

# polytan



FULL CATALOGUE

POLYTAN SPORTS SURFACES

## SYNTHETIC TURF



ENTANGLEMENT technology  
High resistance against wear  
and soft filaments



100 % PE formulation  
Exclusive PE formulation



CoolPlus function  
Reflects infra-red radiation,  
providing a cooler surface



Certifiable  
Suitable for certifications from  
the World Sports Associations  
or according to national/  
international standards



SharkSkin technology  
Smoother surface, reduced  
glare and a more natural look



RAL-tested  
100 % quality control through  
neutral testing institute



BiColour  
Two-tone filaments for an even  
more natural appearance



Resource conservation  
Careful use of resources



Texturing process  
Texturised filaments for lasting  
turf volume and easy main-  
tenance and care



Professional  
Suitable for stadiums  
and professional sports



PreciTex  
High-performance texturing  
process for precise multi-shape  
filament cross-sections



Performance  
Suitable for club sports and  
municipal facilities



MultiBack technology  
Textile secondary backing for  
improved dimensional stability  
and force absorption

## SYNTHETIC SURFACES



Waterproof  
Waterproof surface



Factory textured topcoat  
Consistently high quality and  
easier installation



Water-permeable  
Water-permeable surface



High Performance Surface  
Superior abrasion resistance



Smooth  
Surface with flat-laid,  
bound granules



Certifiable  
Suitable for certifications from the  
World Sports Associations  
or according to national/  
international standards



Structured  
Surface granules interspersed  
with visible tips



RAL-tested  
100 % quality control by a  
neutral testing institute



Spike-tested  
Suitable for running shoes  
with spikes



Resource conservation  
Careful use of resources



MultiColour  
Colour-coordinated areas for  
more individuality



Professional  
Suitable for competitive sports



UV stable colours  
Polytan uses modern  
formulations to deliver high  
UV stability



Multifunctional  
Suitable for school sports  
and ball sports



Seamless  
No seams and abutting edges,  
easy maintenance with long lifespan



Indoor multi-functionality  
Suitable for multi-purpose halls



# SPORT BRINGS PEOPLE TOGETHER



Sport brings together generations and cultures. Sport represents competition as well as respect. Sport is excitement and passion, and can help break down prejudice and contribute to integration into a community.

We are one of the leading manufacturers of sports floors and delighted to make a contribution to the success of this social and political task: we build sports facilities for amateur and high-performance athletes, for children and adults, councils and clubs, schools, nurseries and care homes for older people – in short: for everyone.

However, we focus on more than just future users of our sports floors – we also prioritise you: the people who create these sports facilities. Whether you're a building contractor, architect, planner, club or association, our most important aspiration is to give you the perfect basis for success.

To this end, we offer all-round support, including expert advice as well as working together to find solutions that fit not only your requirements but also your budget. This service is brought together with extremely high-quality products, ensuring that you will enjoy our systems for many years to come. We also offer a

wide range of services that enable you to always be sure you've made the right choice by purchasing one of our products.

Our experience maintaining many years of partnerships and collaboration with major associations and regularly fitting out renowned international competitions speaks for itself.

This catalogue presents the full range of our portfolio, and we would relish the opportunity to inspire you with our products and service in practice!

Best regards,

Markus Deimling,  
CEO Polytan GmbH

# CONTENTS

## THE COMPANY

Polytan – The company	08
Taking responsibility for people and the environment	10
Our history	12
Everything from a single source	14
Consultation and support	16
Research and development	18
Production	20
Installation	22
Repairs and service	24

## TURF/SYNTETIC TURF

Synthetic turf systems	28
Overview of synthetic turf systems	30
Synthetic turf systems – structure and technology	32
Turf fibres	34
Elastic layers	36
Infills	37
ComfortClimate	38
Certified and preferred	40
LigaTurf RS Pro II CoolPlus	42
LigaTurf RS+ CoolPlus	44
LigaTurf Legend	46
LigaTurf Ultimate CoolPlus	47
LigaGrass Pro CoolPlus	48
TerraGrass	50
Poligras Platinum CoolPlus	52
Poligras Mega CoolPlus	54
Poligras Terra CoolPlus	56



# POLYTAN – THE COMPANY

## THE PERFECT SURFACE FOR ATHLETIC ACHIEVEMENT

Our mission at Polytan has been to provide the perfect surface for athletic achievements, and we have been doing so for almost 50 years. What in 1969 started as a pioneering task in the area of synthetic running tracks has to the present day remained a passion that constantly pushes us forward to new levels of performance.

Polytan is now one of the world's leading manufacturers of synthetic sports surfaces: from running tracks to all-weather and soft-impact surfaces, to highly developed synthetic turf systems, we offer the full product range from a single source including installation, maintenance and service – Made in Germany.

Sport surfaces from Polytan are used not only in leisure facilities and schools, but also in international competitive sports – very recent examples of which include the FIFA Women's World Cup in Canada and the Olympic Games in Brazil. We believe that certifications in accordance with international standards are just as important as a clear commitment to sustainability.





GERMANY



## CERTIFIED IN ACCORDANCE WITH RAL AND ISO

Our synthetic turf systems and our synthetic surfaces both carry the RAL quality mark, representing the highest level of quality from production right through to installation.



RAL quality mark 943,  
synthetic surfaces

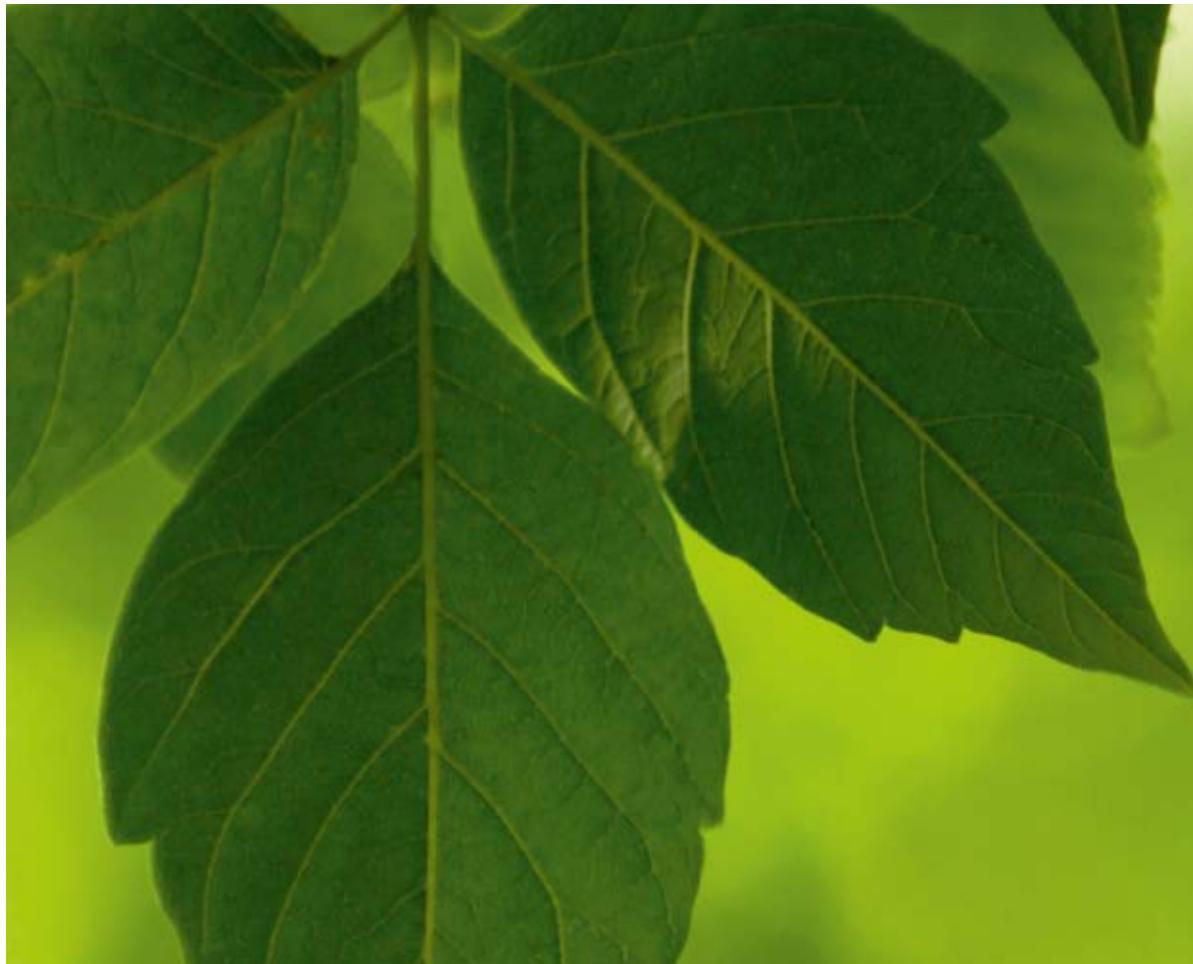


RAL quality mark 944,  
synthetic turf systems



Polytan, a responsible, sustainability-focused company, has also been certified with the internationally recognised ISO 9001 and 14001 standards for quality and environmental management, as well as ISO 50001 for energy management.

# TAKING RESPONSIBILITY FOR PEOPLE AND THE ENVIRONMENT



Polytan has always attributed great importance to sustainability and environmental compatibility. As a system manufacturer with our own research and development, production, sales and in-house installation technology, we can stay true to this claim in our own special way.

All Polytan synthetic turf systems and synthetic surfaces are produced at our advanced production site in Grefrath, Germany. This central location in Europe ensures short and efficient transport routes to all European markets, and effectively reduces the embodied energy of our sports surfaces, while environmentally friendly raw materials and low-energy production processes ensure compliance with all environmental requirements stipulated by national and international standards.



Products that feature this icon use up particularly low levels of resources.



#### CAREFUL USE OF RESOURCES

Our synthetic turf systems also allow for considerably more intensive use than natural grass; this is particularly beneficial for surface use in congested urban areas in particular. Maintenance and servicing also require significantly lower costs and less resource use than natural grass, particularly with respect to water consumption, further improving the eco-balance of our products. We also support our customers in the event of wear or damage to surfaces, providing cost-effective and environmentally friendly solutions for repairs and renovations, or expert removal together with reuse, recycling and further processing of our products.

We are a responsible one-stop supplier. We ensure appropriate and careful use of resources in all phases of our products' life-cycle – from selecting raw materials to production, installation and use, right through to disposal and recycling.

# OUR HISTORY



1969

Firl + Schretter Sportstättenbau OHG is founded and "Polytan" is registered as a trademark.

1974

PRATER STADIUM, VIENNA

Polytan installs a synthetic surface (Polytan M) at an international athletics stadium.

1995

Polytan acquires a production site for synthetic turf and polyurethane in Grefrath (North Rhine Westphalia).

2004

LA PAZ, BOLIVIA

Polytan installs its highest situated football field to date, 4,000 m above sea level. The low-oxygen climate makes laying the 9,000 m<sup>2</sup> synthetic pitch a challenge, and everything first has to be transported up in a lift.



2005

SYNTHETIC FOOTBALL TURF FOR EUROPEAN PREMIER LEAGUE TEAMS

Polytan lays a synthetic pitch system at the Red Bull Arena Salzburg, the first premier league home stadium in Europe to be equipped with such technology. Further premier league clubs in Europe soon follow suit, with pitches being laid at the Stade de Suisse in Bern and the Stadion La Maladière at FC Xamax Neuchatel.



U17 WORLD CUP IN PERU

The U17s Football World Cup in Peru becomes the first tournament in footballing history to have all 31 matches played on synthetic turf. Four of the five host stadiums are equipped with Polytan products: the Lima main stadium as well as the arenas in Trujillo, Chiclayo and Piura.

2007

Polytan develops its market and quality leadership worldwide by acquiring the companies STI, EnviroSport and Sportsbygg.

## 1996

### OLYMPIASTADION MÜNCHEN

Polytan updates the 1972 track in time for the Spar European Athletics Cup, laying a state-of-the-art Polytan PUR surface using a re-topping process.



## 2002

### COMPLETE RENOVATION OF OLYMPIASTADION MÜNCHEN

To prepare the site for the 18th European Athletics Championships, the whole of the old track is taken up and replaced with a brand new Polytan M track in brick red.

## 2003

### NEW SYNTHETIC TURF PRODUCTION PLANT IN GREFRATH

2003 sees the introduction of fully vertical manufacturing for synthetic turf products at Polytan.

### PARTICIPATION IN THE FIFA QUALITY PROGRAMME FOR FOOTBALL TURF

Polytan becomes a licensee in the FIFA Quality Programme for Football Turf and installs the first FIFA Recommended 2 Star certified synthetic turf pitch.

## 2011/12

Polytan|STI becomes preferred producer to FIFA and preferred supplier to the FIH for world rugby. Polytan also builds the hockey pitch for the Olympic Games in London.

## 2015

### WOMEN'S FOOTBALL WORLD CUP IN CANADA

For the first time ever, all matches for the Women's Football World Cup are played on synthetic turf. Polytan provides a synthetic turf system for the BC Place stadium in Vancouver, which hosted the finals in Canada.



## 2016

### POLYTAN ON AN INTERNATIONAL STAGE

Polytan is also represented at major international sports events: the company equips the hockey field in Rio, the running track in Amsterdam Olympic Stadium for the European Athletics Championships, and the pitch edging in two European Championship stadiums in France. Astro-Turf and ProGrass also become part of the corporate group, increasing its market presence in North America.



# 16

## CONSULTATION AND SUPPORT

We work together with you to determine your requirements, enabling us to find the perfect product to meet your specific use.

# EVERYTHING FROM A SINGLE SOURCE

## HIGH PERFORMANCE AND THE SYSTEM BEHIND IT.

Every situation is unique, and that means that every solution needs to be unique as well. At Polytan, we take a systematic approach based on a sophisticated system of perfectly coordinated modules, which can be individually combined for the specific use.

We rely on an integrated solution from a single source, enabling us to supply an equally high level of quality on a global scale.

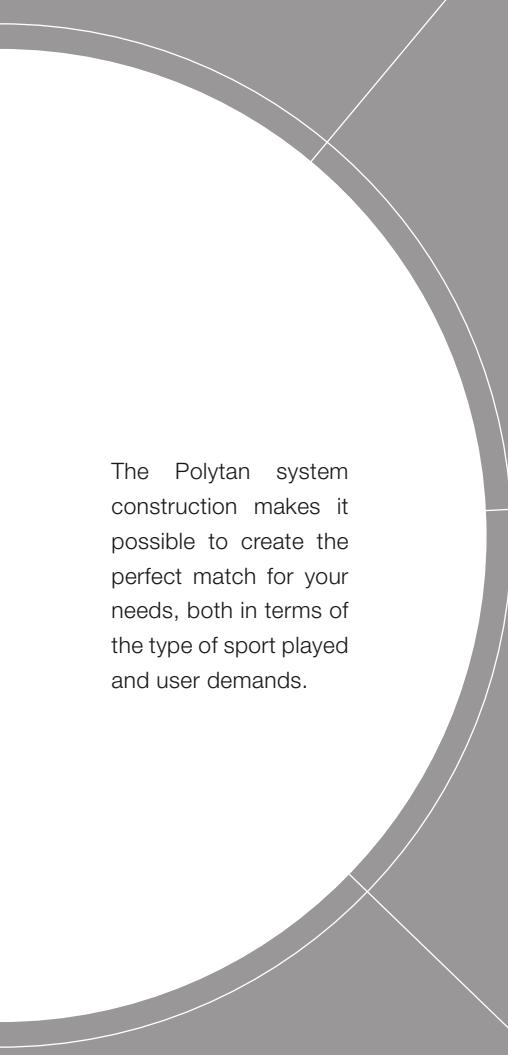


THE POLYTAN  
SYSTEM

# 24

## REPAIRS AND SERVICE

Our product range is rounded off with accessories and support, maintenance and repair services.



18 |

## RESEARCH AND DEVELOPMENT

All relevant system components are developed in our in-house laboratory, and put through their paces in extensive testing processes.

20 |

## PRODUCTION

We also hold the reins when it comes to production: all Polytan products are manufactured using our in-house production facilities.

22 |

## INSTALLATION

Polytan, a global manufacturer of sports surfaces, is the only company in all markets that has its own installation teams and machines.

The Polytan system construction makes it possible to create the perfect match for your needs, both in terms of the type of sport played and user demands.



We also provide extensive informational materials and samples to ensure that you're always happy you've made the right decision in selecting our company. Our specialists are also delighted to provide expert support in the creation of CAD plans and detailed technical drawings.



## OUR TOP PRIORITY IS MEETING YOUR NEEDS

Your needs come first: your individual requirements and specific ideas of what your new sports surface must be capable of, and the budget, are our top priority. We work together with you to find the solution that best meets your needs.

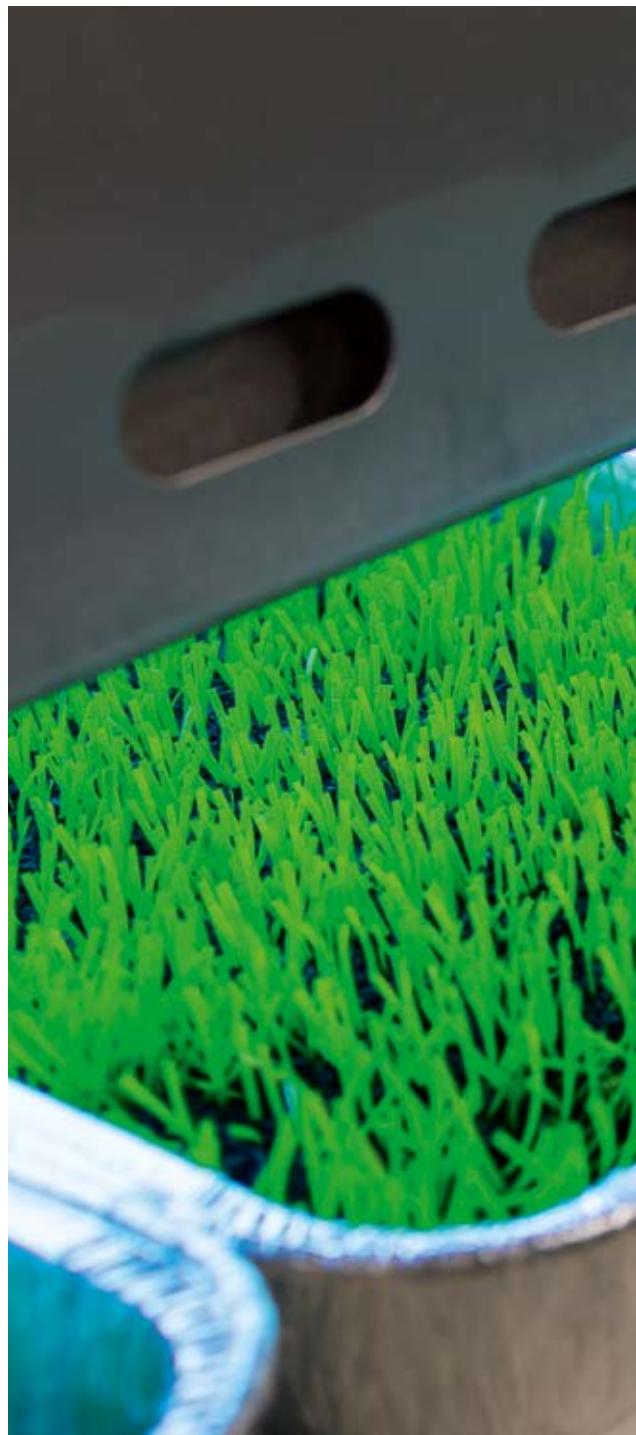
Polytan is by your side as a useful point of contact throughout the project: from choosing the right product to project planning to handover, we will provide you with reliable support and expert knowledge, based on our many years of experience. This means that everyone is happy with the final result: from the builders and planners to the clubs – and of course the players and athletes themselves!

