

discovery!

the future of grass technology



BY HATKO
HYBRIGRASS
SUPPORTS NATURE

www.hatkosport.com

➤ ALLIANCE of the EXPERIENCES!

Rob de Heer, who is well known as developer of re-turfing techniques and hybrid grass technology, and **HATKO**, which is one of the leader companies in the production of synthetic sports surfaces, brought their experience together to create the ultimate "**HYBRIGRASS**"

In 1999 Rob founded Support in Sport and as Director of Operations grew the company to one of the leading natural and synthetic grass companies in Europe. The company was renowned for its design and construction of 5-a-side football centres in the UK and development of re-turfing techniques for major stadia.

Rob gained many years of experience in the design and construction of high performance pitches. He was responsible for projects in many major stadia, such as the Amsterdam Arena, Old Trafford, Millennium Stadium, Stade de France, Stadio Della Alpi, Parken Stadium and Santiago Bernabeu. Rob's engineering skills were tested whilst developing lightweight pitch constructions for the sliding pitches in Gelredome Arnhem and Arena Auf Schalke.

From 2001 Rob was part of the team developing new natural grass reinforcement systems or later named Hybrid grass systems. He is one of the pioneers and implemented Hybrid grass in some of the major stadia in the world.

After **15+ years** of research and experience Rob decided to join forces with **HATKO**. The philosophy behind this decision is to unite Rob's hands on experience and **HATKO**'s production technology. In this system all the elements come together from initial pitch design, specific carpet reinforcement design to management of hybrid grass systems.

➤ NATURALLY THE ANSWER FOR INCREASED USAGE

HYBRIGRASS is the ultimate marriage between natural grass and synthetic grass. It combines the benefits of natural grass playing surfaces with the strength and durability of synthetic grass. The **HYBRIGRASS** system consists of high quality Omega synthetic grass fibres, tufted in a special patented backing incorporating over **40% voids**.

The **HYBRIGRASS** carpet will be installed on a specific rootzone layer and carefully filled with a clearly defined rootzone mixture before high quality sports field grass seed is drilled into the surface. The natural grass will grow between the synthetic grass fibres creating a strong and vigorous playing surface. The 'open' texture of the backing ensures that the grass roots are not obstructed in their vertical movement downwards from the day of installation.

Meeting International Football Standards

One of the major design challenges for HYBRIGRASS is for the system to meet the International Football Standards



Features

- Pile Height : 50mm
- Pile Weight : 1.000 gr/m²
- No. of Filament : 98,280/m²
- Porosity: %40

Installation



We are able to turn around **HYBRIGRASS** installations in 5-7 days (when seeded in-situ) or 2-3 days when pre-grown **HYBRIGRASS** turf/sods are used.

Design, Build & Maintenance Packages (DBM)

Our HYBRIGRASS engineering support service enables us to provide the customer the complete package from defining the initial design brief to preparing the working design, execute the installation and maintenance. Our experienced engineers will be able to translate the client's requirements to the most optimum design whilst taking into account local conditions and available construction materials. Within the sports field design we offer the following in-house systems:

- Sports Pitch Hydro drainage systems
- Sports Pitch Hydro water harvest/retention systems
- Sports Pitch Hydro irrigation systems
- Sports Pitch Hydro undersoil heating systems
- Sports Pitch Hydro subsurface aeration & vacuum drainage system

Our in-house construction and installation crews guarantee a smooth and on time installation, where most competitors have to rely on their subcontractors and supplier's agenda. We are able to turn around HYBRIGRASS installations in 5-7 days (when seeded in-situ) or 2-3 days when pre-grown HYBRIGRASS turf/sods are used. All of our installations and construction projects will be managed by an experienced engineer/foreman on a day to day basis.

Within our DBM service we have the opportunity to offer maintenance support during the HYBRIGRASS establishment period (typically 8-12 weeks) or enter into an annual or multi annual maintenance contract.



Benefits For The Players

- Playable 24/7 under most conditions
- Uniform and level playing surface, even in high wear areas and goal boxes
- Always green surface, even when natural grass is worn out in areas
- Playing on sandy soil infill and not rubber crumb or cork infill. No rubber smell, washed out cork granules showing on the surface and always a cool surface to play on.
- Optimum parameters on player-surface interaction (friction, rotational friction, underfoot stability)
- Less chance on playing surface related injuries
- Train and play on the same surface

Benefits For The Groundstaff

- No more divot repairs. Only small scar damage to the surface that requires attention
- No special maintenance equipment required
- Easy to manipulate playing surface conditions, tailored to the players and managers requirements
- Quick recovery of natural grass during the season and during regeneration period
- Shorten the out of season regeneration period
- Easy to repair damages if these occur

Benefits For The Facility Manager

- Increase of playing capacity up to 1000 hours per annum
- Play and train on the same surface and therefore reducing the need for additional training areas
- The 'always green' surface will guarantee a good visual appearance to the users and spectators
- HYBRIGRASS initial installation cost are very competitive compared to similar quality hybrid grass systems
- HYBRIGRASS on-going cost for maintenance are in line with those for sand based natural grass surfaces
- No need to invest in special maintenance equipment
- The 'end of life' cost liability is easily reduced to zero when lifting the system as turf rolls/sods and re-use
- Above all HYBRIGRASS running cost are beneficial as it ensures a much higher usage compared to natural grass surfaces and has double the lifespan compared to synthetic grass surfaces

HYBRID TURF SYSTEMS – COMPARE FUNCTIONALITY

Sport Related Function		Fibre Reinforced Rootzones	Fibre Injected Systems	Carpet Systems Tufted	Carpet Systems Woven
Percolation	+	+	+	+	+/-
Hardness	+	+	+/-	+/-	+
Traction	+	+/-	+	+/-	+
Ball roll	+	+	+	+	+
Ball bounce	+	+	+/-	+	+
Energy restitution	+	+	+	+	+
Surface stability	+	-	+/-	+/-	+
Surface evenness	+	+/-	+	+	+
Visual performance under wear	+	-	+/-	+/-	+
Capability of meeting FIFA quality standards	+	-	-	-	+/-

CONSTRUCTION RELATED FUNCTION					
Face weight upper 50 mm	+	-	+/-	+/-	+/- > +
Fibre width	+	-	- > +	+/-	+/- > +
Fibre density	+	-	-	-	- > +/-
Tuft lock / fibre anchoring	+/-	n/a	+	-	+
Porosity	+	+	+	+/-	+/-
Frost resistance	+	+	+	+	+
Water retention	+	-	-	+	+
Resistance to wear	+	-	+	+/-	+
Dust binding capacity	+	-	-	+/-	+
Capability for repairs	+	+	-	+	+
Estimated lifespan	+	+/-	+/-	+/-	+

ENVIRONMENTAL FRIENDLY

Using a reinforced natural grass system like HYBRIGRASS contributes to a better environment. Once established, HYBRIGRASS consists for up to 90% of natural grass and hence contributes to CO² reduction in the atmosphere. The cooling effect of natural grass caused by its respiration, benefits the direct, often urban, environment as well as the well-being of the players.

Compared to synthetic grass systems, the lifespan of HYBRIGRASS is minimally doubled and hence reduces the environmental impact of producing synthetic turf carpets dramatically.