**DEBEN UK Limited**
Brickfields Business Park, Old Stowmarket Road
Woolpit, Bury St. Edmunds, Suffolk IP30 9QS. UK.

Tel: +44 (0)1359 244 870, Fax: +44 (0)1359 244 879
E-Mail: info@deben.co.uk Web: www.deben.co.uk

# 500N Tensile stage for use with Micro CT Tomography systems

Deben have recently finalised the development of a range of tensile stages specifically designed for use with Micro/Nano CT Tomography systems.

In association with the major manufacturers of CT tomography systems including NIKON, GE and XRADIA we are now able to offer an integrated tensile testing solution for your CT application.

Using tensile testing with CT provides a clear visual interpretation of how the properties of materials and composites change under different loading conditions.

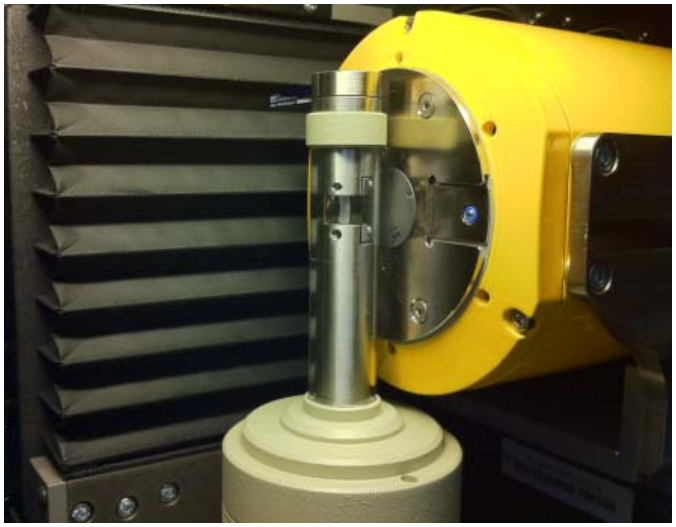
The compact design of the new testing stage allows it to be used with the smallest high resolution CT systems providing tensile and compression forces up to 500N and resolutions down to 5mN.

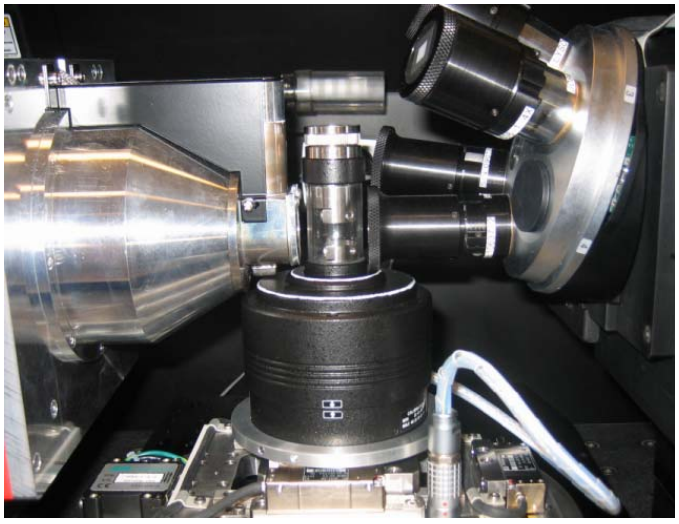
Systems are controlled from the comprehensive MICROTEST tensile stage control software giving a wide range of control functions and a live display of load verses extension and supplied with all required cabling and mounting adaptors for specific CT systems.

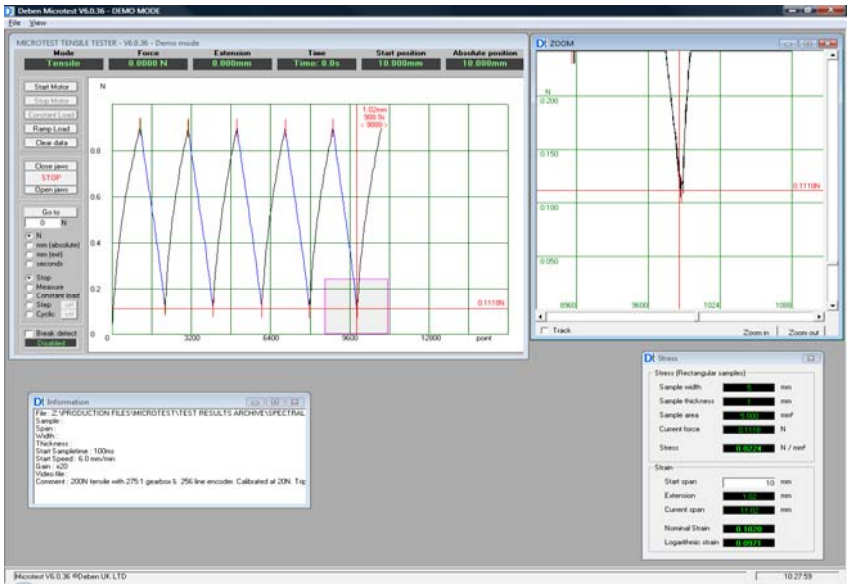
Further details and pricing is available from your CT supplier or direct from Deben

