

TRUFIRM: NEW IMPACT MEASUREMENT AND ANALYSIS SYSTEM FOR GOLF COURSES AND SPORTS FIELD SURFACES

What is TruFirm? Developed by the United States Golf Association for use at USGA championships, TruFirm is a system that allows the golf course superintendent to measure and analyze the firmness of turf and bunker sands over the course of a tournament, the playing season, or many years. TruFirm has been used to gauge the firmness of putting surfaces, fairways, and bunker sands at every U.S. Open since 2005 and every 2008 USGA Championship. In 2008, TruFirm was used at two men's major championships.

Why measure firmness? Having an objective evaluation of firmness is an important tool for the golf course superintendent. Measurements can be used to

provide consistent conditions over key areas of the course. The TruFirm System will help identify areas where playing quality has been adversely affected by overwatering and/or excessive buildup of organic matter. As corrective practices are implemented, TruFirm provides a means of determining the progress that is made over time. The TruFirm System also can be used to determine firmness of the green profile prior to seeding and to identify the potential for buried lies in bunkers.

Using the TruFirm System. Taking measurements with the TruFirm System is as simple as raising and dropping the hammer. Data and GPS information are stored and displayed on the handheld computer and are color coded according to your desired firmness levels. Easy-to-follow graphs allow you to review changes in firmness over time, at specific locations, or over the entire course, as well as hole-to-hole variation.

Data collected on the handheld can be downloaded to your desktop or laptop PC so that printable reports can be generated and further analysis conducted.

Maintaining the desired firmness for important turf areas — for an event, season, or year after year — depends on managing water usage and controlling the buildup of organic matter. TruFirm gives the superintendent an objective measure of turf firmness to aid in irrigation and maintenance decisions.

Purchasing the TruFirm System. The TruFirm System is available from the USGA at a cost of \$8,700, plus tax where applicable. The price includes the TruFirm System (hammer, handheld computer, GPS, all cables and chargers, software for handheld and desktop/laptop PCs) in a waterproof case, along with a Stimpmeter.[®] The purchase price of the TruFirm System also includes updates to the software and technical support for one year.

For more information, call (908) 470-5009.



PHYSICAL SOIL TESTING LABORATORIES

The following laboratories are accredited by the American Association for Laboratory Accreditation (A2LA), having demonstrated ongoing competency in testing materials specified in the USGA's Recommendations for Putting Green Construction. The USGA recommends that only A2LA-accredited laboratories be used for testing and analyzing materials for building greens according to our guidelines.

Brookside Laboratories, Inc.
308 Main Street, New Knoxville, OH 45871
Attn: Mark Flock
Voice phone: (419) 753-2448
FAX: (419) 753-2949
E-Mail: mflock@BLINC.COM

Dakota Analytical, Inc.
1503 11th Ave. NE, E. Grand Forks, MN 56721
Attn: Diane Rindt, Laboratory Manager
Voice phone: (701) 746-4300 or (800) 424-3443
FAX: (218) 773-3151
E-Mail: lab@dakotapeat.com

European Turfgrass Laboratories Ltd.
Unit 58, Stirling Enterprise Park
Stirling FK7 7RP Scotland
Attn: Sharon Bruce
Voice phone: (44) 1786-449195
FAX: (44) 1786-449688

Hummel & Co.
35 King Street, P.O. Box 606
Trumansburg, NY 14886
Attn: Norm Hummel
Voice phone: (607) 387-5694
FAX: (607) 387-9499
E-Mail: soildr1@zoom-dsl.com

Hutcheson Technical & Soil Services
8 West Street, South
Huntsville, ON, Canada, PIH IP2
Attn: Chelsea Stroud-Gammage
Voice phone: (705) 788-0407
Fax: (705) 789-4457

ISTRC New Mix Lab LLC
11372 Strang Line Road
Lenexa, KS 66215
Voice phone: (800) 362-8873
FAX: (913) 829-8873
E-Mail: istrnewmixlab@worldnet.att.net

Sports Turf Research Institute
hyperlink to www.stri.co.uk
St. Ives Estate, Bingley
West Yorkshire BD16 1AU
England
Attn: Michael Baines
Voice phone: +44 (0) 1274-565131
FAX: +44 (0) 1274-561891
E-Mail: stephen.baker@stri.org.uk

Thomas Turf Services, Inc.
11183 State Highway 30
College Station, TX 77845
Attn: Bob Yzaguirre, Lab Manager
Voice phone: (979) 774-1600
FAX: (979) 774-1604
E-Mail: soiltest@thomasturf.com

Tifton Physical Soil Testing Laboratory, Inc.
1412 Murray Avenue, Tifton, GA 31794
Attn: Powell Gaines
Voice phone: (229) 382-7292
FAX: (229) 382-7992
E-Mail: pgaines@friendlycity.net

Turf Diagnostics & Design, Inc.
613 E. First Street, Linwood, KS 66052
Attn: Sam Ferro
Voice phone: (913) 723-3700
FAX: (913) 723-3701
E-Mail: sferro@turfdiag.com