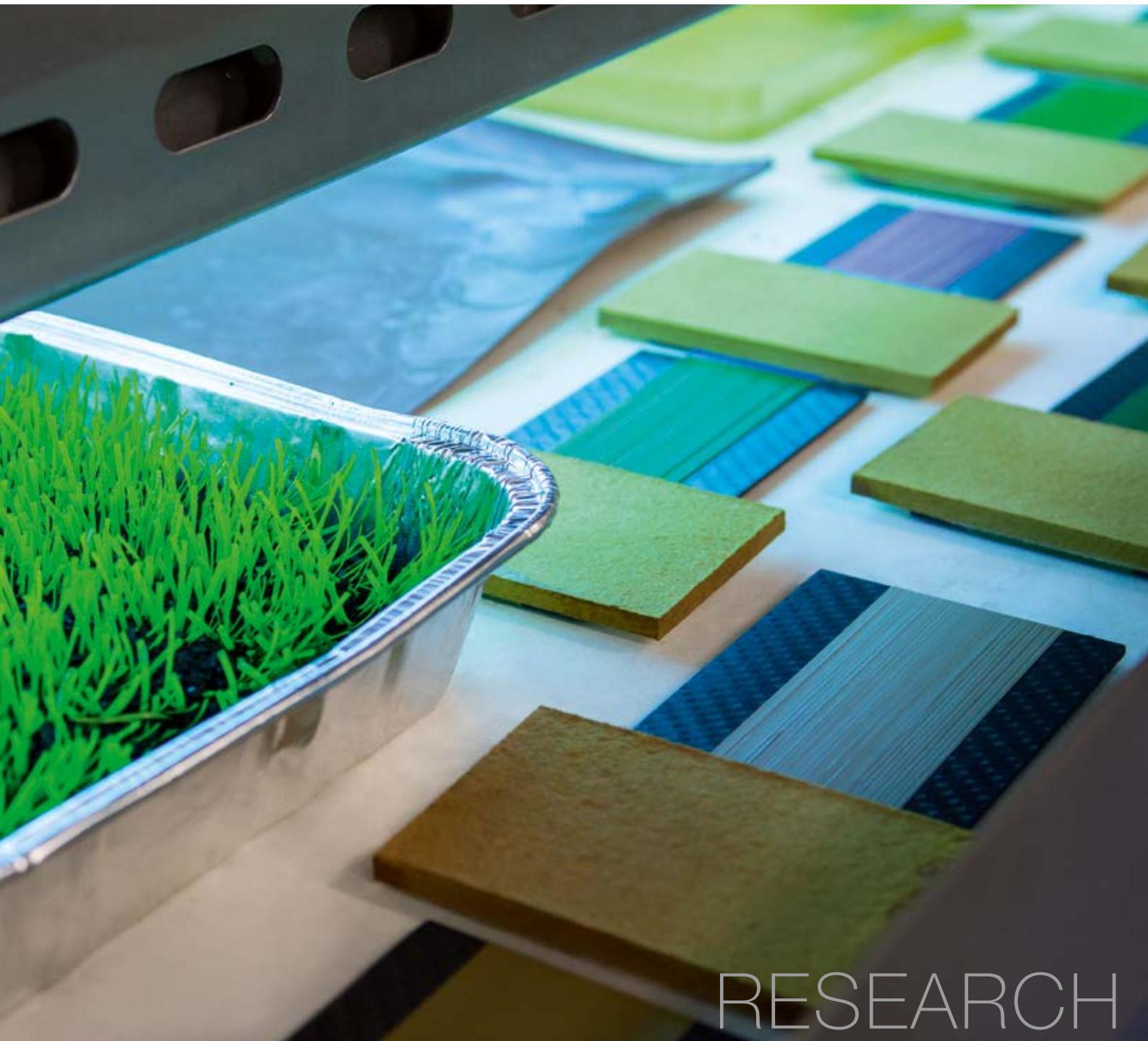
# GOOD IS NOT GOOD ENOUGH. FOR US.

Whether you need a synthetic lawn, a running track or soft-impact surfaces – Polytan creates tailor-made combinations of high-performance components to suit a wide array of requirements. This is the result of many years of work in research and development.

Our lab technicians work every day to further refine our components and find new ways to combine them for an even better result. Over the course of many years, we have developed proven module combinations perfectly suited to an enormous range of uses.

In particular, in recent years we have successfully developed a number of innovations that make our products unique in a variety of ways in the relatively young market of high-quality synthetic turf systems. We also continuously work on our formulations and system designs for our running surfaces to support elite and amateur athletes alike in their quest to achieve top performance.





## RESEARCH AND

## DEVELOPMENT

In our technical centre, all the new developments are tested under very strict conditions to assess their performance, protective effect and suitability for everyday use – far beyond current standards and specifications.

# OUR RECIPE FOR SUCCESS IS DO EVERYTHING YOURSELF

We also leave nothing to chance in the production of our sports surfaces, and instead manufacture all of our products ourselves.

In order to ensure a consistently high level of quality, the production process at Polytan starts with the formulation and production of individual components. After all, it is only possible to manufacture our top of the range products if the raw materials and composition used fully comply with our requirements.



Our "master batches", developed in-house, are key factors in determining the specific properties of the turf filament, for example its fibre resilience, elasticity and surface temperature.

# NON- PRODUCTION

Advanced production facilities are used to create premium system components with precisely defined features, which are combined to form different products depending on the intended use.

This results in sports surfaces with outstanding sport physiology-related properties, which enable an optimum use experience over the course of many years.



# PERFECTION FROM START TO FINISH



We do not use any pre-manufactured parts when putting our synthetic surfaces in place; instead, the entire surface is installed seamlessly and uniformly on-site. This ensures that the running track features extraordinary properties, consistently over its entire surface.

Installing sports surfaces demands specific expertise and a high level of precision and experience. After all, the optimum sports physiological properties of the surface can only be harnessed when all components are professionally and properly installed.

# INSTALLATION



That's why Polytan has its sports surfaces installed only by employees specifically trained for the relevant forms of processing, and this has made us the largest installation operation in the world.

No matter whether it's a case of synthetic surfaces or synthetic turf systems, all our system components, right down to the markings and lines, are installed by our own specialists or certified partners. As a result, wherever you are in the world you can be sure that the system components optimised in our development department are also implemented at the required level of quality on your site.



# WE'RE THERE WHEREVER WE'RE NEEDED

We're also by your side after installation. We strive for long-term customer relationships, making it a matter of course that we are also there for you for care, maintenance and repair.

Whether it's cleaning or repair work, topping up granules, lining work, or re-topping or renewing stress impact points, our service teams will support you with advice and services, enabling you to enjoy your Polytan sports surfaces for as long as possible.

You can also rely on us for upgrading old systems. We use one of the most efficient removal machines in the world, which as far as possible separates all the materials on site.

We also offer special care equipment and maintenance contracts, with which you can achieve optimum care for your Polytan sports surface and protect your investment in the long term.





REPAIRS  
AND SERVICE





# PRODUCTS

28 |

## SYNTHETIC TURF SYSTEMS

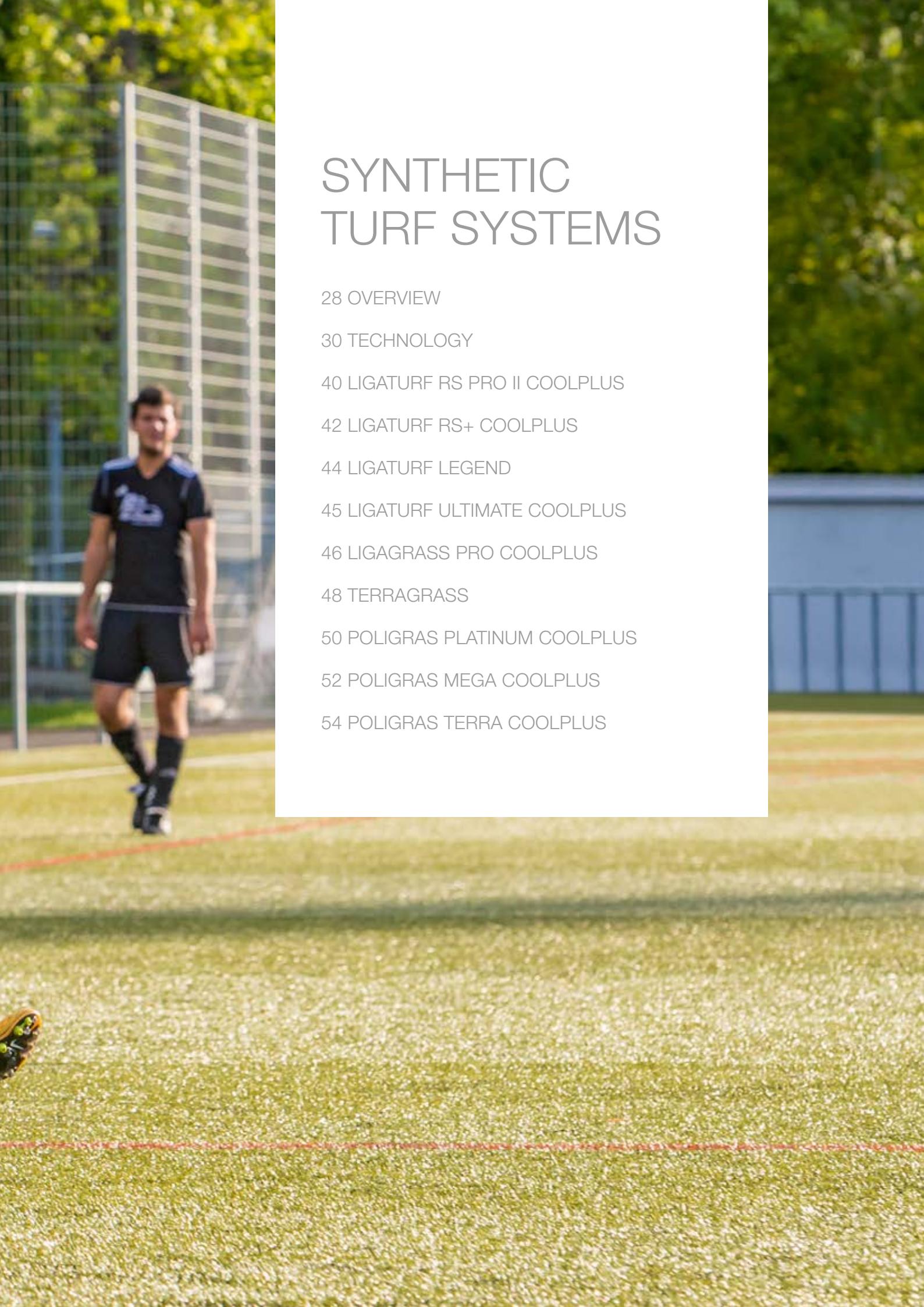
Solutions for football, rugby, American football, hockey and more

58 |

## SYNTHETIC SURFACES

Solutions for athletics, school sports, tennis, handball, soft-impact surfaces and more



A photograph of a man in a dark blue sports jersey with the number 13, black shorts, and black socks, walking across a synthetic turf soccer field. He is positioned in front of a white goalpost and a chain-link fence. The background shows a green grassy area and trees.

# SYNTHETIC TURF SYSTEMS

28 OVERVIEW

30 TECHNOLOGY

40 LIGATURF RS PRO II COOLPLUS

42 LIGATURF RS+ COOLPLUS

44 LIGATURF LEGEND

45 LIGATURF ULTIMATE COOLPLUS

46 LIGAGRASS PRO COOLPLUS

48 TERRAGRASS

50 POLIGRAS PLATINUM COOLPLUS

52 POLIGRAS MEGA COOLPLUS

54 POLIGRAS TERRA COOLPLUS

# BETTER THAN NATURAL GRASS

Whether it's football, rugby, American football or hockey, Polytan synthetic turf systems have become established in modern ball sports and have been successfully used in stadiums, tennis centres and clubs for many years.

The synthetic turf system developed by Polytan, consisting of straight or textured turf fibres, infill granules and an elastic base layer ensures an astonishingly natural-feeling surface for play, a high level of protection against injury, and outstanding wear resistance – tried and tested, and certified in accordance with all the usual standards.

With our wide range of products, we offer perfect solutions with optimum play properties for every demand and every budget – from multipurpose pitches for amateur clubs through to premier league stadiums.

## SYNTHETIC TURF SYSTEMS

PRODUCT	FOOTBALL	RUGBY	AMERICAN FOOTBALL	HOCKEY	TENNIS	MULTI-SPORT	
LigaTurf RS Pro II CP	■						
LigaTurf RS+ CP	■	■	■				
LigaTurf Legend	■	■				■	
LigaTurf Ultimate CP	■	■	■	■		■	
LigaGrass Pro CP	■			■		■	
TerraGrass				■	■	■	
Poligras Platinum CP				■			
Poligras Mega CP				■		■	
Poligras Terra CP				■	■	■	

Straight filaments, filled

Textured filaments, filled

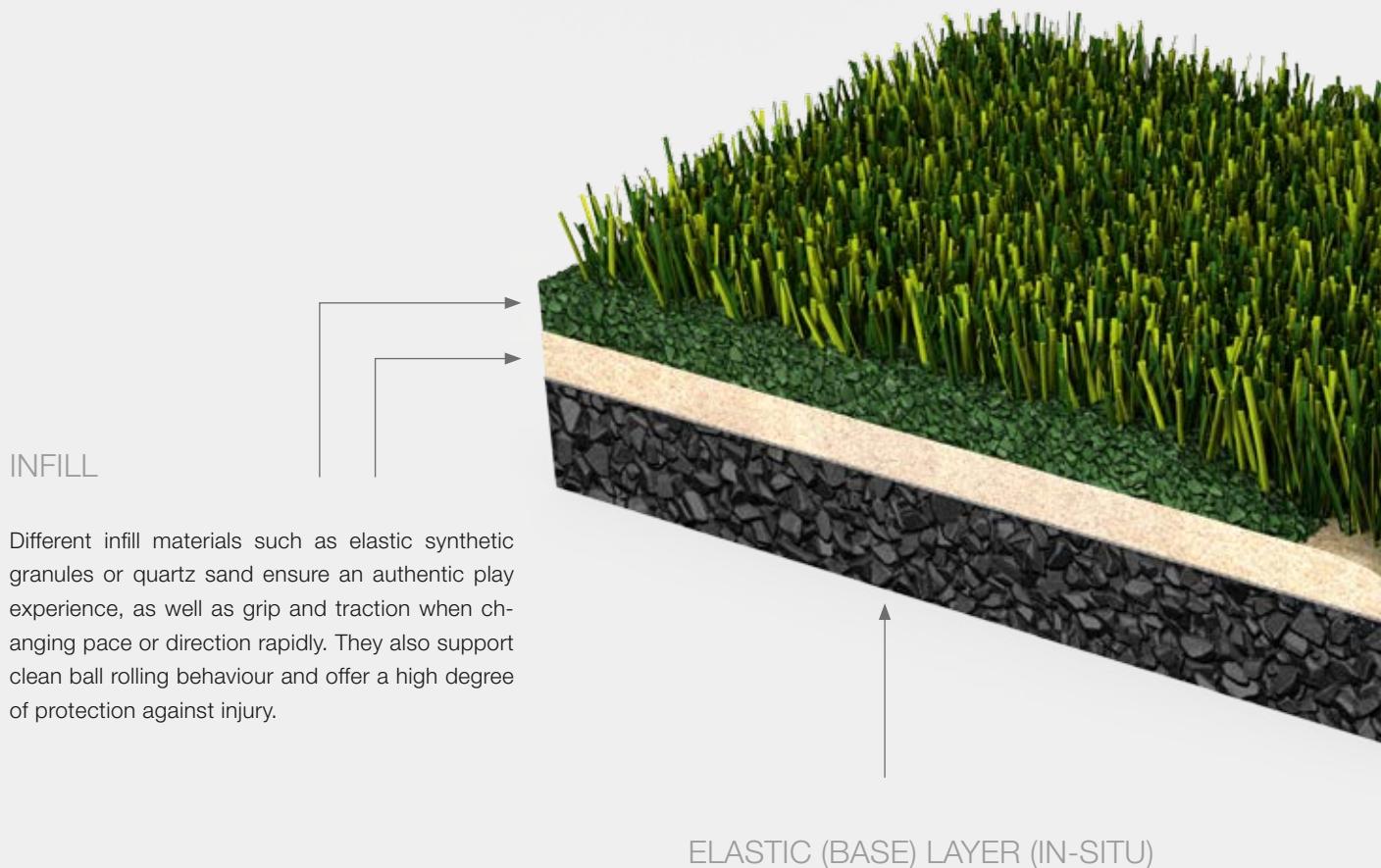
Textured filaments, unfilled

Textured filaments, filled



# SYNTHETIC TURF SYSTEMS – STRUCTURE AND TECHNOLOGY

Synthetic turf systems from Polytan are high-tech products that are made up of different components depending on the intended use. The Polytan Anti-Compaction System (ACS) is a precisely defined combination of a synthetic turf surface, infill granules and an elastic layer. The combination selected has significant influence on the preferred play properties, as well as the durability and longevity of the system.



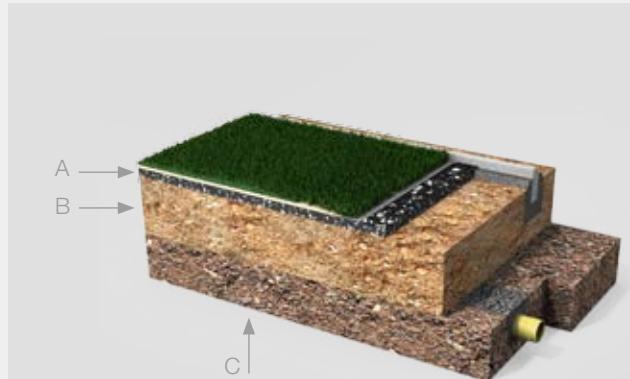
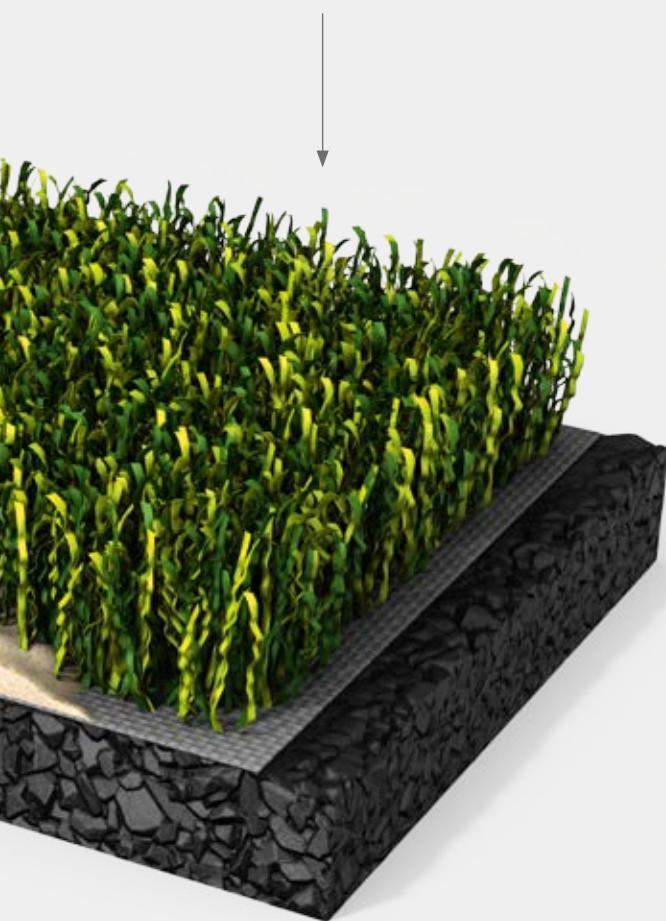
Different infill materials such as elastic synthetic granules or quartz sand ensure an authentic play experience, as well as grip and traction when changing pace or direction rapidly. They also support clean ball rolling behaviour and offer a high degree of protection against injury.

