



VISION

THE LEEDS TEST OBJECTS NEWSLETTER
AUGUST 2011

the third issue of VISION is here

Welcome to the August 2011 edition of Vision, the bi-annual newsletter for Leeds Test Objects. In this issue of Vision we feature details of new product releases, news on the progress of product development and news about members of our team.

Adrian Walker MSc

what you can find in this issue

- Team news
- CE marking
- New products
- We are working on

Visit Leeds Test Objects distributors' area.



www.leedstestobjects.com/distributors-area

Leeds Products are now CE marked

We are proud to announce that as of September 2011 all of our products will carry CE certification.



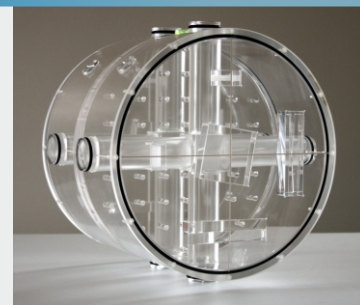
PIXMAM due to launch

PIXMAM will be launched in September. PIXMAM fulfills the routine tests detailed in NHSBSP/Euref protocols.



MagIQ due to launch

Leeds' MagIQ (Magnetic Resonance Image Quality) phantom will be launched in September.



team news

A new addition to the team for this summer is Oliver Grimston. Oliver is currently studying towards a Medical Physics degree at the University of Leeds. Leeds Test Objects took him on for a 10 week Summer internship to give him a greater insight into the world of medical imaging.

"I would like to say a big thank you to Leeds Test Objects for this great opportunity and I hope to make a positive contribution to the company."

Oliver Grimston

Oliver Grimston
University of Leeds Student



Leeds Test Objects team and management bid a fond farewell to our colleagues and friends Eva and Pavel who are returning home to the Czech Republic after 7 years working for MiRo house.

We thank them for their valuable contribution and we wish them all the best for the future.

Eva Cisarova
Test Object Technician



Pavel Nyvlt
Programmer



congratulations

Congratulations to Justin Mumby of MediScientific Ltd who won our ten-pin bowling competition and the inaugural EO cup despite allegations of cheating as his early lead slipped.

Justin Mumby
MediScientific Ltd



CE marking

Quality is our priority at Leeds Test Objects and we have worked hard over the past few months to ensure that all our product range carries the CE mark. This marking represents our continuing commitment to produce high quality products.

The CE mark shows that our products conform to the requirements of the Medical Devices Directive, 93/42/EEC. This means we have met their safety and quality requirements and that our products are fit for their intended purpose.

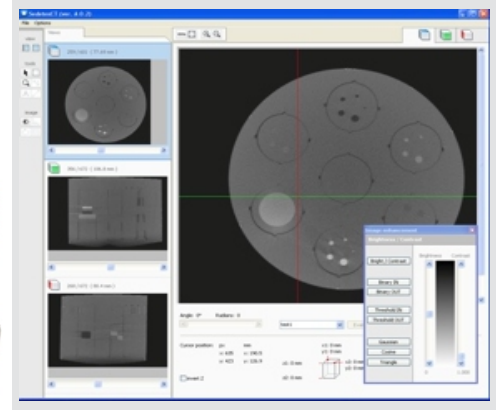


new products

The following new products are being launched in August/September. We will send our distributors and partners more information on specification and price by email soon.

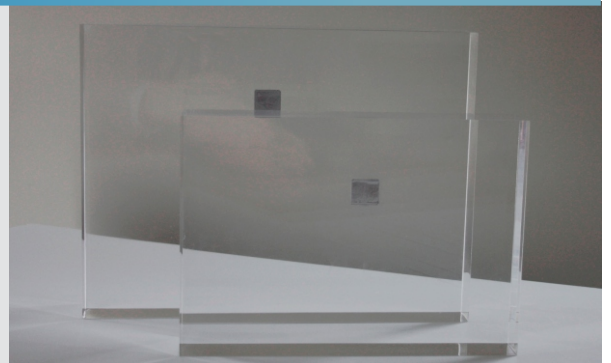
SedentexCT IQ Software

August sees the release of analysis software for the SedentexCT IQ phantom. The software permits the selection of test features and automated calculation of results. It also features a DICOM viewer with window/level, zoom and distance measurement functions.



PIXMAM

Radiographers can now fulfil the tests detailed in NHSBSP/Euref protocols using Leeds' PIXMAM phantom. A high purity Aluminium filter is encapsulated in a precision-machined acrylic block, of either 300x240x45mm or 240x180x45mm.



MagIQ (Magnetic Resonance Image Quality)

Leeds' MagIQ phantom is imminently available for purchase. The phantom comprises two identical flood-fill sections (for filling with materials suitable for different strength magnets) of outer diameter 230.0mm, inner diameter 210.0mm.

The outer casing houses a spirit level and white centre lines to aid positioning of the phantom. An LCD temperature strip is attached to the outer casing. Internally, the phantom houses measurement features for spatial resolution (2x LP/mm and 1x MTF edge), slice profile (2 pairs of wedges and ramps), contrast resolution (4x chambers which can be filled with your choice of media), flood-fill section free of features for noise/homogeneity, array of circular holes for geometric distortion measurement. Image interpretation software will be available.



