path for the industry with the recycling of old synthetic turf. What do you expect from it?**

A lot. Material recovery is the most beneficial way of recycling materials. Ideally, we would be able to make new synthetic turf out of the old one, but as far as I know, this isn't technically feasible yet. The FormaTurf approach of making old plastic products into new ones is the right one.

**What do you expect from policymakers and the public sector regarding the recycling of plastics? Synthetic turf is only a small part of the waste being produced.**

Many people might not know this, but those who generate the waste are responsible for disposing of it in accordance with the law. For a municipality, this means that it must find an appropriate solution. If it is not done legally, the municipality is responsible. However, policymakers have gone one step further. A municipality is more or less obligated to find the best possible, i.e. most sustainable, disposal method. This quickly becomes clear when you look at the new procurement law, competition law and the Waste Management Act. There are clear specifications.



**Many public offices don't seem to have acknowledged that yet. Rather, it is still price that matters most, and disposal is not even considered in calls to tender. What's going on?**

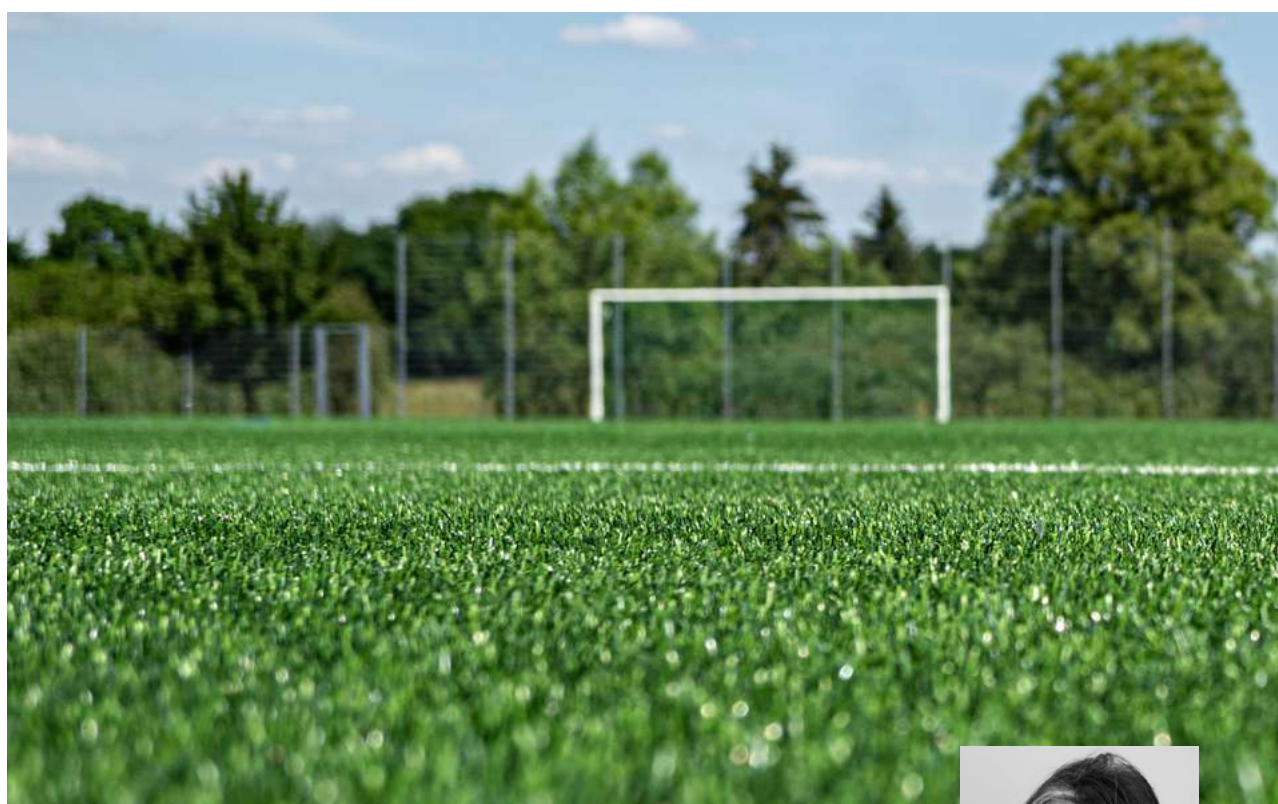
There is still a lot of uncertainty in this area. Especially in municipalities, training and education is needed. In recent years, the legal situation has changed massively in favour of a circular economy and sustainability. Calls to tender must include specifications for the proper disposal of old synthetic turf. And these must conform to the legal requirements. Industry can provide clarification as well. Because, like I said, people are often unaware of the legal situation. I can only recommend that anyone looking to replace a synthetic turf pitch examines the issue closely.

**Are we only talking about Germany or about Europe?**

The waste hierarchy applies throughout the EU. This means that prevention and reuse of waste are prioritised over other methods. However, there are big differences between the 27 member states. Germany is well on its way, but Sweden and Denmark are doing even better. In southern and eastern Europe, the situation is tricky. I already mentioned that I don't consider incineration to be a good solution. It is also becoming increasingly difficult to export old synthetic turf. In fact, you can't get approval for it if there is a better disposal solution available domestically.

**Back to FormaTurf: What can the company expect as a newcomer to the recycling business?**

In short, FormaTurf will be a disposal company and will therefore be inspected at least once a year by independent auditors. It is the company's responsibility to meet all the requirements. This can only be ensured by strict internal controls. That is a demanding task, but in discussions with those in charge, I sensed that they are extremely aware of this and have established a tight-knit control system that starts with the deconstruction of the old turf and ends with the new product.



**DR. BEATE KUMMER – OWNER OF  
KUMMER UMWELT:KOMMUNIKATION GMBH**

Dr. Kummer has a PhD in chemistry and toxicology and advises companies such as BASF and the public sector on environmental and sustainability issues in her role as an environmental expert.



# THE WONDER OF SITTENSEN



**Egbert Haneke, Chairman of VfL Sittensen, has succeeded. His club's new sports facility, which opened last autumn, has been upgraded with innovative technology. An accompanying study will scientifically document that modern synthetic surfaces can be sustainable. Among them are systems from Polytan.**

Sustainable synthetic turf is developing at a rapid pace. In Sittensen, located between Bremen and Hamburg, this progress is clear to see. The local sports club VfL Sittensen and the neighbouring school train at a facility that meets the current environmental requirements. This will soon be scientifically verified with the publication of a study by the Institute for Energy and Environmental Technology, overseen by the German Federal Environment Agency.

"Our goal with the results of this research, and others, is to assure sports clubs, associations, municipalities and sponsors regarding the ecological footprint of synthetic turf pitches of this type, so that they can make decisions with their eyes open," says the initiator of the project, Egbert Haneke, Chairman of VfL Sittensen. "Based on the expected results, we also want to ensure that more synthetic turf pitches are built in Germany and Europe from 2022 onwards, so that children have the opportunity to participate in sports all year round and clubs can find robust solutions to the medial tendencies of our society."





**Representatives of municipalities, associations and clubs are already lining up to see the “wonder of Sittensen” for themselves.**



Egbert Haneke, Chairman of VfL Sittensen

Polytan provided knowledge and material for the “pilot facility”. The company laid a synthetic turf in Sittensen, featuring PE yarn sourced from renewable materials instead of fossil materials (in this case, sugar cane). Furthermore, the production chain has been certified carbon-neutral. “This turf has a high percentage of PE yarn compared to conventional synthetic turf systems, so we were able to limit the amount of infill to around 2 kg/m<sup>2</sup>,” explained Haneke. In older synthetic turf, around 6 to 8 kg/m<sup>2</sup> is typical. One thing is already clear: the reduced quantity does not affect the high technical and athletic quality of the turf. The rubber granules used for the infill are made from up to 70 % hemp and chalk, i.e. natural raw materials.

One pitch has rubber granules on it, while the other has a natural infill. “The infill itself on one of the two pitches consists of small, rounded wood chips, which were tested here for the first time with Polytan,” says Haneke. Unlike cork, the wood chips do not rise to the surface. The granules, which have been named BrockFILL, are now officially offered by Polytan following positive experiences in Sittensen.

This is accompanied by a world-first prototype of a gutter filter system by Hauraton. It cleans rainwater runoff from sports facilities using a highly effective substrate filter before the water is collected. In preliminary trials, this reduced the amount of microplastics released by 98 %. The system is now in serial production.



Read the full-length interview with  
Egbert Haneke about the development  
of the pilot facility online at:  
[lead.me/wonder-of-sittensen](https://lead.me/wonder-of-sittensen)





*FRANCE SPECIAL*

# SETTING A GREEN EXAMPLE

---

Climate-neutrality is only possible when all protagonists follow the same goal of “zero emissions” in every area of life, including the sport sector. The result can be seen in the commune of Eysines in the Arrondissement Bordeaux.





When renovating its sports pitch, the commune of Eysines in France desired sustainability above all else, without compromising on athletic functionality. According to [sudouest.fr](http://sudouest.fr), the commune of approx. 24,100 residents in the Departement Gironde invested almost 480,000 euros in the climate-friendly renovation of the playing field. Since then, athletes have enjoyed playing on France's first climate-neutral synthetic turf. "The time had come to replace our synthetic turf from 2009," explained Mayor Christine Bost, in an interview with [lagazettedescommunes.com](http://lagazettedescommunes.com). The commune in the Nouvelle-Aquitaine region attempted "to take environmental aspects into account to the greatest possible extent," Bost was quoted as saying on the website.

At the end of October, the new eco-friendly pitch from Polytan was officially opened for use in the presence of former national team and Girondins-de-Bordeaux player Patrick Battiston.