## ELASTIC (BASE) LAYER (IN-SITU)

Directly below the turf, there is a 25-35 mm elastic layer made of rubber granules and a PU bonding agent produced by Polytan. This provides a long-term guarantee for the elasticity required to ensure player safety, while the system's structure in-situ levels out any unevenness in the subfloor.

## TURF FIBRES

The turf fibres tufted onto a base fabric, together with the elastic base layer, are key in defining play properties. Depending on the relevant application, straight or textured turf fibres with precisely defined properties are used.



## SUBFLOOR PREPARATION

Polytan synthetic turf systems are generally installed on an unbound base layer in combination with a bound, elasticised base layer (ET). Standard DIN 18035-7 describes the requirements for the substructure.

### A) Bound, elasticised base layer (ET)

Bound, elasticised base layers of 35 mm or more in thickness are produced from grit, a rubber portion, and a polyurethane bonding agent. The in-situ construction method means that they are completely flat and entirely seamless, while also being water-permeable.

### B) Unbound base layer

On top of the elasticised base layer, there is a single or multi-level base layer that is around 200 mm thick and is made of natural aggregates; this layer has a stable central framework without the use of a bonding agent. In combination with the elasticised base layer, this ensures the load-bearing capacity of the turf system, while its water-permeable design enables rainwater to quickly disperse.

### C) Foundation

The foundation, consisting of the substructure and subfloor, must have load-bearing capacity, and in particular must ensure that the layers above it are even. It also absorbs seeping water or, in combination with a drainage system, supplies it to a run-off area.

# TURF FIBRES



## FORMULATION AND RAW MATERIALS

All turf fibres made by Polytan are produced using a premium PE polymer formulation which has been developed in-house. Special fibre geometries and cross-section designs make our turfs particularly resilient, and feature extraordinary shock absorption, a great deal of wear resistance and reliable fibre resilience. The particularly soft PE formula guarantees that it feels comfortable against the skin. Depending on the intended use, Polytan offers synthetic turf systems with straight or textured turf fibres, while two-colour filaments help to create a more natural grass look.



## STRAIGHT TURF FILAMENTS

The ideal choice for football pitches or playing fields used only for football. They feel soft for the players and create a natural feel for the match with perfect ball rolling and rebound properties. Almost exclusively straight turf fibres are used in professional football, rugby and American football.

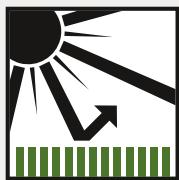


## TEXTURED TURF FILAMENTS

Although they previously mainly occupied the hockey pitch, textured turfs have undergone significant development over recent years, and become even softer due to special formulations and fibre designs. The textured structure efficiently holds sand and infill in place and ensures long-lasting volume. This means that these turfs enable intensive use while also providing a high level of availability and reduced expenses for maintenance and care.

## TECHNOLOGIES FOR A SAFE, DYNAMIC GAME

With a huge number of innovations, Polytan continues to ensure that the play properties of artificial turf systems are increasingly similar to those of natural grass.



CoolPlus function

Polytan synthetic turf systems equipped with the CoolPlus function reliably prevent the playing field from getting too hot. This is made possible by pigments incorporated on the surface of the turf fibres, which effectively reflect the infrared part of solar radiation – which is responsible for heating up the turf – on an ongoing basis.



SharkSkin technology

Polytan offers even more protection for players with its SharkSkin technology: a surface that feels like the skin of a shark prevents the "stick-slip" effect, which is responsible for grazes. The skin does not stick to the turf fibres as it can glide over them with reduced heat formation. Other benefits include that the turf is less blunt and often does not need to be irrigated in order to improve gliding properties.



ENTANGLEMENT technology

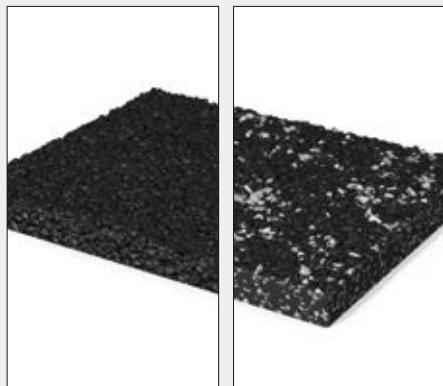
Our ENTANGLEMENT technology cross-links the molecule chains in the turf fibres with each other to create an additional non-directional molecular link. This results in improved abrasion protection and protection against UV ageing, no splaying of thinner fibre areas and improved strength in all stress zones.



PreciTEx technology

PreciTEx enables precisely controlled crimping of textured fibres, regardless of the fibre cross-section. The result is a multi-directional and tightly sealed surface with optimum ball rolling behaviour, which simultaneously supports the cooling effect of the CoolPlus function.

# ELASTIC LAYERS



The core of the Polytan ACS system is formed by the elastic (base) layer made of SBR rubber granules and a PU bonding agent. It guarantees outstanding shock absorption and deformation values in the long term, thereby providing a high degree of protection against injury. It is laid seamlessly in an in-situ procedure, therefore guaranteeing a huge number of benefits that is unique among elastic components.

## LONG-LASTING ELASTICITY

The elasticity features – which ensure player safety in the long-term – are particularly unique. Even if there is an extreme infill material shifting, or the turf surface is completely worn out, shock absorption and deformation qualities are retained perfectly – for a period of at least 30 years.

## ABSOLUTELY FLAT AND SEAMLESS

The in-situ construction method for Polytan elastic layers or unbound, elasticised base layers (ET) ensures not only that evenness requirements can be fully complied with, but also that the end result is an absolutely flat surface with the required angles of inclination. This construction method is also the only way to create a seamless connection between the laid tracks always required for a sports field. This prevents unevenness and the formation of cracks, while also ensuring that the turf surface laid on it does not develop ripples and gaps.

## A PREMIUM RECYCLING PRODUCT

However, the elastic layer not only enables sports functionality, but also features consistently reliable drainage properties and an outstanding eco-balance: the SBR rubber granules are 100 % produced from recycling material.

## GOOD FOR NATURE AND THE ENVIRONMENT

The use of recycling materials protects natural resources, and the availability of SBR rubber granules in many European countries provides for short transport routes. Water-permeable construction prevents large-area sealing, while monitoring the construction materials employed using the RAL quality mark guarantees that existing stipulations in the valid Federal Soil Protection Ordinance and international environmental standards are complied with.

# INFILLS



Synthetic turf systems can be equipped with different infills depending on the type of sport and preferred play properties. In the interests of optimum functionality and competitiveness, we concentrate first and foremost on elastic infill granules made of EPDM variants (ethylene propylene diene M-class rubber). These enable a natural grass feeling in any weather as well as grip and traction, clean ball rolling behaviour and a high degree of protection against injury. Strict compliance with low threshold values stipulated by the EU commission for PAKs in the new REACH ordinance is another advantage of EPDM technology. Classified as infill granules since mid-2016 by the EU, it not only fulfils the requirements set forth in Article 28, but also the significantly stricter requirements of Article 50 in the EU Directive cited above.



BIONIC FIBRE

Bionic Fibre translates forms and structures from nature into innovative synthetic technology. With its organic material form, it combines the positive properties of natural materials with the long-lasting reliability of proven cross-linked, EPDM-interspersed granules. We also distribute grain sizes carefully to create an even more natural appearance, meaning that our synthetic turf systems approximate the play properties of a well-maintained natural grass pitch even more closely – but are significantly more durable.



EPDM ST

The cross-linking is extremely stable and the material properties have been refined to make the EPDM ST high-performance infill particularly impressive. EPDM is also extraordinarily well-resistant, colour-stable and odourless, does not heat up as much in summer, and keeps its elasticity in colder weather. EPDM materials are also suited to indoor use and are available with flame-retardant properties if required (cfl-s1).



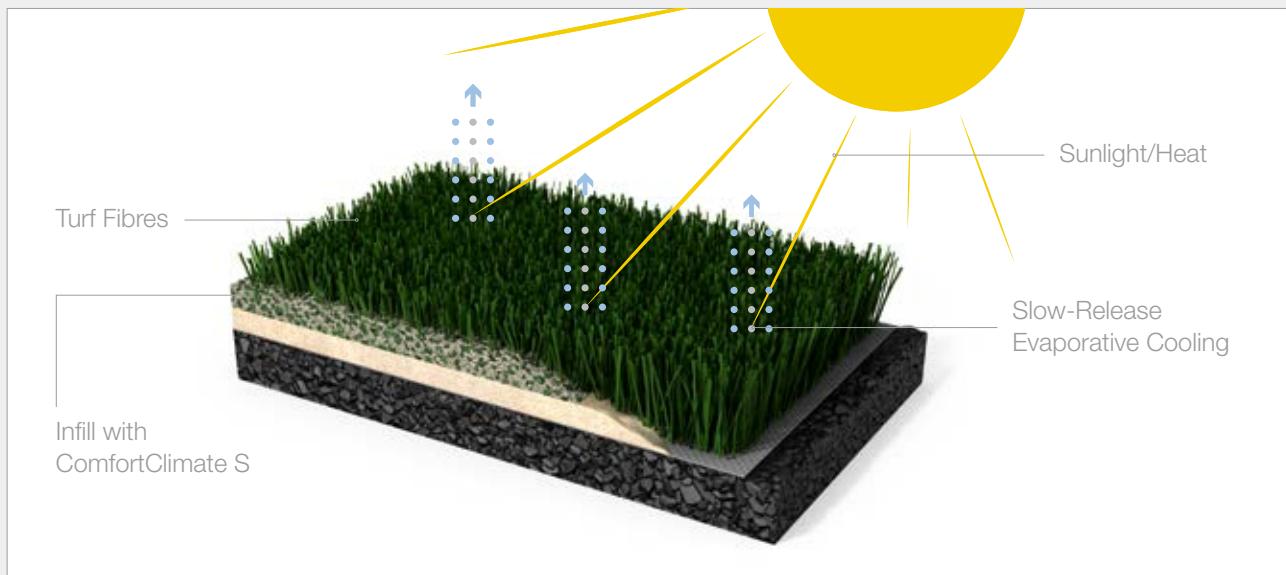
SMARTINFILL

The Polytan "SmartInfill" brings together the advantages of the tried-and-tested EPDM ST infill with a granule blend produced from technical rubber products. It consists of 50% EPDM ST and a recycled EPDM rubber that comes directly from the manufacture of exactly created, premium rubber products.



Other standard infills such as SBR, RPU or natural infill granules (sand or cork) are available at the customer's request.

# COMFORTCLIMATE – CLIMATE CONTROL FOR YOUR TURF



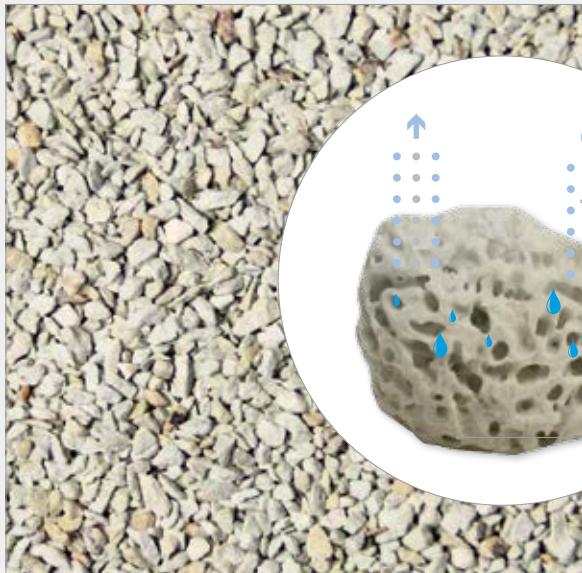
Weather extremes such as the midday heat on summer days or snow and ice in winter may impact the performance of your turf, depending on your climatic region. With the special ComfortClimate S (summer) and ComfortClimate W (winter) infills, Polytan offers an outstanding yet cost-effective solution that will help you keep your synthetic turf area usable for even longer.

ComfortClimate infills consist of a granule type that is based on natural raw materials; it is able to store large quantities of moisture and – when necessary – to release it back into the environment. This means that ComfortClimate W offers a drier, higher-grip turf surface in snow and ice, while retaining optimum damping properties.

For the other end of the scale, ComfortClimate S enables a long-lasting cooling effect in the summer heat, achieved through even evaporation of the moisture stored in the infill. For optimum play conditions all year round – tailored to your climatic region.

## ENVIRONMENTALLY FRIENDLY AND SUSTAINABLE

ComfortClimate is based on natural raw materials and does not contain any chemical additives. With its long-lasting effect of up to 2 years, ComfortClimate S means you need to water the turf less often in summer, which also results in lower water consumption. ComfortClimate W offers a cost-effective and low-energy alternative to installing turf heating.



When natural rainfall occurs or when you water the turf, ComfortClimate S stores the moisture deep within the granules. The turf surface remains dry and high-grip to the touch.

If temperatures are increasing or the turf is subject to direct sun, the moisture stored within the granules is emitted into the environment on a controlled basis. The evaporation creates a pleasant cooling effect.

## COMFORTCLIMATE S

ComfortClimate S has the capacity to delay the heating up of the entire synthetic lawn system over a period of hot weather, enabling the temperature of the sports surface to be reduced by up to 10°. In particular in combination with the CoolPlus function, ComfortClimate S therefore enables comfortable pitch temperatures during play even in high summer, while retaining all the required protection and sports functionalities.

## COMFORTCLIMATE W

ComfortClimate W withdraws moisture from the turf surface, even at temperatures below zero, and stores it within the granules. In this way, ComfortClimate W prevents black ice from forming on the turf blades, and the infill from freezing over due to water or snow sticking to it. The surface retains its full grip quality even in winter, as well as its optimum damping properties.

### PRODUCT SPECIFICATIONS

- Suitable for all sand/rubber-filled systems
- Easy installation, including in existing pitches
- Can be mixed with Bionic Fibre/EPDM ST
- Grain size: 0.5 – 1 mm

### PRODUCT SPECIFICATIONS

- Suitable for all sand/rubber-filled systems
- Easy installation, including in existing pitches
- Can be mixed with Bionic Fibre/EPDM ST
- Grain size: 1 – 2.5 mm

# CERTIFIED AND PREFERRED

The high quality and excellent play properties of our synthetic turf systems have also been verified by numerous seals of quality and certificates. For example, all Polytan synthetic turf systems meet current national and international standards and have also been certified by a number of international sporting associations.



## FOOTBALL

As a licensee in the FIFA Quality Programme, our football turfs can also be certified according to the FIFA Quality and FIFA Quality Pro standards and approved for use in national and international football championships, including the UEFA CHAMPIONS LEAGUE and FIFA. Polytan has received the world's highest number of re-certifications in accordance with the FIFA Quality Pro Standard, the highest level of quality covered by FIFA.



## RUGBY

Polytan is the Preferred Turf Producer to the World Rugby Association, which has created a consistent set of rules for synthetic turf pitches, with the key aim of ensuring player protection. The Preferred Turf Producers and accredited test labs appointed by World Rugby play a particularly important role in ensuring that turf systems meet high standards for quality, performance and innovative development.



## TENNIS

The International Tennis Federation analyses the most important criteria for all types of tennis court; it assesses surfaces by categorizing them according to court pace ratings for use on tennis courts. Polytan has several systems in this area that have been certified in speed classes from "Slow" to "Medium Fast" by the ITF.



## FIELD HOCKEY

Synthetic turf has already become established as the standard in the world of field hockey, replacing natural grass for all performance classes, and Polytan has been a committed partner in this process from the outset. The logical consequence of this is that Polytan was appointed official global supplier to the International Hockey Federation (FIH) in May 2016. Polytan is therefore the exclusive supplier of hockey turfs for the 2018 and 2022 world championships, as well as for the 2020 Olympic Games in Tokyo.

STRAIGHT FILAMENTS

## LigaTurf RS Pro II CoolPlus



FOOTBALL

PLAY LIKE THE PROFESSIONALS

LigaTurf RS Pro II is the new elite product for professional football turf systems. Thanks to its intelligent yarn design and exclusive material composition, it is in a league of its own when it comes to both play properties and wear resistance. Our innovative ENTANGLEMENT technology helps to ensure that the filament remains soft despite the larger cross-section thickness, while also providing excellent protection against wear and tear. The reduced aspect ratio ensures outstanding recovery capacity and makes the turf easier to maintain. This means that the natural feel of the playing surface lasts even longer without you needing to carry out any additional maintenance work. The wide, two-tone filaments improve both the appearance and coverage of the turf while also keeping the level of splash to a minimum.



System structure

AREAS OF USE

- Stadiums
- Professional training facilities
- Amateur and professional clubs
- Sports universities

PRODUCT SPECIFICATIONS

- Monofilament turf fibres with approx. 400 µm Fibre thickness
- Exclusive Polytan CoolPlus function
- Innovative Polytan ENTANGLEMENT technology
- Finely tuned cross-section design
- BiColour design



Fibre thickness: approx. 400 µm



Infill granules



Stockhorn Arena  
Thun, Switzerland  
LigaTurf RS Pro II CoolPlus

Straight Filaments

## LigaTurf RS+ CoolPlus



FOOTBALL ▪ RUGBY ▪ AMERICAN FOOTBALL

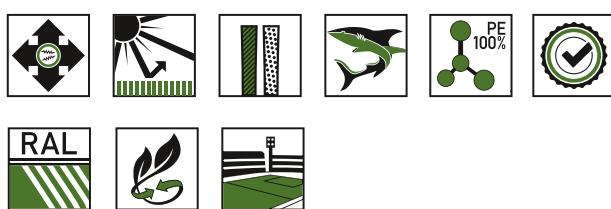


System structure



Fibre thickness: approx. 360 µm

Infill granules



### SUCCESSFULLY TESTED BY PROFESSIONALS

The LigaTurf RS+ CoolPlus synthetic turf system is relied upon by professionals and amateur athletes alike. The rhombus-shaped design of the turf fibre with a thickness of approx. 360 µm, combined with ENTANGLEMENT technology, easily satisfies the technical requirements for force absorption, ball rolling and ball bouncing properties. And it will continue to do so for many years to come. Often copied but never equalled: LigaTurf RS+ CoolPlus is the world's leading product with FIFA Quality Pro certification. The LigaTurf RS+ CoolPlus was the surface of choice for the players taking part in the Women's World Cup in Canada, and was also used as the FIFA Quality Pro pitch for the World Cup Final at the BC Place stadium in Vancouver.

