



Cleaning and the condition of artificial surfaces

I MUST TELL YOU that I have never been a proponent of artificial surfaces even though I know they have their place and certainly have made an impact in the sports world. My background as a head groundskeeper, for both the Cleveland Indians and Cleveland Browns, gave me a good understanding of sport surfaces. I occasionally dealt with artificial practice fields, but most of my activity was on natural grass.

When I started my own field maintenance company we competed with artificial field companies and I saw different aspects of these surfaces. I got to see the evolution from the directional Astroturf, improved Astroturf, poly-grass and infill cushioned turf. Most of them are sold as maintenance-free surfaces. I am not aware of anything that is maintenance free. Owners and managers were totally unaware that cleaning was a nor-

mal part of owning these surfaces. The life of these surfaces also was a question. Various materials performed differently and cleanliness is a factor.

Years ago, the first indication for me that cleaning could be an issue came from Spin Martin, head groundskeeper of the Indianapolis Colts. He suggested that I get into the artificial surface cleaning business; he said he was cleaning and spraying the Colts'

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surfaces regularly. I then talked to some executives at the leading artificial turf supplier in the US about disinfecting and cleaning turf. They seemed to be in denial about the subject.

I was worried about the liabilities that my company might face from both the players and the surface manufacturers. Years went by, and then my current business partner, Steve Smetana, reintroduced it to me. He has experience working and playing on turf in many uses and was looking into the cleaning process.

EQUIPMENT IMPROVEMENTS

The cleaning process has been improved due to the better cleaning equipment now available and more attention paid to player/disease questions. The early blades were difficult to clean due to their rough surface and shape. The newer poly blades are better because they are smooth and slick, but before the newer equipment it was impossible to clean and not remove the rubber infill. But those issues have been solved if you have the right equipment.

No matter which carpet materials are used, cleaning makes it last longer. Brushing will not remove dirt nor clean, but in fact drives the dirt down to the backing. Many facilities brush to clean. Brushing will pick up the blades and spread the infill, and the leaves appear cleaner, but in fact it will not remove the dirt.

The dirt we are concerned about is mostly hair, bodily fluids and skin, but we find pins, paper, uniform parts and various things that show up from the participants. I was very surprised at the amount of hair and dirt that we collect. Some indoor facilities even have dog shows and other non-sport activities, but do not clean afterwards. You would think that cleaning would be the natural thing to do, as most people consider it as a part



>> **VACUUM BAG** with surface debris.

of standard of living. Most testing done on artificial surfaces for bacteria and fungus are on new surfaces. I am sure that growth on the new carpet samples is not a question, but growth on the nasty debris that accumulates in the surface is a different story.

In the 1930's and 1940's salesmen went door to door selling vacuum cleaners. The sales pitch was to vacuum on half of an area and then dump the collected material, removed from the carpet, on the rest of the carpet. This demonstrated how much dirt was still in the carpet.

I was surprised that the owners and operators of synthetic turf fields do not seem to worry about the buildup of dirt that is in playing surfaces. I suppose the question is what responsibility the owners or operators have or what should the customer expect. I would be taken aback if the hotel room I book does not have a clean floor, clean towels and sheets. Is this different? I do not think so. We are presently doing the same

thing as the vacuum salesman of yesteryear and it still works.

Most facilities we visit do a great job cleaning locker rooms, eating and spectator areas. Why should it stop at the playing surface door? You know that a dirty locker room is not a good sign of the quality of the operation, but you cannot see the dirt in the field. There are also ways to make this a positive for a business. As in the hotel business, the customers want to know you have their interest at heart. Signs for the cleaning times do work. We have owners who say that they want the customers to know that they are spending time cleaning.

DISINFECTING

Disinfecting is a different process and just as important. The NFL has set some parameters and some of the surface manufacturers have as well. I do not know if there is presently a problem with bacteria or fungus growth, but in time it is possible. *(Editor's note: Dr. Andy McNitt, director of The Center for Sports Surface Research at Penn State, says outdoor synthetic fields do not need disinfectant applications but indoor synthetic fields should be disinfected, and that using a solution with Tide detergent is as effective as commercial disinfectants.)* As mentioned before, the disease that one would worry about would more likely be a host of the accumulated dirt. Another problem is the ever-changing reaction that people have to viruses and bacteria. Disinfecting slows

or stops that process and will make any surface safer.

I have not mentioned the difference between the outdoor surfaces and the indoor surfaces. It is easy to see that indoor surfaces, with consistent heat and moisture, make a better environment for bacteria growth.

Outdoor surfaces have the help of the sun, rain and freezing weather to curb bacteria and fungus growth. For your information, the beauty of natural grass surfaces is that the soil and grass comes with its own bacteria that eliminates or competes with the unwanted strains. It is understood that the natural grass surface cannot survive around the clock activities, but they do cost less to install, last longer and if you have enough area for all the activities, will provide a good surface.

One other factor regarding any surface is the cushion capability. This is measured in the form of G-Max. This science is rather new, and I am not sure that the understanding of the data is conclusive. We do know that it will measure consistency of cushion throughout the surface. These measurements do change in any playing surface do to use, age and weather. The same is true for both natural grass and artificial surfaces. Softness, cushion and cleanliness change the characteristics of foot release, which can be a safety concern. The early synthetic surfaces actually got sticky when they were dirty.

The bottom line for most field improvement is the cost and benefits. The money spent on each facility can be affected by competition. In some situations, the competition between sports may take competitors to different venues. The Hertz rental car theory is, "The cleaner the vehicle, the better the customer takes care of it" has always been of interest to me. If the entrance to a building, parking lot or associated areas are trashed, what would you think the inside looks like? Cleaning is a part of any presentation and cost effective. ■

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