Why did Eysines opt for the Polytan LigaTurf Cross GT zero? The system from Polytan is "made from a plant-based raw material, and not from an oil-based one," explains Stéphane Landry, Manager of the Grand Ouest area.

One example is the infill. Here, the commune opted for sand. With the renovation of the sports pitch, the project in Eysines has set the bar for sustainable sport in France.

The local schools and football clubs now play on the only carbon-neutral synthetic turf available from Polytan worldwide. Players don't need to compromise when it comes to the playing properties of the turf. On the contrary: "Alongside a natural grass look, this surface offers the perfect playing properties for football training and fulfils the athletic requirements for tactics, speed, flexibility and dynamics. The elastic base layer provides improved shock absorption and protects players from injuries," reports the national news platform [aquitaineonline.com](http://aquitaineonline.com). What's more, the turf offers the advantage of resource-friendly maintenance and durability. The website of [aquitaineonline.com](http://aquitaineonline.com) declared the renovation a "success story" for athletes and the surrounding communities.

The lighthouse project is proving effective. The playing field in Eysines has attracted interest from other French communes.



# THE MULTITALENTED LUDOVIC BESSON

Ludovic Besson is considered to be one of the leading Olympic hopefuls among the current crop of French decathletes. In 2015, he became a global sensation for the first time when he set new personal bests in seven disciplines at the World Championships for 16-17 year olds in Colombia. With a time of 4:59.38 in the 1500 metres middle-distance event, he also broke the French decathlon record and became vice world champion at the same time. His performance has steadily improved since then. This most recently became apparent last year, when he became French champion in the indoor heptathlon in Liévin.

The Polytan brand ambassador now has his sights set on the 2024 Olympics, which will be held in Paris.

**"It would be a dream come true,"**

says Besson when talking about potentially having a place in the French team and competing in front of his home crowd. "I can hardly wait."

There are several reasons why the decathlete was chosen to be a brand ambassador. "Ludovic Besson is the right choice since his world-class performances mirror Polytan's aspirations," explains Tobias Müller, Head of Marketing at Polytan. What's more, France is also an important market for the company, whose hockey pitches will once again feature at the 2024 Olympic Games. It therefore makes sense to have a French athlete on board as an ambassador. And last but not least, Ludovic Besson's social commitments are impressive – despite all his sporting ambitions and a demanding training schedule, Besson still finds time to get involved with the "Solution Internationale Sport" charity project in Senegal. By doing so, he wants to give access to sport to people in Senegal, especially those who otherwise could not afford it. "Personally, I was very keen to get involved in Senegal since that's where my roots are." The decathlete wants to give back some of the support he received. "I think it's important that everyone has a chance."

The next steps towards the Olympics are the European Championships in Germany and the World Championships in the USA. However, as a result of the pandemic, preparations for major upcoming sporting events have been marred over the past two years. International competitions were largely cancelled, and training schedules could no longer be followed.

To make up for what was missed due to the coronavirus, a tailor-made training programme and good training opportunities in the run-up to these competitions are absolutely vital. Besson is currently training under the best possible conditions at the national sports centre in Montpellier. He believes that high-quality sports facilities are a key to the road to success: "A good track is important for our health and safety," he states. "It must not be too hard, but not too soft either. If I feel comfortable on a running track or a run-up track, I can give my best performance," he says. "We build on the expertise that has been and continues to be put into track development." He also likes them to be colourful: "I am motivated by tracks in unusual colours. I love competitions on colourful tracks."

Ludovic Besson is a sound example of the successful nurturing programme put in place by French athletics. His talent was spotted and supported early on. For this reason, he is now also using his experience to help foster up-and-coming young talent. "I believe athletics has a great future. This is also down to the increasing support for young talent." In this way, children are motivated to play sport from an early age. He took up athletics at the age of eight. "I am now 23 years old and I'd say I have learned a lot through my sport."



More about the  
"Solution Internationale Sport" project:  
[lead.me/senegal-projekt](https://lead.me/senegal-projekt)



**YOUNG HOPE**

---

**French decathlete Ludovic Besson is a brand ambassador for Polytan**





# "SUSTAINABILITY IS INCREASINGLY BECOMING THE DECIDING FACTOR"

Ricardo Lezcano has many years' experience in the Iberian sports field market and recently joined Polytan as Business Development Manager.

## **Ricardo, can you describe the Spanish market for us?**

The local market for sports facilities is one of the biggest in Europe. That has to do with the fact that we have more than 8,000 municipalities in Spain, and each one has its own sports facility. To be precise, the number of football pitches is currently around 400.

## **Are there many synthetic turf pitches in Spain, and what type of sports are played on them?**

Primarily, we play 11-a-side or 7-a-side on synthetic turf. We also have some pitches specially for rugby (although it's not overly popular here) and hockey. There are only a few of these, but they are very high-quality.

## **How are things in terms of sustainability, and does the state support the renovation and construction of new sports facilities with climate-friendly materials?**

There is an interest in funding measures to prevent climate change. However, there is often a lack of relevant information on the topic, so to be honest, we are lagging quite far behind other European countries in this regard.

## **How much does sustainability play a role in public calls to tender in the individual municipalities?**

Sustainability is increasingly becoming the deciding factor in the criteria for public contracts. This particularly applies in the transport and packaging sectors, and in other specific areas. In sports facilities, sustainability is getting more consideration, but it's still price that takes priority.







### **Spain has a hot, dry climate. What does that mean for the pitch characteristics?**

It's true that we have very high summer temperatures here in Spain. That's why we need sports surfaces that conserve water and reduce the surface temperature of the pitch. In this respect, the Polytan CoolPlus turf system has enjoyed exceptional popularity in Spain.

### **Have environmental considerations played a part in the growing number of renovations?**

Sadly not. The pitches are only renewed when they reach the end of their expected lifespan (or sometimes even later). But when a facility is renovated, then it does play a role. Then, climate-friendly systems and products are at least considered. Whether the public sector is prepared to invest a little more money is another question...

### **And private companies?**

...Unlike the public sector, private companies value this aspect more highly and are prepared to invest accordingly.

### **Spain is hosting the Women's Hockey World Cup, together with the Netherlands. Will Polytan be involved?**

Absolutely. Polytan is the manufacturer of the hockey pitch used in the Terrassa Olympic Stadium, including both the elastic base layer and the synthetic turf. Terrassa is the proverbial hockey capital of Spain.

### **How was that received?**

The fact that Polytan is using its best product at the World Cup has attracted the interest of the country's leading hockey clubs. Many clubs have told me that the difference in quality and playing characteristics on a Polytan turf is significant.

### **The most popular sport in Spain is football, both as an amateur sport and professionally. Which surfaces do the top clubs use at their training facilities?**

In Spain, only first and second-division teams play their official games on natural grass. All the lower divisions play on synthetic turf. However, all clubs have synthetic turf pitches on their training grounds, where they train regularly.

### **What future developments do you envision?**

It's only a matter of time until football matches are played on synthetic turf in all competitions, including the World Cup. All future professional footballers in Spain have been playing on synthetic turf since their youth, sometimes exclusively so.

### **What sports do you enjoy?**

Does playing cards count as a sport? Other than that, I like swimming, gymnastics and hiking. When I find the time, I also go sailing.



## **RICARDO LEZCANO – OUR MAN IN SPAIN**

Polytan Business Development Manager and Spanish expert Ricardo Lezcano foresees a bright future for synthetic turf pitches, describes the status quo when it comes to sustainability, and looks forward to the Hockey World Cup on the Iberian Peninsula, which will be played on Polytan turf.

# WORKING FOR POLYTAN

## *MORE THAN A JOB*

Polytan's high-quality, sustainable sports pitches are a meeting point for people of all generations and cultures – and just like in sports, at Polytan the biggest successes are won as a team.







The Polytan team at the Burgheim office

**The company has grown steadily in the past few years. This success story was made possible by a strong team of ambitious employees.**

As Polytan continues to grow and new projects added, the company has been steadily increasing its workforce to stay on top of things. But what makes working for Polytan so attractive? From a purely financial point of view, it's the pay package and benefits, but for Andreas Ruppert, Head of HR at the Sport Group and Polytan, the following aspect is at least as important: "Our employees tackle a very broad range of tasks. We are also a company of short pathways, quick decisions and close coordination between departments. Good ideas are welcome. We support creativity and initiative. Here, you can make your mark, both in the literal and figurative sense. That's what sets us apart as an employer."

The company sees every new challenge as an opportunity. When it comes to sustainability, Polytan and the Sport Group are pioneers in the industry with their products and strategies. They are also forging new paths in digitalisation, while internationalisation is progressing with great momentum. The company is now setting its sights on markets beyond Germany.

The teams who install the pitches or running tracks can travel all over the world. "We welcome motivated employees who are prepared to be away on an installation job for several months. Even late career changers," says Ruppert. "In order to retain our position as one of the world market leaders, we welcome clever minds from all areas," he adds, and mentions the opportunities available to grow and develop:

**"Change within the company encourages communication and opens up new perspectives."**

Like its parent company Sport Group Holding GmbH, Polytan has its headquarters in Burgheim, Upper Bavaria. Further offices are located in Halle and Berlin. At high season, the Sport Group has approx. 1,900 employees worldwide, of which almost 350 employees work for Polytan.

**JOIN OUR TEAM!**

Would you like to find out more or become part of the Polytan team?  
Feel free to contact us at:  
[job@polytan.com](mailto:job@polytan.com)





# GOOD VIBES

By Welsh standards, the construction of the new campus for Fitzalan High School is the investment of the century. According to press reports, the Welsh government is investing some 64 million pounds in the school's redevelopment, which forms part of the Welsh government's "21st Century Schools" programme. The project includes the creation of a large outdoor and indoor sports complex – with Polytan involved as one of the suppliers.

