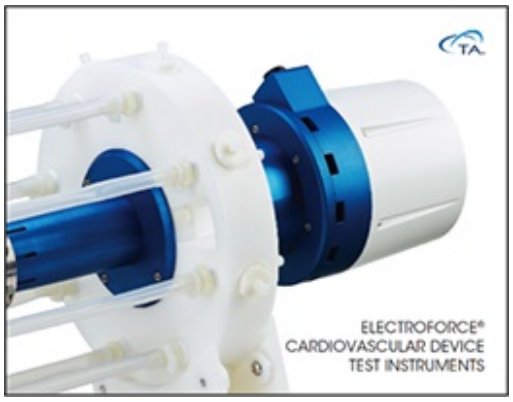
TA ElectroForce® Testing News

Volume 9 Number 1 January 2017

Newsletter At-A-Glance:

New! ElectroForce Cardiovascular Test Instruments Brochure

Accelerating development of life-saving technologies!



For more than 20 years, ElectroForce® products have been used by the worlds largest medical device companies to support the development of innovative, life-saving technologies. The NEW ElectroForce Cardiovascular Device test instrument brochure introduces the broadest portfolio of test instruments used to characterize the widest variety of cardiovascular devices and constructs. From the new DuraPulse SGT, to the DuraPulse HVT, or the 3230 and 3330 MSF test instruments - discover the test instruments that are trusted for testing along the entire development pathway.

Download the NEW Cardiovascular Device Test Instrument brochure here.

2017 Academic Matching Grant Program

We are pleased to introduce the AMG program for 2017

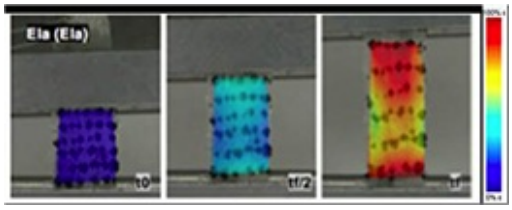
The Academic Matching Grant Program (AMG) allows universities and other academic institutions to maximize the value of their grant funding. It is a cost-effective way to acquire high performance thermal analysis, rheology, microcalorimetry, and mechanical test systems for your laboratory. TA will add $20,000 to the value of any grant for the purchase of select load frame systems, tissue engineering instruments, or material and tissue characterization instruments. Visit the AMG website to see all of the ways we can help you fulfill your laboratory's needs.

Click here to read a letter from the president.

Why Choose TA?

Customer Highlight Creating a Periosteum-Inspired Functional Textile

Weaving elastic and silk to mimic a natural tissue fabric



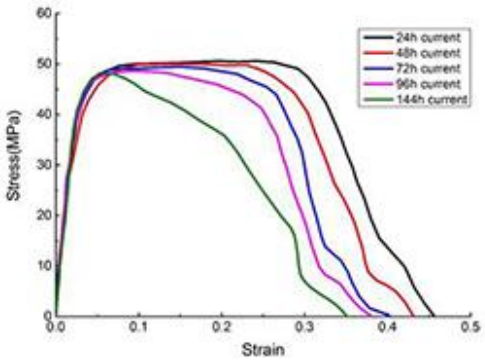
The Engineer, a weekly publication out of the UK targeted at engineers in the manufacturing industry, recently published an article highlighting the work of Dr. Melissa Knothe Tate and her team at the University of New South Wales. Their research, which is also the subject of a paper recently published in Nature, explores the use of elastic threads and silk in a variety of woven textile patterns in an attempt to mimic the behavior of elastin and collagen found in periosteum, a thin soft tissue that covers bone. The group characterized the mechanical properties of the various woven textiles using an ElectroForce 3200.

To access the online article, click here.

To access the publication in the journal *Nature Scientific Reports*, click here.

Customer Highlight Mechanical Testing of Solder Used in Flip Chip Applications

Understanding the impact of electric current on the mechanical properties of solder



The reliability of solder used in the interconnection of semiconductor devices, such as integrated circuits or microelectromechanical systems (MEMS), is the subject of a recent article published in the journal Engineering Fracture Mechanics. Solder reliability has become increasingly important as these devices become even more complicated. Dr. Yao Yao and colleagues from Northwestern Polytechnical University explore the impact of electromigration, the transport of material caused by the gradual movement of the ions in a conductor, and its effect on the mechanical integrity of these joints. The result was the development of a constitutive model to predict the performance of these solder joints.

To access the publication abstract and paper, click here.

TA ElectroForce at ORS 2017 An Invitation to Highlight Your Research

Cutting-edge orthopaedic research on display this March in San Diego

The Orthopaedic Research Societys (ORS) annual meeting will be taking place in San Diego, CA from March 19th to the 22nd. The meeting will bring together leading clinicians, scientists and engineers who will be presenting the most innovative research in the field of orthopaedics. **As we have done in the past, we would welcome the opportunity to highlight any research being presented at this years conference on a poster to be displayed in our booth.** If you would like

to include your research on this poster, please contact Jason Lusk at jlusk@tainstruments.com for more information. In addition, we are excited to be sponsoring an ORS Techniques Workshop titled Fracture Mechanics of Rodent Bones: Evaluating Bone Material Quality.

For more information regarding the conference, visit the ORS conference website.

Free! Online WinTest Training

Live training by an ElectroForce Field Service Engineer

Has it been a couple of months since you last used WinTest to set-up and perform a test? Or are you new to the testing on an ElectroForce test instrument? We would like to remind you that we offer free online WinTest training to our customers every two months. To find out about the next scheduled training date and to register, take a look at the ElectroForce training page. Upcoming training sessions will also be posted each month in the Upcoming Events section in future newsletters.

Upcoming Events

MD&M West

February 7 - 9
Anaheim, CA
Booth 2562

Pittcon

March 5 - 9
Chicago, IL
Booth 2220

Free WinTest® Training

March 6
Online
Register

ORS

March 19 - 22
San Diego, CA
Booth 104