#### **Accurate Drop Heights**

The unique design of the Triax-2010 with the magnetic release and lifting cable allows for the headform to be located at the same height and impact the same location on each drop. The headform is on a steel cable held in place with a clamp device mounted on one of the tripod legs.

#### Surveyor's Rod

Use the surveyor rod to provide the exact drop height of the headform for each drop. This surveyor rod is extended to the headform and the height is read at eye level making the operation very easy.

clamping





Alpha Automation, Inc. 127 Walters Ave. Trenton, NJ, U.S.A. 08638 Tel(609) 882-0366 Fax(609) 882-0382

> **CAN**<sup>\*</sup>**DIAN** PLA GROUND ADVISØRY Inc. 2344 Manor House Crt., Mississauga, Ontario, Canada, L5M 5Y3 Tel: 416-410-7506 fax: 905-812-8036

## Impact Attenuation Instrumentation





# Triax2000.com

U.S.A. Tel: 609-882-0366 Fax: 609-882-0382 paulb@alpha-automation.com

Canada Tel: 416-410-7506 Fax: 905-812-8036 rolf@playgroundadvisory.com

# ASTM F1292-09 Free Fall Tester Triax2010



The Triax2010 meets the technical requirements of the ASTM F1292-09 and EN1177 Standards for the testing of Playground Surfaces. The Triax2000 can also be used for manual pre-testing with velocity recording.

The portability of the Triax2010 makes field testing straight forward and cost effective. This allows the owner/operator to confirm the compliance of the surface to standards and contract specifications. The Triax2010 is ideal for testing in the laboratory.

#### The Triax2010 consists of;

- Hemispherical headform with triaxial accelerometer
- Rubber reference pad
- Tripod with magnetic release and lifting cable
- Extendable legs, drops to 12' (3.65M)
- Handheld recording device with SD card.
- SD card transfer of data to PC.
- Velocity at point of impact capture.
- Triax2010 software, win95-win 7
- Special polyester case with wheels

#### **Accurate Measurement**

The state of the art electronics and software provide for the measurement of gmax and HIC. The capture of the velocity at the point of impact allows for confirmation of the physical drop height.



## Triax2010 Affordable

The Triax2010 is the result of more than 20 years of research and development. Rigorous testing by laboratories throughout the world has confirmed the accuracy of the Triax2010. The portability and technology allow for testing to be performed in the field at temperatures ranging from 10°F-120°F. This covers the requirements of all international standards.

Cost: US\$12,100.00

Training by separate arrangements

# Impact Attenuation Instrumentation

U.S.A.

Alpha Automation, Inc. 127 Walters Ave. Trenton, NJ 08638 U.S.A. E-mail: paulb@alpha-automation.com Tel: 609-882-0366 Fax: 609-882-0382 Alpha Automation Inc., 127 Walters Avenue, Trenton, NJ, 08638 USA

Tel: 609-882-0366 Fax: 609-882-0382

July 2011





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# **Triax2010 and Accessories**

The Triax2000 is compliant to the requirements of ASTM F1292-09, EN1177 and CNS12643 A1043. This device will also comply with the test methods required to perform surface testing to the CSA-Z614-07 standard. It is recommended that, prior to performing a test of a surface the person purchases and familiarises themselves with the relevant standards.

## Components

Triax2010 (Surface Impact Tester).....

\$12,100.00USD

Consisting of:

- Handheld Data Acquisition Recorder with SD card that stores 1000 drops
- Aluminium headform that conforms to ASTM F1292-09 and EN1177, with padded carrying case
- 3. Connecting cables
- 4. SD card for data acquisition and transfer to PC.
- 5. Operating manual and calibration certificate (on SD card)
- 6. Triax2010 Host Application for Windows (95 to Windows 7)
- 7. Rubber reference test pad
- 8. 1 set batteries (5 AA )
- Tripod with 3 sections of screw together legs (extending to 12', (3.65M))

- 10. Electromagnetic release system
- 11. Lifting cable and locking mechanism
- 12. Specially reconfigured hard polyester, wheeled case for Tripod, legs, headform and handheld computer
- Surveyor 's Rod A height measuring rod extendable to 15 '(4.5m) indicating height at eye level, metric or inch/foot graduations

#### **Parts and Calibration**

Separate price schedule available on request.

## Training

Section 7 of the ASTM F 1292 requires that the operator, if not an employee of an accredited or recognised laboratory, shall be trained and certified by the equipment supplier, including written and performance testing, to establish competency in performing Specification F1292 testing. All training would consist of a minimum of 1 day. At the present time for persons in the United States the training would take place in Toronto, Canada.

Training will be provided for the Triax2010 on the following basis; Class of 3 to 10 under at a cost of \$350.00USD per participant. Seminar courses may be scheduled around North America from time to time and it is the responsibility of the participant to pay for travel accommodation and meals and any other costs not directly related to tuition. The minimum daily training cost is US\$900.00/day.

Classes can be established at a location selected by the client; however there will be charge for travel and accommodation of the trainer. The training is a minimum of 7 hours and can be as much as 9 hours depending upon detail and questions and as result will involve a hotel stay the day before and after the training. For national and international training the cost of air and ground transportation, meals, accommodation for 3 nights for travel within 4 time zones of Toronto and 4 nights for time zones outside 4 time zones of Toronto.

### **General Conditions**

Shipping point is New Jersey, USA. Shipping is by FedEx, UPS, or Ground Transport as selected by the purchaser. The purchaser is responsible for all costs of freight.

# The purchaser is responsible for all costs associated with import duty, sales taxes or other levies that would be associated with the sale of the Triax2010 to the purchaser.

Currency: All prices and costs listed are in US dollars

Terms: Each order must be accompanied by a deposit in the amount of 30% of the value of the order. Balance of 70% plus shipping is due by international bank draft, wire transfer, Visa or MasterCard prior to release of the order for shipping.

#### Warranty

Warranty: The Traix2010, excluding connecting cables, is warranted for material and workmanship for a period of 1 year from the date of shipping to the purchaser of first record. Damages as a result of vandalism or abuse are not covered.

Certificate of Compliance: Each complete unit (Triax2010, tripod and surveyor's rod) will be delivered with a certificate that the unit conforms to the requirements for instrumentation for ASTM F 1292-09. A certificate of calibration of the accelerometer will accompany the unit at the time of sale and each time the annual calibration is completed.

Representations: No representations are made other than those stated. This instrument is for data acquisition and it is the sole responsibility of the purchaser and user to determine its application in any particular circumstance. The Triax2010

is well within the precision and bias stipulated in the ASTM F1292 revision that is valid at the time of manufacture.

The use of this instrument is invalid and not covered by any warranty or any representation should any of the conditions of compliance with ASTM F1292-09, including, but not limited to calibration (required every 2 years), not be performed.