The Fitzalan students are due to move into Cardiff Council's prestigious showcase in the near future. The construction of the new campus is the largest local building project in the 21st Century Schools programme, funded by Cardiff Council and the Welsh Government. With the move, the old campus with its dilapidated buildings dating from the late sixties will finally be relegated to history. The new Fitzalan High School offers the most advanced educational facilities in a brand new building. Pupils will have access to a learning environment of the highest quality. This will support both teaching and learning.

The project further includes the construction of new sports facilities that will offer new opportunities not only to the school's students but to the entire community as well. Local sports clubs will also be able to use these amenities, located just a stone's throw from the Cardiff Athletics Stadium, for their training. The facilities include a swimming pool, several multi-use sports areas and access to modern rugby and football pitches.

Thanks to Polytan's involvement, the new sports facilities benefit from "quality made in Germany". In collaboration with reliable partner South Wales Sports Grounds Ltd., close to 17,000m<sup>2</sup> of synthetic sports surface have been installed since last October in phase one. Phase two is scheduled to start in the course of this year and will include a hockey pitch, in addition to several multi-use games areas. As you can see, it's a major project.

Indoors, football players will now play on the LigaTurf RS+ flooring system. The outdoor rugby and football pitch has been surfaced with the LigaTurf Legend Pro. Sprinters will run on the blue Rekortan BS. The two multi-use games areas are covered with sand-filled synthetic hockey turf. Such top-class training facilities will make sports a favourite part of the curriculum. So far, the client's project manager has been impressed with what he's seen.





– Andy Miles, Project Manager, Kier Construction

“Your teams’ collaboration, coordination and understanding of our requirements have been excellent. Nothing seems to be too much trouble and your team are truly client focused. The collaborative approach has been very refreshing especially with our programme issues in respect to delays to various pitches. Please on behalf of myself and the Kier Team thank your team for their efforts so far. May it long continue.”





# THE *LEGACY* OF HEINZ NIXDORF



---

The biggest multifunctional sports facility in Paderborn is the Ahorn Sports Park, whose construction was initiated by Heinz Nixdorf in the mid-80s and which was built in the immediate vicinity of production facilities for Nixdorf Computer AG. Over the years, the entrepreneur and computer pioneer expanded Nixdorf AG into an international and globally active electronics group.





Polytan SMART is an innovative, highly precise and user-friendly diagnostics system that is installed directly under the floor. The built-in SMART timing gates enable performance diagnostics or time measurement for users ranging from amateur athletes to professionals. It can be used both with the high-performance sensor from our partner Humotion combined with the SmarTracks diagnostic software, or simply on the user's own smartphone.



Further information about the endless possibilities of Polytan SMART can be found on our website:

[lead.me/polytan-smart-en](https://lead.me/polytan-smart-en)



Today, the 100,000m<sup>2</sup> Ahorn Sports Park features an athletics stadium with a covered stand that seats 2,000 people, three artificial turf pitches, an outdoor street basketball court, a beach volleyball court, a large children's play area of about 1,500m<sup>2</sup>, an outdoor fitness and exercise course, as well as a fitness trail. The heart of the facility is the 10,000m<sup>2</sup>, three-storey sports hall, the upper floor of which houses a 200m indoor track, as well as the first indoor baseball facility built within Germany, constructed in 2009. In addition, there are also surfaces for ball games, athletics tracks, a climbing wall, a weight room, squash courts, an adventure playground, physio-fitness and gymnastics rooms, and a dance floor.

In the course of a renovation, five different products were installed by Polytan. The professional sports surface Polytan Rekortan M in brick red was used for the outdoor running track, which impresses with excellent acceleration and tread elasticity, as well as high cushioning and excellent advantages from a sports medicine point of view. Polytan SMART, our intelligent system for digital performance diagnostics and precise timekeeping, was also installed.

The small pitches, including three grass areas and a mini pitch, were fitted with Polytan LigaGrass Synergy, our turf system that is perfect for club and community sports. Our PolyPlay FS GT fall protection surface, also in brick red, provides protection for users of the outdoor equipment located in the fitness and exercise area. The bulk-coated, water-permeable surface is particularly low-maintenance and, thanks to its cushioning effect, protects against injuries in the event of falls. Last but not least, a green footpath circles the indoor track in the large sports hall, made of Rekortan PUR Indoor solid plastic flooring.

Ahorn Sports Park is staying true to its motto, "Sport for all, at all times", and will continue to make its grounds and facilities available for Paderborn's sports clubs.

# THE BALL IS ROLLING AGAIN

SPARKASSEN FAIRPLAY  
SOCCER TOUR

---

Football unites. It's easy to see on the football pitch:  
When children and young people kick a ball around,  
they show racism and bullying the red card.







Finally, the ball is rolling again. After being forced to take a two-year break due to Covid, this year, the “Sparkassen Fairplay Soccer Tour” is celebrating a comeback. Now, young adults, teenagers and children in the states of Brandenburg, Thuringia, Mecklenburg-Vorpommern, Saxony, Saxony-Anhalt, Berlin, North Rhine-Westphalia and Schleswig-Holstein can compete on a level playing field, with the support of Polytan.

The Fairplay Soccer tournament, which began in 2001, registered a record number of participants the year before the pandemic. In 2019, 21,796 young people took part, before coronavirus relegated the competition to the bench.

The large number of participants demonstrates a high uptake among young people, for whom the tournament also serves as a playful training ground for non-violent social interaction. By playing together, they learn fair play and good sportsmanship. Discrimination is a no-no. Team spirit always gains the upper hand, leaving prejudices behind.

Such commitment to fair play convinced the Polytan management team to become a sponsor of the tournament. The supporting organisation is the Deutsche Soccer Liga e.V., which champions the causes of education, equality and sports.

The final of the tournament will take place in July 2022, following numerous preliminary rounds – on a Polytan playing field, of course. This year’s location Prora, in the resort town of Binz, whose slogan is:

### “Landmark Fairplay”.

This year’s tournament is particularly exciting as the number of participants is once again very high. Among them are the participants who qualified for the Sparkassen Fairplay Soccer Tour last time, and were unable to finish due to Covid-19.

Exact dates and further information about the qualifying matches can be found on the website of the Fairplay Soccer Tour: [www.soccer-tour.de](http://www.soccer-tour.de)





# POLYPLAY ARENA



## STATIONARY, FREESTANDING AND MULTIFUNCTIONAL

Next to our classic football pitch, which was built from scratch with a foundation, elastic base layer and synthetic turf, we also offer a version of the PolyPlay Arena that needs no foundation at all and can therefore be used on top of existing surfaces. When equipped with our high-performance synthetic surfaces, our miniature playing fields are also suitable for sports such as basketball, handball, badminton, volleyball or hockey.



# POLYPLAY ARENA MINIATURE PLAYING FIELDS

Born out of the DFB campaign “1,000 Mini Pitches for Germany” in 2007, Polytan was the DFB’s project partner and general contractor from the get-go and further developed the miniature playing fields together with leading board system manufacturers, so that they are even more versatile today – in the form of the PolyPlay Arena!

## LOCAL RECREATION FACILITY BRIMMING WITH HOLIDAY VIBES

If you live at the foot of the Swabian Jura, yet love waves and the sound of the sea, you are faced with travelling long distances to satisfy your need to be beside the ocean. After all, it’s about 700km to the Adriatic Sea in the south, and another hundred kilometres more to the North Sea. But the Markwasen outdoor wave pool, in the midst of a park landscape in Reutlingen, is much closer. The complex centres around an outdoor pool built in 1954/55. In the 1980s, a separate wave pool was added to the complex, which many visitors still consider the main attraction today: various wave programmes create waves up to 1.5m high, so it almost feels as though you’re on a beach holiday.

The grounds are being continually improved, and as such, a multifunctional playing field with basketball hoops and two PolyPlay Arena mini playing fields in the popular DFB size of 20 x 13 m have been added recently. The durable PolyPlay S all-round surface in brick red adorns the multifunctional playing field (480m²) – and this is by no means a coincidence since this colour has proven itself many times over on playing fields and facilities for school and ball sports, as well as a wide range of leisure activities. The two mini-pitches feature Polytan LigaGrass Synergy, a synthetic turf made of soft and flexible Synergy filaments, as well as the larger and firmer LigaGrass Pro filaments. The TriColour design (lime green, field green, tan) lends the LigaGrass Synergy in Reutlingen a truly natural look in an area covering 532m². The scope of delivery of the mini pitches included our robust boards as well as goals and rear-goal nets, which can be supplemented with side and roof nets if required.

Alongside various design variants, the PolyPlay Arena is also available in an anti-vandalism version, as well as with optional sound-insulating boards.



**WE MAKE  
SPORT.**

**HUN**



Our sports surfaces are the foundation on which sport enthusiasts around the world meet and grow together. For us, sport represents passion, diversity and emotions that last a lifetime. That's why we develop our surfaces with the highest standards in quality, safety and durability – for sport that builds lasting connections.

IAN.

# SYNTHETIC TURF SYSTEMS

Polytan's synthetic turf systems, made of smooth or textured fibres, infill granules and an elastic base layer, provide a deceptively realistic playing experience, effective protection against injuries, and exceptional resistance to wear – tried, tested and certified in accordance with all the conventional standards.

Our broad product range offers the perfect solution with optimal playing properties for every need and every budget – from multi-purpose playing fields for amateur clubs, to first-division stadiums.