### AREAS OF USE

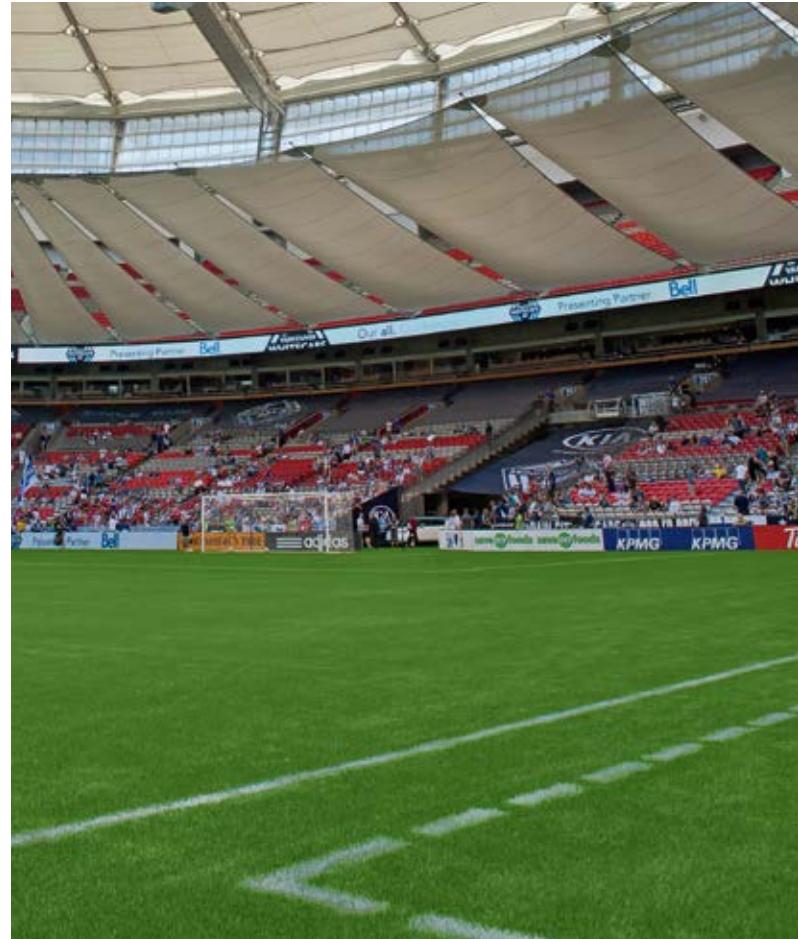
- Stadiums
- Professional training facilities
- Amateur and professional clubs
- Sports universities

### PRODUCT SPECIFICATIONS

- Monofilament turf fibres with approx. 360 µm Fibre thickness
- Exklusive Polytan CoolPlus Funktion
- Innovative Polytan ENTANGLEMENT technology
- Exclusive Polytan 100 % PE formulation
- BiColour design



2008: VfL Kaufering  
Kaufering, Germany  
LigaTurf RS+ CoolPlus



2015: BC Place Stadion  
Vancouver, Canada  
LigaTurf RS+ CoolPlus



## 10 YEARS THE ARTIFICIAL TURF FOR PROFESSIONAL SPORTS CELEBRATES AN ANNIVERSARY

The first LigaTurf RS+ CoolPlus synthetic turf systems were installed precisely 10 years ago. The synthetic turf enjoyed impressive success from the outset and quickly became established for professional applications in stadiums all over the world, as well as in sports clubs and municipal sports facilities. No other synthetic turf system has received the FIFA Quality Pro quality mark as often as the LigaTurf RS+ CoolPlus. In summer 2016, the stadium turf for the Kaufering municipality in Germany received the FIFA Quality Pro certificate for the eighth time in a row, making it the most frequently re-certified synthetic turf in this category worldwide.

Straight Filaments

## LigaTurf Legend



FOOTBALL ■ RUGBY ■ MULTISPORT



System structure



Fibre thickness: approx. 360 µm



Infill granules



### THE POWERHOUSE FOR DEMANDING CLUBS

LigaTurf Legend is a real powerhouse when it comes to performance: With its entirely redeveloped multi-shape filament cross-section, LigaTurf Legend football turf achieves optimum fibre resilience. As a result, it offers perfect sport-specific performance – as shown by the turf's certification in accordance with various international standards. The newly designed cross-section also achieves ball rolling and play properties similar to those achieved with natural grass. Visually, the larger filament width provides good coverage and – together with the BiColour design – ensures that the playing field looks fresh and natural. The high wear protection of the filaments has been verified in extensive laboratory tests, and ensures the required sustainability. The use of balanced turf designs and the Polytan system structure mean that athletes always feel at home on the turf.

### AREAS OF USE

- Professional training facilities
- Amateur and professional clubs
- Sports universities

### PRODUCT SPECIFICATIONS

- Monofilament turf fibres with approx. 360 µm Fibre thickness
- Exclusive Polytan 100 % PE formulation
- Newly developed multi-shape cross-section
- BiColour design

STRAIGHT FILAMENTS

## LigaTurf Ultimate CoolPlus



FOOTBALL ▪ RUGBY ▪ AMERICAN FOOTBALL ▪ HOCKEY ▪ MULTISPORT

### FOR THE ULTIMATE KICK

LigaTurf Ultimate CoolPlus is the "ultimate" refinement of Polytan LigaTurf football turf now being used successfully around the world. Ultimate CoolPlus is a completely new development and is even better than its predecessor. Ultimate look. Ultimate feel. Ultimate longevity. Thanks to its innovative ENTANGLEMENT technology and CoolPlus function, LigaTurf Ultimate CoolPlus provides the ultimate feeling of playing on natural grass. With a triangular cross-section and a thickness of approx. 250 µm, the fibres are very pleasant to the touch. LigaTurf Ultimate comes in a bicolour colour combination of lime and field green.



System structure

### AREAS OF USE

- Training facilities
- Amateur and professional clubs
- Sports universities

### PRODUCT SPECIFICATIONS

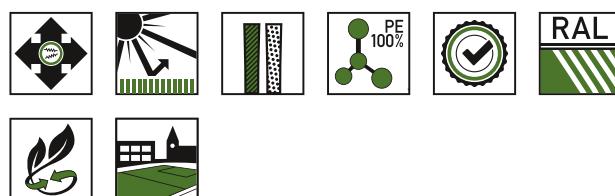
- Monofilament turf fibres with approx. 250 µm Fibre thickness
- Exclusive Polytan CoolPlus function
- Innovative Polytan ENTANGLEMENT technology
- Exclusive Polytan 100 % PE formulation
- BiColour design



Fibre thickness: approx. 250 µm



Infill granules



TEXTURISED FILAMENTS

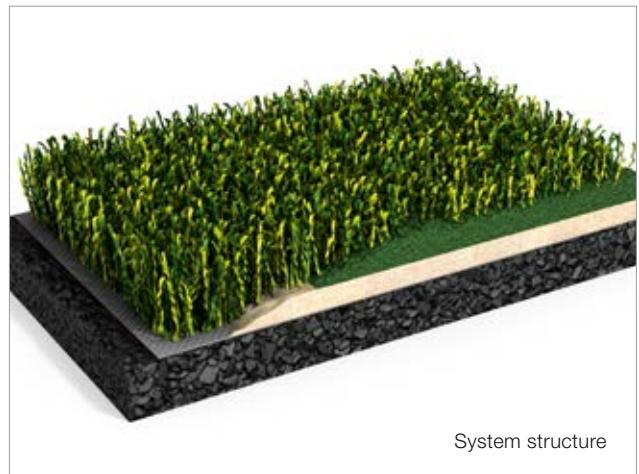
## LigaGrass Pro CoolPlus



FOOTBALL ▪ HOCKEY ▪ MULTISPORT

### REDEFINING TEXTURED TURF!

Polytan is quite rightly regarded as a pioneer in developing textured turf systems for football pitches, and the new LigaGrass Pro CoolPlus marks another milestone in the successful history of our company. After all, thanks to the new Polytan PreciTEx texturing technology, even functional filament cross-sections with a thickness of up to 250 µm can now be processed easily. Compare this to other turfs and you'll see that the new LigaGrass Pro turf is a no-splash turf like no other. The infill is carefully secured between the blades to prevent the granules and infill material from jumping up. This guarantees a more enjoyable playing experience, prevents the infill material from being displaced and makes the turf easier to maintain. In terms of its functions and performance, LigaGrass Pro CoolPlus sets a new benchmark for textured football turf systems.



System structure

### AREAS OF USE

- Training facilities
- Amateur clubs
- Mini-pitches
- Multisport facilities
- University sports facilities

### PRODUCT SPECIFICATIONS

- Monofilament turf fibres with approx. 250 µm Fibre thickness
- Exclusive Polytan 100 % PE formulation
- Exclusive Polytan PreciTEx texturing technology
- BiColour design



Fibre thickness: approx. 250 µm



Infill granules



Hoeschpark  
Dortmund, Germany  
LigaGrass Pro CoolPlus

TEXTURISED FILAMENTS

## TerraGrass



HOCKEY ▪ TENNIS ▪ MULTISPORT

ROBUST, DURABLE AND VERSATILE

Hockey and tennis are the TerraGrass turf system's favourite sports. It can be individually optimised to the different types of sport according to the specification in each case. The material formulation consisting of 100 % PE has its own positive effect on longevity and protection against wear. The exclusive Polytan texturing process ensures additional volume, a green finish and the desired play properties.



AREAS OF USE

- Multisport facilities
- Tennis turfs
- Mini-pitches

PRODUCT SPECIFICATIONS

- Monofilament turf fibres with approx. 160 µm fibre thickness
- Exclusive Polytan 100 % PE formulation
- Exclusive Polytan texturing process



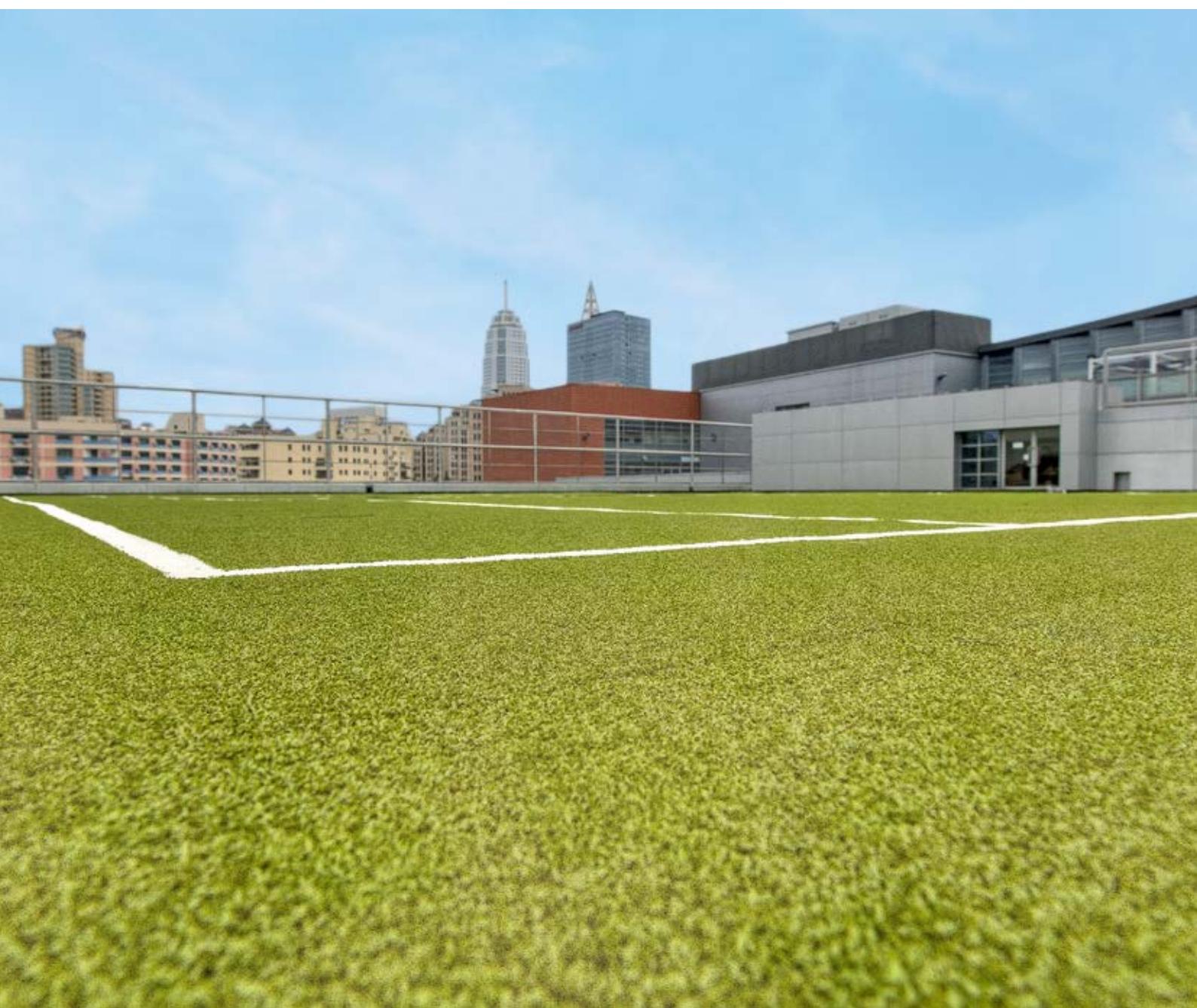
System structure



Fibre thickness: approx. 160 µm



Infill granules



Concordia International School  
Shanghai, China  
Polytan Turf

## UNFILLED TURF

### Poligras Platinum CoolPlus



## HOCKEY

### THE PERFECT STAGE FOR HOCKEY

Precise, fast and safe – the Poligras Platinum CoolPlus is setting new standards for hockey. The familiar Poligras Mega CoolPlus has been enhanced and made ready for series production in a close development partnership with international hockey players and coaches.

The stitch density has been increased to create an even more compact appearance, while the new Polytan PreciTEx texturing technology ensures optimum crimping. The result is a multi-directional closed surface that demonstrates unbeatable ball rolling behaviour. The ultra-closed surface also provides a perfect platform for the turf's CoolPlus function, which cools the surface and reduces water consumption.

Experts and international professional associations alike are impressed by Polytan's tried-and-tested quality, and this resulted in Poligras Platinum CoolPlus being selected as the official pitch for hockey events at the 2016 Olympic Games in Rio.



System structure

## AREAS OF USE

- Professional hockey facilities and stadiums
- Training facilities



Fibre thickness: approx. 110 µm

## PRODUCT SPECIFICATIONS

- Monofilament turf fibres with approx. 110 µm Fibre thickness
- Exclusive Polytan CoolPlus function
- Exclusive Polytan PreciTEx texturing technology
- Exclusive Polytan 100 % PE formulation with ENTANGLEMENT technology
- MultiBack backing construction



Deodoro Park  
Olympic Hockey Centre  
Rio, Brazil  
Poligras Platinum CoolPlus

UNFILLED TURF

## Poligras Mega CoolPlus



HOCKEY ■ MULTISPORT

### THE STANDARD FOR HOCKEY PITCHES

Poligras Mega CoolPlus by Polytan represents a fully synthetic turf system that meets all the requirements of a professional hockey pitch. It provides a dense and even surface which means that ball rolling behaviour is not distorted by directional factors, allowing players to play a fast and accurate game. The special texturing process preserves the exceptional volume and resilience of Poligras Mega CoolPlus, whilst the Polytan CoolPlus function also ensures that the synthetic material does not heat up too quickly or excessively, even in strong sunlight. This also reduces water consumption. More than half of the clubs in the German hockey league rely on Poligras Mega CoolPlus. All the hockey pitch products from Polytan meet the international requirements of the International Hockey Federation (FIH), and this product is no exception.



### AREAS OF USE

- Professional hockey facilities and stadiums
- Hockey pitches
- Multisport facilities



System structure

### PRODUCT SPECIFICATIONS

- Monofilament turf fibres with approx. 100 µm Fibre thickness
- Exclusive Polytan CoolPlus function
- Exclusive Polytan 100 % PE formulation
- Exclusive Polytan texturing process
- MultiBack backing construction



Fibre thickness: approx. 100 µm



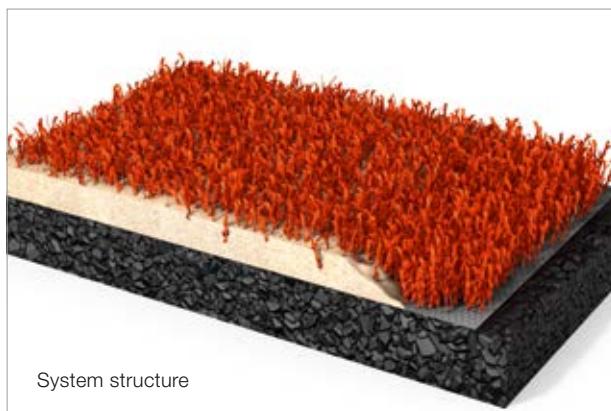
Hockeyclub MHC Forescate  
Voorschoten, Netherlands  
Poligras Mega CoolPlus/  
Poligras Terra CoolPlus

FILLED TURF

## Poligras Terra CoolPlus



HOCKEY ▪ TENNIS ▪ MULTISPORT



System structure



Fibre thickness: approx. 100 µm

Infill granules

### THE FUTURE OF SAND-FILLED MULTIPURPOSE TURF

Sand-filled Poligras Terra CoolPlus is suitable for tennis and hockey, depending on the fill quantity or filling height in each case. Fine yet extremely strong filaments ensure a whole new level of surface softness for textured products. The CoolPlus filaments absorb most of the infrared heat radiation, and this has a positive effect on reducing the turf's surface temperature. However, Poligras Terra CoolPlus offers a closed turf surface while the high density of the filaments ensures the perfect impression of colour. The right product can be chosen from a wide range of colours depending on the intended use in each case.

### AREAS OF USE

- Turfs for clubs
- University sports facilities
- Multisport facilities

### PRODUCT SPECIFICATIONS

- Monofilament turf fibres with approx. 100 µm Fibre thickness
- Exclusive Polytan CoolPlus function
- Exclusive Polytan 100 % PE formulation
- Exclusive Polytan texturing









# SYNTHETIC SURFACES

- 58 OVERVIEW
  - 60 TECHNOLOGY
  - 70 REKORTAN PUR/REKORTAN PUR INDOOR
  - 72 REKORTAN M/REKORTAN M INDOOR
  - 73 TARTAN GOLD
  - 74 SPURTAN WS/SPURTAN WSS
  - 76 SPURTAN SES/SPURTAN SL
  - 78 RE-TOPPING SYSTEMS
  - 80 POLYPLAY S/POLYPLAY SE
  - 82 POLYPLAY FS
  - 84 POLYPLAY FS NATURE/POLYPLAY FS FUN
  - 86 OVERVIEW OF SPORTS HALL FLOORS
  - 88 GYM POINT
  - 89 GYM AREA
  - 90 GYM COMBI
  - 92 OVERVIEW OF ACRYLIC SPORTS SURFACES
  - 94 LAYKOLD ADVANTAGE
  - 96 LAYKOLD MASTERS COLOR
  - 98 LAYKOLD MASTERS 5
  - 99 LAYKOLD MASTERS 8
- 

# THE PERFECT BASIS FOR SPORTING ACHIEVEMENTS

Synthetic services from Polytan are tried-and-tested, high-performance products that have been in use worldwide for decades – in professional competitive stadiums, on club pitches and in recreational sport.

As a result of the system structure Polytan employs, its products offer fantastic sports-specific properties, as well as high load-bearing capacity and long product lifecycles – tried and tested, and certified in accordance with all the usual standards. We offer synthetic surfaces with an optimum price/performance ratio, tailored to your individual needs.

As well as traditional running track surfaces, our product portfolio also includes multifunctional sports surfaces as well as those for tennis, handball and soft-impact surfaces.



