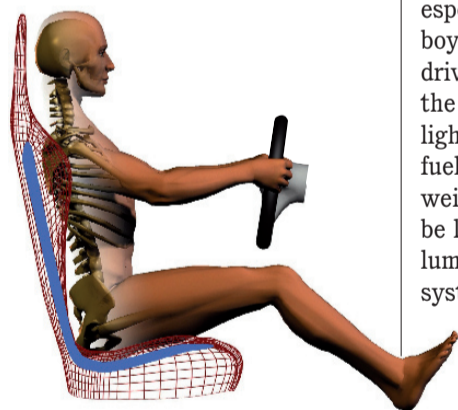


Sitting pretty

Interviewed by **Dean Slavich**
Editor, EAC News

Launched less than a year ago in Europe, NuBax's advanced seat technology is close to achieving a major breakthrough in the auto industry. "Without naming any names, we've got around half a dozen seats in various stages of automotive test in Europe," reveals Jon Hall, who heads the company's automotive division.

The foam-based seat system, branded ProBax, first surfaced in the European automotive arena around a year ago, when Lotus added it to the Exige and Elise models [see Seats for all]. But while Hall says there's been lots of interest from other OEMs, uptake of ProBax has ultimately been slow, despite the plethora of benefits the technology offers to car makers and customers. At the time of writing, Lotus remains the only European automotive name on NuBax's books. "It's a bit frustrating for me," admits Hall. "Part of my career was spent at Lotus and things there tended to happen very quickly. The pace at some of the bigger OEMs is somewhat slower because there are so many more



ProBax offers health benefits

TAGed

There's no doubt that NuBax is gathering momentum, and two major players in the aviation field have registered a serious interest in ProBax. The company's profile was further boosted earlier this year when TAG Group announced it had purchased a 15% share.

Hall says the cash injection from TAG will be used to further grow the company. Part of the ongoing expansion is the new, state-of-the-art larger premises, located in Weybridge, UK. "We won't grow too fast, that's the plan – we don't want to run before we can walk – but at present the business is looking good and things are looking healthy," says Hall.

Both NuBax and TAG are keeping the financial details of the deal under wraps, but *European Automotive Components News* has learnt the transaction is in the Euro millions price range. And Hall hopes TAG will be more than just a silent partner: "We want to avoid the scenario where the company provides funding and then waits to see what happens. TAG has big interests in aviation with its jet fleet and Farnborough airport in the UK. The company also has serious links with McLaren and Mercedes-Benz, which is very interesting from an automotive point view. There is a lot we can potentially benefit from with this development."

people involved in the decision-making process. The main thing is that we are getting in with these OEMs and we appear to be making good progress."

Politics are rife within the automotive industry, and one major difficulty Hall and his colleagues have so far avoided is upsetting the influential Tier 1 suppliers whose business focuses on developing seats and systems associated with seats, such as the lumbar support, mechanical motors and safety coils – features that ProBax does away with. "It's a balancing act," believes Hall. "Potentially – as we did with the Lotus project – we could go and eliminate the need for adjustable lumbar support systems – and that would obviously alienate the big Tier 1s such as JCI and Faurecia. But while the engineers at the OEMs would be delighted if we were to do this, marketing teams within the same car maker would not be too happy because we would be taking out optional extras and feature contents from their brochures. I think what we'll end up doing in time is perhaps getting rid of some of the features, but not all of them.

"I realise there is scope for conflict with our technology, especially as we are the new boys, but equally there's a big driver from the powers that be in the industry to make all vehicles lighter and more economical with fuel. So any opportunity to take weight out of the vehicle should be looked at seriously. Obviously lumbar motors and lumbar systems, along with all the wiring and switches that goes with this technology, add to the weight of the vehicle and it's



Already installed in Lotus applications, the aim now for NuBax is to secure contracts with other OEMs

a fairly big mass that can now be taken out of the vehicle."

The initial target for NuBax was to secure a contract with an OEM by September, but Hall has some doubts: "That might happen, but I have reservations. Although the technology can be integrated very easily, very cheaply and very quickly into existing seats – there's no need for re-homologating various points and therefore no need to change restraint systems – I actually think what will happen is that the introduction of our technology will be timed with either a mid-life facelift or a model year update."

The application scope for ProBax is huge, and Hall says it's only a matter of time before the technology comes onto the market in mass-market form: "I think where you'll see it coming first will probably be the C- and B-segment vehicles, for example the Ford Fiesta and Ford Focus area. But equally other OEMs, with different strategies, might chose to drive it from the top down such as Mercedes Benz, for example, where new systems come in at the S-Class and then filter down over time to the C-Class and A-Class."

Seats for all

ProBax, a foam-based technology, can be applied to the majority of existing automotive applications. NuBax personnel conduct analysis tests on a seat and then optimise the ProBax version of the seat using foam inserts of different densities and hardnesses. The foam materials used for the insert – which are all conventional automotive foams, but details of which are being kept under wraps by NuBax – change the manner in which the occupant is supported. The big advantage for OEMs is that ProBax requires no modifications to OE seats when the insert is included, other than to the foam itself. Seat style, covers, frame and – critically for occupant restraint systems – the homologated seat H-point are all unchanged. As a result, it's possible for OEMs to introduce ProBax to the market in a relatively short time.

NuBax says its technology has the potential to both increase seat comfort and reduce seating development costs as it can remove adjustment mechanisms and complex components that take up space and add to the overall weight of the vehicle. UK-based Lotus – the first car maker to embrace the technology, on the 2006MY Elise and Exige models – estimates that NuBax cut 800g from the weight of each car. The technology also shaves 25 minutes off the production time of each vehicle.



Lotus estimates that NuBax eliminated 800g from the total car weight