*Liga***TURF**

Product	GT	Filaments	Filling	Sport	Division
LigaTurf Cross GT zero	Organic	Straight and textured	S, S+C, S+B	Football Rugby American football	Professional Amateur Leisure
LigaTurf Cross GTR	Organic Recycling	Straight and textured	S, S+C, S+B	Football Rugby American football	Amateur Leisure
LigaTurf Cross GT	Organic	Straight and textured	S, S+C, S+B	Football	Amateur Leisure
LigaTurf Cross		Straight and textured	S, S+C, S+B, S+R	Football Rugby American football	Professional Amateur Leisure
LigaTurf Trion GT	Organic	Straight and textured	S, unfilled	Football Multisport	Amateur Leisure
LigaTurf Motion Pro		Straight and textured	S	Football Multisport	Amateur Leisure
LigaTurf RS Pro II		Straight	S+R, S+C	Football	Professional
LigaTurf RS+		Straight	S+R, S+C, S+B	Football Rugby American football	Professional Amateur
LigaTurf Legend Pro		Straight	S+R, S+C	Football Rugby American football	Professional Amateur Leisure

*Liga***GRASS**

Product	GT	Filaments	Filling	Sport	Division
LigaGrass Pro		Textured	S, S+R, S+C	Football Multisport Hockey	Amateur Leisure
LigaGrass Synergy		Textured	S, S+R, S+B	Football Multisport	Amateur Leisure





Product	GT	Filaments	Filling	Sport	Division
Poligras Tokyo GT	Organic	Textured	Unfilled, W	Hockey	Professional
Poligras Platinum GT	Organic	Textured	Unfilled, W	Hockey	Professional Amateur
Poligras SuperPlay		Textured	S	Hockey Multisport Tennis Padel	Professional Amateur Leisure
Poligras TeamPlay		Textured	Unfilled, W	Hockey Tennis	Professional Amateur Leisure

S = filled with sand, S + C = filled with sand and cork, S + B = filled with sand and BrockFILL,  
S + R = filled with sand and rubber, W = water-based



polytan



## CERTIFIED AND PREFERRED

The high quality and excellent playing properties of our synthetic turf systems are proven by numerous quality seals and certifications. For example, all Polytan synthetic turf systems comply with the current national and international standards, and have all the relevant certifications of international sporting associations.

Polytan is also a licensed FIFA Preferred Provider, Preferred Turf Producer of World Rugby and Global Supplier of the FIH (International Hockey Federation). Accordingly, Polytan has a special responsibility as a manufacturer to ensure the high quality, performance and safety of its turf systems for various applications. Meanwhile, the company is working with international sports associations to further develop qualitative and innovative solutions for the future of sports. As of this year, Polytan is certified as a manufacturer and Polytex as a producer in accordance with ISCC Plus (International Sustainability & Carbon Certification).





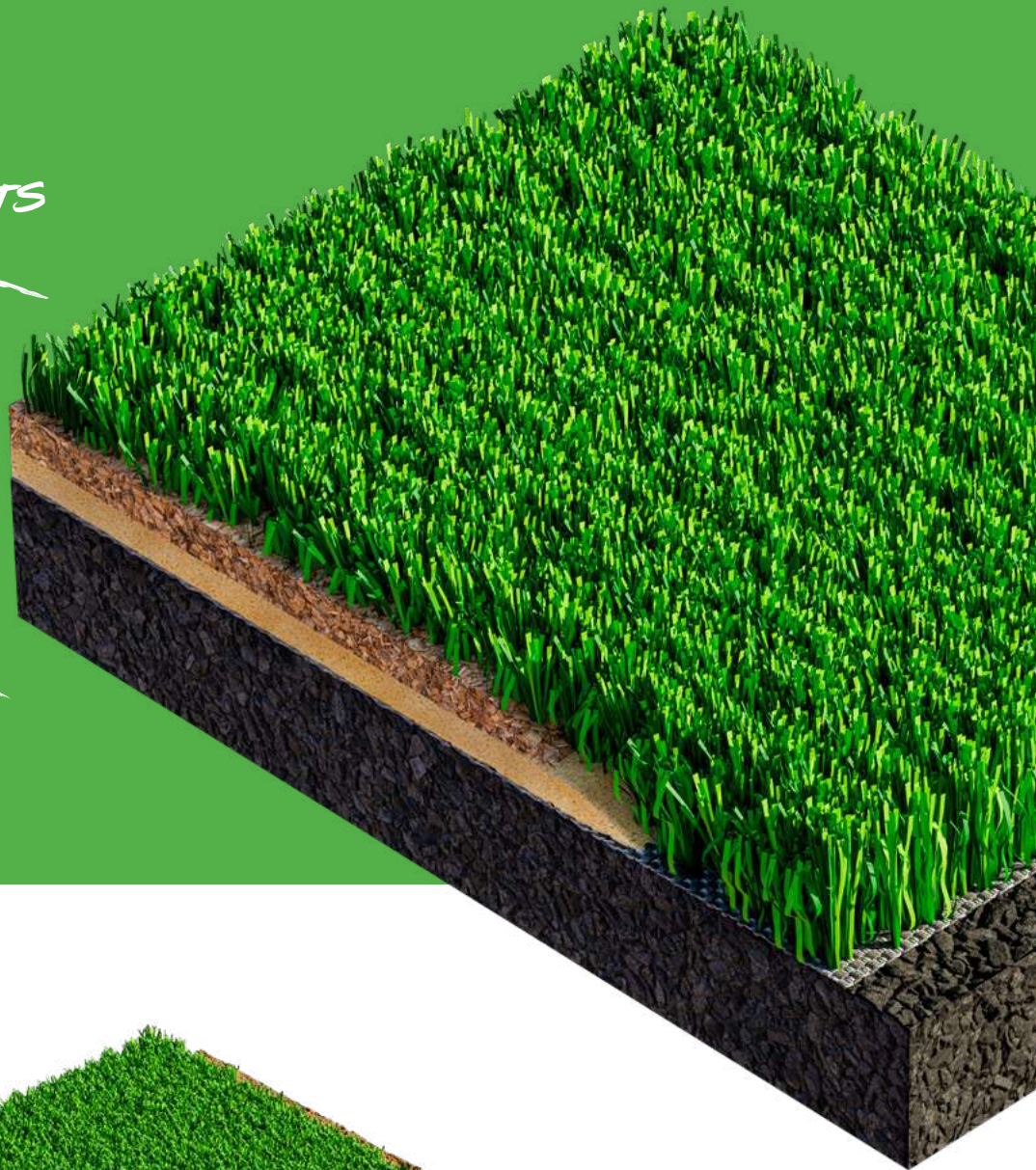
# SYNTHETIC TURF SYSTEMS – STRUCTURE AND TECHNOLOGY

Synthetic turf systems from Polytan are high-tech products that are composed of different components, depending on their specific purpose. The Polytan Anti-Compaction System (ACS) is what enables the precisely defined, optimal interaction between the synthetic turf surface, infill granules and elastic layer. The respective combination determines the desired playing characteristics, toughness and durability of the system.

*TURF FILAMENTS*

*INFILL*

*ELASTIC  
(BASE) LAYER*



## SUBSTRATE PREPARATION

Bound elastic  
(base) layer

Unbound  
base layer

Foundation





## TURF FILAMENTS

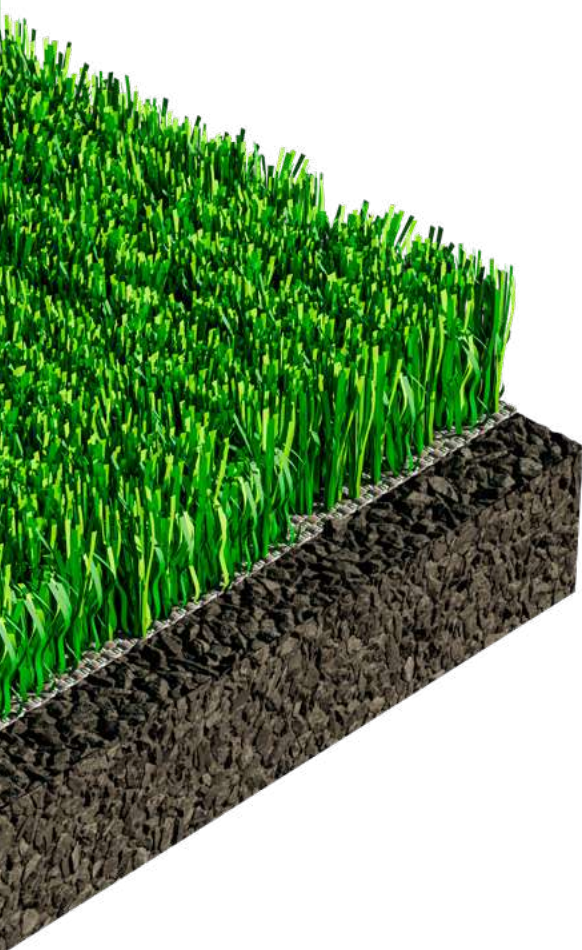
The turf filaments are tufted onto a fabric layer and determine, together with the infill and elastic layer, the protective and playing properties of the synthetic turf. Depending on the application, smooth or textured filaments with precisely defined properties may be used. In recent years, combinations of both filament types, which combine the advantages of both, have become increasingly popular.



Smooth  
filaments



Textured  
filaments



## INFILL

Depending on the system, different infill materials, such as elastic rubber granules, natural infill materials or quartz sand ensure an authentic feel, grip and traction during a fast-paced game with quick directional changes, unadulterated ball rolling behaviour and high player protection. Professional hockey turf is usually laid as an unfilled carpet and does not require any infill at all, thanks to its high fibre thickness. Unfilled turf with a longer pile height and slightly higher stitch density is now also used in football turf systems. The lack of granules in this system is compensated for by a high number of filaments and significantly higher yarn mass.