Coarto (Mammo Force Gauge)

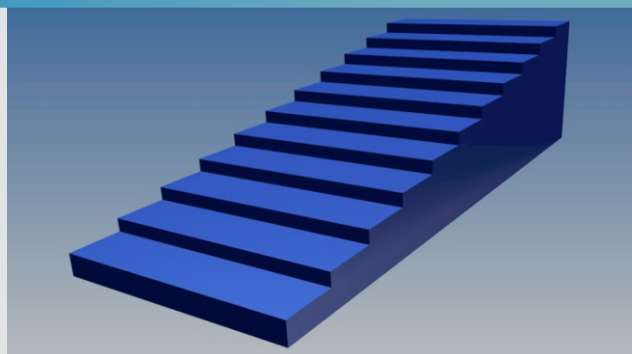
Coarto allows users to ensure their compression systems comply with IPEM Report 89 and the Euref protocol. The set includes a fully calibrated scale with 45mm thick compressible rubber block, which both simulates the 'standard breast' and avoids damage to the equipment. The scale can test peak force, and allows visual inspection of the range of applied force over time.



Fluoro Stepwedge

Blue anodized aluminium step wedge for a routine check of the dynamic range of fluoroscopy systems.

This consists of 11 steps: first step 5mm thick; all subsequent steps 3mm higher.



we are working on

At Leeds Test Objects we are always pushing the boundaries and developing new products for the medical imaging QA market. The projects which we're currently working on are: TOR DEN digital +, Anthropomorphic training aids, Linac Geometry and Dosimetry QA kit Ultrasound 'AAA' phantom, PET phantom, PET/CT alignment phantom, Digital Breast Tomosynthesis, MTF edge.

We look forward to giving you further news on these projects in our next issue of Vision.

SedentexCT Mini

The routine tests detailed in the SedentexCT quality manual can be fulfilled using the SedentexCT Mini. This phantom allows the user to measure image homogeneity and pixel intensity value.

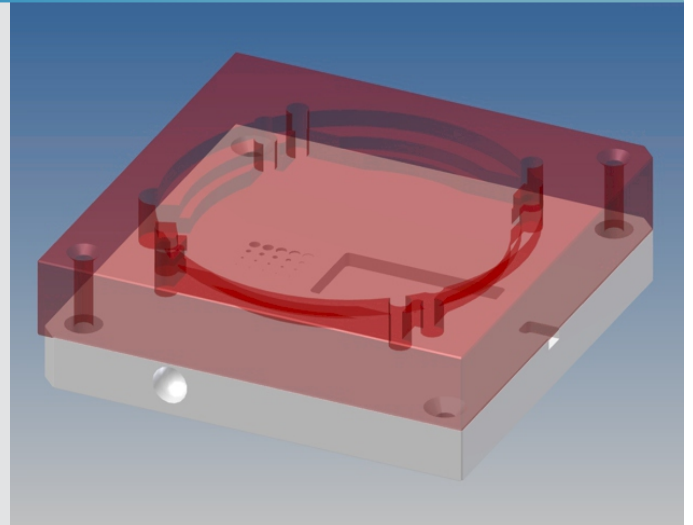


TOR DEN Digital +

TOR DEN Digital+ expands upon existing routine dental imaging phantoms by offering a means of measuring the image quality of higher resolution modern imaging systems.

TOR DEN Digital+ is capable of measuring spatial resolution up to 20 LP/mm. An array of 20 contrast details provides greater discrimination of threshold contrast.

TOR DEN Digital+ is currently undergoing clinical validation.



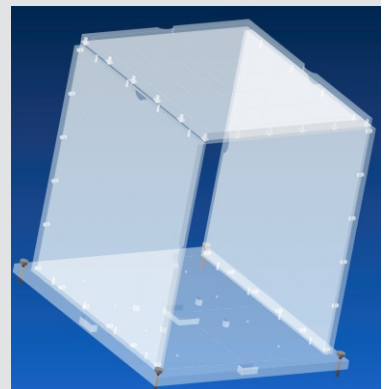
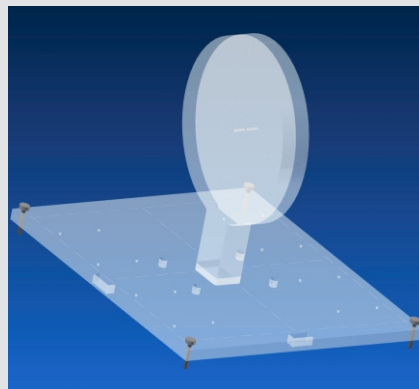
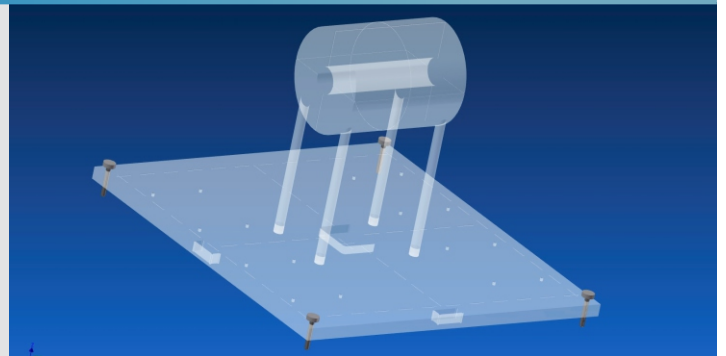
Linac Geometry and Dosimetry QA Kit

The linac QA kit can be used to check the performance of radiotherapy linacs' and simulators.

We have designed it in accordance IEC 60976:2007, IEC 60977:2008 and IPEM Report 94.

The kit comprises of 3 phantoms which enable the user to make the follow tests:

- Radiation Isocentre verification
- Radiation Field size calibration and symmetry
- Field size indicator relative to light field size
- Light field to radiation field congruence
- Beam symmetry
- Laser and Cross hair alignment
- Radiation beam axis indication
- Parallel-opposed alignment.
- Dose and dose rate constancy verification



PET Phantom

The Positron Emission Tomography (PET) phantom meets the NEMA NU2-2007 standard for assessing image quality in PET. In addition to the standard phantom we are working on an extension which realistically mimics clinical patients.