## ONE WORLD – ONE PRODUCT PORTFOLIO

Our product names used to differ on a region-specific basis. We have now harmonised these names as part of our company's increasing globalisation, while retaining those that enjoy the highest levels of recognition. The Rekortan, Spurtan and Tartan brands have a long history. The first Rekortan synthetic surface was installed back in 1969 in the Olympic Stadium in

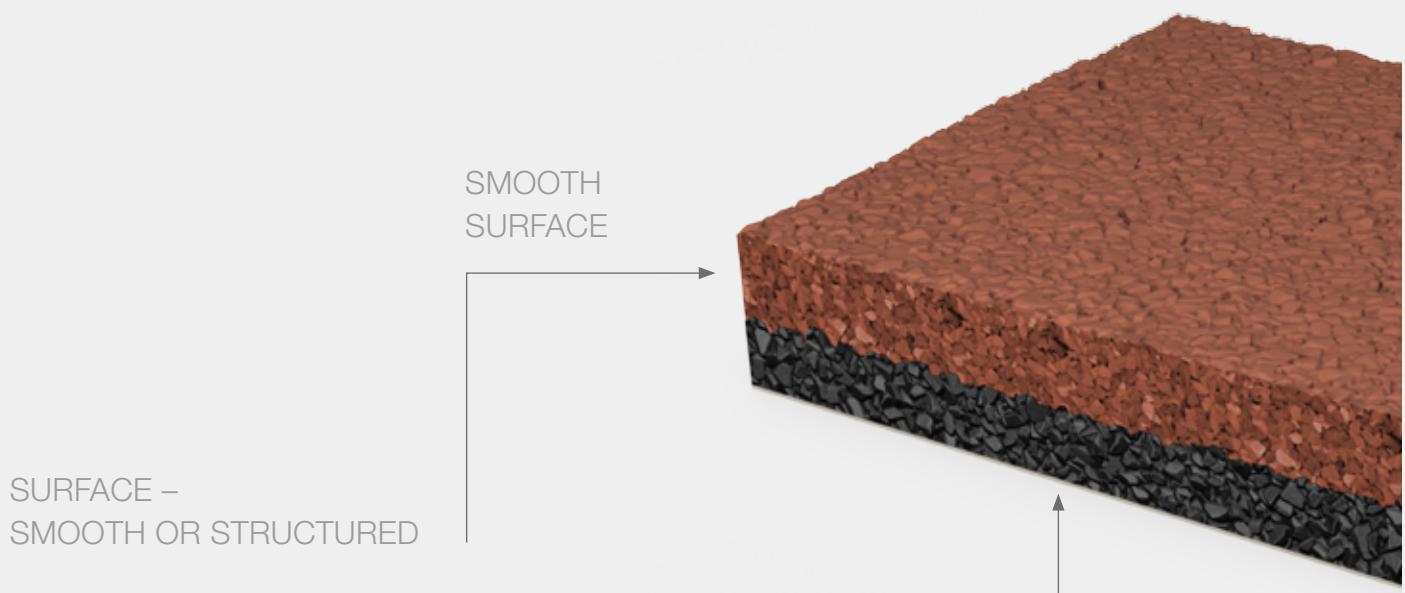
Berlin, and multiple records were also broken three years later on this as a subsurface at the Munich Olympics. The first time a Tartan running track was used at the Olympics was in 1968 in Mexico City.

## RUNNING TRACK, MULTIFUNCTION AND SOFT-IMPACT SURFACES

PRODUCT	COMPETITION/ STADIUM	TRAINING	MULITPURPOSE/ SCHOOL SPORTS	SOFT-IMPACT SURFACE	
Rekortan PUR/ PUR Indoor	■	■			
Rekortan M/ M Indoor	■	■	■		Waterproof
Tartan GOLD	■	■			
Spurtan WS/ WSS	■	■	■		Water-permeable
Spurtan SES/SL	■	■	■		
Re-topping systems	■	■	■		Water-permeable and Waterproof
PolyPlay S/SE			■		Water-permeable
PolyPlay FS				■	
PolyPlay FS Nature				■	Water-permeable with synthetic turf surface
PolyPlay FS Fun				■	

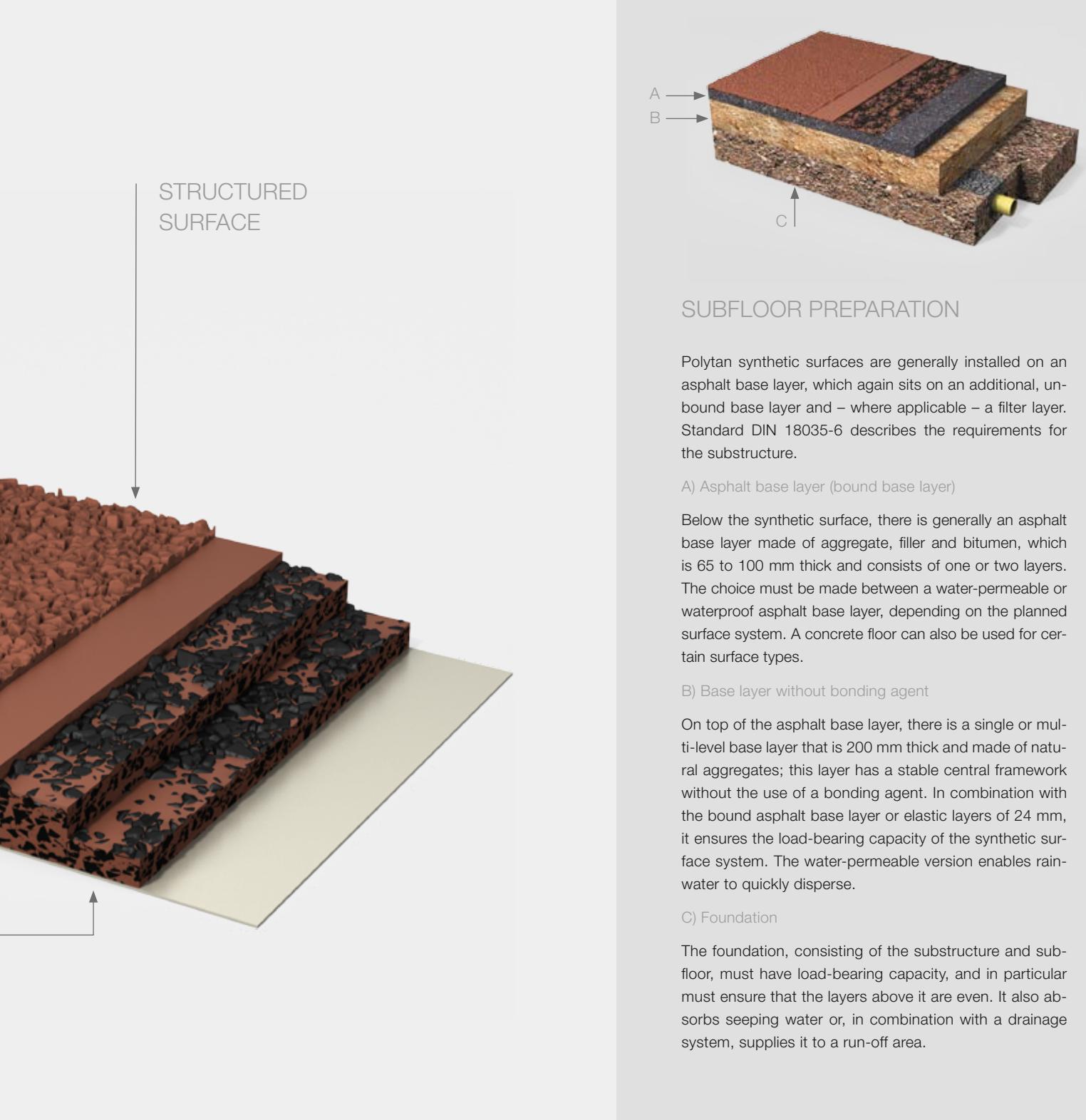
# SYNTHETIC SURFACES – STRUCTURE AND TECHNOLOGY

Synthetic surface systems are complex structures which are made up of different layers depending on the intended use. The elastic synthetic surface layer, which is 8 to 40 mm thick (and up to 130 mm thick for soft-impact surfaces), is the thinnest and yet most complex part of the entire system. It is crucial for defining the sports-specific and protective properties of the turf. Depending on the specific requirements in each case, different materials are brought together to form a surface that is tailored to the intended use. Synthetic surfaces may be water-permeable or waterproof, pour-coated or granulated, and solid or multi-layer. Whatever the design, it is always installed as a seamless, secure structure.



The final surface coating consists of premium EPDM granules, in either a smooth or structured design. The coating's structure and thickness as well as form, quantity and how the granules are interspersed play a crucial role in the sport function-specific properties such as energy enhancement and shock absorption. Stable properties with respect to temperature stability, colour-fastness, UV stability, abrasion resistance and tensile strength are important factors in ensuring the longevity of a surface system. Polytan EPDM granules provide peak performance for all of these material properties.

The base layer made of rubber granules and a polyurethane bonding agent provides the material with the required elasticity. Depending on the installation thickness and particle size, the surface achieves precisely defined damping, therefore offering ideal and tailored conditions for the intended sports disciplines, or soft-impact surfaces.



## SUBFLOOR PREPARATION

Polytan synthetic surfaces are generally installed on an asphalt base layer, which again sits on an additional, unbound base layer and – where applicable – a filter layer. Standard DIN 18035-6 describes the requirements for the substructure.

### A) Asphalt base layer (bound base layer)

Below the synthetic surface, there is generally an asphalt base layer made of aggregate, filler and bitumen, which is 65 to 100 mm thick and consists of one or two layers. The choice must be made between a water-permeable or waterproof asphalt base layer, depending on the planned surface system. A concrete floor can also be used for certain surface types.

### B) Base layer without bonding agent

On top of the asphalt base layer, there is a single or multi-level base layer that is 200 mm thick and made of natural aggregates; this layer has a stable central framework without the use of a bonding agent. In combination with the bound asphalt base layer or elastic layers of 24 mm, it ensures the load-bearing capacity of the synthetic surface system. The water-permeable version enables rainwater to quickly disperse.

### C) Foundation

The foundation, consisting of the substructure and subfloor, must have load-bearing capacity, and in particular must ensure that the layers above it are even. It also absorbs seeping water or, in combination with a drainage system, supplies it to a run-off area.

# CERTIFIED AND AWARD-WINNING

Synthetic surfaces from Polytan fulfil the strictest requirements, as well as complying with all the usual national and international standards and environmental guidelines. International sport associations also rely on Polytan and enable official certification for many surfaces in accordance with association regulations.

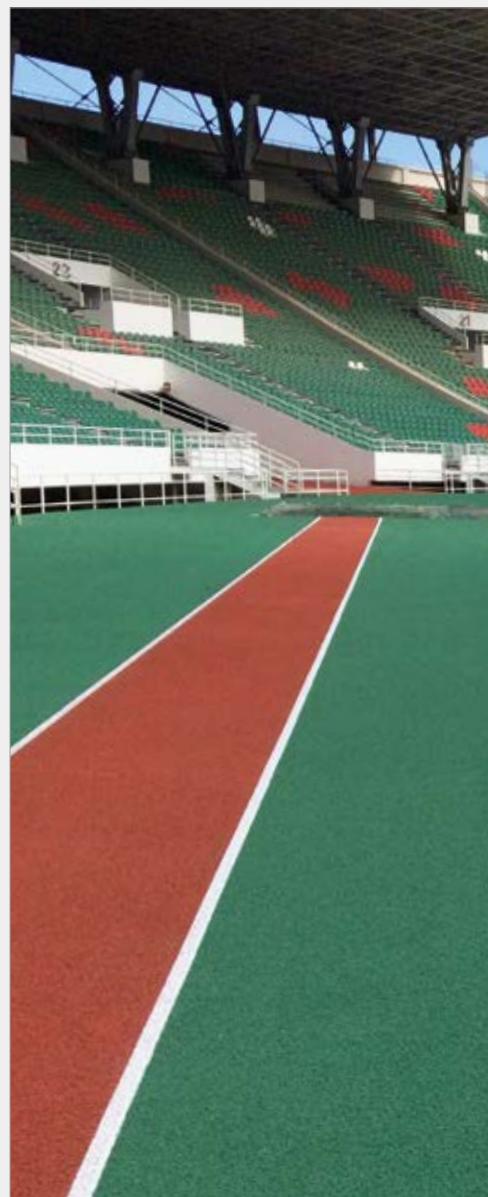


## ATHLETICS

The high quality and performance of our synthetic surfaces is proven by the trust placed in our products by the International Association of Athletics Foundation (IAAF): there is not a single manufacturer worldwide that equips more IAAF Diamond League stadiums with competitive tracks than Polytan. Currently, this includes the Alexander Stadium in Birmingham, the Qatar Sports Club in Doha, the Bislett Stadium in Oslo, the Olympic Stadium in Stockholm and the Prince Moulay Abdellah Sports Complex in Rabat.

Synthetic surfaces in accordance with IAAF categories

- Structural spray-coated surface (spray coating) – EN14877 type A
- Poured surface (sandwich) – EN14877 type D
- Poured surface (full PU) – EN14877 types E & F
- Prefabricated surface – EN14877 type G
- Other





The first IAAF Diamond League Stadium on the African continent, equipped with competitive tracks by Polytan: Prince Moulay Abdellah Sports Complex, Rabat, Morocco

# CERTIFICATES



## TENNIS



The International Tennis Federation (ITF) also certifies our products.



## HANDBALL



Polytan also offers surfaces appropriate for handball courts; these surfaces can be certified in accordance with International Handball Federation (IHF) regulations.

## DIN CERTIFICATES



### DIN/EN 14877/DIN 18035-6

With DIN/EN 14877 tests, we ensure that our products for outdoor facilities (areas of use: athletics, tennis and multisport facilities) achieve both the sport-specific properties and player-floor interaction level required for the planned use. The supplementary DIN 18035-6 regulates subfloor construction and environmental compatibility.

### DIN/EN 14904

The European standard EN 14904 sets out requirements on multipurpose indoor sports floors, on which hall-based sports types such as volleyball, basketball, badminton and handball are typically played.

### DIN/EN 1177

All of our soft-impact surfaces meet the provisions set out in DIN/EN 1177, which defines requirements for shock-absorbent floor systems.

### DIN/EN 71-3

All Polytan surfaces are free from toxic substances and therefore comply with the criteria in DIN/EN 71-3 on toy safety.

# SHOW YOUR COLOURS!

The time that running tracks and synthetic turf surfaces all looked the same has passed. These days it's a matter of course that sports and leisure facilities feature striking and unusual colours, particularly when it comes to synthetic surfaces – and that includes in international competition.

Whether it's pink hockey turf, a green synthetic running track or multicoloured athletics facilities, Polytan's innovative materials and sealing processes mean that these days there's almost no limit on freedom of design. The properties of our new, high-colour formulations are equal to those of the more traditional colour variants with respect to weather-based influences such as heat, UV radiation, frost or rain, and mechanical influences in ongoing operation.



Brick red



Orange/turquoise



Sky blue



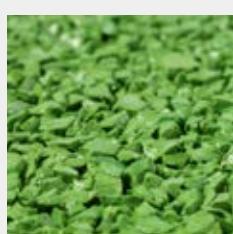
Blue/yellow



Reseda green



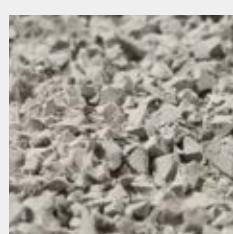
Multicolour



Spring green



Chili red



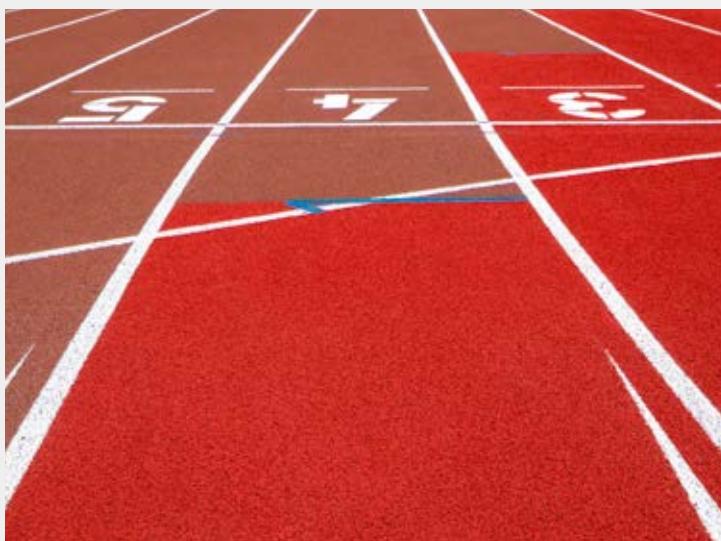
Light grey



Hertha blue



Your Polytan sales representative will be happy to provide you with a selection of samples with current colours and detailed information!



## RED MAKES A COMEBACK: POLYTAN CHILI RED

The trend of new, noticeable colours in sports surfaces continues to rise. It's high time for a fiery comeback for red – as an exclusive on-trend colour Polytan Chili red!

This powerful, brilliant red is much more striking than the classic brick red, and offers significantly more colour intensity. Polytan Chili red is available both for poured and granulated surfaces, and will bring a new shine to running tracks, school playgrounds and multifunctional areas alike. For sports with added spice!

# COURSE OF FRESH CELL TREATMENT FOR OLD SURFACES

What should you do with outdated or ageing sports facilities, or those with large areas of damage? An increasing number of sports facility operators are asking themselves precisely this question. Polytan's contemporary answer to this question is re-topping.

In a re-topping process, the existing synthetic surface system is simply provided with a new top layer. This means there is no need for old systems to be removed and disposed of at great expense; instead, they can be reused as a substructure. This is not only low-cost but also protects the environment as there is practically no waste.

A defined test procedure is performed to determine in advance whether an old surface can be re-coated. If all its properties such as shock absorption and tensile strength fulfil the requirements for a substructure, re-topping can be performed. This is a case of either a PUR coating with EDPM granules dispersed within it, or a spray coating.

The Polytan in-situ process means that installation is completely seamless, and all damage to the old surface is levelled out. The sports properties of a professionally installed re-topping surface are absolutely equivalent to those of a new system, and are outwardly identical.

Re-topping is a cost-effective option even if you just want a new colour, for example in the event of changes to the use concept or a new sponsor.





This method also uses very little in the way of resources.



The old sports surface must be carefully prepared before the actual re-topping. First, the top layer of the existing surface is sanded and cleaned. We then apply the new top layer.

WATERPROOF

## Rekortan PUR / Rekortan PUR Indoor



COMPETITION/STADIUM ▪ TRAINING

### HIGH-SPEED SYNTHETIC SURFACES FOR TOP PERFORMANCE

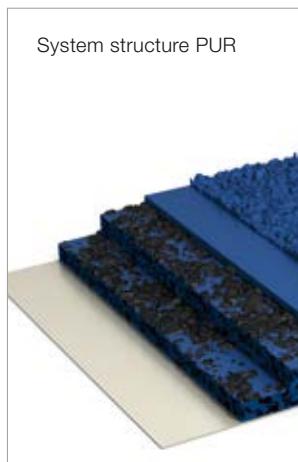
Rekortan PUR is a solid synthetic surface ideal for best times, records and international elite sport. Thanks to the combination of an elastic base layer and a solid structure, Rekortan PUR Indoor running track surfaces provide optimum conditions for professional athletes and demanding amateurs. This high-speed synthetic surface ensures maximum acceleration and fantastic shock absorption values. The EPDM granules dispersed in the top layer make both sports surfaces ideal for running shoes with spikes and offer extremely high acceleration. Energy-enhancing tread elasticity and high abrasion resistance complete the properties of these elite surfaces.

### AREAS OF USE

- Indoor athletics facilities
- Athletics stadiums
- Competitive running tracks

### PROPERTIES

- Poured in situ surface (solid synthetic surface)
- Granules with visible tips interspersed, ideally suited to spikes
- Waterproof
- Can be certified according to IAAF requirements



System structure PUR



System structure  
PUR Indoor



Cross-section



Photo credit: Paul K. Robbins, Courtesy of Sydney Olympic Park Authority



Sydney Olympic Park Athletic Centre  
Sydney, Australia  
Rekortan PUR

WATERPROOF

## Rekortan M / Rekortan M Indoor



COMPETITION/STADIUM ▪ TRAINING ▪ MULTIPURPOSE/SCHOOL SPORTS



System structure M Indoor



System structure M



Cross-section

### THE PROFESSIONAL CHOICE AMONG SPORTS SURFACES

Rekortan M is an authentic professional sports surface recognised worldwide as the ideal competition surface. In May 2016, several best times for the year were achieved at the Diamond League competition in the Moulay Abdallah Stadium in Rabat, the first host location for the athletics meetings in Africa. Rekortan M offers exceptional acceleration performance and enhanced tread elasticity. It is also quick and boasts excellent shock absorption, and is much respected among practitioners of sports medicine. Rekortan M Indoor complies with strict emission limits for interior spaces, making it ideal for athletics halls. In contrast with the Rekortan M, the structure of the indoor version features EDPM rubber granules.