**Depending on the sport and desired playing properties, synthetic turf systems may contain different infills. We offer systems that are filled with sand only, with sand and cork, or with sand and olive pits.**



**New in our portfolio: BrockFILL**  
is a natural filling material made  
of rounded wood chips.

## ELASTIC (BASE) LAYER (IN SITU)

Directly under the turf, there is a 10-30mm elastic layer made of rubber granules and a PU binding agent, produced by Polytan. To achieve the desired base layer properties, the mixture is enriched with grit up to a height of 35mm. It permanently guarantees the elasticity needed to ensure the safety of the players and levels out uneven spots in the foundations with its in-situ construction.

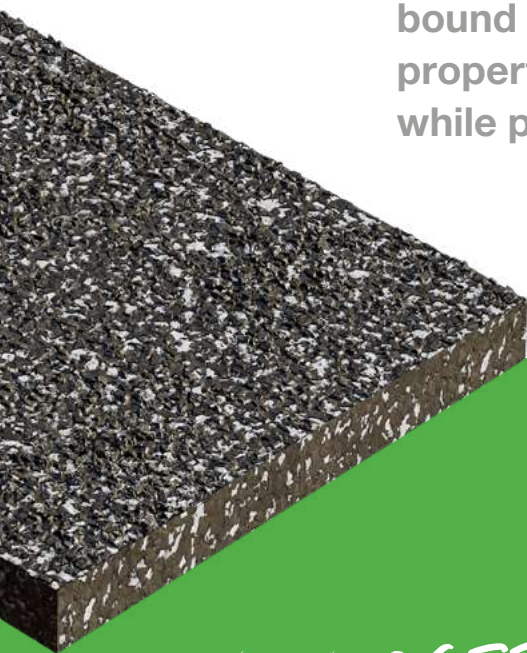


Further information about our  
synthetic turf systems can be found here:  
[lead.me/artificial-turf](https://lead.me/artificial-turf)

FEATURE

# EL, ET AND POLYBASE GT

The consistent and uniform shock absorption of the bound elastic layer (ET) preserves the excellent playing properties of the synthetic turf throughout its lifespan, while providing perfect protection for players.



## ADVANTAGES

### RECYCLING

- Rubber granules made of 100 % post-consumer recycled material conform to the waste hierarchy set out in EU Directive 2008/98
- European, quality-tested recycled granules in accordance with the REACH regulation
- Easy reprocessing and reuse of the elastic base layer for synthetic turf

### SUSTAINABILITY

- Polytan PU binding agent saves approx. 14 % CO<sub>2</sub>
- Lasts for over 35 years
- Positive environmental footprint, compared with rubber granules made of new material

### HEALTH AND ENVIRONMENT

- Stringent testing of soil and groundwater compatibility
- Optimal player protection, thanks to lasting elasticity
- No surface sealing, thanks to water permeability

The shock absorption values and sport-specific properties of Polytan ET are adapted to various sports and fulfil the requirements of sports associations like FIFA, FIH and World Rugby. The elasticity values of Polytan ET, which ensure player safety, are functionally and athletically unique: Even with extreme redistribution of infill material or a heavily worn surface, the shock absorption and deformation properties remain optimal.

The product lifespan is typically over 35 years. It therefore lasts for at least three generations of synthetic turf and can easily be reprocessed for further use. The bound elastic base layer by Polytan is below the PAH concentration limit in accordance with DIN ISO 28540 F40: 2014-05 and DIN EN ISO 17993 F18: 2004-03. Polytan ET has also been proven harmless in terms of its impact on the soil and groundwater.

### RUBBER GRANULES MADE OF 100 % RECYCLED MATERIAL

The Polytan ET system is exclusively made using high-quality, quality-monitored and environmentally tested ELT (End-of-Life Tyre) rubber granules, mineral aggregates and a special PU binding agent. The rubber granules are coated with a polyurethane binding agent to seal in all the components' recycled material. This material is available anywhere in Europe without long transport distances, and meets all the requirements of REACH and the corresponding PAH concentration limits. For every tonne of ELT granules that is recycled instead of incinerated, CO<sub>2</sub> emissions are reduced by more than 700 kg – a significant contribution to saving resources and our environment.





### PERFECTLY EVEN AND SEAMLESS THANKS TO IN-SITU INSTALLATION

During in-situ installation, PU, rubber granules and mineral aggregates are mixed and installed on site. In contrast to prefabricated layers and shock pads, this construction method ensures a perfectly flat surface with defined angles of inclination. As a result, any minor irregularities in the unbound base layer (gravel bed) can be levelled out by the ET on site. What's more, only in-situ installation allows a seamless connection to be formed between the strips of material, as required for any playing field.

### OPTIMAL DRAINAGE AND ENVIRONMENTAL PROPERTIES

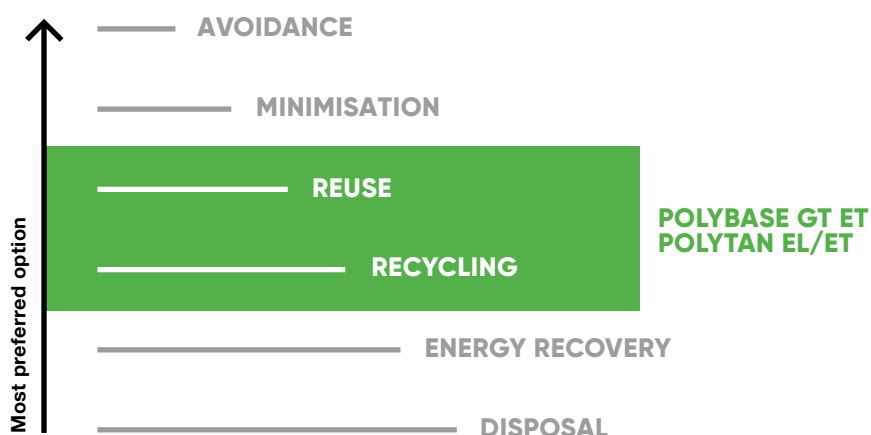
The bound elastic layer not only ensures the athletic function of the turf, but also has reliable drainage properties, allowing the surface to be used in heavy rain. Seamless quality control in accordance with the strict regulations of RAL GZ 944/2 additionally monitors the environmental compatibility of the surface.

### POLYBASE GT ET

**Polytan PolyBase GT ET:** the next step towards the perfect elastic base layer. Polytan's latest Green Technology development combines the known advantages of a bound elastic base layer that is installed in situ with the ecological advantages of a recycled product and a revolutionary new technology for the utilisation of CO<sub>2</sub>. The product by German polymer manufacturer Covestro is called **cardyon®** and, for the first time ever, has made it possible to use CO<sub>2</sub> as a raw material in the manufacture of plastics. This in turn reduces the consumption of fossil resources, such as petroleum. **Cardyon®**, which is made of up to 14% natural CO<sub>2</sub>, is used to bind the rubber granules in Polytan's PolyBase GT ET, ensuring permanent elasticity.



### WASTE HIERARCHY



# NATURAL INFILLS

## THE GREEN SIDE OF THE PITCH

Elastic granules in a synthetic turf improve the playing properties. However, due to the size and the material properties of the rubber granules, they are considered a micro-plastic. In the medium-term, an EU ban will prevent rubber granules being used as an infill. The big question for the industry now is: how can the high demands of a sports surface be met if rubber granules are banned? Polytan has multiple solutions to offer.

The discussion about an EU-wide regulation concerning microplastics in sports facilities has caused widespread uncertainty among operators, planners and investors. The granules are thought to release microplastic particles that pollute the environment. Whether or not the rubber granules will be banned is yet to be decided. The EU Commission is expected to make the decision before the end of the year.

Almost no one disputes that protecting the environment is an important consideration in the construction of sports facilities. Especially not in Germany, which has the highest number of synthetic turf playing fields in the entire EU, according to the Federal Institute of Sport Science. The solution are mixtures with natural infill materials "that are not affected by the potential EU regulations", claims a fact sheet by the German Olympic Sports Confederation. That's where Polytan's innovative strength comes into play.

For example, BrockFILL. Polytan uses wood in the mixture, developed for synthetic turf. It is sourced from fast-growing pine trees and used as a component in a wood/sand infill to create a synthetic turf that meets athletic requirements. The mixture has multiple benefits: for instance, durability, optimal drainage properties, a cooler ground temperature and the prevention of weed growth. What's more, the material does not splinter or float. It is also free of mould and bacteria, which are often a problem when using organic materials. At the end of its service life, the used material is fed back to the environment as mulch.

The infill material has been checked for athletic suitability and meets the requirements of FIFA Quality, FIFA Quality Pro and World Rugby. From the point of view of sports biomechanics, the material offers benefits for movement patterns, as demonstrated by biomechanical tests. Accordingly, BrockFILL not only has a positive effect on the environment but on athletes as well.



Further information about  
natural infills can be found here:  
[lead.me/natural-infills](https://lead.me/natural-infills)



Another natural infill material is cork. This natural material is extremely environmentally friendly, as demonstrated by one fact in particular: cork forests consume huge amounts of CO<sub>2</sub>. With a surface of around 2.3 million hectares, Mediterranean cork forests alone absorb around 14 million tonnes of CO<sub>2</sub> each year. This equates to around a tenth of the CO<sub>2</sub> emissions caused by traffic in Germany, according to the German Environment Agency. In addition, the bark has excellent insulating properties. This protects the surface from temperatures that are too high or too low. At the same time, the infill granulate is breathable and resistant to pests and bacteria.

