



HSPG

High Score
Performance Ground

a product of the HCCG

High Score Performance Ground (HSPG)

The riding surface for winners!



What is the HSPG?

For years horse specialists have been working with scientists from the university to achieve optimization in riding surface construction.

The HSPG was developed as a result of using high-quality materials including an elastic mat which has been tested under extreme stress.

A number of horse owners, riders and even vets are convinced by this riding surface, and the results speak for themselves.

The HSPG delivers

- high factor of safety
- joint-friendly characteristic
- economical and ecological benefits
- ease of installation



Safety aspect

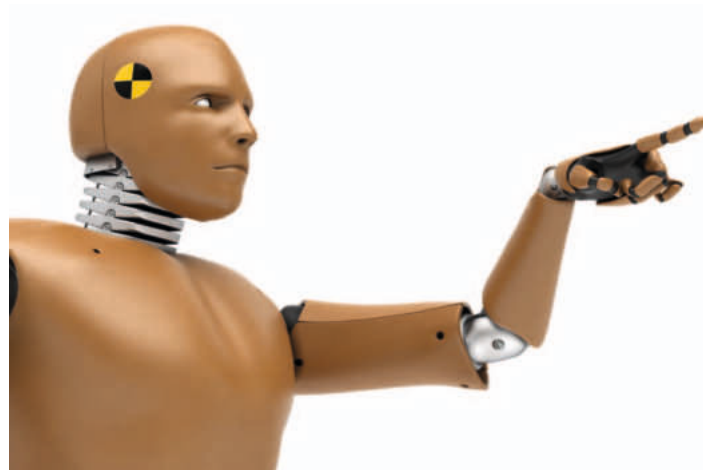
The determination of the Head Injury Criterion (HIC) confirms the considerably increased safety for riders on the HSPG. The threat of head injuries in cases of accidents is reduced by over 50 %.



What is the Head Injury Criterion?

The Head Injury Criterion (HIC) is a measure to evaluate the likelihood of head injuries arising from an impact. HIC is often used to determine the safety of impact-absorbing surfaces on playgrounds i.e. under climbing frames. In the process the critical fall height is determined. It describes up to which height the occurrence of severe head injuries could be excluded.

The HIC-Test has been operated by the Institut für Sportstättenprüfung (ISP).



Application and results of the HIC measure on riding surfaces

To analyse the safety of riding surfaces, in case of falling from a horse, the HIC measure was applied on riding surfaces. Riding surfaces with an elastic mat and riding surfaces without an elastic mat were involved in the analysis.

For the HSPG the results confirm a reduced risk of severe head injuries by more than 50 % compared to ordinary riding surfaces. This is proven by the increase of the deviation between critical fall heights detected by HIC. Both riding surfaces containing an elastic mat showed a critical fall height of 3,2 m whereas the ordinary riding surface measured a critical fall height of 1,1 m.





Rideability properties

- The elasticity of the embedded matting ensures riding that is both kind to the joints and strength-conserving, whether in the arena or on the course.
- An optimum level of surefootedness is guaranteed by means of a constant moisture penetration of the treading layer.
- A constant moisture content in the treading layer ensures there is no harmful dust exposure for either horses or people.





Economy and ecology

- The fully-automatic, computer-controlled irrigation and drainage of the HSPG is hugely labour-saving. With the HSPG, costly manual watering is entirely unnecessary.
- With elastic matting made of environmentally-friendly recycled materials and a sustainable irrigation system, the HSPG also scores highly where sustainability is concerned.

Reliability

- The HSPG uses considerably less water than other irrigation systems. The continuous monitoring of water consumption, conducted by the HCCG, confirms a saving of up to 50% in the amount of water used compared to conventional layer-constructed surfaces.
- Wet-spot formation in the treading layer is avoided by means of an even distribution of the water throughout the sand grains.
- In comparison to other ebb-and-flow systems, excess water drains three times faster, meaning that even after heavy downpours the HSPG presents no significant delay in a return to optimum riding conditions.

→ Cancelling tournaments is a thing of the past



References

Decades of practical experience coupled with a thorough understanding of the latest scientific developments have allowed us to design a riding surface which is truly optimal in every respect.

A variety of test results from international experts confirm the superiority of the HSPG.

"As tournament organisers we need optimum riding surfaces which offer the best-possible rideability properties throughout a tournament, whatever the weather. With the HSPG, we can guarantee that."

At the international equestrian sporting event Horses & Dreams in Hagen a.T.W. in 2012, Charlotte Dujardin achieved a new world record with her horse "Valegro" on the HSPG. The British Olympian won the Grand Prix Spécial with more than 88 percentage points.

Ullrich Kasselmann

And the HSPG has also undergone initial tests outside of Germany:

"In Oman it only rains a few times a year but when it does rain, it rains a lot. The mass of rain water had interfered with our tournament more than once. It was only after installing the elastic matting from Germany that the rainfall could be drained quickly and the tournament could go ahead as planned."

**Brigadier Abdulrazak Alshahwarzi, Commander of the Royal Cavalry,
Sultanate of Oman**



The path to your very own HSPG

With our extensive know-how and the knowledge of our highly-competent partners, we are able to fully oversee the implementation of your HSPG.

Through our ever-growing network, we have at our disposal a wealth of contacts we can work with.

We are on your side, right from the very first idea through to the finished HSPG and beyond. We look forward to your call!

Customized precision work
according to individual demands



Installation of the HSPG for the Royal Equestrian & Camel Festival 2011
Maidan al Fath · Muscat · Sultanate Oman



Excellent counselling





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