### AREAS OF USE

- Athletics stadiums
- Competitive running tracks
- School sports facilities



### PROPERTIES

- Poured in-situ surface
- Granules with visible tips interspersed, ideally suited to spikes
- Waterproof
- Can be certified according to IAAF requirements



WATERPROOF

**Tartan GOLD**

COMPETITION/STADIUM ▪ TRAINING

## THE RUNNING TRACK FOR SETTING RECORDS

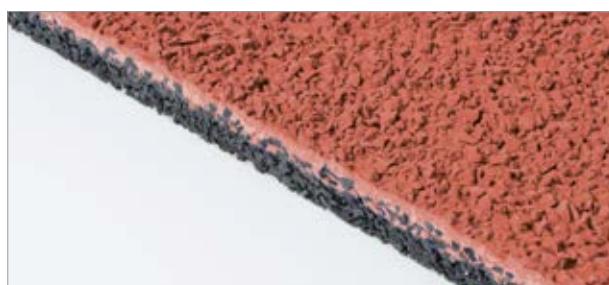
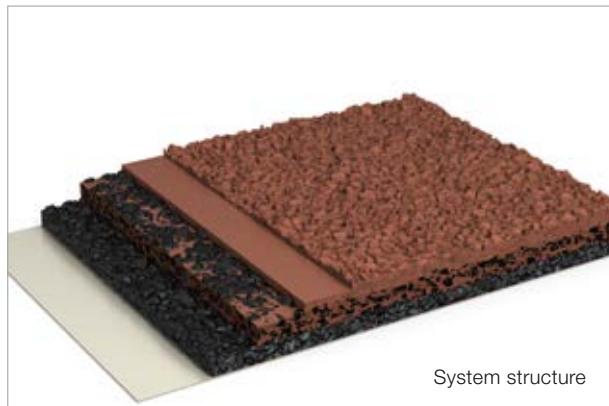
Polytan has been constantly refining its synthetic surfaces for more than 40 years, and its new Polytan Tartan GOLD is a high-performance surface for top-class international sport. The structure combining a solid PU surface and shock-absorbent levelling layer ensures excellent durability for this synthetic waterproof surface with outstanding and long-lasting force-absorption properties. The EPDM granules dispersed in the top layer make Tartan GOLD the ideal choice for running shoes with spikes and offers extremely high acceleration performance. Energy-enhancing tread elasticity and high abrasion resistance complete the properties of this elite surface, making it perfect for setting new records!

## AREAS OF USE

- Athletics stadiums
- Competitive running tracks

## PROPERTIES

- Poured in situ surface, multilayer
- Waterproof
- Granules with visible tips interspersed, ideally suited to spikes
- Certified according to IAAF requirements



Cross-section



WATER-PERMEABLE

## Spurtan WS/Spurtan WSS



COMPETITION/STADIUM ▪ TRAINING ▪  
MULTIPURPOSE/SCHOOL SPORTS

### THE MULTIPURPOSE SOLUTION FOR COMPETITION AND TRAINING FACILITIES

The Spurtan WS synthetic surface is the cost-effective multipurpose solution for athletics. The structural spray-coated surface is primarily used for running tracks, run-up tracks and athletics facilities. Together with the WSS surface from the Polytan product range, it has a structured surface that is also water-permeable, allowing for easy and fast installation.



### AREAS OF USE

- Athletics stadiums
- Competitive running tracks
- School sports facilities
- Multipurpose facilities

### PROPERTIES

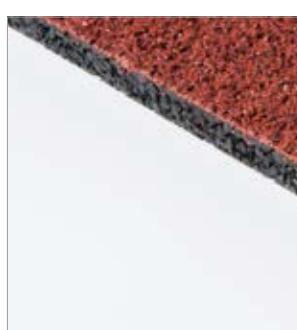
- WS: Structural spray-coated surface
- WSS: Structural spray-coated surface with thick top layer
- Rubber granules, elastomer, spray-coated
- Water-permeable
- Can be certified according to IAAF requirements



System structure WS

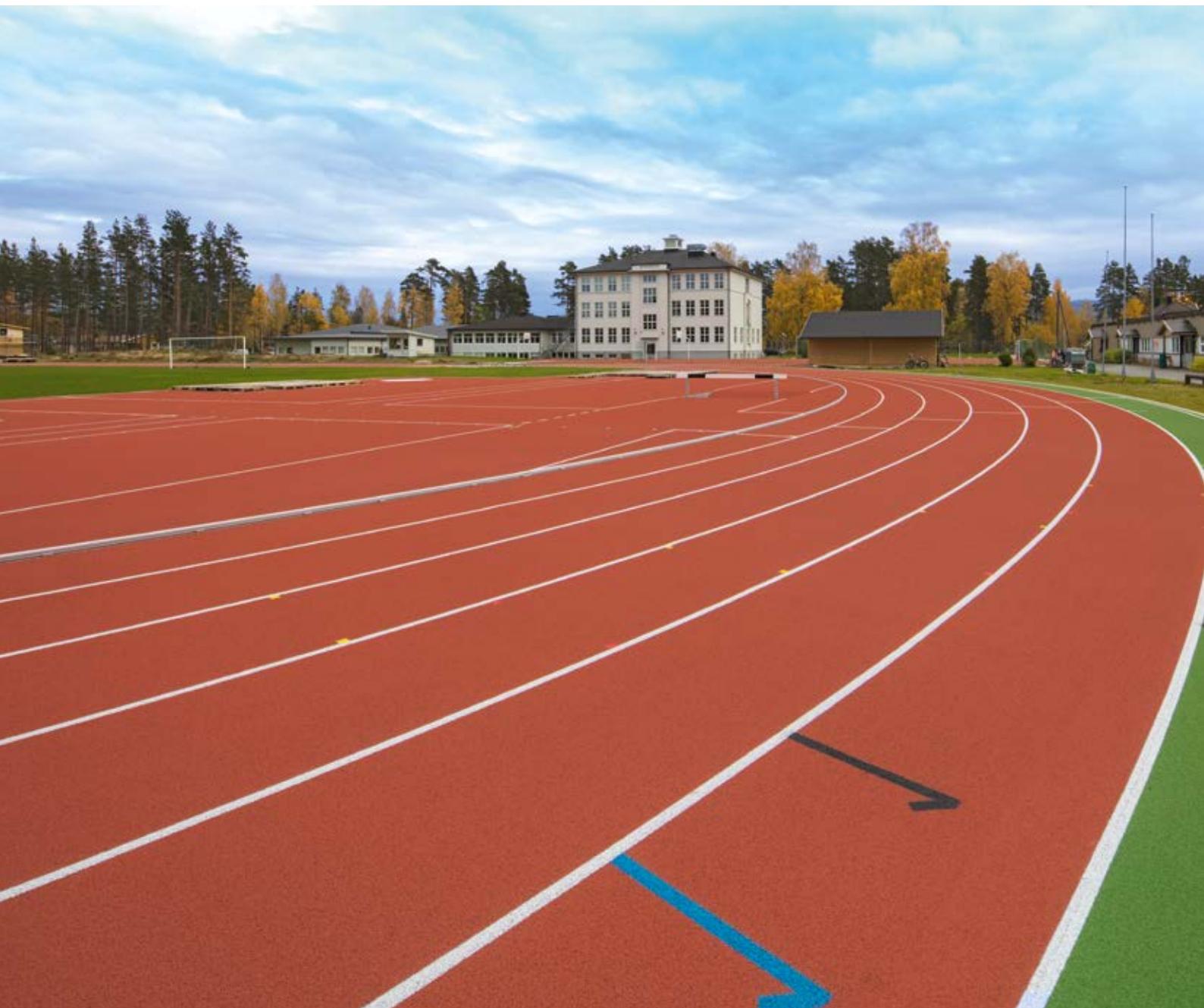


System structure WSS



Cross-section





Hornnes Idrettspark  
Evje og Hornnes, Norway  
Spartan WS / Spartan WSS / PolyPlay SE

WATER-PERMEABLE

## Spurtan SES/Spurtan SL



COMPETITION/STADIUM ▪ TRAINING ▪  
MULTIPURPOSE/SCHOOL SPORTS

### THE MULTIPURPOSE SOLUTION FOR SPORTS FACILITIES WITH HIGH NUMBERS OF VISITORS

Spurtan SES and SL are water-permeable, structured surfaces for professional athletics training facilities. In the SES system, the base layer is designed using coloured EDPM so that it matches the colour scheme of the structural coating. The surface is primarily used for running tracks, run-up tracks and athletics facilities. In contrast, Spurtan SL is a triple-layer surface where the middle layer matches the colour of the structural coating. It is primarily used for stress zones on running and run-up tracks and athletics facilities. The high-quality raw materials and system construction used in both synthetic surfaces guarantee a long-lasting, visually-appealing surface. The surface is very quick and easy to install.

### AREAS OF USE

- Athletics stadiums
- Competitive running tracks
- School sports facilities
- Multipurpose facilities



System structure SES



System structure SL

### PROPERTIES

- Structural spray-coated surface
- Rubber granules and elastomer compound, sprayed
- SES: Colour-coordinated base layer
- SL: Colour-coordinated middle layer
- Water-permeable



Cross-section



Stadio Nando Martellini  
Rome, Italy  
Spartan synthetic surface

WATER-PERMEABLE/WATERPROOF

## Re-topping systems

COMPETITION/STADIUM ▪ TRAINING ▪  
MULTIPURPOSE/SCHOOL SPORTS

### OLD RUNNING TRACKS GIVEN A NEW SHINE

Both water-permeable and waterproof surfaces can be achieved with Rekortan M RT and Spurtan WS RT. Rekortan M RT and Spurtan WS RT systems are a very cost-efficient solution for refurbishing athletics tracks and sports facilities. This is because the existing elastic substructures can be used again, enabling a long product lifecycle without the need for disposal. This means it is possible to install surfaces poured in-situ as well as prefabricated track products on the old surface, regardless of the design of the initial installation. All Rekortan M RT and Spurtan WS RT surfaces have structured surfaces and are suitable for spikes, offering the optimal subsurface for professional applications. Rekortan M RT and Spurtan WS RT systems are frequently installed prior to IAAF competitions and are certified according to IAAF requirements.

### AREAS OF USE

- Athletics stadiums
- Competitive running tracks
- School sports facilities

### PROPERTIES

- Professional physical and visual upgrade of the sports surface
- Minimal installation time
- Reduced costs – no asphalt work, no disposal of the old surface
- Independent of the manufacturer of the existing surface
- Suitable for competitions, thanks to certification in accordance with IAAF requirements



System structure M RT



System structure WS RT



M RT cross-section with base layer



M RT cross-section without base layer



Stadio Ridolfi  
Florence, Italy  
Rekortan M RT

WATER-PERMEABLE

## PolyPlay S / PolyPlay SE

MULTIPURPOSE/SCHOOL SPORTS

### THE MULTIFUNCTIONAL TALENT WITH A SMOOTH SURFACE

Durable multipurpose PolyPlay S and SE surfaces are primarily used for playing fields and facilities for ball sports and leisure activities. Their smooth surface and good ball bouncing behaviour make them the ideal surface for ball sports in schools and multipurpose facilities. PolyPlay S/SE is water-permeable, and as a result playing fields dry out very quickly, making them suitable for year-round use as all-weather pitches. This makes both of the surfaces slip-resistant, despite the flat top layer. Additional advantages include the high level of wear resistance and low maintenance costs. While PolyPlay S is laid on a base layer, SE is a single-layer surface.

### AREAS OF USE

- Multipurpose facilities
- School sports facilities
- Jogging trails
- Care homes for older people
- Rehabilitation facilities

### PROPERTIES

- Granulated single (SE) or double-layer (S) surface
- Coated granules, flat-laid
- Water-permeable



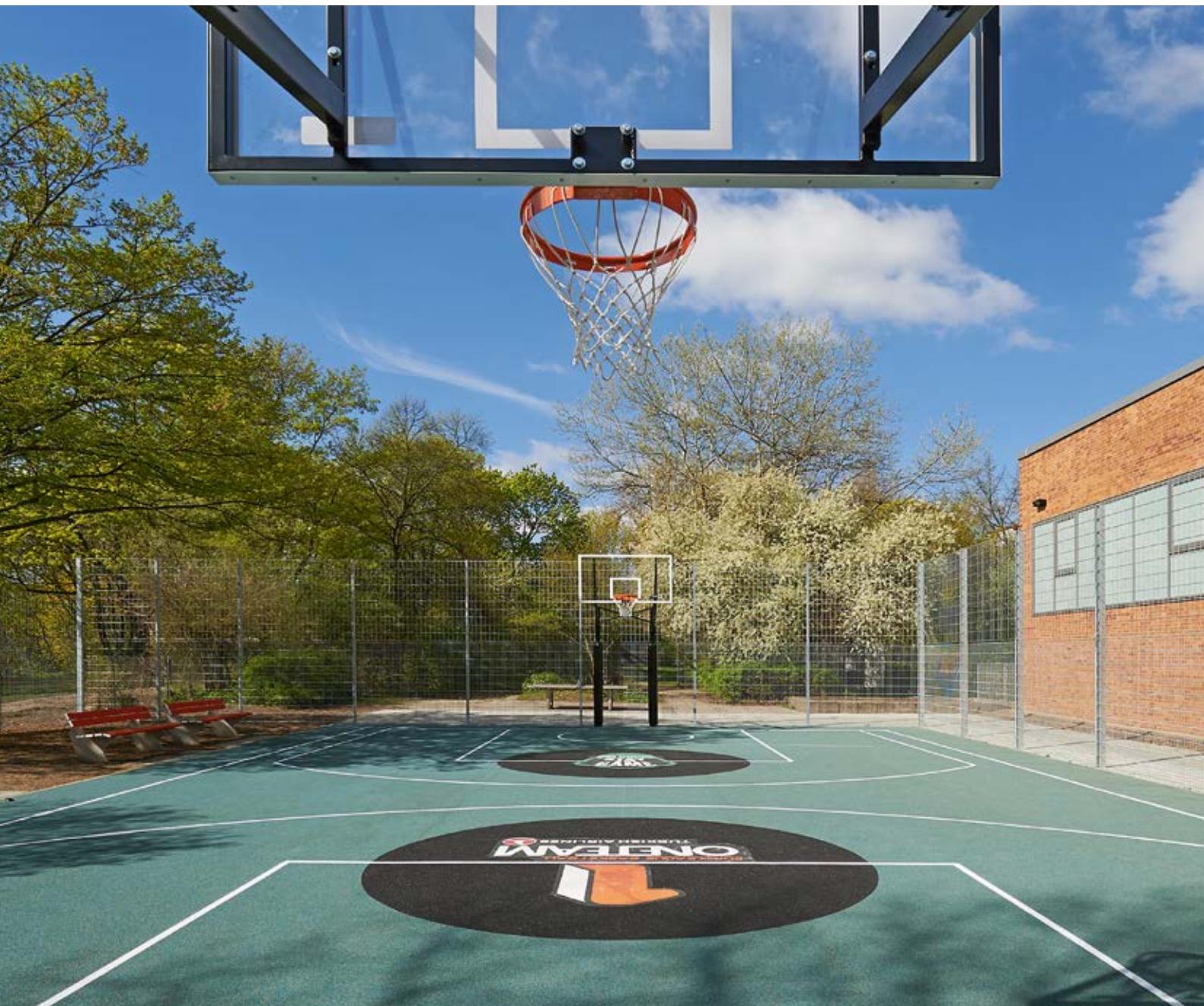
System structure SE



System structure S



Cross-section



Grundschule am Teltowkanal  
Berlin, Germany  
PolyPlay S / PolyPlay SE

WATER-PERMEABLE

## PolyPlay FS

SOFT IMPACT SURFACE

### THE CLEAN AND SAFE SOLUTION FOR OUR CHILDREN

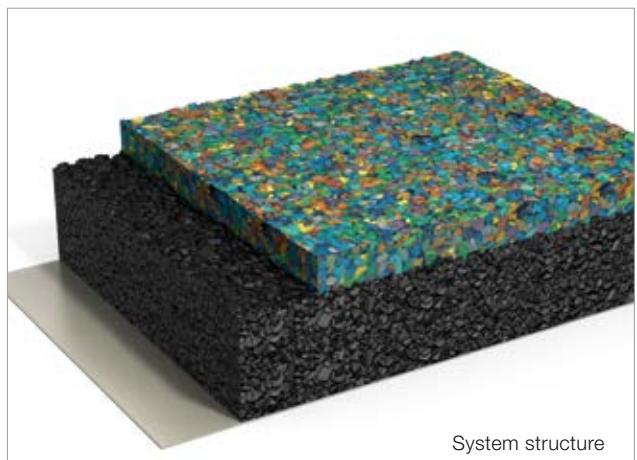
PolyPlay FS (soft-impact surface) is primarily used in playgrounds and nurseries as a shock-absorbent surface in a variety of thicknesses. The granulated, water-permeable surface is particularly easy to maintain, and its damping effect protects small children against injury, for example if they fall. Its outstanding resistance to weather and rotting ensures a long product lifecycle and low maintenance costs. Soft-impact surfaces are a considerably more hygienic and, more importantly, safer solution than sandpits.

### AREAS OF USE

- Children's play areas
- Nurseries
- Parks
- Care homes for older people
- Rehabilitation facilities

### PROPERTIES

- Granulated surface
- Coated coloured granules, flat-laid
- Water-permeable
- Various colours available
- HIC testing according to DIN/EN 1177



System structure



Cross-section



Photo credit: @Claudia Dreyße



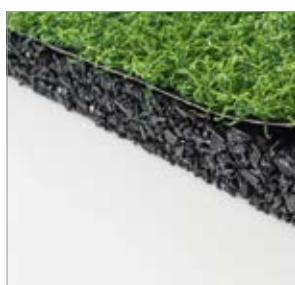
Erich Kästner Schule  
Oelde, Germany  
PolyPlay FS

WATER-PERMEABLE

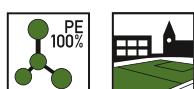
## PolyPlay FS Nature / PolyPlay FS Fun



SOFT IMPACT SURFACE



Cross-section



### REDEFINING SOFT IMPACT SURFACES

Whether you want a natural look or a playful colour scheme, PolyPlay FS Nature and FS Fun offer architects and planners a myriad of design options for play areas, educational facilities, adventure playgrounds and landscaping. Both products feature a textured artificial turf surface.