**Other systems available for CT applications:**

Peltier heating and cooling for CT (-20°C to +160°C)
5KN tensile with optional heating & cooling
25KN tensile with optional heating & cooling



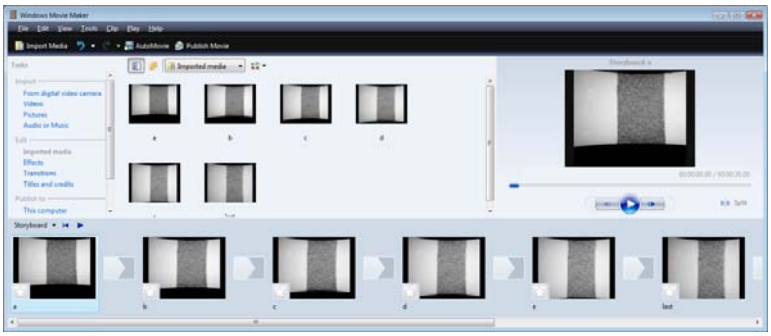




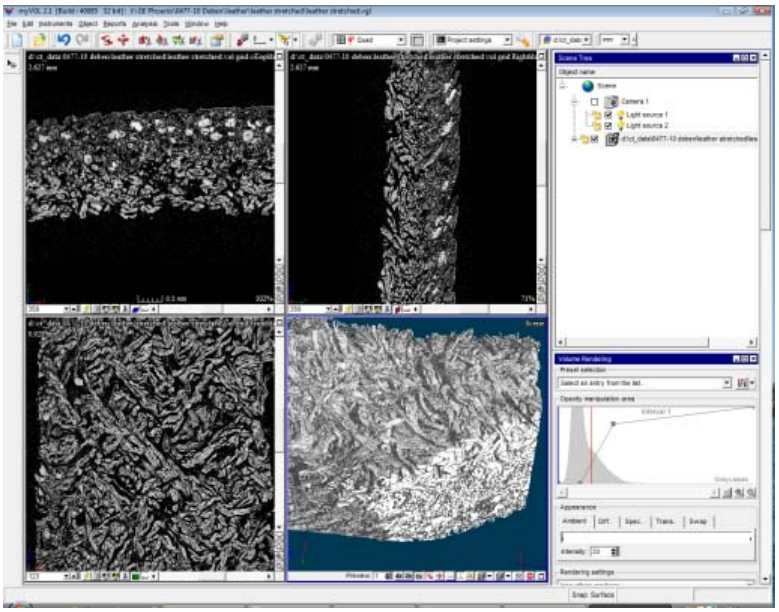
**DEBEN UK Limited**
Brickfields Business Park, Old Stowmarket Road
Woolpit, Bury St. Edmunds, Suffolk IP30 9QS. UK.

Tel: +44 (0)1359 244 870, Fax: +44 (0)1359 244 879
E-Mail: info@deben.co.uk Web: www.deben.co.uk

Still image sequencing and AVI generation using freely available movie software



Full image reconstruction and comparison Of samples under different loads allows a Better understanding of a materials properties



## SPECIFICATIONS

- modular tensile & compression testing system to be installed within X-Ray tomography system
- simple specimen exchange mechanism with high strength acrylic support ring, 1.5mm wall thickness (3mm in beam path)
- tensile and compression jaws, can be customised to customer specifications
- mounting plate for fitting onto existing rotary table, with slot for cable exit through centre or side
- precision slides & leadscrew
- maximum extension 10mm (stroke can be set depending on customer requirements, default is (10-20mm tensile), (10-1mm compression) with compression jaws.
- fixed loadcell with accuracy, 1% of full scale range, choice of 100N, 200N, 500N
- maximum resolution, 1000:1 dynamic, 2000:1 static (of full scale range)
- 10mm linear extensometer for position readout, resolution 3µm, linearity 1% of full scale
- fast gearbox with 134:1 ratio with speed range 0.1mm/min to 1.0mm/min
- 16 line optical encoder fitted to motor giving speed control accuracy better than 5%
- size: 87mm diameter, 140mm to bottom of tube, tube length to suit X-Ray source (details required)
- Stage weight: ~1kg.
- MICROTEST drive electronics and Windows software providing comprehensive USB2 control of the tensile stage
- a PC is required to drive this system, minimum specification Dual core 2Ghz with Windows XP/Vista/7.0 Professional, 2Gb RAM, CD-ROM and one free USB2 port
- warranty period: 12 months for parts and labour. General wear and tear along with damage caused by running the equipment outside of the normal operating conditions is not covered
- operating voltage 220-240V or 110-115V@200VA