

IsoSOC – lower limb, prosthetic measurement tool

POWERED BY NEUROMUSCULAR TECHNOLOGY

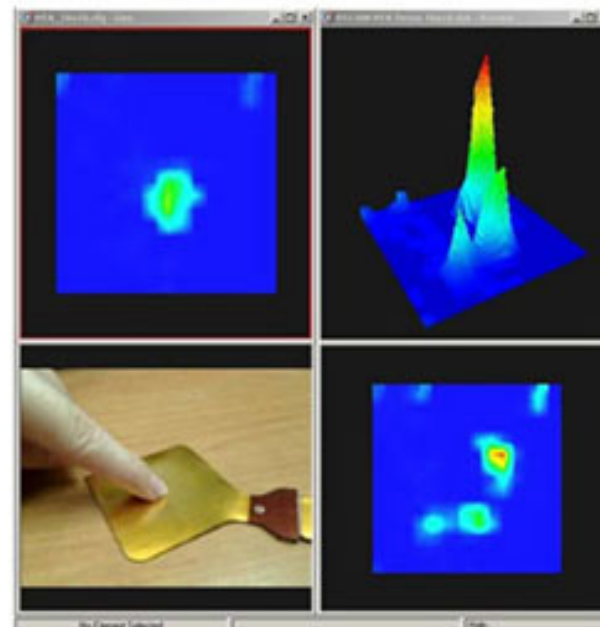
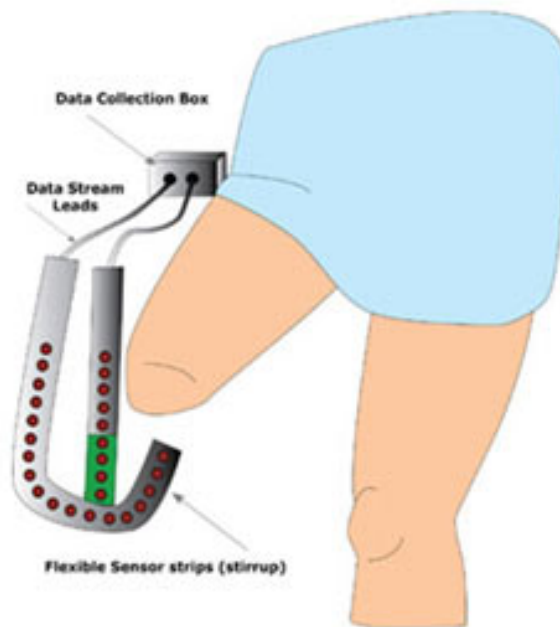
IsoTechnology 



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## Goals

- ◆ IsoSOC “PROSTHETIC” analysis is used in limb applications to test for pressures on the truncated limb -the pressure sensors are attached to the limb surface. Transmission of data takes place using wireless technology. Real time video is utilized to add further information to the patient’s gait status. The pressure ranges may vary from grams to ounces to pounds.
- ◆ Measurement of the forces at the point of contact with a patient’s prosthetic provides valuable information in prosthetic fitting with consequent improvement in various skin and comfort conditions.





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## Background

### Product Lifecycle

In July 2009 there was a requirement from the Department of Defense, Joint Improvised Explosive Device Defeat Organization (JIEDDO), for the development of limb applications to test for pressures on a truncated limb. The pressure sensors were to be attached to the limb surface.

The equipment consisted of sensors capable of providing real-time data on actual pressures being applied to the truncated limb.

JIEDDO required two (2) prototypes to be delivered.

Walter Reed Military Hospital played a pivotal role in the research and development of the IsoSOC system to date.

