



**ProBax**<sup>TM</sup>  
Advanced Seating Technology

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## **ProBax<sup>TM</sup> Technology Revolutionises the Future of Seating - *Sitting is Believing***

Back pain is the UK's leading cause of disability, costing the NHS just under £500 million each year\*, and the nation an estimated £5 billion due to 4.9 million working days being lost\*\*.

NuBax Limited unveiled its innovative new seat design today (Monday 31 October, 2005) at the Transport Research Laboratory (TRL) in Wokingham. NuBax's patented seat technology, ProBax<sup>TM</sup>, offers groundbreaking benefits in terms of comfort and health, and has already attracted considerable interest from the automotive and aviation industries. The new technology has also been embraced by health and education campaigners, who have recognised the impact the technology could have in both educational and office environments.

ProBax technology is already available in the automotive industry, with Lotus leading the way, becoming the first manufacturer in the world to introduce the "ProBax" seat in its 2006 MY Elise and Exige marques. Both models have had seats specifically adapted and developed by NuBax, helping to significantly improve the postural position of the occupant's spine whilst seated.

Steve Swift, Head of Vehicle Engineering at Lotus, commented, "We are the first car manufacturer in the world to feature the 'ProBax' technology and we are very impressed with the results. We have carried out extensive tests with people of various shapes and sizes and the improvements are extremely good. The seat padding and foam base have been specifically designed by NuBax, enabling us to remove the pre-existing lumbar mechanism. This has helped reduce weight, vital for Lotus of course, increase the amount of useable space in the cockpit, and lower item costs."

ProBax seat technology offers considerable medical benefits, including:

- significant improvements to comfort levels
- increased blood flow through the body, resulting in improved alertness and performance
- major implications for the reduction of DVT-like events in both the automotive and aviation industries
- an enhanced sitting position that helps maintain the correct natural curvature of the spine for longer
- reduced muscle fatigue
- improved spatial awareness

Monday's 'Experience' was organised by NuBax with Lotus Cars, offering guests the opportunity to test drive two of its Elise models and two of its Exige models – one of the model variants being fitted with 2005 model year seats, and the other with 2006 model year ProBax seats. Guests also took part in a 'live experiment' to measure blood flow and comfort levels of the new automotive and aviation seats.

Mike Raulerson, a registered vascular technician from the Medical Clinic of North Texas, has worked closely with NuBax during the development of the ProBax technology, and flew to the TRL test track to conduct trials on the blood flow of guests sitting in the NuBax-designed seats versus the originals.

The trials were designed by Dr Jon Senkowsky, an eminent US cardiovascular surgeon. Dr Senkowsky said, "NuBax seat technology significantly improves the postural position of the spine whilst seated, and the ProBax technology has demonstrated a significant improvement in lower limb blood flow for the occupant of the seat. Increased blood flow has been shown to enhance response times, raise alertness levels and reduce the onset

of muscle fatigue. It also reduces the risk of DVT-like events. The technology offers significant health and safety benefits for the automotive, aviation and general working environments alike.”

The ProBax seat is currently in testing with five global automotive manufacturers, however, while the benefits of the automotive seat were clearly demonstrated during the ‘test drive’, the day also provided NuBax with the perfect opportunity to unveil its prototype aviation, school and office seats.

NuBax CEO Ian Moore commented, “The technology lends itself to rapid, cost effective implementation and is revolutionary in the respect that it can be applied to almost any vehicle or aircraft seat, or freestanding chair, regardless of who makes the seat, frame, or cushion. The ProBax seat has already been adopted by Lotus in the automotive industry, and we’re extremely excited about the unveiling of our prototype seats for the aviation industry, educational and office environments.

“ProBax technology is attracting major interest from a number of industries around the globe. Improved comfort, coupled with clear medical benefits to the end customer, is a powerful combination. To achieve this whilst potentially lowering costs, reducing weight and increasing the overall spatial awareness of the vehicle is what makes our technology so unique.”

Dr Lady Ann Redgrave, a campaigner for the introduction of ProBax seating in schools, also attended the event on Monday to voice her support for the technology and its potential benefits, and stated, “Having spent many years treating patients with back pain, often caused by poor posture, the NuBax technology offers a solution which could easily be incorporated into all types of seating. The successful trials suggest that using this technology in school seating would not only improve posture and assist in preventing future back problems but also increase attention span and learning capabilities due to reduced muscle fatigue and improved blood flow.”

ProBax technology changes the dynamics of the underlying foam seat without changing the structural elements in any way. It acts to subtly, but directly alter the body’s posture so as to improve comfort. Tests suggest that the postural and medical improvements brought about by the design could lead to improved productivity and raised concentration levels, a reduction in health problems such as neck and lower back pain, leading to implied benefits for both employees and employers.

Donna Jackson, Founder & Director of Product Development at NuBax said, “The more knowledgeable the consumer becomes about their body, the higher the demand for comfort and safety. While technology is constantly offering us mechanical devices to make changes, the spine remains the same and innately knows how it needs to sit. NuBax technology was designed to allow the total body an opportunity to maintain its natural position without effort. There are 24 important reasons to maintain proper posture: 7 cervical, 12 thoracic and 5 lumbar! There is a reason your mother told you to sit up straight, now you can tell her you are”.

- ENDS -

**For further information on NuBax or ProBax™ technology visit: [www.nubax.com](http://www.nubax.com)**

\* Source: [http://www.flexibak.net/back\\_facts.html](http://www.flexibak.net/back_facts.html)

\*\* Source: HSE press release E077:05 - 2 June 2005, <http://www.hse.gov.uk/press/2005/e05077.htm>

#### **Notes to Editors**

Graphics and images available on Press CD.

The NuBax seating concept was designed, tested and patented in 2001.

Benefits of ProBax™ design: Maintains correct curvature of the spine; Eliminates reverse pelvic tilt; Minimises pressure under the coccyx; Manages the Ischial pressure points; Limits pressure under the hamstring muscles; Provides support under the pelvis; Provides a soft spinal channel; Is effective for 95% of the population; Requires no upholstery or frame changes.

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