The ISSS helping UEFA care about football

C.S.T.

ISSS ADVISORY PANNEL

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ISSS Task

To prepare test procedures that will give UEFA the tools to ensure only synthetic turf pitches that **play like the best quality grass pitches** are used for UEFA competitions

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Remit of ISSS Test Panel

1 To assist UEFA in selection of test methods

2 To prepare detailed test procedures

3 To review comments on testing received by UEFA from external bodies

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Remit of ISSS Test Panel

4 To advise UEFA on test conditions, locations and protocol

5 To assist UEFA in developing an accreditation system for test houses

6 To verify the testing protocol

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Test Method Preparation

Pre- ISSS

UEFA identified ‘footballistic’ characteristics

Draft test methods prepared by individual test houses for UEFA consideration

Consultation by UEFA with interested bodies

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ISSS Test Panel Methodology

1 To select test procedures and equipment that were internationally established (where possible) and available at a number of test houses

2 To review & confirm UEFA's decision not to allow alternative test methods for measuring any one property

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ISSS Test Panel Methodology

3 To select tests that are suitable for use on site and in the laboratory

4 To select tests that are suitable for assessing long pile synthetic turfs

5 To participate in round robin testing

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ISSS Test Panel Methodology

6 To draft UEFA test methods to allow UEFA to retain control - as opposed to referring to working documents or standards published by others (CEN drafts, DIN, AFNOR, BS etc)

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So what did we recommend?

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Ball Rebound

Principle

Ball allowed to fall from vertical height of 2m and rebound from surface

Measured using timing gates

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Test Ball

To minimise the effect on testing of the inherent variations found in footballs, UEFA will supply balls to the accredited test laboratories for the purposes of testing.

Prior to test the pressure of the ball is adjusted to give a rebound on concrete, at the temperature the test will be made, of 1.35 ± 0.03m (± 0.05m), from a drop height of 2 metres.

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Football Rolling Distance

Principle

Ball released down inclined plane & distance of roll measured

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Football Pace

Principle

Ball fired onto surface at specified velocity and angle, speed of ball measured as it rebounds from surface and percentage reduction in velocity calculated

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Rotational Friction

Principle

Resistance to rotation of loaded studded test foot measured using torque meter

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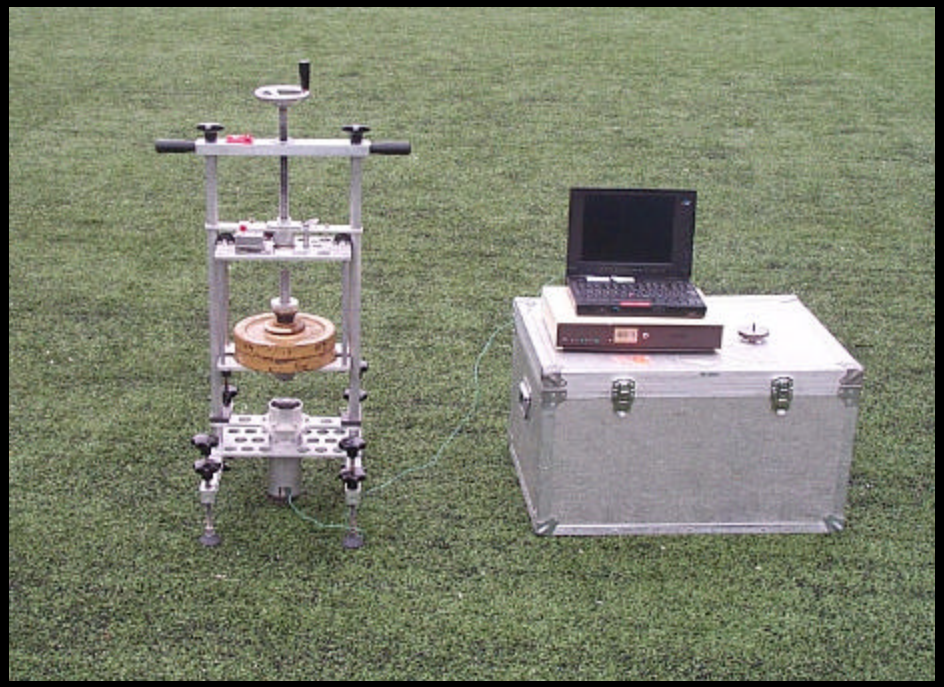
Shock Absorption



Principle

Impulse of energy (simulating loading pattern of player) imparted to surface and maximum impact force recorded. Reduction in force compared to similar measurement made on concrete calculated as %.