### AREAS OF USE

- Children's play areas
- Nurseries
- Rehabilitation facilities
- Landscaping

### PROPERTIES

PolyPlay FS Nature:

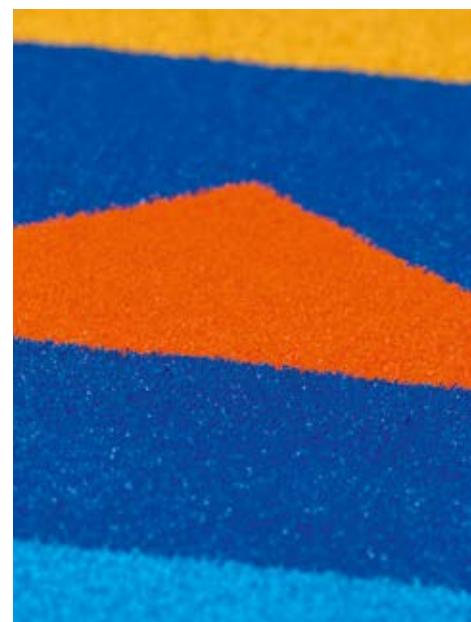
- BiColour design

PolyPlay FS Fun:

- Available in green and blue
- Inlays such as hopscotch or picture elements available on request

PolyPlay FS Nature/FS Fun:

- Exclusive Polytan 100 % PE formulation
- Exclusive Polytan CoolPlus function
- Natural look
- Water-permeable
- HIC testing according to DIN/EN 1177



# FLOORS FOR SPORTS HALLS



Point elastic



Area elastic



Combined elastic

## POLYTAN GYM POINT

Flexible, yielding sports floor with vertical deformation that closely fits the area of the load.

## POLYTAN GYM AREA

Flexible, rigid sports floor with a wide area of vertical deformation.

## POLYTAN GYM COMBI

Area elastic sports floor with point elastic top layer. Vertical deformation in the section with the load dispersion layer is large. On the surface, it closely fits the area of the load.

## INDOOR SYSTEMS IN ACCORDANCE WITH EN 14904

SPORTS HALL TYPE	SPORT TYPE/USE		POINT	AREA	COMBI
MULTIPURPOSE HALLS	Events, concerts		■ *	■■■	■
	Grandstand facilities, seating		■ *	■■■	■
	Wheelchair users		-	■■■	-
 SPORTS HALLS	AMATEUR AND RECREATIONAL SPORTS	Multisport	■■■	■	■■
	 PROFESSIONAL SPORTS	Volleyball	■■■	■■	■■
		Handball	■■■	■■	■■
		Basketball	■	■■■	■■
		Football	■■	■	■■■
		Hockey	■■	■■	■■■
		Gymnastics/aerobics	■■■	-	■■
		Competitive dancing	-	■■■	-
		Skate sports	-	■■■	-
		Gymnastics	■■	■■	■■■
		Martial arts	■■	■■	■■■

- not suitable ■ limited suitability ■■ well-suited ■■■ exceptionally well-suited \* Can only be used in multipurpose sports halls with additional fabric reinforcement.

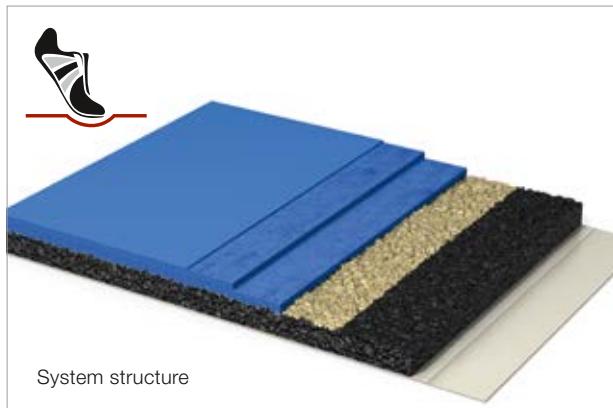
## STANDARD COLOURS, INDOOR SURFACES



Colour may vary. Special colours upon request.

POINT ELASTIC

## GYM Point



cross-section

### A DURABLE AND LONG-LASTING SCHOOL SPORTS SURFACE

The point elastic sports floor is a flexible, yielding floor that is particularly well-suited for amateur and recreational sports. The soft surface cushions falls immediately. In addition, the point elastic layers only require a small mass to exhibit their shock-absorbent effect. This plays a particularly important role in children's and school sports if the athlete is relatively light. Thanks to the simple design of the elastic layer and PUR wear surface, GYM Point can be installed quickly and easily and is more cost-effective than wooden sports floors. The surface is extremely resistant to both mechanical influences and liquids. The elastic layer is moisture-resistant and retains its shock-absorbent properties even after many years of use. Simple maintenance of the seamless surface rounds off the system.

### AREAS OF USE

- School and recreational sports
- Types of sports with a greater need for a protective function, e.g. handball or volleyball

### PROPERTIES

- Seamless surface
- Soft, point elastic surface
- Can be certified according to international sports association requirements



AREA ELASTIC  
**GYM Area**

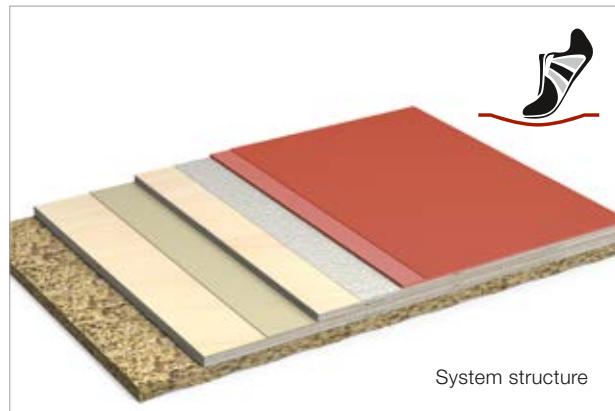


### THE MULTIPURPOSE SURFACE FOR SPORTS HALLS

GYM Area is a true high-performance sports floor that is suitable for multipurpose use by adult athletes. This area elastic indoor surface offers very high level of shock-absorption. Quick turning, running and jumping movements are cushioned across a broad area. When force is exerted on the surface, it creates a vertical depression across a wide area around the point of impact. In the process, the foot does not sink into the point of rotation and is not slowed down too quickly. In addition, GYM Area ensures more freedom during rotational movements. It also offers fantastic protection for athletes' joints, muscles and ligaments. Professional sports such as basketball and competitive dance or skate sports predominantly take place on area elastic sport floors. Thanks to the high degree of stability, GYM Area is ideally suited for multipurpose halls with mixed use for sports and events with mobile grandstands and seating.

### AREAS OF USE

- Multipurpose facilities
- Sports and multipurpose halls with mobile grandstands
- Types of sports that place priority on ball bouncing properties, e.g. basketball
- Cycling and roller sports



Cross-section



### PROPERTIES

- Seamless surface
- Hard, area elastic surface
- Can be certified according to international sports association requirements

COMBINED ELASTIC

## GYM Combi

### A HIGH-PERFORMANCE SURFACE OFFERING EXCELLENT PROTECTION

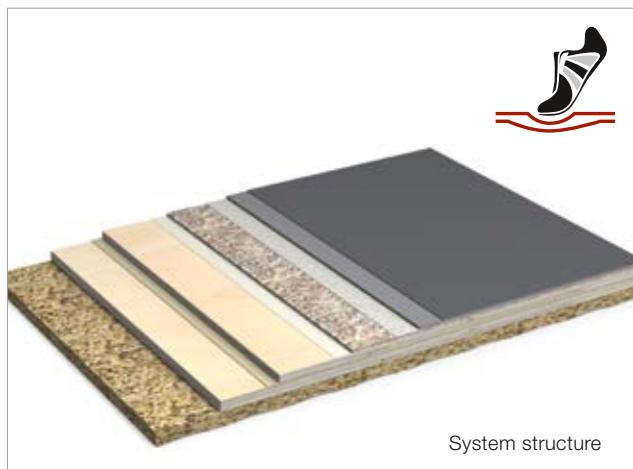
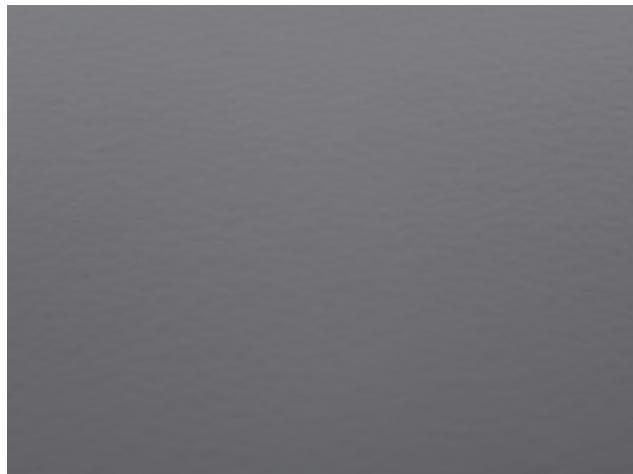
GYM Combi combines the positive protective function properties of point elastic systems with the benefits of the sport function properties of area elastic systems. GYM Combi combines the protective function properties of point elastic systems with the sport function properties of area elastic systems. This means that fast jumping and running movements are dynamically spring-cushioned across the area, and the softness of the point elastic top layer also provides protection in the event of falls; this is a particularly useful feature when it comes to combat sports. This combination of properties makes the surface equally suitable for lightweight and heavyweight athletes. Like all other Polytan GYM sports flooring systems, GYM Combi offers a tough, scratch-resistant surface that is particularly easy to clean and maintain thanks to seamless installation. This makes it just as suitable for both lightweight and heavyweight athletes. Like the other Polytan GYM sports flooring systems, GYM Combi offers a tough, scratch-resistant surface that is particularly easy to clean and maintain thanks to seamless installation.

### AREAS OF USE

- School and recreational sports
- Multipurpose sports floor surface for all sport types

### PROPERTIES

- Seamless surface
- Soft, point and area elastic surface
- Can be certified according to international sports association requirements



Cross-section



Gymnasium Daubigny  
Auvers-sur-Oise, France  
GYM Combi

# ACRYLIC SPORTS SURFACES



SPORTS	HARDCOURT		CUSHION COURT	
	LAYKOLD ADVANTAGE	LAYKOLD MASTERS COLOR	LAYKOLD MASTERS 5	LAYKOLD MASTERS 8
Tennis	■	■	■	■
Roller sports	■	■		
Multipurpose	■	■	■	■
School sports	■	■	■	■

PRODUCT FEATURES	LAYKOLD ADVANTAGE	LAYKOLD MASTERS COLOR	LAYKOLD MASTERS 5	LAYKOLD MASTERS 8
UV stable colours	■	■	■	■
Slip resistant, injury reduction	■	■	■	■
Long lasting, recoatable	■	■	■	■
Glare resistant	■	■	■	■
Environmentally friendly, no heavy metals or solvents	■	■	■	■
High performance surface		■	■	■
Designed for existing substrates with cracks or imperfections			■	■
Force reduction COMFORT (SA 11-19*)			■	■
Force reduction PREMIUM (SA 20-30*)				■

\* Force reduction classification according to EN 14877

## COLOURS



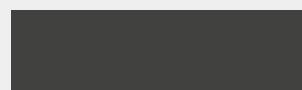
Grass green



Dark green



Light grey



Dark grey



Red



Burgundy



Light blue



Dark blue

Colour may vary. Special colours upon request.

HARDCOURT SYSTEM

## Laykold Advantage



TENNIS ■ ROLLER SPORTS ■  
MULTIPURPOSE/SCHOOL SPORTS

### THE MULTIPURPOSE SURFACE

Laykold Advantage system is comprised of factory textured colors using a select blend of silica sands. Batch mixing is simplified, resulting in superior quality control and a consistent surface pace regardless of location or applicator.

### AREAS OF USE

- Tennis facilities and halls
- Roller in-line hockey facilities
- Streetball or basketball courts
- Multipurpose facilities

### PROPERTIES

- Consistent surface pace regardless of location or applicator thanks to factory-textured top coat
- Environmentally friendly – does not contain asbestos, lead or mercury
- High abrasion and UV resistance



System structure



Cross-section



Tennis Club Magnanville  
Magnanville, France  
Laykold Advantage

HARDCOURT SYSTEM

## Laykold Masters Color



TENNIS ■ ROLLER SPORTS ■  
MULTIPURPOSE/SCHOOL SPORTS

### TENNIS SURFACE FOR COMPETITIVE SPORT

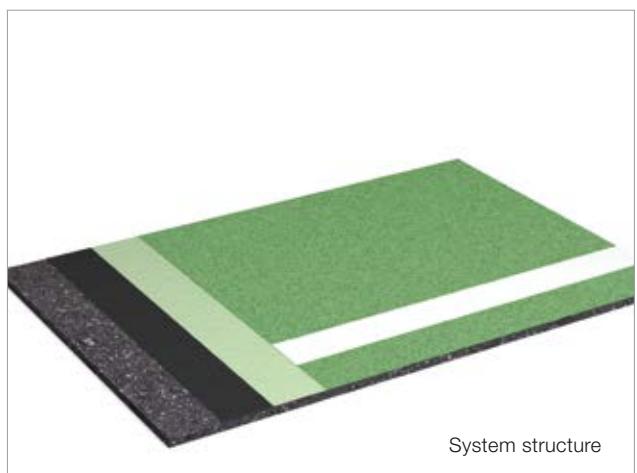
Our Laykold Masters Color system is a high-performance, all-weather, acrylic court surface, using a proprietary blend of factory-texture to ensure consistent surface pace regardless of location or applicator and enduring style.

### AREAS OF USE

- Tennis facilities and halls
- Roller in-line hockey facilities
- Streetball or basketball courts
- Multipurpose facilities

### PROPERTIES

- Superior abrasion and UV resistance
- Consistent surface pace regardless of location or applicator thanks to factory-textured top coat
- Environmentally friendly – does not contain asbestos, lead or mercury



System structure



Cross-section



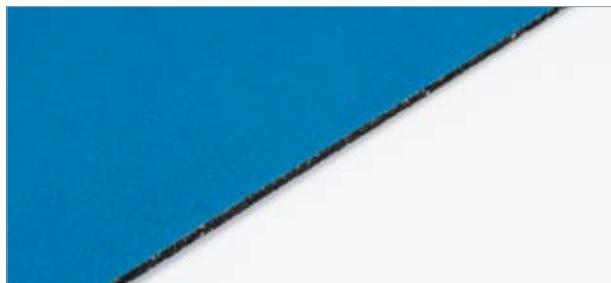
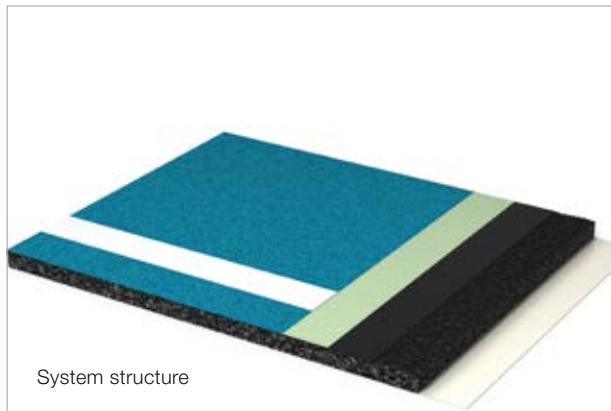
Tennis Club Paris  
Paris, France  
Laykold Masters Color

CUSHIONED SYSTEM COMFORT

## Laykold Masters 5



TENNIS ▪ MULTIPURPOSE/SCHOOL SPORTS



Cross-section

### TENNIS SURFACE WITH COMFORT ZONE

Laykold Masters 5 is a cutting-edge polyurethane/rubber/acrylic composite court system with an excellent force reduction. Each utilizes a custom prefabricated shockpad for advanced player comfort and is coated with Laykold Masters acrylics for consistent ball bounce, reliable footing and staying power.

### AREAS OF USE

- Tennis facilities and halls
- Streetball or basketball courts
- Multipurpose facilities

### PROPERTIES

- Permanent cushion
- Force reduction COMFORT
- Superior abrasion and UV resistance
- Consistent surface pace regardless of location or applicator thanks to factory-textured top coat
- Environmentally friendly – does not contain asbestos, lead or mercury





CUSHIONED SYSTEM PREMIUM  
**Laykold Masters 8**



TENNIS ▪ MULTIPURPOSE/SCHOOL SPORTS

DIVERSE, AND TAILORED FOR  
SPORTS AND PROTECTION

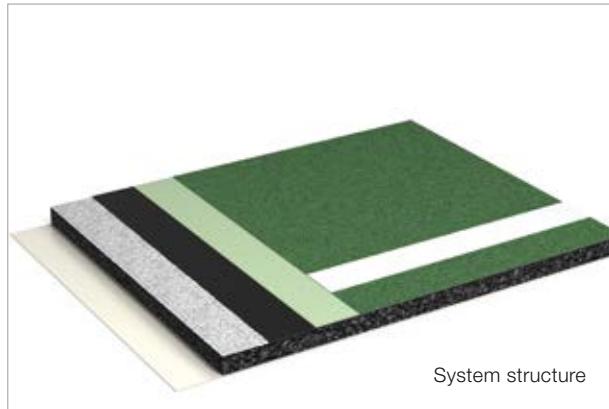
Laykold Masters 8 is a cutting-edge polyurethane/rubber/acrylic composite court system with a premium force reduction. Each utilizes a custom prefabricated shockpad for advanced player comfort and is coated with Laykold Masters acrylics for consistent ball bounce, reliable footing and staying power.

AREAS OF USE

- Tennis facilities and halls
- Streetball or basketball courts
- Multipurpose facilities

PROPERTIES

- Permanent cushion
- Force reduction PREMIUM
- Superior abrasion and UV resistance
- Consistent surface pace regardless of location or applicator thanks to factory-textured top coat
- Environmentally friendly – does not contain asbestos, lead or mercury



System structure



Cross-section





# EXTRAS

We are an innovative one-stop provider, and we always strive to develop products and solutions that offer our customers real added value. We have developed products that supplement our standard synthetic turf system and sports surfaces, in the form of tailored solutions.

104

## POLYTAN SMARTTRACKS

An intelligent running track for precise training diagnostics

106

## POLYTAN MINI-PITCHES

Huge amounts of fun on small pitches

108

## LOGOS AND PITCH / COURT EDGING

Perfect presentation in the pitch or court edging

110

## TURF HEATING

Enjoy sports all year round with turf heating

# AN INTELLIGENT RUNNING TRACK FOR PRECISE TRAINING DIAGNOSTICS

SmarTracks from Polytan offers ambitious and professional athletes and trainers a refined system for recording and assessing details of their performance during training using digital technology.

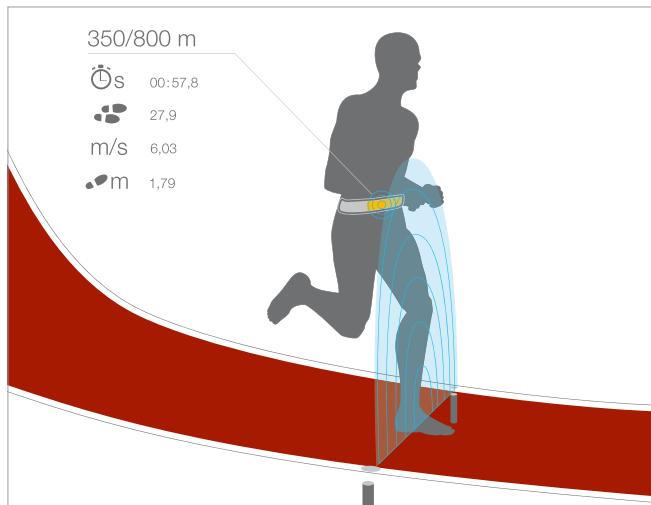
Polytan SmarTracks consists of magnetic timing gates integrated invisibly into the running track, a lightweight (24 g) body-worn sensor and an extensively trialled piece of analysis software from our partner Humotion, the specialist for recording, analysing and processing human movements using body-worn sensors.

Compared to other time recording systems such as light barriers, or GPS and video-based assessments, Polytan SmarTracks offers low measurement tolerances, 100 % protection against vandalism and absolute weather-resistance, as well as being extremely easy to use.