### Test Site

Walter Reed National Medical Center  
8901 Rockville Pike  
Bethesda, MD

### Our Patent Information

Patent Title: - Palpation Monitor – IsoSOC Ref:-USA 11/723,023

Date Filed: - 16 March 2007

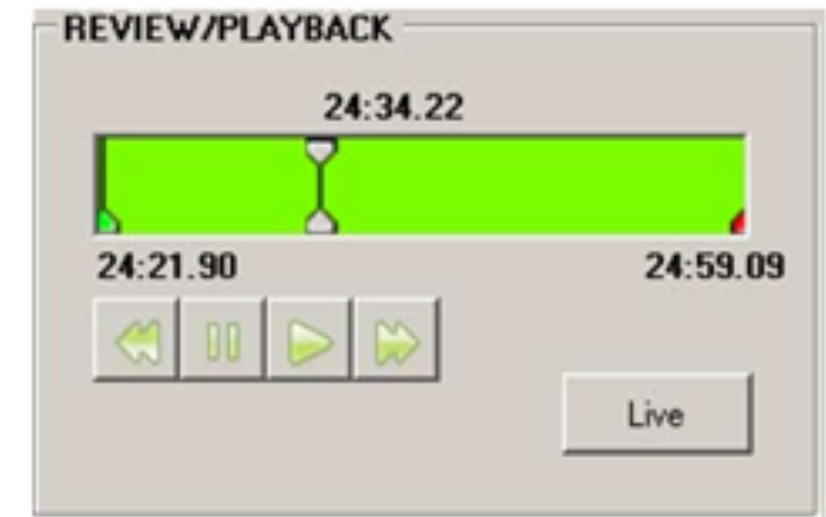
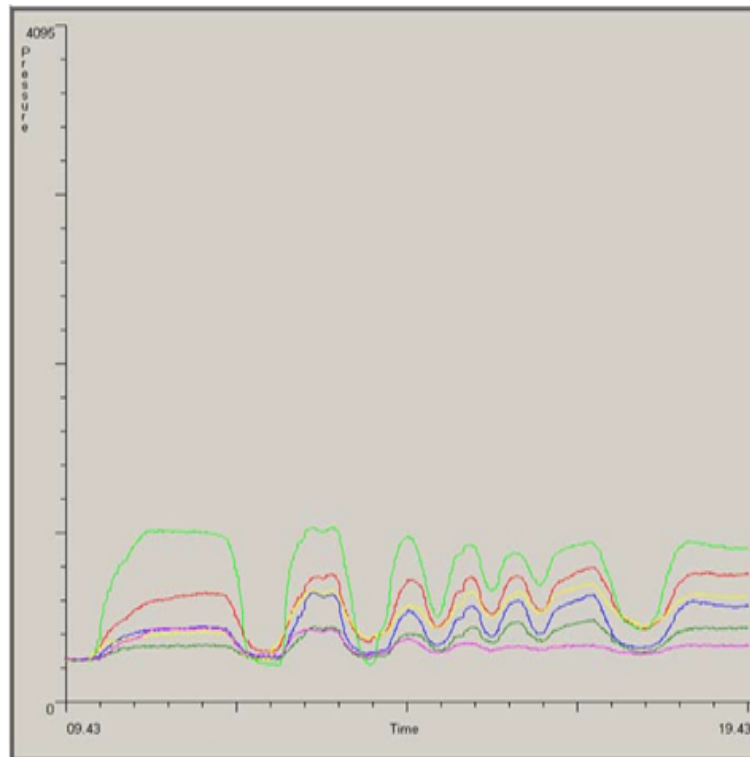
Date Published: - 20 Sept 2007

Inventor: - Terence C Vardy

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## Visualizing Software

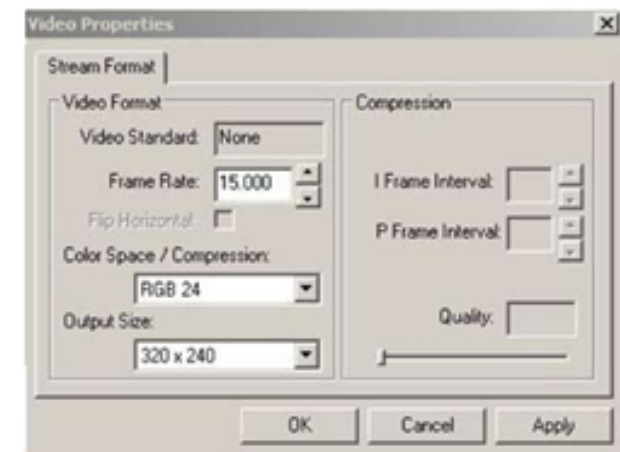
IsoSOC visualizing software is used to acquire data from the IsoSOC sensors. The graphical output shows a pressure vs. time graph.



