



Planning now for the future, with the help of Furntech-AFRDI

a message from Bob Panitzki, CEO Furntech-AFRDI

The economy is tightening in a way that quite rightly concerns everybody. Concurrently, the Federal government's commitment to reducing pollution and to becoming more environmentally responsible is starting to gather momentum. Perhaps understandably, sensible business people are battenning down the hatches to ride out the storm.

That's the conventional wisdom. But this is not a time for conventional wisdom – rather, it's a time for thinking in clever and innovative ways, to discover new opportunities, and to capitalise on them. Specifically, it's time to devote effort into finding ways to profit from 'adversities' such as a shrinking economy, the need to become visibly 'green' in the manufacturing process and, allied to this, minimizing our carbon footprint.

Consider for a moment the types of businesses that will come out of the present downturn well-placed, and who will start on the recovery path running, not staggering along after a long period of inactivity. They'll be the ones who have looked ahead, identified the new markets and compliance needs, and planned accordingly. The businesses that lie low now, and serve up more of the 'same-old same-old' in the future most likely will go under, sooner rather than later.

The future in our business of furniture will be a tougher one – that much is certain. The Federal government has indicated it wants industry to identify all costs so that the carbon footprint created through an item's production can be properly identified and costed. For most of us, that means looking at the real cost of importing components and raw materials, and the cost of transporting these items from China. It may possibly mean that we have to reconsider the value of producing some selected items onshore again. It's already happening in the United States. *(see article page 5)* **The trading climate of the future also means that we have to examine as we have seldom done before whether our products genuinely make a responsible use of resources and of the environment.**

Furntech-AFRDI has been examining these issues too, and we are about to launch our new standard on sustainability, the Green Tick. It will be another valuable component in the testing regime that already wins for superior products the coveted Blue Tick certification. And certification – for quality, for durability, for longevity of service – increasingly will be qualities sought after in the marketplace.

More than ever in the future, it will pay to have your products certified, because the marketplace will have become conditioned to look for the assurances certification implies. U.S. consumer sentiment surveys indicate that already, people are buying less, but are choosing better quality.

So, to help ride out the storm, talk to Furntech-AFRDI now about your upcoming production, compliance and testing programs. Looking ahead now can help you with your design process, and will be the key to surviving in a tougher economic future.



Season's Greetings from everyone at Furntech-AFRDI. Thanks for your business in 2008. We look forward to working with you again in 2009.

Can consumers detect greenwash?

That's the question being posed by a number of companies as they attempt to tread the fine line between developing an environmental conscience and meeting emerging standards on accountability.

And the answer is, yes, they can detect greenwash, which although it is a new practice, already is being seen in some quarters as a failed corporate strategy.

Greenwashing is described as the practice of promoting environmentally friendly programs to deflect attention from an organisation's environmentally unfriendly or less savoury activities.

"When it comes to the environment, consumer are insisting on both transparency and consistency from the corporations they patronise," says Jessica Hogue, research director of Nielsen Online. "Consumer support depends on action as well as perceived sincerity and commitment."

Contradictory action was the top online discussion topic, followed by actions that were incongruous with company or its history and false or misleading comments. This comes at a time when the concept of climate change is being supplanted in popularity with the buzzword 'sustainability.'

Meanwhile, in the United Kingdom, a new survey of the FTSE 250 by BSI British Standards reveals a genuine and significant commitment to environmental issues among British business.

Eighty-one per cent of those surveyed have implemented an environmental management system such as ISO 14001 – an increase of 10% from 2006. Ninety-five per cent of those surveyed, compared with 84% in 2006, believed that their company's environmental performance had improved over the last ten years, demonstrating that businesses recognize their responsibilities and are acting on them.

At Furntech-AFRDI, we are careful about making 'green' claims. What we are sure of, however, is the scientific rigour that attaches to our awarding a product the coveted Blue Tick. Furntech-AFRDI operates a national system for quality certification for furniture, furniture components, and related products and materials with the aim of lifting quality and longevity, safety and fitness for purpose. Products that successfully come through this process are awarded the Blue Tick.

If we are not exactly 'bright green', we believe we are contributing to the process of sustainability through conservation of resources.

Helping architects and specifiers tick the right boxes, first time up



In a typical classroom, Furntech-AFRDI can give advice on specifying chairs, tables and storage units

Meeting OH&S requirements, performance criteria and practising ethical standards of procurement can be a difficult task for specifiers and architects in a fast-changing world that increasingly demands accountability from every part of the supply chain.