Polytan uses these properties in the Amorim Nature 130, for example. The name represents natural infill granules for synthetic turf pitches. "It also assists shock absorption, reducing the risk of injury and, thanks to a lowered energy recoil, it provides more player comfort. The mixture gives the artificial turf fibre the necessary support function and does not rot," explains Michael Pajak, Product Manager for Synthetic Turf Systems at Polytan.

Infill made of shredded olive pits is another sustainable alternative to rubber granules. Like the other infills that have already been mentioned, it is compostable. Here too, the following applies: olive pit granules do not float, and form a durable and temperature-regulating material.



# SUSTAINABLE

© Amorim Cork Composites. All rights reserved.



# SYNTHETIC SURFACES

Synthetic surfaces from Polytan are proven top-quality products that have been used around the world for decades – in professional stadiums, club facilities and amateur sport alike.

Polytan's systematic construction method combines optimal athletic properties with high durability and a long lifespan – tried, tested and certified in accordance with all conventional standards. We can offer you synthetic surfaces with an optimal price-performance ratio, tailored to your individual requirements. As well as classic running track surfaces, our product portfolio also features multifunctional sports surfaces, tennis surfaces and fall protection surfaces.

## Rekortan®

Product	GT	Surface	Certification	Sport	Division
Rekortan GEL GT	Organic	Structured	WA, EN, RAL	Athletics Competitive sport	Professional
Rekortan PUR/Indoor		Structured	WA, EN, RAL	Athletics Competitive sport	Professional
Rekortan M/Indoor		Structured	WA, EN, RAL	Athletics Competitive sport School sports	Professional
Rekortan BS		Structured	WA, EN, RAL	Athletics Competitive sport School sports Multi-purpose	Professional Amateur Leisure
Rekortan B2S		Structured	EN, RAL	Athletics Competitive sport School sports Multi-purpose	Professional Amateur Leisure
Rekortan AS GT	Organic	Structured	WA, EN, RAL	Athletics Competitive sport School sports Multi-purpose	Professional Amateur Leisure
Rekortan SL		Structured	EN, RAL	Athletics Competitive sport School sports	Amateur Leisure
Rekortan SES		Structured	EN, RAL	Athletics Competitive sport School sports	Amateur Leisure
Tartan GOLD		Structured	WA, EN, RAL	Athletics Competitive sport	Professional





## POLYPLAY

Product	GT	Surface	Certification	Sport	Division
PolyPlay S		Smooth	EN, RAL	School sports Multi-purpose Miniature playing fields Rehab facilities	Amateur Leisure
PolyPlay SE		Smooth	EN, RAL	School sports Multi-purpose Miniature playing fields Rehab facilities	Amateur Leisure
PolyPlay FS GT	Organic	Smooth	EN, RAL	Playgrounds Kindergartens Recreational parks Park facilities	Leisure
PolyPlay FSI GT	Organic	Smooth	EN, RAL	Playgrounds Kindergartens Recreational parks Park facilities	Leisure

## Laykold

Product	GT	Surface	Certification	Sport	Division
Laykold Advantage		Textured	ITF	Tennis	Professional Amateur
Laykold Masters Color		Textured	ITF	Tennis	Professional Amateur
Laykold Masters 5		Textured	ITF	Tennis	Professional Amateur



**TESTED AND  
CERTIFIED**

Synthetic surfaces from Polytan fulfil the highest requirements and conform to all conventional standards and environmental regulations, domestically and internationally. International sports associations place their trust in Polytan and have awarded official certification to many of our products in accordance with their guidelines.

The high quality and performance of our synthetic surfaces is demonstrated by the confidence placed in our products by World Athletics (WA). In addition, our products are certified by the International Tennis Federation (ITF).

# SYNTHETIC SURFACES – STRUCTURE AND TECHNOLOGY

Synthetic surfaces from Polytan are complex structures that are composed of different layers, depending on their specific purpose. With a thickness of 8-35mm (or up to 130mm for fall protection surfaces), the elastic base layer is both the thinnest and the most complex part of the overall system. It determines the athletic and protective properties of the surface. Depending on requirements, different materials are combined to form an ideal surface that is optimised for the intended purpose. Polytan synthetic surfaces can be water-permeable or impermeable, pour or bulk-coated, solid or multi-layered. They are always installed as a seamless, permanent construction.



## SUBSTRATE PREPARATION

Asphalt base layer  
(bound (base) layer)

(Base) layer  
without  
binding agent

Foundation





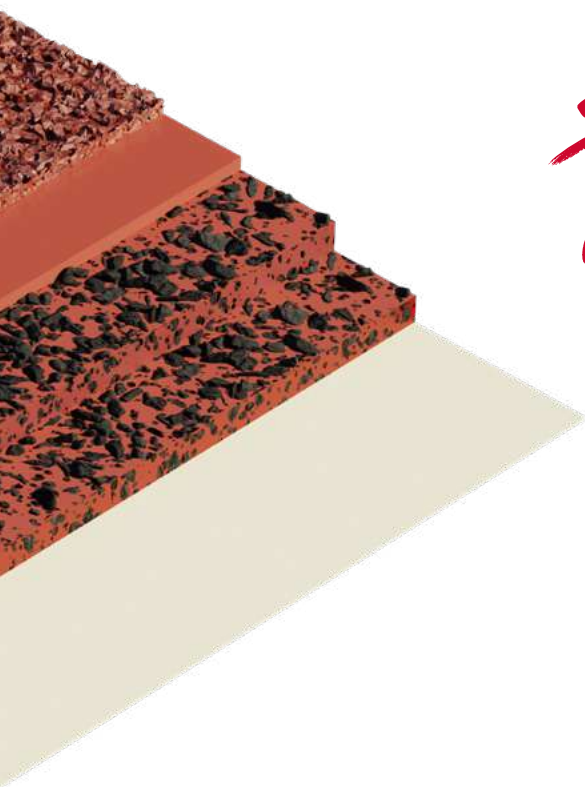
## SURFACE – SMOOTH OR STRUCTURED

The final surface coating consists of high-quality EPDM granules, either with a smooth or structured finish. The structure, installation thickness, shape, quantity and distribution of the granules have a significant influence on the athletic properties, shock absorption and deformation of the surface. When it comes to temperature stability, colour fastness, UV-stability, wear-resistance and tensile strength, stable properties are important for a durable surface. Polytan EPDM granules deliver consistently outstanding values in terms of these material properties.



# SHOW YOUR COLOURS

We offer our synthetic surfaces in a wide variety of colours.



Brick red



Chili red



Eggshell



Light grey



Hertha blue



Blue/yellow



Spring green



Reseda green

## BASE LAYER

The base layer, made of rubber granules and a polyurethane binding agent, provides the necessary elasticity. The installation thickness and granule shape determine the precise shock absorption properties of the surface, providing optimal, tailor-made conditions for the intended sport or fall protection surface.



Further information about our synthetic surfaces can be found here:  
[lead.me/synthetic-surface](https://lead.me/synthetic-surface)

# POLYPLAY FSI GT SETS NEW STANDARDS

The combination of BASF Infinergy® and Polytan's Green Technology binding agent enables outstanding fall protection properties, as well as optimised material consumption.

## INFINERGY® INSIGHT

The benefit of using Infinergy® in the base layer is its elasticity, which is like rubber, but lighter. The material is composed of foam particles, made from thermoplastic polyurethane (E-TPU). The covering layer of PolyPlay FSI GT consists of PU-bound EPDM granules.

## Fully flexible...

Thanks to the combination of BASF Infinergy® and a specially developed binding agent containing cardyon® technology, PolyPlay FSI GT exhibits outstanding elasticity that withstands extreme temperatures. Accordingly, PolyPlay FSI GT can still be used in cold weather conditions, e.g. as a play surface for children.

## ...and versatile

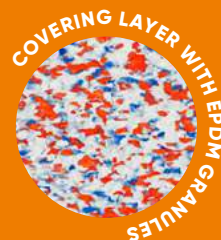
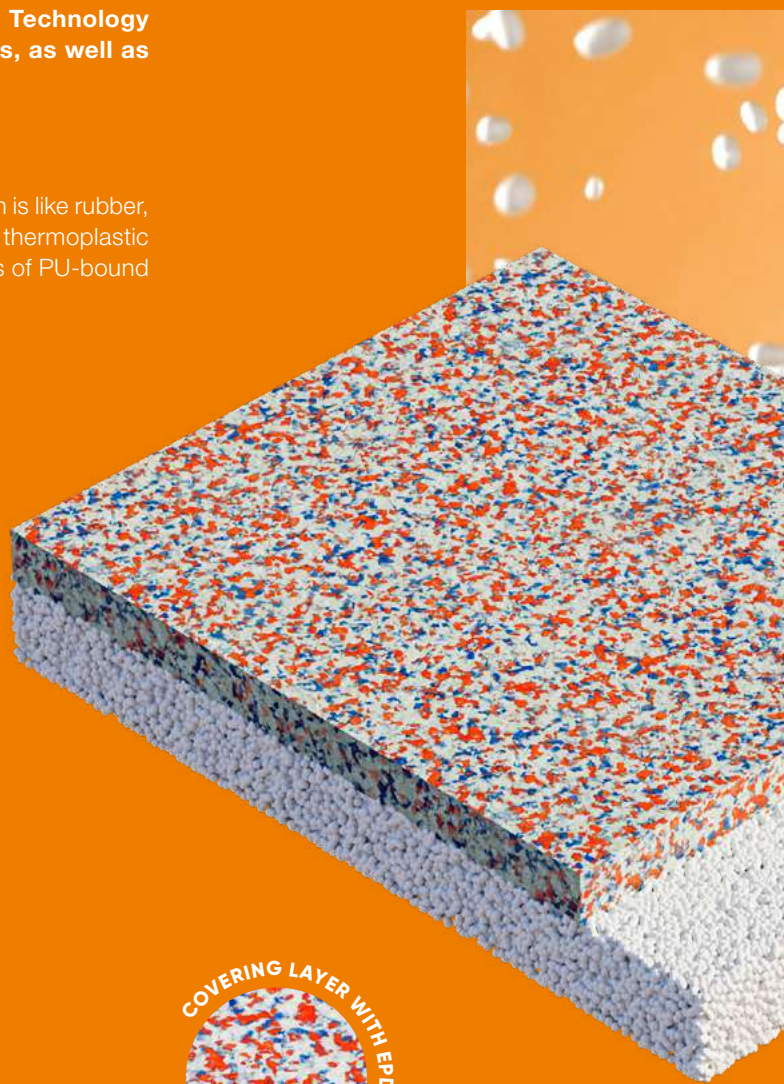
In the outdoor segment, PolyPlay FSI GT has set a new milestone in unsealed, sustainable and eco-friendly fall protection surfaces in schools, facilities for the elderly, rehab facilities, kindergartens and playgrounds.