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## Software – Video Inclusion

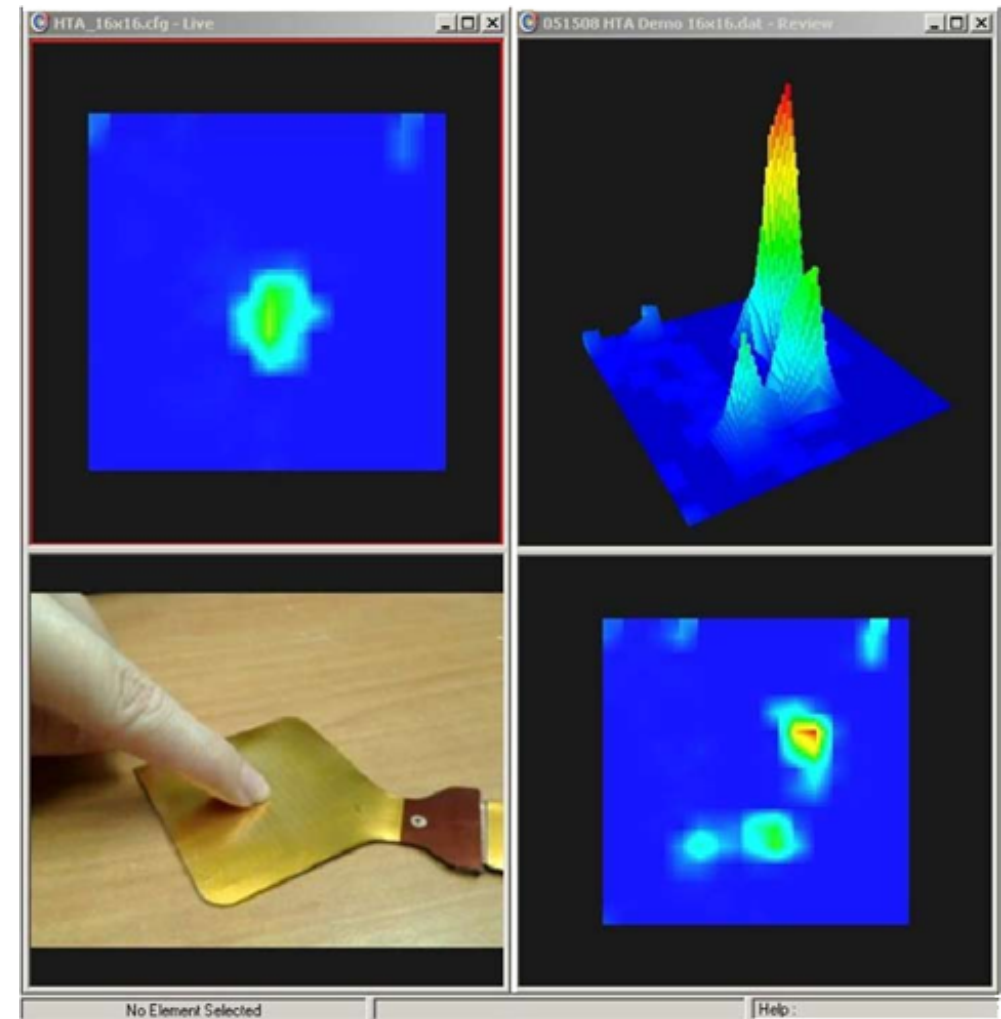
IsoSOC allows for video to be captured using the supplied video camera. Extensive controls are available to adjust the video capture facility:



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## Software – Main Sensor Display

The main sensor display area can contain one or more windows showing live, recorded, saved, or video captured data.