But in the field of commercial furniture procurement, there is a one-stop solution that ticks nearly all the boxes – specifying furniture that has the Furntech-AFRDI Blue Tick.

Furntech-AFRDI tests and certifies a range of office and institutional chairs, fixed height chairs, tables, office desking systems, storage and wall units and other furnishing products. Furntech-AFRDI carries out physical testing, featuring accelerated wear to establish strength and durability, and is about to launch a standard for stability, and for sustainability (to be known as the Green Tick).

When Furntech-AFRDI issues Blue Tick certification for an office task chair, for example, it is an assurance that the chair has passed rigorous scientifically-based testing, involving perhaps 200-thousand load duty cycles. The Blue Tick indicates that:

- the chair is robust, and can be specified to meet an anticipated range of tasks and duty cycles
- that it complies with relevant regulations and standards
- that it is ergonomically sound
- that its foam upholstery will comply with fire ratings
- that because of its inherent quality it will offer longevity in service, contributing to sustainability

The Furntech-AFRDI testing and certification process does much of the hard work for architects and specifiers. It could be said that by gaining the Furntech-AFRDI Blue Tick a chair is truly 'best of breed' both in performance and in meeting environmental and sustainability goals.

For architects and specifiers, taking advantage of the Blue Tick and certification program can reduce exposure to liability, reduce environmental impact, contribute towards gaining 'green' project accreditation, and is a verifiable way of responsibly minimising a project's carbon footprint.

The challenge: producing school furniture for a new generation of taller, heavier students

A new British report highlights problems with school furniture, and suggests that use of inappropriate furniture could be 'storing up problems' for the workforce of the future.

The research was carried out by the Furniture Industry Research Association (FIRA) and the British Educational Suppliers Association (BESA), and compared height and weight data for a range of current-day students with data dating back to 1971.

Among other things, this revealed that British children are growing taller at the rate of about one centimetre a decade, with most of the growth in the lower leg. Their arms are growing at a faster rate, and are now up to 15 per cent longer than they were 30 years ago. It's in the area of weight however that the biggest gains are being made, with an average 16 year old boy now weighing 67 kilograms, and a girl of the same age 60 kg. In earlier generations, these weights were not reached until the age of 18.

In Britain, much of the country's school furniture was designed in the 1960s, for a physically smaller generation. The report warns that sitting for extended periods on chairs that are of an inappropriate size and lacking ergonomic design, and at desks or tables where the height relative to the chair is incorrect will be uncomfortable, reduce attention, and is also recognized as a major cause of back pain in adolescence and later life.

The report also suggests that schoolwork can suffer because of back pain caused by unsuitable furniture, leading to distraction, disruptive behaviour and school absence.

Reaction to the report in the United Kingdom has been varied, with some suggesting that the true nature of the problem is the growing prevalence of childhood obesity. Others criticize the practice of school authorities of pursuing a 'one size fits all' policy in their furniture purchasing. In Europe and in North America, some schools have been replacing standard seating with exercise balls.

Local reaction

One Australian manufacturer, Woods Furniture, makes seating in a range of sizes, including a newly-added senior secondary chair, with a seat height of 500 mm compared with the former top limit of 460 mm.

Glenn Webster, Woods' director of sales and marketing, says the company observes IS 5970 and BS EN1729, in the absence of an Australian standard on sizing. The company's chairs however are certified by AFRDI for strength and durability.

Reflecting upward mobility in some schools, the company is experiencing strong growth in its German-designed but locally built Panto Flex and Panto Move 3D chairs. The Panto Flex costs twice the price of a standard school chair, the 3D four times, but both are said to offer considerable flexibility in the seating position, a plus for young, active people.

Extended weight standard for chairs meets market need

Meeting a frequently requested demand, Furntech-AFRDI is developing an extension of an existing standard to cope with changing body mass in the general population.

Furntech-AFRDI Technical Manager, Ian Burton, says that for some time clients have expressed a desire to be able to make defensible claims that their products are suitable for users up to a given mass, which falls outside what is considered the normal range for fixed height chairs, a nominal loading of 100 kg.

"We have to consider that the population is increasing in body mass and height, so assumptions which may have held true several decades ago may no longer be considered as truly reflecting the current situation," Ian says.

