

# ARTIFICIAL TURF CARE

## SMG explains how to prevent a discharge of infill granules into the environment.

It is more important than ever to handle artificial turf installation and care/maintenance machines in the correct way, to avoid discharge of infill granules into the environment.

To this end, SMG has outlined some recommended guidelines for construction companies and operators working with synthetic turf systems with polymer filling granules.

### INSTALLATION

Exact and precise installation is crucial. This can be achieved through the use of machines with orbital oscillating brush systems to lift the artificial turf fibres while incorporating filling material which can be delivered in kg/m<sup>2</sup>.

This procedure ensures a level and even filling level of the infill material, as well as an artificial turf fibre that is supported and lifted by infill material, which stabilises the infill material in position.

Using this procedure, a discharge of incorrectly incorporated filling material due to environmental influences or during periods of play is not possible.

A later refilling of the surface also becomes unnecessary.

### REGULAR MAINTENANCE

SMG recommends weekly and demand-based removal of coarse dirt, such as stones and leaves etc.

This should be done by using a rotary brush with an adjustable vibrating screen to receive overlying coarse dirt and the top layer of the filling material, with simultaneous separation of dirt and filling material and metered return of the filling material on the artificial turf.

In this case, a constant amount of infill material in the sieve is a decisive factor for the return/re-loading of the infill material to areas which have become "underfilled" during play.

The regular use of this method and the corresponding driving tactics ensures a uniform filling height, an artificial turf

fibre supported by filling material and, in addition to a longer service life of the artificial turf system, the avoidance of discharge of filling granules into the environment.

### ADVANCED MAINTENANCE

**Decompaction:** An artificial turf fibre stabilised by loosened filling material ensures the necessary retention of the material and prevents the discharge of filling material into the environment. This is achieved by the monthly loosening and levelling of the filling material by the use of tow-behind devices with flexible and adjustable tines set at the working depth for simultaneous lifting of artificial turf fibre.

At the same time, by regular loosening of the artificial turf system, compacting (compression) of the system is prevented and thus the amount of filling material for refilling is drastically reduced or superfluous.

**Deep cleaning:** SMG guarantees a care process that ensures that the abrasion of polymer filling granules can be extracted and properly disposed of. The annual deep cleaning is carried out by the use of a rotary brush with a sieve function to clean even deeper layers of the filling material, with simultaneous



extraction of fine dust, microparticles and used fibres. The collected waste material is freed of dirt and dust and spread evenly.

For the separation of fine dust, microparticles and other contaminants, a filter element with a separation efficiency of > 98% at 4 micrometers is used.

**Repatriation:** Filling material can reach the edge of the playing surfaces during use, incorrect care or environmental influences (like rain, wind, etc.) and from there be carried into the environment. To prevent this, the filling material must be returned. Rotary brushes with a sieve function are used for this purpose. The sieve insert acts as a material reservoir during this care process. Alternatively, sweeping brushes can be used, but only if they are adjustable in their working width. ■

