

## Sports

### Case Study: Football friction! Silicone for pitch surface testing

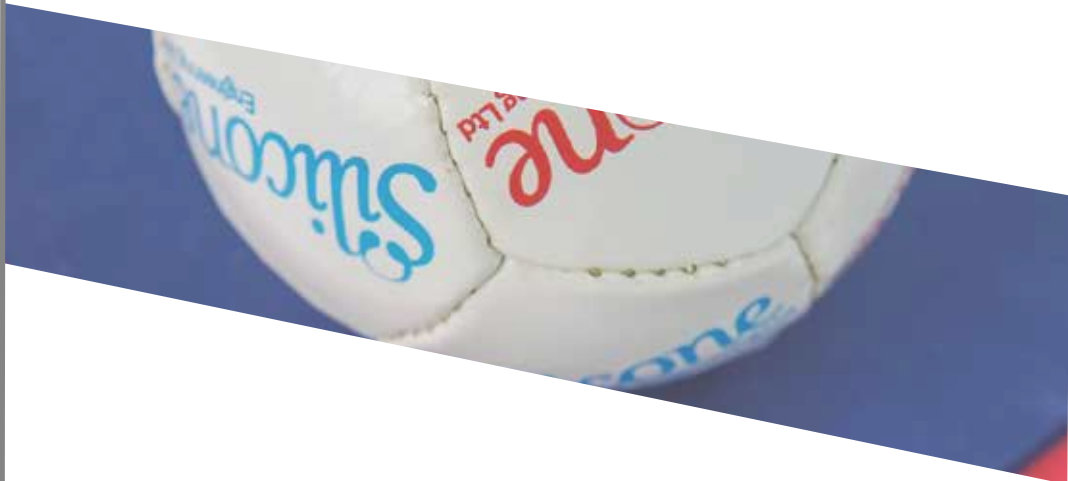
Professional football pitches often choose to use a high-quality hybrid grass system. Hybrid grass consists of 95% real, natural grass reinforced with 5% artificial turf fibers. The durability and performance of sports surfaces are essential for player safety and the quality of the game.

Football governing bodies conduct rigorous testing to ensure that grass and hybrid stadium turfs meet high standards. These tests include using reliable silicone solid sheets to simulate human skin. This case study explores how major footballing governing bodies use silicone solid sheets to measure skin/surface friction and abrasion during play.

### The Opportunity & Challenge

A football governing body contacted Silicone Engineering to help source a dependable material to replicate human skin in their friction and abrasion tests for hybrid and grass and artificial turfs for football pitches.

The challenge was to find a silicone sheet that could consistently perform under controlled laboratory conditions, providing accurate and repeatable results. The material needed to withstand the test procedures while maintaining its integrity and performance.





## The Solution: **kSil® GP60**

After discussing the project, our material engineers chose kSil® GP60 silicone solid sheets to be used in the controlled tests by the football governing body. The silicone sheets were cut into specific dimensions and then mounted on a test foot device to simulate various game actions such as tackles, shots, and blocking. The smooth surface of the kSil® GP60 sheets, when mounted on the device, served as an excellent test skin specimen.

The use of kSil® GP60 silicone solid sheets significantly enhanced the accuracy and reliability of friction and abrasion tests for sports surfaces.

The material's superior and stable properties made it an ideal choice for this critical application, contributing to safer and higher-performing artificial turf surfaces for use in league and tournament football.

Click here for more information on kSil® Solid sheeting applications: <https://silicone.co.uk/products/silicone-sheeting/silicone-solid-sheeting/>

