



MonoTurf[®]

Performance football turf



PERFORMANCE FOOTBALL TURF - 200 µm / 360 µm

polytan[®]

IT'S THE DIFFERENCE THAT COUNTS

The Strong, soft fibre

Polytan has over 40 years of experience in the development, manufacture and installation of synthetic sports surfacing systems. We have accumulated a wealth of experience in the use of monofilament fibres in synthetic turf pitches through constant quality checks by our research department, independent testing establishments, together with the ability to draw on the experience of actual users. On the basis of this, a new monofilament fibre designed for football use has been developed by Polytan. To take account of the special requirements involved, not only was the geometric design of the pitch fibres altered, but the way in which the material is put together has been redeveloped and applied. This new and unique pitch technology was developed without any compromise in favour of wider areas of application, and accordingly it has been integrated into the FIFA quality concept, underpinned by the requirements for playing football on synthetic turf.

The result is an especially soft, pure MONOFILAMENT fibre synthetic turf pitch, which satisfies all the requirements of the new FIFA 1-star and 2-Star standard, as a quality sports pitch capable of withstanding heavy stresses.

Special features:

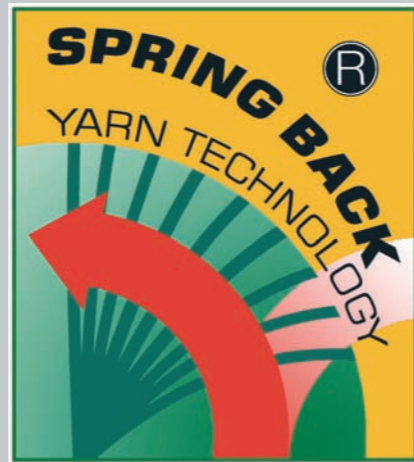
- Thickness of the monofilament fibre - **MonoTurf** min. 200 microns
- Thickness of the monofilament fibre - **MonoTurf RS+** 360 microns
- Improved spring-back fibre geometry
- Special **Polytan PE** formula

Characteristics:

High levels of long-term elasticity, unique spring-back capability, extremely hardwearing, with an optimised yarn surface which is more upright and softer on contact.

Colour and appearance of the pitch:

The new pitch has an absolutely flat, even appearance, and unlike natural pitches there is no difference in colour or patchy surface coverage even in the areas subjected to heavy wear. The new colouring on the fibres produces a rich, natural-looking green.



MonoTurf®

Performance football turf



The multipurpose football pitch. Outstanding playability

Polytan MonoTurf is based on the newly developed spring-back yarn technology. It is designed to be a particularly hardwearing option, and is in demand wherever the best playing characteristics are needed for football, but where other sports (American football, rugby, hockey) can also be played. The main focus of this product is on a long lifetime, profitability and low maintenance costs.

The best for all:

A new quality of synthetic turf pitch. Especially robust, outstanding soft, and highly economical.



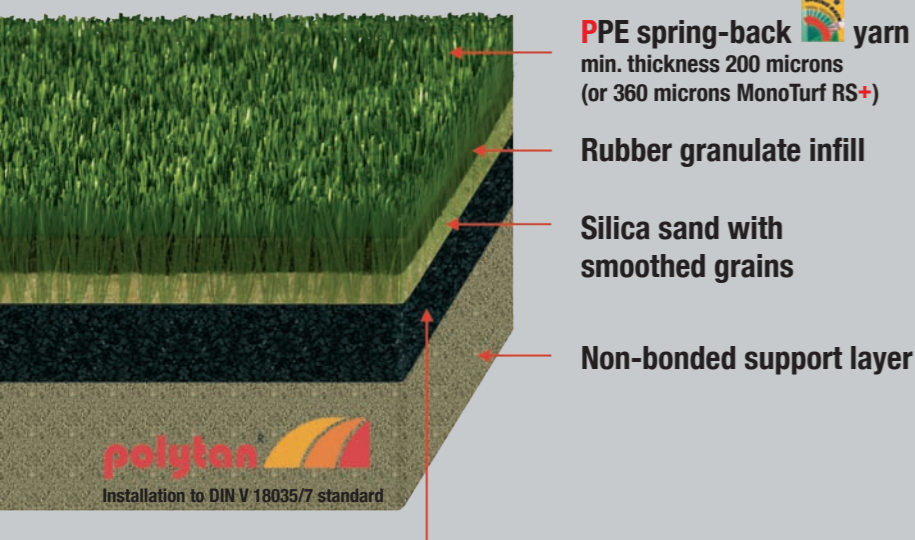
The economical pitch with straight spring-back yarn

The cost-effective football pitch for lovers of that Wembley-look, with hitherto unknown playing performance. The soft yarn makes the players feeling like on natural turf. With regular and expert care using the ACS maintenance system, this new type of turf retains its outstanding looks and excellent playing characteristics over the long term.

The system technology

Only a **total system** which is balanced in terms of its structural elements and with each of its individual components optimised can guarantee lasting optimal use and consistently good playing qualities.