## Green design...

The high-performance Infinergy® material by BASF used in PolyPlay FSI GT has an excellent environmental footprint and is OEKO-TEX®-certified – 100 % recyclable, waste-free and water-permeable.

## ...eco-friendly production

Reduced pour density means that less material is needed. What's more, Infinergy® is extremely durable in terms of elasticity and stability.



**POLYPLAY®**



Made with E-TPU  
from BASF

**Infinergy®**



**“The collaboration between the Sport Group and BASF will generate a sustainable new solution for the construction of sports facilities.”**

**In an interview with ON TOP, Jens Dierssen of BASF highlights the possibilities provided by the thermoplastic polymer Infinergy®.**

**Mr. Dierssen, what are the properties of Infinergy® and what is it made of?**

Infinergy® is made of expanded TPU (E-TPU). This is a thermoplastic polymer and is characterised by immense elasticity and outstanding durability.

**What are your hopes for the partnership between BASF and the Sport Group?**

I am very pleased with this partnership, which we began a little over two years ago and which has intensified considerably in recent months. The strategic collaboration between the Sport Group and BASF will generate a sustainable new solution for the construction of sports facilities.

**How easily can Infinergy® be recycled?**

In sport, it can be used to make unsealed, sustainable and environmentally friendly sports facilities, running tracks and playgrounds. The production cycle is also completely waste-free. The product can be removed and reused without any harmful residues.

**How does the elasticity perform in extreme weather conditions?**

To demonstrate how good it is, we held a presentation in front of journalists, in which we exposed a normal sport shoe and a shoe made with Infinergy® to extreme cold at minus 20 degrees Celsius. In the test, the normal shoe was completely stiff and inflexible, while the Infinergy® shoe retained all its elasticity.

**Where has Infinergy® already been used successfully?**

As well as in sports shoes, it has also been used in a tennis racquet, designed in collaboration with Dunlop. Alternatively, it could be used in work shoes for people who stand in a production line all day or who walk a lot. Thanks to its comfortable properties, it keeps fatigue at bay and protects the joints, as confirmed by a study by the University of Rostock. We show all the things it can do in our virtual showroom.

**The virtual showroom:** [www.infinergy-virtualshowroom.com](http://www.infinergy-virtualshowroom.com)



**JENS DIERSSEN – DIRECTOR OF  
GLOBAL BUSINESS MANAGEMENT  
INFINERGY® AT BASF**

Chemist Jens Dierssen has worked for BASF since 2000. Based in Singapore, Dierssen has overseen the development of Infinergy® from the beginning and is now responsible for marketing the polymer as Director of Global Business Management Infinergy®.



**Read the full interview at:**  
[l.ead.me/polyplay-fsi-gt-en](https://l.ead.me/polyplay-fsi-gt-en)

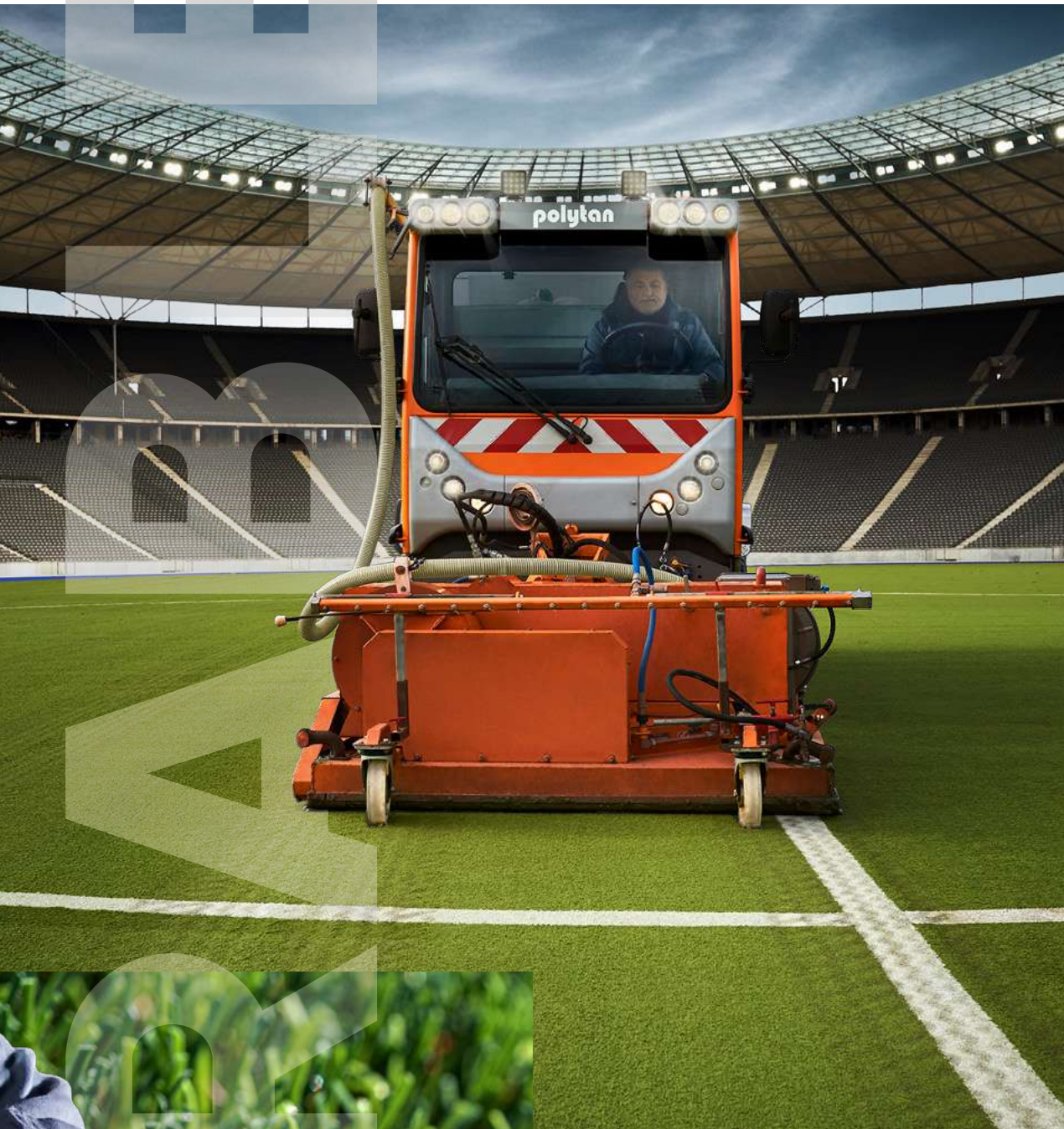
# WE MAKE SPORT. DURABLE.

---

Maintain the long-term athletic  
playing properties of your pitch  
with professional service







**polytan**  
Service GmbH  
**WE MAKE SPORT.**

**PROFESSIONAL SERVICE**

Would you like to enjoy your sports facility for a long time to come? Then good maintenance is a must.

Polytan Service GmbH offers professional support with all maintenance work. Thanks to professional staff and state-of-the-art technology, your synthetic turf or running track will remain in tip-top condition throughout its entire lifespan.





# HOW TO TAKE CARE OF SYNTHETIC TURF

---

By opting for Polytan, you have not only chosen a high-quality sports surface that is perfectly tailored to your needs; you can also rest assured that you will always have a professional service partner at your side.





## DRY CLEANING AND GRANULES

Either as a one-off service or a fixed maintenance contract, Polytan offers deep cleaning for synthetic turf and refilling of rubber granules, quartz sand and cork. Depending on the location, Polytan recommends deep cleaning at intervals of 1 to 3 years. When the turf is dry, a suitable vacuum sweeper is used to extract the granules, clean them, and return them to the pitch.

## MAINTENANCE CLEANING

To preserve the optimal playing properties of your Polytan synthetic turf long term, the turf should be brushed regularly and the infill levelled and loosened as part of a regular maintenance routine. We recommend our ACS maintenance device for this purpose. For fully automated care, we recommend our TurfRob maintenance robot.

## SPECIAL MAINTENANCE MEASURES

For intensive deep cleaning, our team of qualified professionals offers various dry or wet cleaning methods using a machine. This should be performed once a year by a RAL-certified provider such as Polytan.

## REPAIRS

Repairs are professionally performed by our Polytan service team, e.g. replacing worn-out penalty spots, renewing line markings or restoring stress zones.

## REMOVING OLD SYSTEMS / RECYCLING

We also handle the removal of old systems for you – quickly and responsibly: old surfaces are removed layer by layer, disassembled into their individual components, and then reprocessed or reused.