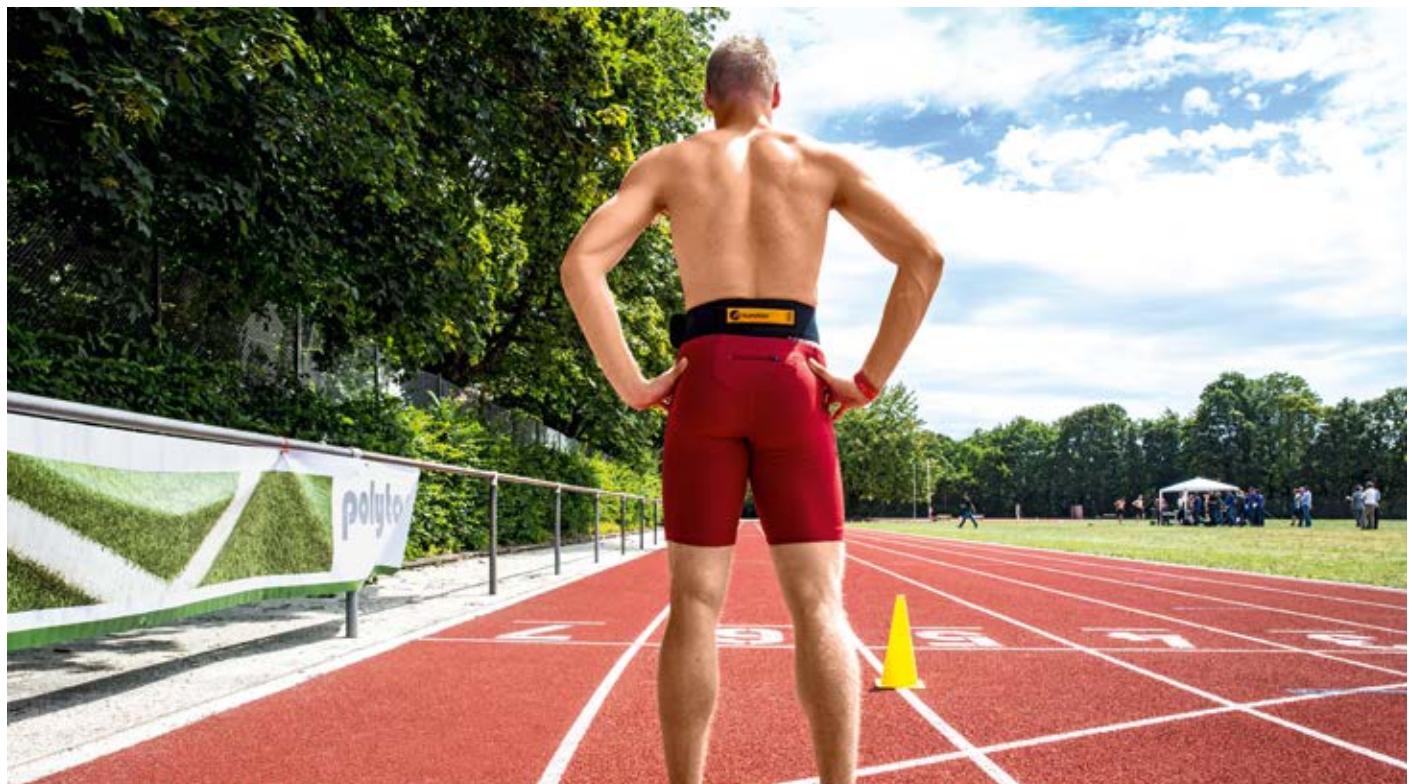
Once installed, the system offers constant availability and can also be used in parallel by several athletes.



Magnetic timing gates can also be easily integrated into existing running tracks. They are entirely maintenance-free and are simply let into the running track at defined intervals. The boreholes created in this process are then properly resealed.



The sensor is worn on the body, in a belt. It registers the runner's precise total run time and splits, as well as the distance run, stride frequency and step count.



If you would like further information,  
please contact us to request a brochure.

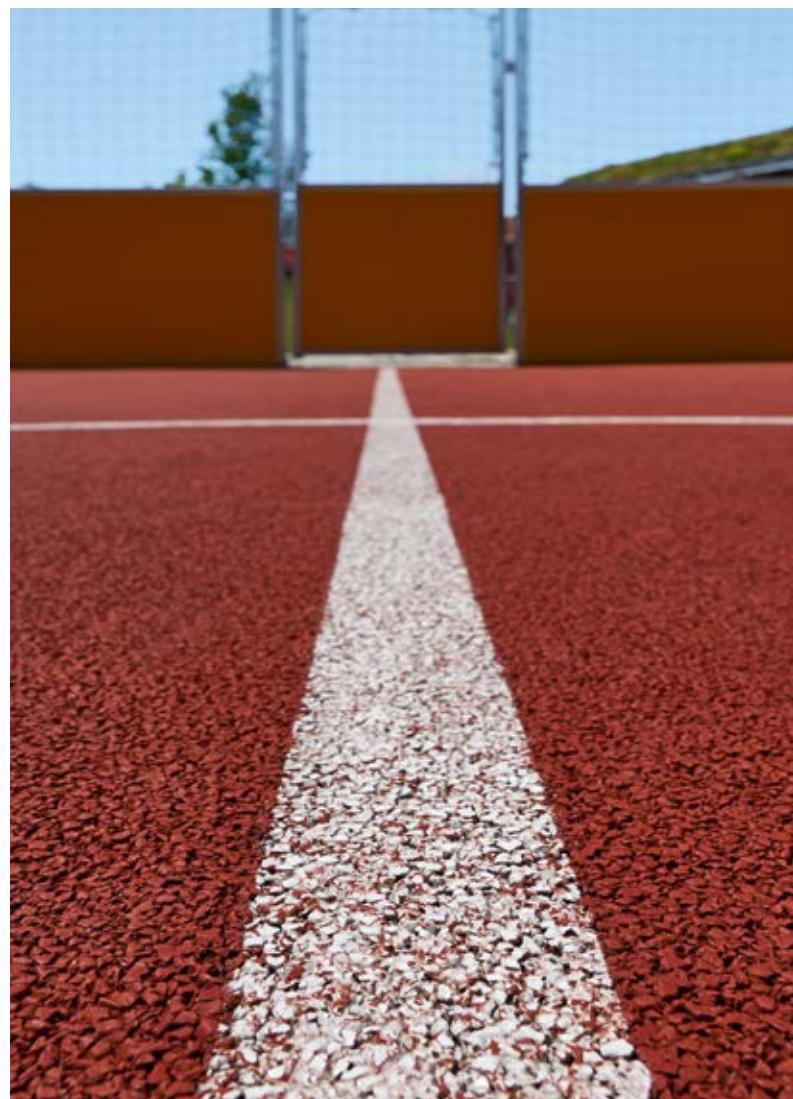
# HUGE AMOUNTS OF FUN ON SMALL PITCHES

Mini-pitches are intended for areas where space is tight, and are used to create compact, premium pitches fully equipped with synthetic turf systems or synthetic surfaces, goals, boards and nets for ball games.

Originating from the 2007 DFB "1,000 mini-pitches for Germany" campaign, Polytan was from the outset a project partner and general contractor for setting up mini-pitches. It took mini-pitches that were initially designed solely for football and developed them to become multiuse surfaces.

## MULTIFUNCTIONAL ON EVERY SURFACE

As well as the classic DFB mini-pitch, which is being completely rebuilt with foundations, an elastic base layer and synthetic turf, we also offer a foundation-free version for mini-pitch boards. The courts, which are also stationary, can be installed without a solid foundation; this enables their use in new building projects or even on existing surfaces. The range is supplemented with the Multi-mini-pitch, which is equipped with a high-performance synthetic surface in place of the turf. This also opens up the idea of mini-pitches for sports such as basketball, handball, badminton, volleyball and hockey.





If you would like further information, please contact us to request a brochure, or visit [www.minispieldfeld.polytan.com](http://www.minispieldfeld.polytan.com)



## MINI-PITCHES

### CERTIFIED SAFETY

All Polytan mini-pitches have received the TÜV certificate and the GS seal. In addition, due to their compliance with DIN/EN 15312, they are also in line with the standard for freely accessible sports equipment.

All mini-pitches are available in three standard sizes as well as special sizes based on customer requests. The scope of delivery includes soundproof boards, goals and back-of-goal nets, with side and top nets available as an optional extra.

# PERFECT PRESENTATION IN THE PITCH OR COURT EDGING

Synthetic turf areas not only provide premium pitches and courts, but also – in contrast with natural grass – are ideal for adding club emblems or logos. An increasing number of clubs are also using synthetic turfs to supplement natural grass fields in pitch edging.



Multicoloured FC Basel logo integrated into artificial turf.





If you would like further information, please contact us to request our brochures.



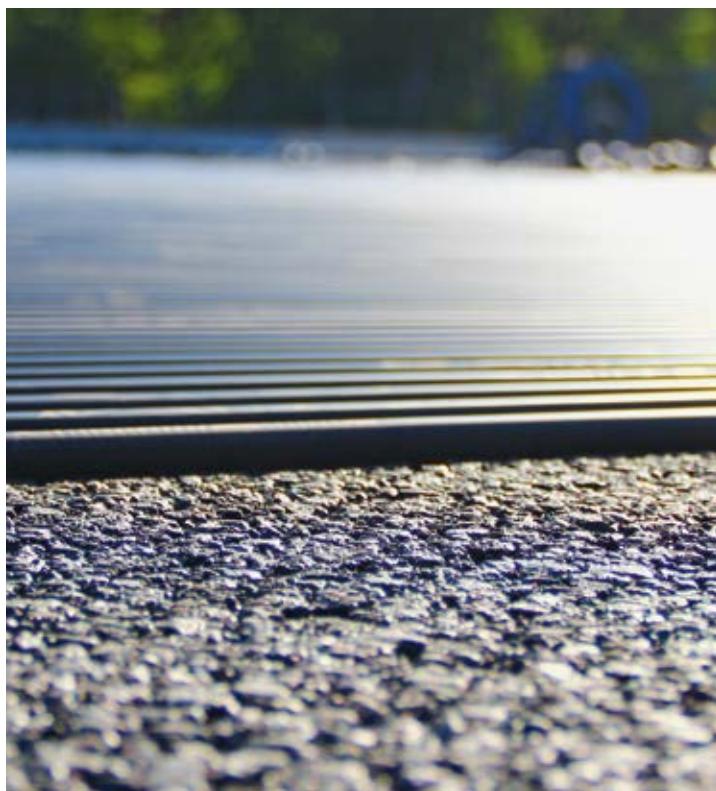
## LOGOS AND PITCH EDGING

The pitch edging with synthetic turf, starting from the touchlines and bylines at goal, offer interesting advantages when compared with previous solutions: This also creates a natural-feeling surface outside the actual pitch, which significantly reduces the risk of injury during tackling at the edge of the pitch. The sideline areas – which are often subject to heavy use by running linesmen, coaches, and players warming up – always look great and enable precise and fast use. They therefore consistently offer outstanding play conditions for throw-ins and corners.

Synthetic turf also offers an ideal area for presenting club emblems or logos of sponsors and advertising partners. Whether at the edge of the pitch or directly on it, integrating multicolour logos is guaranteed to attract attention and is a very persuasive argument when acquiring sponsors!

# ENJOY SPORTS ALL YEAR ROUND WITH TURF HEATING

Synthetic turf areas from Polytan are significantly less sensitive and much easier to care for than natural grass pitches; they do not need to be rested for periods of time, and can be used all year round. However, snow, ice and ground frost always cause problems – and this is where turf heating can help.



Heating mats are laid directly beneath the elastic layer, meaning that the system gets by with low supply temperatures and is particularly fast to react.



Winter weather such as snow, ice or hard frost can restrict the play properties of synthetic turf systems, and therefore also increase the risk of players becoming injured. When installing synthetic turf systems in colder regions with frequent snowfall, we therefore recommend putting in place turf heating. The turf heating Polytan offers together with our partner AST Eis- u. Solartechnik GmbH is not only effective even in the event of snow and ice, but also particularly energy-efficient. In contrast with traditional systems,

special heating mats are used; these are installed directly below the elastic layer, thereby enabling lower supply temperatures and significantly shorter reaction times. As a result, the heat loss in Polytan Turf heating systems is around 50% lower than with traditional pipe systems that are installed deeper.



# SERVICE

116

CLEANING, MAINTENANCE  
AND REPAIR

Care recommendations for synthetic turf  
systems and synthetic surfaces

120

ACCESSORIES/PROJECT  
SUPPORT/TRAINING

Accessories tailored to your specific needs,  
and individual support

# COMPETENT AND RELIABLE

In choosing Polytan, you have selected high-quality sports surfaces that are precisely tailored to your needs, combined with the security of always having a reliable service partner at your side.

We are a one-stop provider with service teams we have trained in-house and our own special machines for efficient cleaning, care and repair of your Polytan sports surfaces. We would also be delighted to provide you with a Polytan care protection letter – our maintenance and service contract for ensuring consistently high quality in the use of our products, and maximum value retention.

We also offer an extensive range of accessories such as goals, long jump bars and basketball hoops. We would also be delighted to perform subsequent expert upgrades for you, keeping your costs within budget.





# PROPER MAINTENANCE OF SYNTHETIC TURFS

Polytan synthetic turf systems are designed to retain their full functionality, even after many years of intensive use. Even the toughest turf needs to deal with the impact of weather, dirt, dust and flower pollen or leaves over the long term.

Routine visual inspections and the immediate removal of surface dirt are among the duties of any groundsman. In addition to this, the surface should also be cleaned thoroughly on a regular basis. To support you in this task, we offer training and special cleaning equipment, or in fact will just perform the cleaning for you – with trained specialists, who can also quickly and expertly perform repairs when needed.



## ROUTINE CARE

We recommend the Polytan ACS maintenance unit for routine care. This equipment can be used to both quickly and easily brush the blades of the synthetic turf, and – if necessary – to evenly distribute and relax the fill material in the same process. This will enable you to enjoy optimum play properties from your Polytan synthetic turf in the long term.

## NON-ROUTINE CARE

We offer a variety of wet and dry cleaning services performed by our qualified experts for an intensive deep clean. This should be performed once a year by an RAL-certified company such as Polytan GmbH.

## REPAIRS

Our Polytan service representatives perform expert repairs, such as replacing worn-out penalty spots, repainting lines or preparing stress zones.

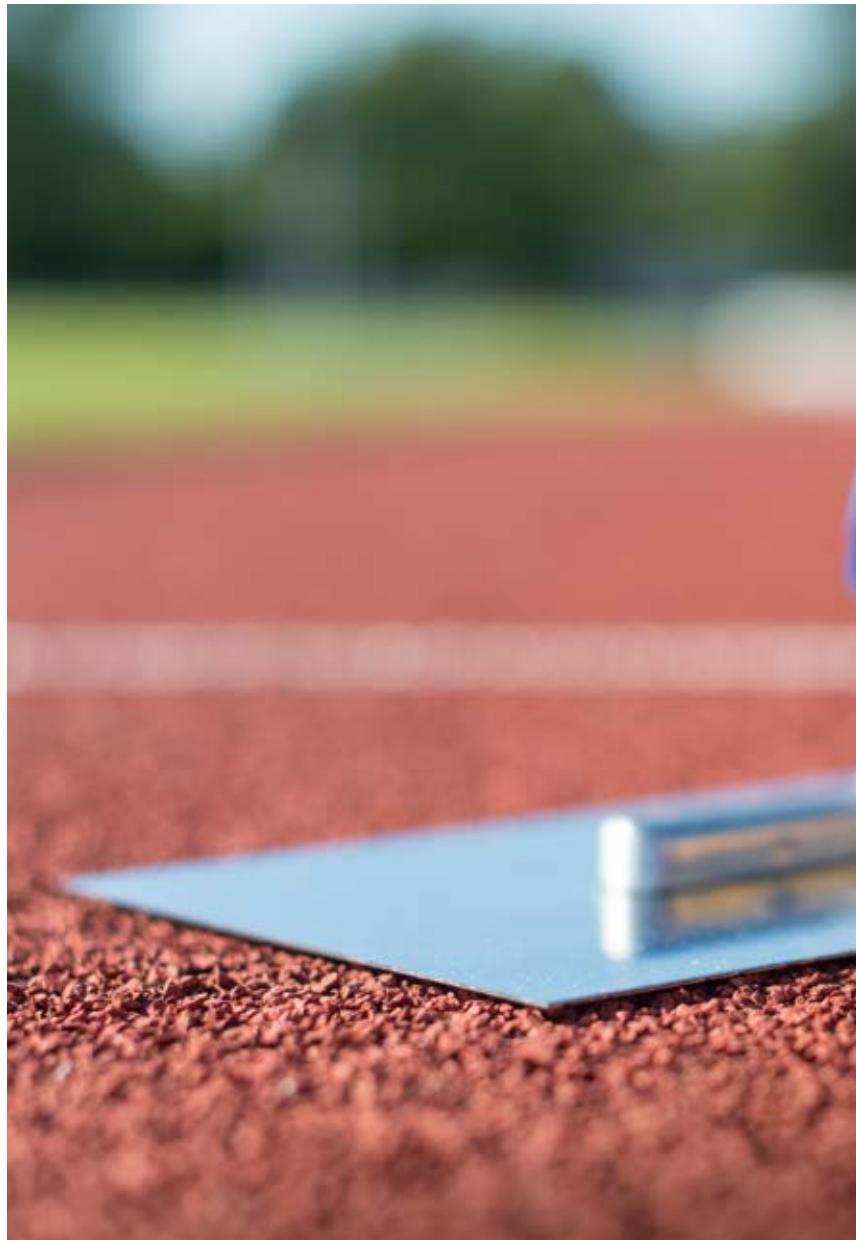
## REMOVING OLD SYSTEMS/ RECYCLING

We will also remove all systems for you – quickly and expertly: the old systems are removed in sections, broken up into their components, and then sorted and further processed, recycled or made use of.



# PROPER MAINTENANCE OF SYNTHETIC SURFACES

Over the course of time, even the surfaces of running tracks and multifunctional services can be impacted in that the surface becomes weathered or encrusted, or moss accumulates, for example. Although this contamination is usually only superficial and is mostly very easy to remove, any damage should be remedied as soon as possible by our Polytan specialists.





## CLEANING

Normal dirt due to environmental influences can be removed using mechanical high-pressure wet cleaning. This process quickly restores the sports-specific functions and look of the running track.

## REPAIRS

Damage due to vandalism, incorrect use or wear is expertly repaired by our Polytan service teams. We also quickly and efficiently renew pitch lines.

## REMOVING OLD SYSTEMS/ RE-TOPPING

The Polytan re-topping system means it is no longer necessary to remove and dispose of old systems at great cost; instead, they can be used as a subfloor for new coatings.

CLEANING  
REPAIRS  
REMOVAL

# ADDITIONAL PRODUCTS AND SERVICES FROM POLYTAN



Further tips and information on maintaining synthetic turf and synthetic surface systems are available in our maintenance handbooks. Just get in touch and we'll be happy to help.



## ACCESSORIES

As well as maintenance equipment for our synthetic turf systems and synthetic surfaces, we also offer a wide selection of premium sports equipment and accessories.

- Goals, baskets, nets and markings for all the usual ball sports
- Protective grating, mats, take-off boards, starting blocks, hurdles, etc. for athletics
- Players' tunnels, winners' podiums, transport vehicles and much more

## PROJECT SUPPORT

Planning sports facilities is a complex task that needs to take into account a wide range of factors depending on the planned use. We will be happy to support you right from the planning phase for your project, e.g. with respect to

- The creation of CAD plans and technical drawings
- Measurement and line marking
- Advice on financing

## TRAINING AND SEMINARS

Every groundsman can become a Polytan maintenance expert with our seminar programme. We offer different training for each product:

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



Polytan GmbH

Gewerbering 3

86666 Burgheim

Germany

T: +49 (0) 8432 / 87-0

F: +49 (0) 8432 / 87-87

[info@polytan.com](mailto:info@polytan.com)

[www.polytan.com](http://www.polytan.com)