

Surfer Assists the Sporting Community

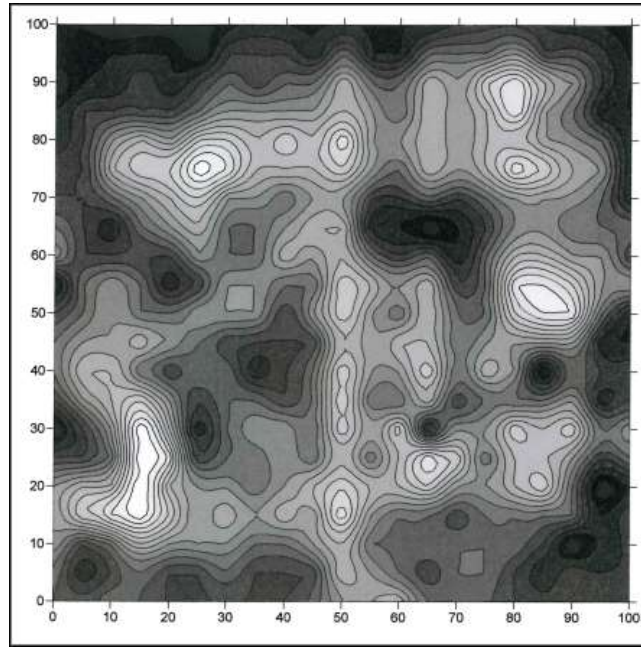
The dreaded dead spot. Tormenting professional and recreational players alike, the dead spot can quickly wreak havoc on any indoor gymnasium event whether it is basketball, red rover, or a track event. When dribbled on a smooth surface, a ball typically bounces back quite easily; however, when the ball happens upon a dead spot, the bounce back is either greatly reduced or even changes direction. Dead spots are also noticeable when running across the floor, and the supposedly solid surface is not so solid underfoot, and injuries have been caused by these flooring distortions. Thankfully, the individuals at Mathusek Incorporated, a sports and commercial flooring contractor, have found a way to eliminate these dead spots in their floor installations by utilizing Surfer.

A sports floor is only as good as the concrete slab it rests on. One of the leading causes of a dead spot is the flatness, or lack thereof, of the slab. Prior to installing a gym floor, Mathusek offers a concrete slab assessment. Specifications require the slab tolerance to be no more and no less than 1/8 of an inch in a 10-foot radius. To verify the level, Mathusek establishes a benchmark in the middle of the floor. Readings are then taken every five feet and recorded. Each point is compared to the center benchmark to verify it is within the 1/8” requirement.

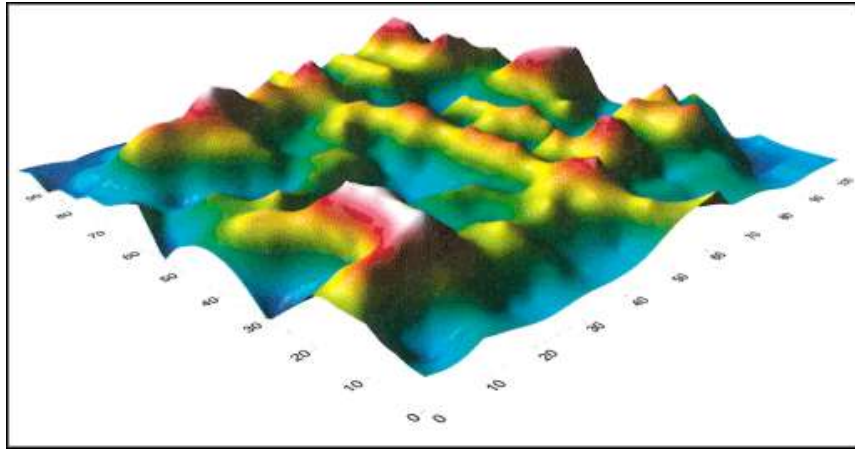
	-7	-8	-9	-8	-8	-9	-7	-7	-6	-6	-6	-8	-9	-8	-8	-8	-4	-7	-7
90-3	-8	-7	-8	-8	-8	-7	-7	-7	-8	-5	-8	-8	-6	-6	-6	-6	-6	-7	-6
	-9	-8	-8	-8	-8	-6	-7	-6	-6	-3	-6	-6	-4	-5	-3	-3	-5	-5	-8
80-7	-7	-7	-7	-7	-6	-5	-5	-5	-5	-3	-6	-6	-5	-5	-4	-3	-6	-6	-9
	-8	-6	-5	-4	-5	-4	-4	-4	-4	-1	-5	-6	-4	-6	-5	-4	-5	-3	-7
70-7	-7	-6	-4	-2	-1	-2	-4	-4	-4	-1	-6	-6	-4	-5	-5	-3	-5	-3	-6
	-7	-7	-6	-5	-4	-3	-5	-5	-7	-5	-4	-8	-7	-6	-7	-6	-5	-6	-6
60-6	-7	-8	-6	-5	-4	-6	-6	-5	-4	-3	-8	-8	-10	-8	-7	-5	-5	-8	-7
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10-4	-1		-1	-3	-4	-4	-5	-4	-4	-2	-5	-6	-5	-4	-5	-6	-5	-6	-9
	-4	-6	-3	-4	-4	-4	-5	-6	-6	-5	-2	-6	-6	-6	-6	-6	-6	-7	-10
0-5	-7	-6	-6	-6	-6		-7		-7	-4	-6	-6	-7	-6	-6	-7	-9	-8	
		-5									-5	-6							
0	10	20	30	40	50	60	70	80	90	100									

A grid reading of a concrete slab. Measurements are taken every five feet to determine the deviation values from the central benchmark.

The measurement readings are then fed into Surfer, and a topographic map and 3D surface map is created of the concrete slab. These maps allow installers to quickly locate areas on the concrete slab outside of the 1/8” specification range.



A topographic map of the concrete slab grid readings created in Surfer.



A 3D surface map created in Surfer from the concrete slab grid readings. One can quickly determine the locations on the concrete slab that lie outside the slab's tolerance.

By utilizing Surfer's functionality, Mathusek, Inc. ensures their flooring installations are not impacted by a subpar concrete slab. Additionally, Mathusek has found new revenue streams as they now offer corrective services for concrete slabs that do not meet the flatness specifications. Mathusek customers can rest assured knowing their sports floors are even and free of the dreaded dead spot.

Mathusek Incorporated is a family owned sports and commercial flooring contractor, and have been installing floors since 1965. Some of their noteworthy gymnasium installations include the West Point Military Academy Chrystal Fieldhouse and Hofstra University Golden Eagles. Other noteworthy installations include the Broadway stage for the Marriott Marquis Theatre and Princeton University's weight room floor.



The completed Hofstra University gymnasium floor.

For more information on Mathusek Incorporated, visit their website at <http://www.mathusek.com>.

For questions regarding Surfer's functionality, visit the Surfer product page or email surfer@goldensoftware.com.