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Shock Absorption

‘Flat foot’

Studded foot

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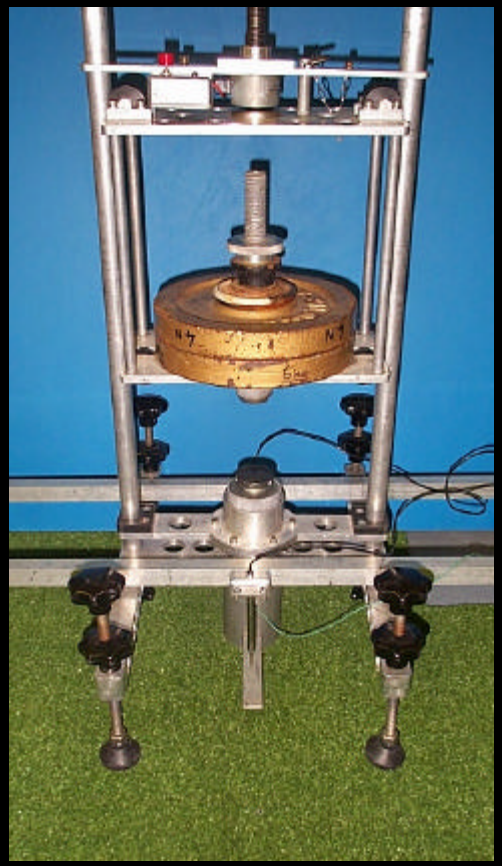
Vertical Deformation



Principle

Impulse of energy (simulating loading pattern of player running) imparted to surface and deformation of surface determined at specified impact force

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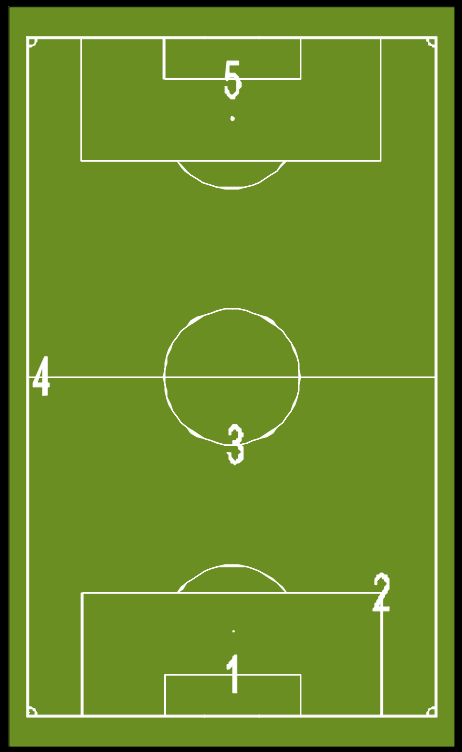
Field Test Positions



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Test Area Conditioning

Conditioning of lab samples and pitches having less than 120 hours use.

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Test Temperatures & Conditions

Laboratory

Dry and wet samples @ 23 ± 2 ºC

Field

Surface ‘as found’ between 5ºC & 35ºC

Wet

Specified procedures for wetting test areas

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Sub-ambient Tests

Effects of freezing on performance

Ball rebound and shock absorption @ -5ºC after wetting

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Product Identification

Manufacturer in conjunction with test house to provide identification characteristics/data to allow products to be ‘finger-printed’

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Other Properties Considered

Linear friction:	Current tests considered unsuitable - UEFA to establish working group to develop
Ball roll velocity	Tests undertaken by NBI concluded that current formulas do not correlate with ball roll
Flammability:	Club's will need to refer to national legislation and requirements

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Other Properties Considered

Durability:

UEFA only concerned about quality of pitches for UEFA competitions, diverse climates and range of uses mean that national & European standards should be specified by national bodies

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