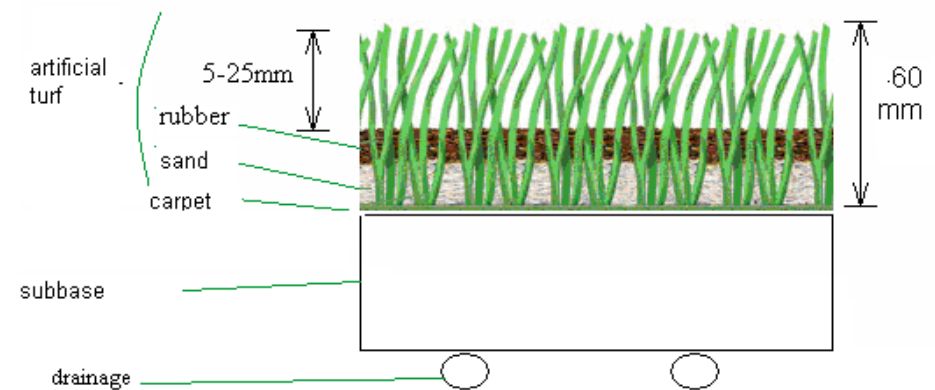
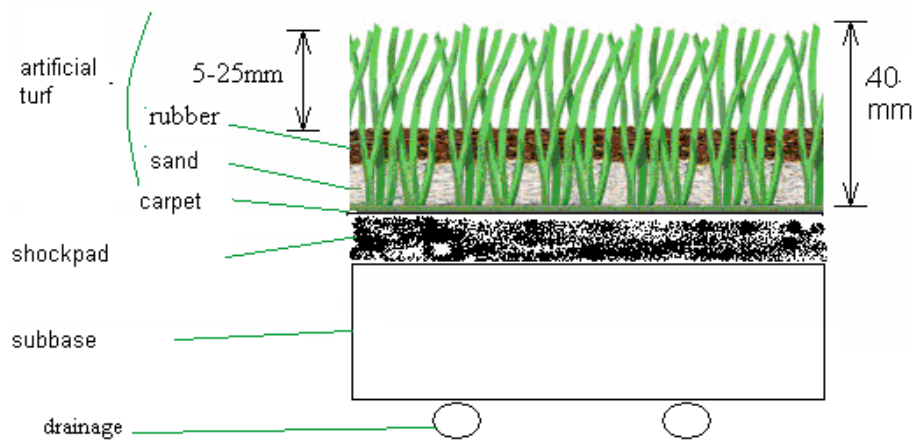


The role of Ghent University in artificial turf developments and sports application

Stijn Rambour, Dagmar D'hooge, Paul Kiekens

What is artificial turf?





Why installing artificial turf?

FC Nazareth
before and
after artificial
turf



**Less climate dependant
More playing hours
More equal properties**

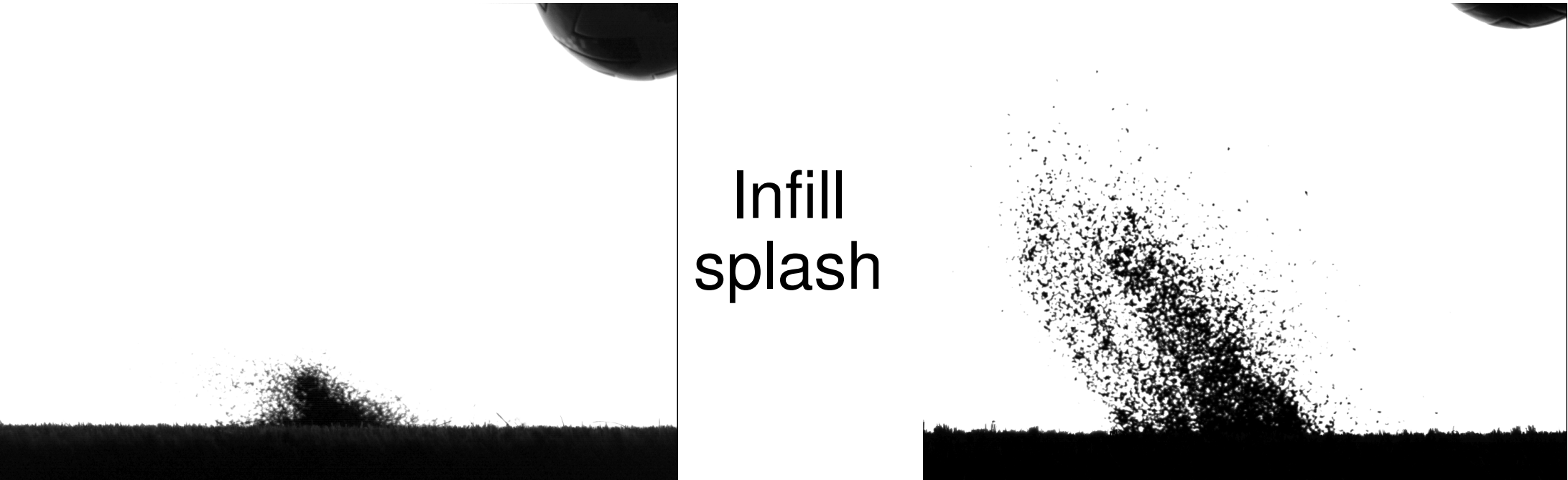
What is ERCAT?

