

Economic laser trapping with Elliot Scientific Optical Tweezers



Optical Tweezers have been around for a long time. Over 40 years have passed since Arthur Ashkin and his colleagues described the single-beam gradient force trap and sparked a realisation in many scientists that this novel instrument would be a powerful tool for use in the course of their research. However, the costs and complexities of building Optical Tweezers were often prohibitive.

With the development of easy to use 'straight out of the box' systems by Elliot Scientific, Optical Tweezers have come down from the heights of esoteric research and can be found in many labs around the world. Real experiments carried out in one such lab can be found [here](#).

Download our **Optical Tweezers Brochure**. It describes all the systems we offer; from open architecture kits to complete computer-controlled multiple spot trapping systems with force detection and more, or [contact us](#) to discuss details.



The NOMAD-Touch temperature measurement system is a hot performer from Neoptix

NOMAD-Touch: A single-channel fibre-optic thermometer offers impressive versatility from a rechargeable touchscreen device.

This single-channel fibre-optic thermometer allows you to freely move from one area to another to measure temperatures between -80 and 250 °C.

Critical sensing points in medical, microwave, radio frequency, high voltage, aerospace and military applications can benefit from the 0.1 °C resolution the NOMAD-Touch offers.

NOMAD-Touch™ is perfect wherever you need immunity to electromagnetic fields, where conventional metallic sensors cannot be used. Please [contact us](#) for more information.



Using CryoLab to measure Seebeck coefficients: Video from DEMCON kryoz explains



The Seebeck effect is the direct conversion of temperature differences to electric voltage and vice versa. A thermoelectric device creates voltage when there is a different temperature on each side. Conversely, when a voltage is applied to it, it creates a temperature difference.

By using the **CryoLab from DEMCON kryoz**, it is possible to measure the Seebeck coefficient of a material sample, wire or thin film from 373 Kelvin down to cryogenic temperatures. In this informative [video](#), DEMCON kryoz demonstrate how such measurements are made using their equipment. For more information, please [contact us](#)

Superior pitch adjuster screw sets from Kozak Micro are perfectly matched



Kozak Micro manufactures super-smooth adjustment screw sets with threads as fine as **508 TPI (0.05 mm pitch)**. Available through Elliot Scientific in the UK and Ireland, these adjusters can be purchased in single or OEM quantities.

Proprietary manufacturing on a variety of customised machine tools enables Kozak Micro to produce adjusters in a range of pitches that are superior to industry standards.

Elliot Scientific offers 6 imperial and 4 metric thread pitch ranges of matched-set micropositioning adjustment screws and unbraked bushings that deliver the highest precision and smoothest movement by far for the most demanding of applications. Please [contact us](#) for more information.



Winter Holiday Schedule

Elliot Scientific's offices will be closed from end of business on:

❄ Friday, December 22nd. 2017

We re-open at 08:30 GMT on:

❄ Tuesday, January 2nd. 2018



Photo courtesy of Jill Wellington

Next month, meet Elliot Scientific at...

SPIE. PHOTONICS WEST

Photonics West

30th January to 1st February 2018

Booth #4953, Moscone Center, San Francisco



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