



# MegaTurf<sup>®</sup> CoolPlus

New cooling hockey turf



The new CoolPlus fibre turf system for hockey professionals

**polytan<sup>®</sup>**

IT'S THE DIFFERENCE THAT COUNTS

## MegaTurf CoolPlus – Hot play on cool turf

The MegaTurf CoolPlus hockey turf made of 100% Polytan PE monofilaments sets the standard for the new generation of hockey turf products.

Development in hockey turf systems is an ongoing process. The demands of the players and trainers for fast, precise play with the ball has ensured that hockey turf systems have already achieved a very high level of development and means that the requirements for a perfect synthetic turf system are extremely high.

## With Polytan innovations to a better product

The new MegaTurf CoolPlus hockey turf combines durable texturing and CoolPlus fibre technology to create a high quality innovative system which shows the way forward for professional fully synthetic turf systems. Together with the time-tested Polytan system construction, both professionals and high level amateurs will find this to be a hockey turf system which provides superb playing characteristics, durability combined with excellent economy.



## MegaTurf CoolPlus

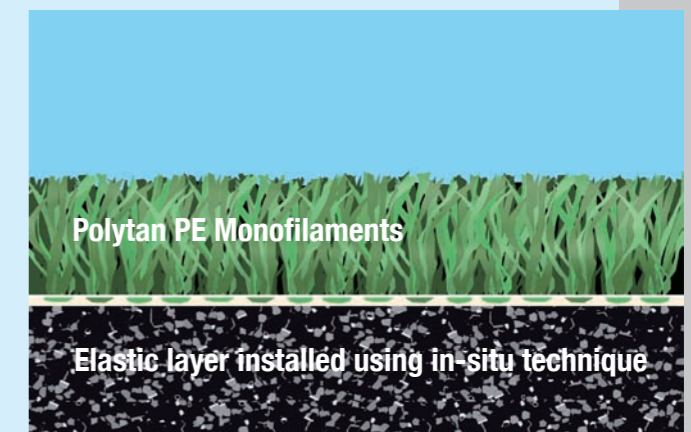
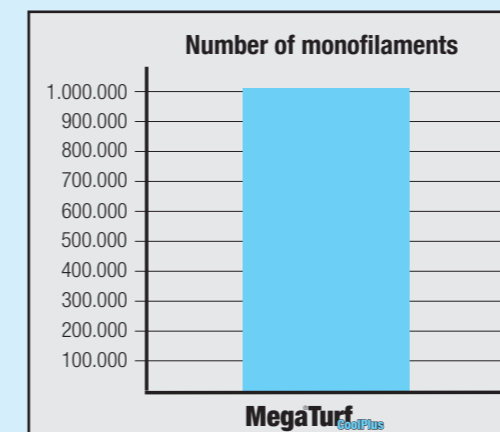
### Genuine Polytan monofilaments

The playing properties are still dependent on the yarn used to make the turf. It is the yarn that determines how straight and fast the ball will roll. It is also the yarn that determines the level of traction and rotation and, therefore, the acceleration and deceleration of the players.



In contrast to the existing standard type, the new Polytan MegaTurf CoolPlus fully synthetic turf system is not made of fibrillated yarn but of individually extruded fibre tapes. The individual tapes mean that an extremely high number of fibres can be used on the surface.

Compared to the fibrillated turf product, this technology offers seven times the number of filament ends in the turf and on the surface.



### Benefits of MegaTurf<sup>®</sup> CoolPlus

#### Genuine multi-function turf

Even with monofilament systems no running or machine direction detectable

#### Good water storage capacity

Drops and molecules of water adhere better to the many filaments and in the spaces in between