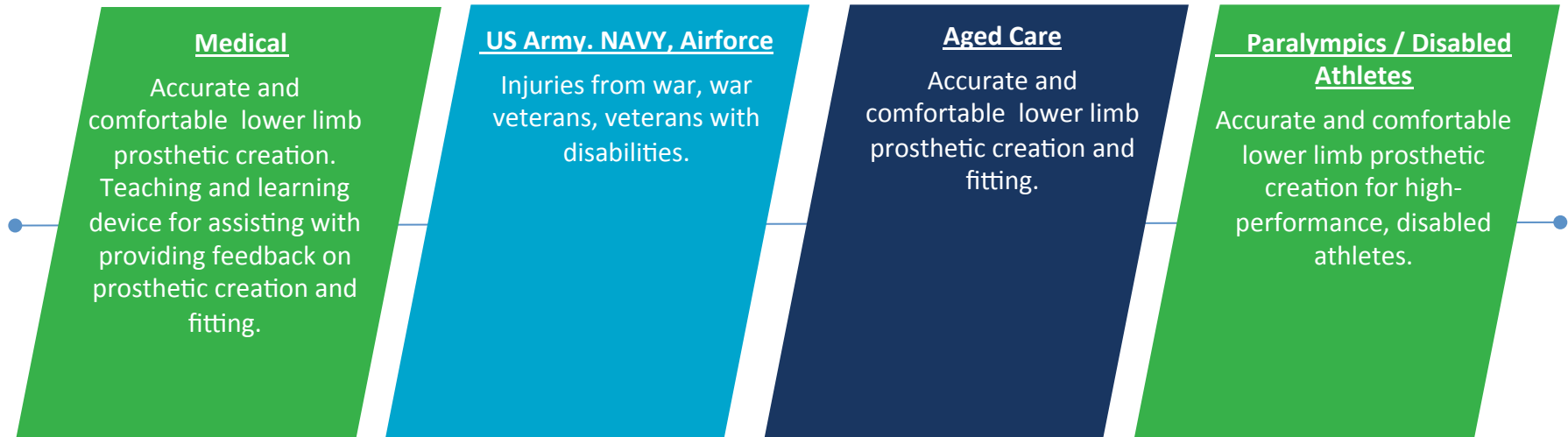
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## MARKET ADVANTAGE

- ◆ The IsoSOC is a state of the art prosthetic measurement system that allows the precise creation of prosthetics for lower limbs.
- ◆ The IsoSOC allows the most comfortable lower limb prosthetic fit available.
- ◆ The IsoSOC can create accurate, high-performance, comfortable lower limb prosthetics that are perfect for high-performance, disabled athletes.
- ◆ The IsoSOC can provide a high level of care for the elderly and other groups who may be more likely to require prosthetics.
- ◆ The IsoSOC was developed with support from the US Department of Defense.

## MARKETS

IsoSOC can provide an effective solution for lower limb prosthetics to a variety of markets including:



# WHO IS

## ISOTECHNOLOGY

- ◆ IsoSOC has been pioneered by Dr. Terence Vardy, an international expert in medical devices, and his qualified team, over the past 35 years.
- ◆ Dr. Vardy, whose educational credentials and qualifications are extensive, has also:
  - Practised in Harley Street, London, United Kingdom from 1988 to 1991.
  - Lectured at NASA – at the Ames Research Center, San Jose and Houston Space Center between 1994 and 1997 on Exercise Countermeasures for -1G.
  - Consulted to US Government Officials on health and medical devices development.
  - Been a Prime Contractor to the USA Government Department Of Defense from 1999.
  - Been extensively involved in various research projects in the USA, UK, Australia and Russia, and has a number of articles published across a wide range of related medical topics.
- ◆ IsoTechnology has assembled a team of technical and industry experts to assist in the development of this technology. These research personnel and associates, located in various countries, are actively working with the product to ensure the the company develops the leading edge technology in every aspect – practically and efficiently.



**Dr. Terence Vardy**  
D.O., N.D., M.App.Sc., Dip.Int.Bus.Mgmt.,  
MAAFN, Ph.D. Candidate  
Neuroscience Program





IsoTechnology 

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## CONTACT US

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