- Part of MaTch (Department of Materials, Textiles and Chemical engineering) of Ghent University
- Accredited by FIFA (football), World Rugby (rugby) and FIH (hockey) for field and lab testing
- Test on the complete structure of artificial turf
- Independent advise and project guide
- Research on all different components of the artificial turf



Lab tests Lisport XL





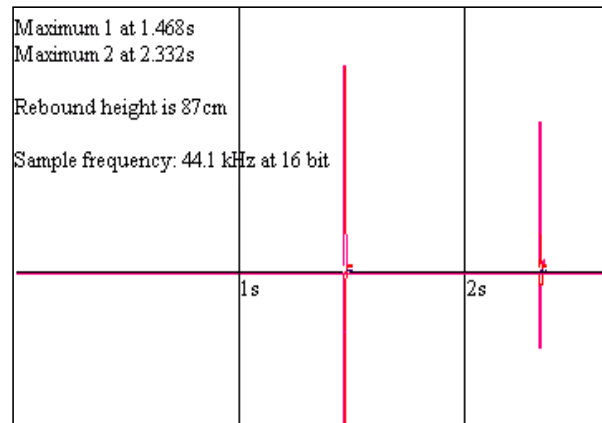
**Infill
splash**



Field tests
all over
the world



Interaction between ball and surface:



Ball rebound

FIFA Quality World Rugby EN15330-1	60-100 cm
FIFA Quality Pro	60-85 cm



Interaction between ball and surface: Ball roll

FIFA Quality Pro	4-8 m (original en retest)
FIFA Quality EN 15330	4-10m (original) 4-12m (retest)



Interaction between player and surface:

Shock absorption, vertical deformation, energy restitution

	FR	VD
FIFA Quality & World Rugby	55-70 %	6-11 mm
FIFA Quality Pro	60-70 %	6-10 mm

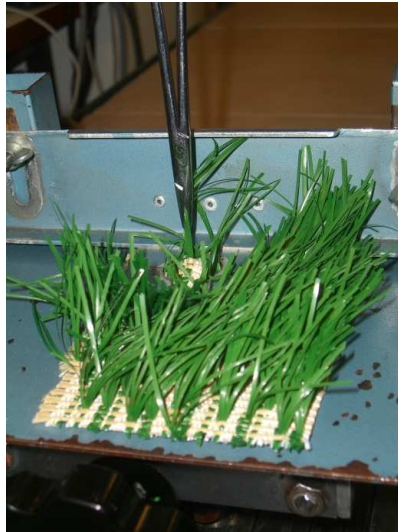


Interaction between player and surface:

Rotational resistance

FIFA Quality World Rugby EN 15330-1	25-50 Nm
FIFA Quality Pro	30-45 Nm

Identification of carpet and infill materials



SBR



EPDM



TPE



cork





Subbase check





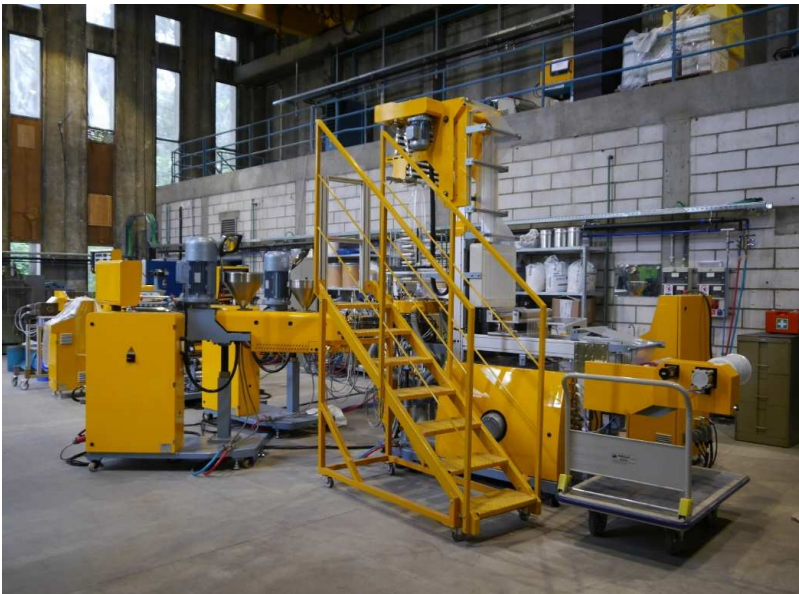
GRASS



Gazons aRtificiels Anti-feu Sûrs et durableS
Vlamwerende kunstgrasmatten: veilig en duurzaam

Project to develop fire retardant artificial turf and promote awareness to use fire-retardant artificial turf

Cooperation



ERCAT
European Research Centre for Artificial Turf



Questions?

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européen de
développement régional
- met de steun van het
Europees Fonds voor
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