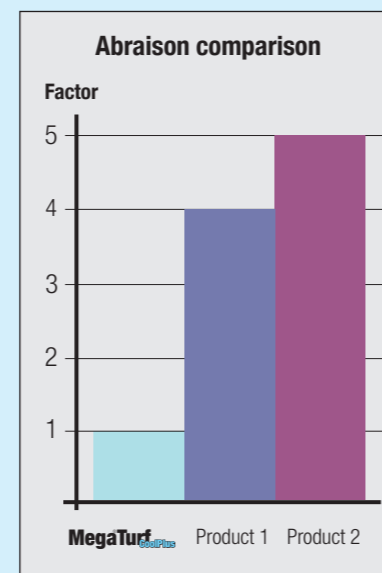
#### Soft to the touch

Each individual filament is soft and has optimum rebound properties

## Pure Polytan PE formulation

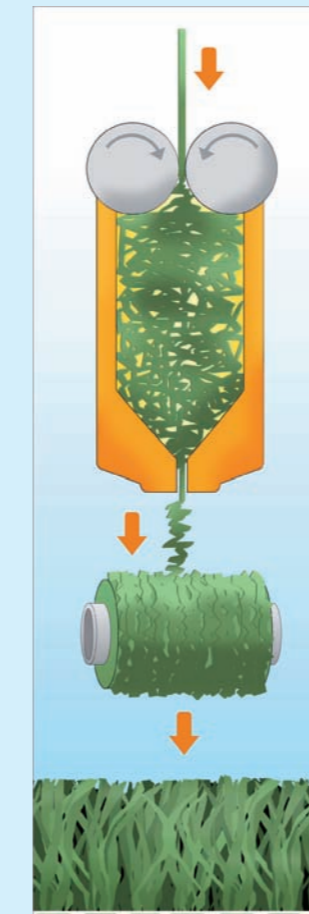
We are familiar with the softness and also the resistance of the Polytan PE formulation from the development of football turf and this product has proven itself on many occasions. The criteria for the formulation of the hockey turf product included increased attention to enhanced softness and the creation of fibres which do not harm the skin.

In the past, softness and resistance have proved to be something of a contradiction as far as fibre materials were concerned. With this new PE formulation, however, Polytan has now managed to eliminate this contradiction whilst at the same time achieving maximum wear resistance for the individual fibres together with the softness mentioned above. The wear resistance of the product has also been considerably enhanced compared to fibrillated fibres.



## Exclusive Polytan texturing

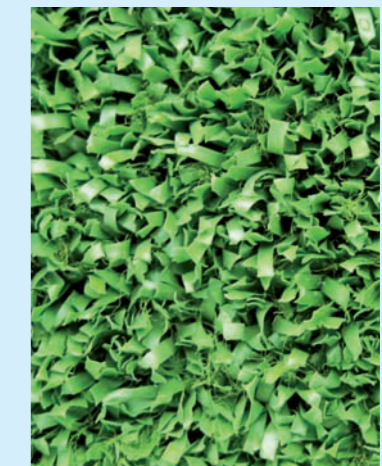
The PE filament can only be given genuine, permanent crimping by means of the texturing process. This increases the density of the turf, produces a uniform, production-independent surface finish without any identifiable pile direction. The volume and the rebound properties of the turf fibres are also improved.



Polytan texturing process

Permanent crimping can only be achieved on the PE filaments using the Polytan texturing process. The combination of heat treatment and mechanical crimping in a precisely defined process provides all of the filaments with texture which is retained throughout the life of the product.

It is this process which allows the 100% PE filaments to be used for the creation of professional hockey turf.



**Benefits of MegaTurf**<sup>®</sup>  
CoolPlus

**High wear resistance**

Wear protection is many times better than that of previous monofilament systems of polyamide or PP filaments

**Soft to the touch**

Each individual filament is soft and has optimum rebound properties

**Benefits of MegaTurf**<sup>®</sup>  
CoolPlus

**Permanent crimping**

Closed surface and improved elasticity

**High volume**

Consistent ball roll properties with no directional effect

**Maximum intersections**

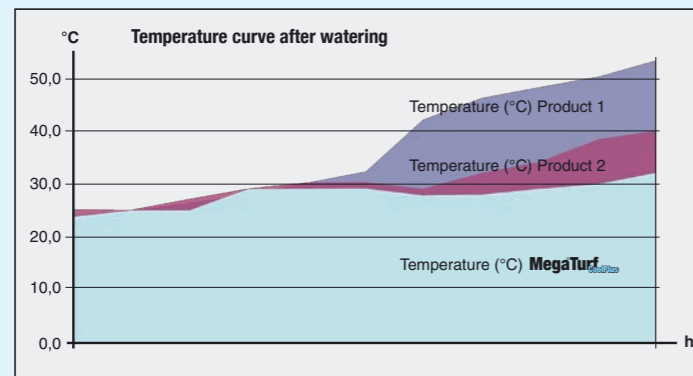
Optimum water storage for reduced water consumption