# HOW TO TAKE CARE OF SYNTHETIC SURFACES

---

Even running tracks and multifunctional surfaces can accumulate dirt over time, so that the surface becomes weathered, mossy or encrusted. However, this type of dirt is usually superficial and can be removed very easily. Damage, on the other hand, should be repaired by our Polytan specialists as soon as possible.



Playground on Körschstrasse in Stuttgart before and after cleaning.

## THE POLYMOBIL

The PolyMobil has been cleaning running tracks and hockey pitches across Europe for 30 years.





## REPAIRS

Damage due to vandalism, improper use or wear is professionally repaired by our Polytan service team. We also refresh line markings quickly and efficiently.

## CLEANING

Common types of dirt caused by environmental influences can be removed by a pressure washer – restoring the athletic and aesthetic properties of the running track in no time.

## REMOVING OLD SYSTEMS / RETOPPING

With the Polytan retopping system, there is no need to laboriously remove and dispose of old surfaces. Instead, these can be used as a substrate for new surfaces.

## WHAT CAN I DO MYSELF?

Regularly inspecting your sports surface prevents damage. In general, you should remove loose debris such as leaves, wood, litter, stray sand from nearby long jump pits, and weeds – especially on water-permeable surfaces – as well as moss and algae.

The inspection frequency depends on the intensity of use and seasonal conditions, such as heavy leaf-fall in the autumn. The sports facility should be thoroughly inspected for damage every quarter. Our service team will be happy to assist you. After non-sporting events, the synthetic surface must immediately be checked for damage.

Further tips and information about maintaining synthetic turf surfaces and systems can be found in our maintenance handbooks. Contact us at: [info@polytan.com](mailto:info@polytan.com)



# CLEARTURF M2

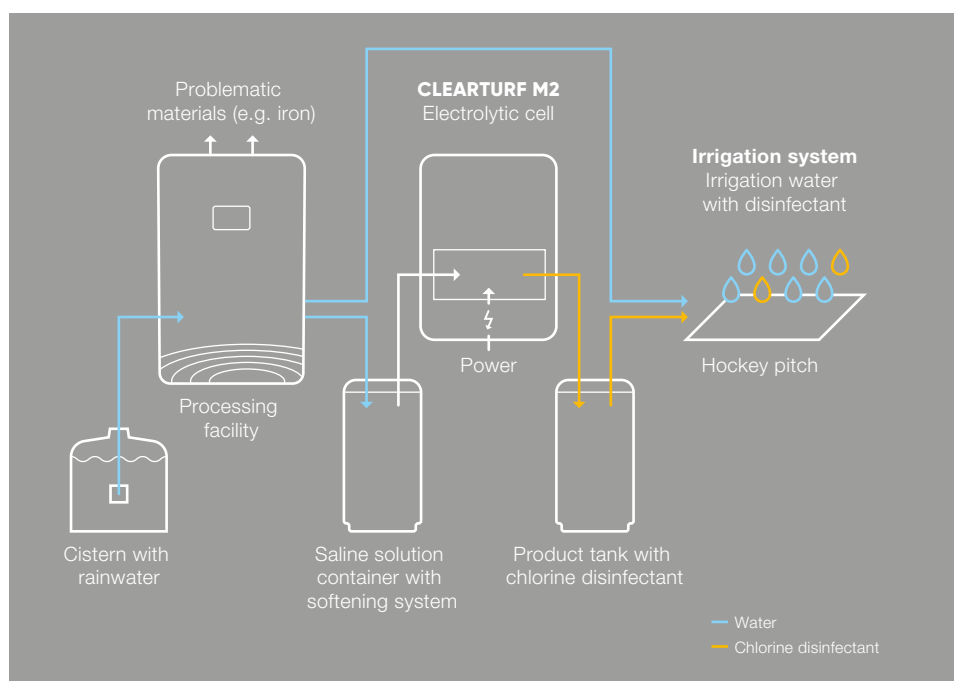
## RELIABLE PROTECTION AGAINST ALGAE

Algae is a problem for many operators of hockey pitches – and not only because it alters the appearance of the pitch and negatively affects its playing properties. Algae also pose a health risk.

**With the ClearTurf M2 system, Polytan offers an ecological solution to the problem. The environmentally friendly water treatment plant is simply integrated in the irrigation system and water circuit of the sports facility.**

Hockey pitches must be watered. The constant moisture on the pitch, along with environmental influences such as leaves, pollen and dust, can lead to red and blue algae, which grow in the gaps between the turf fibres. ClearTurf M2 prevents algae from forming by optimising the pH value of the water and extracting chlorine from the supplied water. This is then mixed into the irrigation water at the required dose. With regular use, this system not only prevents algae and dirt, but also considerably reduces maintenance.

The environmental aspect is important, too. ClearTurf M2 has been tested for its environmental compatibility and groundwater safety by independent laboratories, and declared harmless. It does not pollute the groundwater. Other forms of environmental pollution have also been excluded. The system is also certified.



The ClearTurf M2 system from Polytan offers numerous advantages over conventional cleaning. It keeps dirt and algae at bay long term and reduces maintenance costs. The turf filaments remain intact, which not only improves the playing properties but extends the lifespan of the turf. With ClearTurf, Polytan offers an efficient, environmentally friendly way to keep your hockey pitch clean long term, and to reduce maintenance and operating costs.





# THE WATER WASHERS

## Innovative filter system for dirty cleaning water

**Polytan is forging new paths in the maintenance of sports surfaces. The latest example is the innovative filtration of dirty water when cleaning running tracks, synthetic turf pitches or multifunctional synthetic surfaces. The new CleanTech water filter system removes dirt particles of up to 70 to 80µm in size from the water used while cleaning.**

Running tracks and synthetic turf pitches are exposed to considerable environmental influences. Over time, they accumulate all kinds of dirt. This can include organic substances such as pollen, as well as fine dust generated by industry or traffic, which is transported onto the surface by wind or rain. Regular professional cleaning not only improves the performance of the facility, but extends its lifespan as well.

Previously, dirty cleaning water was pumped directly into the drainage channel. To reduce the environmental impact, Polytan has developed the new CleanTech filter system to remove the dirt from the water and dispose of the sludge responsibly. The filter can clean up to 55l of water per minute.

2,000l of cleaning water, which is the capacity of the filter system, can easily be cleaned of more than 50kg of solid particles. In extreme cases, these particles can build up in the drainage channel.

The PolyMobil cleans the running track using high pressure in a familiar and thorough manner. Polytan CleanTech collects the dirty water generated during the process in a sedimentation tank so that the coarse dirt settles at the bottom. In the second step of the filtration process, the water is pumped into a collection basin. There, even more dirt is removed by a fine filtration process (70 - 80µm) until the water is clear of any remaining dirt particles. Studies have proven that the last filtration step reduces the amount of dirt by a further 50 %.

With this innovative filter technology, Polytan CleanTech helps ensure that this dirt never enters the drainage system in the first place and reduces the impact on sewers and treatment plants. Instead, it is separated right from the start and disposed of in an environmentally responsible way.



# WE MAKE SPORT. FASHIONABLE.

---

We've been giving makeovers to running tracks, all-weather pitches, synthetic turf systems and much more since 1969. Now it's your turn!





# Polytan **MERCH**



**DRESS TO  
IMPRESS**



with our Polytan Collection  
in the new Polytan Merch Store:  
[lead.me/merch-polytan](https://lead.me/merch-polytan)



# WHAT ELSE CAN WE DO FOR YOU?

## PROJECT SUPPORT

Designing a sports facility is a complex task with a variety of factors that need to be taken into account, depending on its intended purpose. We will be happy to support you, starting from the planning phase of your project, by providing the following:

- CAD plans and technical drawings
- Measurements and line markings
- Financial consultation

## TRAINING AND SEMINARS

Our seminar programme can make any groundskeeper a Polytan maintenance expert. We offer various training programmes, depending on the product:

- General maintenance seminar
- Deep cleaning of synthetic turf
- Surface cleaning of synthetic surfaces

## ACCESSORIES

As well as maintenance equipment for our synthetic turf systems and surfaces, we offer a large selection of light-quality sports equipment and accessories:

- Goals, baskets, nets and markings for all popular ball sports
- Safety nets, mats, take-off boards, starting blocks, hurdles, etc. for athletics
- Player cabins, winners' podiums, transport carts and much more



VISIT US AT



## LEGAL INFORMATION

### Publisher

Polytan GmbH  
Gewerbering 3  
86666 Burgheim  
Germany  
[www.polytan.com](http://www.polytan.com)  
Responsible in accordance with  
press law: Tobias Müller

### Printing

Druckteam Berlin  
Gustav-Holzmann-Straße 6  
10317 Berlin  
Germany  
[www.druckteam-berlin.de](http://www.druckteam-berlin.de)

### Concept and design

zeroseven design studios  
Frauenstraße 83  
89073 Ulm  
Germany

### Edition 06/22

This magazine was printed climate-neutrally on Circle Offset Premium White Papier (100% recycled paper certified with the Blue Angel, FSC® recycled credit and climate-neutrally produced).



**Carbon neutral**

Print product

[ClimatePartner.com/11854-2202-1002](https://ClimatePartner.com/11854-2202-1002)

# WE MAKE SPORT.

# polytan

WE MAKE SPORT.

Polytan GmbH | Gewerbering 3 | 86666 Burgheim | Germany  
+49 8432 87-0 | [info@polytan.com](mailto:info@polytan.com) | [www.polytan.com](http://www.polytan.com)

┌

┐

└

┘

*Liga*TURF

*Liga*GRASS

POLIGRAS®

Laykold®

Rekortan®

POLYPLAY®