The elastic support layer means that the playing surface retains outstanding playing characteristics throughout its life.



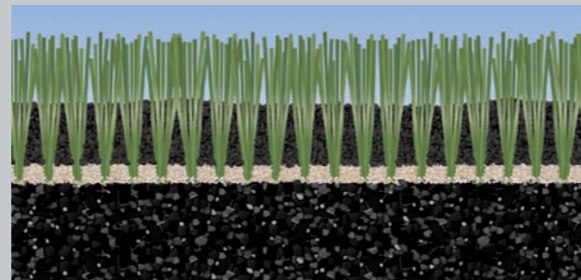
PPE spring-back yarn
min. thickness 200 microns
(or 360 microns MonoTurf RS+)

Rubber granulate infill

Silica sand with smoothed grains

Non-bonded support layer

The foundation: The Polytan system



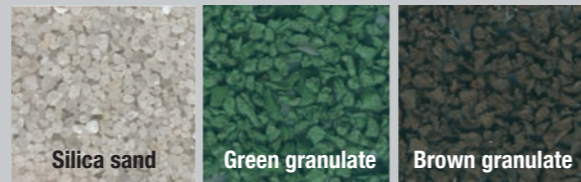
MonoTurf

Performance football turf

Straight monofilament yarn. Soft, upright and perfect.

The enormously high wear resistance of the especially strong and yet soft PPE-fibres allows an open surface structure and good long-lasting playing properties.

Latest in-fill technology using top quality granulates:
Rubber granulate with low compaction levels. Secure grip. Kind on the skin, and environmentally friendly.



The outcome: FIFA certifications

FIFA 2 Star field test specimens*

Turf / playing properties

- Rotational resistance
- Ball roll, ball rebound & angle
- ball rebound
- Stud slide value & stud deceleration value
- Sub-ambient tests

Yarn / infill

- Infill characteristics
- Carpet pile, yarn(s)
- Elevated tests

Sub-system

- Shock absorption
- Maximum & vertical deformation
- Water permeability
- Evenness

Pitches + Infills

Elastic support layer

The benefits: Good performance, economically and with long life



The result
Lasting retention of ideal playing conditions using the optimal maintenance system

*The overview shows some important test specimens.

Polytan EL (elastic support layer) is an indispensable critical system component

Both in terms of force reduction and cushioning, the playing surface achieves above the 60% standard or higher and therefore satisfies the FIFA standards at all times. The characteristics of a playing surface can only be achieved and permanently maintained when in combination with an underlying elastic support layer. At an official FIFA field test measurement at the FC Kaiserslautern training pitch, after two years' constant use the Polytan elastic layer achieved 99% of the cushioning quality it possessed when new, thereby exceeding the highest FIFA requirements being applied.

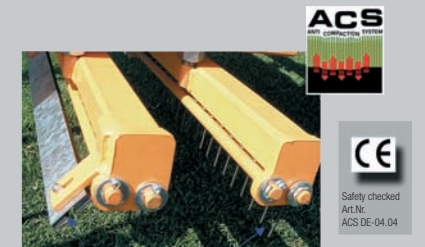


Polyton ACS Machine
Maintenance unit for monofilament synthetic turf pitches

Individually adjustable. Easy to operate.

For variable maintenance tasks:

- Levelling and brushing up pitches
- Repositioning fibre strands vertically
- Decompacting and brushing the turf system



A spring-mounted combing bar mounted in parallel with a magnetic detection bar



MonoTurf®

Performance football turf

MonoTurf 240 ACS 65

FIFA Recommended 2 Star certified for:

Spvgg Weil der Stadt - Germany

1st Test 2005

Re-tested 2006

Re-tested 2007

Re-tested 2008

Re-tested 2009

SV Grün-Weiss Olpe - Germany

1st Test 2006

Re-tested 2007

Re-tested 2008

Kastrup, Vestamager - Denmark

Kastrup, Ved Diget - Denmark

Tårnby FC, Tårnby IF - Denmark

1st Test 2007

Re-tested 2008

Re-tested 2009

MonoTurf RS+ 240 ACS 65

FIFA Recommended 2 Star certified for:

Titisee-Neustadt, Jahnstadion - Germany

1st Test 2009

MonoTurf 240 ACS 65

FIFA Recommended 2 Star certified for:

Tocopilla, Estadio Ascanio Cortes - Chile

Taltal, Estadio Belmor Rojas - Chile

Antofagasta, Estadio Parque Juan Lopez - Chile

1st Test 2009

Hallein, Universität RIF Salzburg - Austria

1st Test 2008

polytan® GmbH

Gewerbering 3

D-86666 Burgheim

Telefon +49 (0) 84 32 - 87 0

Telefax +49 (0) 84 32 - 87 87

Internet: www.polytan.de

polytan®

IT'S THE DIFFERENCE THAT COUNTS

PERFORMANCE FOOTBALL TURF - 200 µm / 360 µm