## Unique Polytan CoolPlus technology

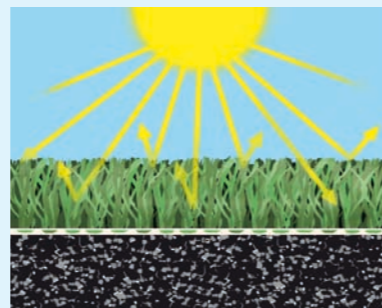
The CoolPlus technology is capable of noticeably reducing the surface temperature of the fully synthetic turf. The reason for this is that the fibres formulation includes pigments which directly reflect a large proportion of the IR radiation which is invisible to the human eye.

This radiation is essentially responsible for the turf heating up when exposed to sunshine.

The Polytan CoolPlus effect is permanent because the filaments are not coated with a coating that would wear off. The CoolPlus pigments are integrated into the raw material during the formulation process and retain their effect throughout the service life of the turf.

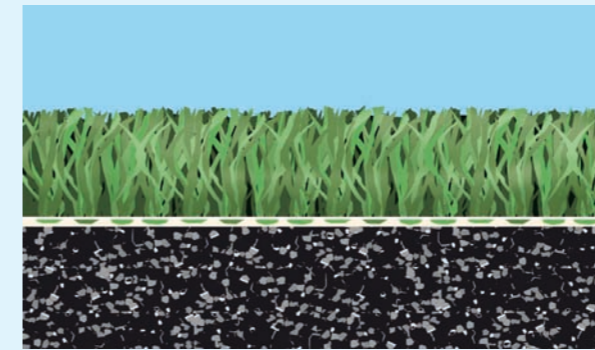


CoolPlus Technology



## Polytan synthetic turf systems – systematic success

Polytan develops and markets the system concept of modern hockey turf. The Polytan system includes a concrete division of labour and every component has a clearly defined role to play.



### Polytan system components

- Polytan PE monofilaments
- Textile second backing
- Elastic layer (ET, EL) installed in-situ

### Elastic layer

The elastic layer in the Polytan system is responsible for ensuring compliance with important sports physiological values such as force absorption and deformation within a precisely defined value range. It is installed using an in-situ technique and offers permanent protection for the players. The in-situ installation ensures seamless joints throughout the entire playing surface and creates a completely flat surface for the turf.

### Polytan PE monofilaments

The Polytan PE monofilaments give the players a feel of playing on natural grass and play an important role in player safety if they have an active and dynamic playing style. They also ensure precise ball reactions and perfect conditions for stick control. High quality raw materials and a unique formulation ensure excellent wear resistance and absolute softness.

### Textile second backing

The textile second backing guarantees maximum dimension stability for the hockey turf. This is the only method of using the full benefit of the base course which has been installed on the absolutely flat surface of the elastic layer. The turf lies fully on the elastic layer and can compensate even for very high stresses.

**Only with the Polytan system concept is it possible to provide an excellent product which offers maximum performance and natural playing properties for players and users of synthetic turf.**

### Benefits of MegaTurf CoolPlus

IR reflection

Less heating of the complete turf system

Reduced temperature

Lower water consumption for the MegaTurf CoolPlus Turf System

Formulation with IR-reflecting pigments

Permanently bound in to the filament for permanent, sustained effect

### Technical data for MegaTurf CoolPlus

(The data in the product data sheet are binding)

Material	100 % Polytan PE formulation
Pile height	11 mm
Stitch density and pitch	40 per 10 cm ; 3 / 16 Zoll
Design	Elastic layer
Certification	FIH Global Certification, DIN V 18035-7: 2002-06

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