The new standard is aimed to address the demand for an increased load rating in relation to fixed height chairs. Work is also commencing on height adjustable office chairs.

"In effect, manufacturers who already have chairs that are Blue Tick certified will be able to employ the new standard to predict the behaviour of chairs when subjected to a client-specified loading, perhaps as much as 200 kg.

"But I must stress that the extended load rating cannot be gained, or maintained, without current certification," Ian added. "Specifically, this means that a new chair must go through the normal battery of tests for certification before the extended certification can be sought." The extended standard is due for release early in the new year.



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Standards, Testing and Product Certification for Commercial, Domestic and Nursery Furniture in Australia and New Zealand



Sustainability key topic for board

The Furntech-AFRDI (FA) board met in Sydney in October, with a range of issues to discuss in a manufacturing and trading world where the traditional goal posts are rapidly moving.

A key issue is progress of FA's sustainability standard, now under development for two years. As the furnishing industry faces questions about its environmental performance and chain of custody issues for raw resources, the new standard will provide benchmarks to report on these and related issues.

The board also discussed issues relating to intellectual property, of particular relevance as FA develops new standards and updates previous ones.

The Furntech-AFRDI board. Front: Peter McCutcheon (chairman), Peter Wortley (deputy chairman). Back: Associate Professor Dr Barbara Ozarska, Dane Walsh, Alvaro Asculi, Sezer Tekbas, Roger Ward, Brian Kutner. Absent: Robert Lee, Mark Copperwaite, Ken Payne.

Furniture associated with many injuries: U.S. report

Furnishings continued to be a major source of injuries in 2007, according to the United States Consumer Product Safety Council (CPSC).

Injuries are reported through the CPSC's National Electronic Injury Surveillance System (NEISS), with data gathered over 25 product groupings from some 100 hospitals of injuries associated with consumer products.

From the sample, a national injury total is estimated, although the CPSC is careful to point out that the injuries reported are associated with, but not necessarily caused by, consumer products.

Falling injuries top the list, at 2.3 million, but beds, mattresses and pillows account for 560-thousand injury reports. Chairs, sofas and sofa beds account for 476,000, tables a further 300-thousand injuries. Desks, cabinets, shelves and racks were involved in 262-thousand injury reports, ladders and stools 228-thousand, and miscellaneous furniture and accessories 122-thousand.

Of particular interest to Furntech-AFRDI, in view of our own testing programs and the continuing ACCC-mandated recalls of faulty nursery equipment, is the number of nursery-related injuries, some 85-thousand.

In Australia, a Monash University report suggests more than six thousand injuries occur each year from incidents associated with nursery furniture. The report confirms that in terms of injury severity, cots have the highest mortality.

Nearly all deaths were due to asphyxia and involved entrapment hazards directly related to cot design or modification. In a slightly older age group, injuries related to using bunk beds number four thousand.

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There's another influence that may also change the way we trade. While Australia – along with many other countries – has shifted production to China and India, because of those countries' generally lax attitudes towards energy efficiency and carbon emissions, if Australia is to fulfil its pledges under the Kyoto Protocol to reduce the impact of climate change, this country along with the international community will have to influence China and India to reduce the growth of their emissions.

That, of course, would mean that the current low-cost advantages of so-called 'dirty' manufacturing could start to diminish, swinging the trade balance more in Australia's domestic industry favour.

It would be wrong to assume that energy prices and concern about carbon emissions alone can bring on a revival of domestic manufacturing in Australia's furnishing industry, but as the Chinese say, we live in interesting times.

Chain of custody issues rising on the environmental agenda

If you manufacture or sell timber based products you may have been asked the simple question 'where does your product come from?'

Many businesses are now being asked searching questions by their customers on the origins of the timber or timber components in your products and some are requesting certified products only.

If you are not being asked these questions at present you undoubtedly will be at some point in the future.

from www.fira.co.uk

Furntech-AFRDI helps science students



Grade 7 science students from Queechy High School in Launceston made a visit to AFRDI headquarters in October, to test some bridge structures they had made to explore load bearing capabilities of commonly available materials.

Under the guidance of teacher Jemima Cooper, and a little welding help from their parents, the students constructed their bridges from 6mm mild steel rod, topped with a timber decking. The bridges were stress tested on an Instron Universal testing machine that's more usually employed testing office chairs.

Nobody was more surprised than Testing Officer Eric Paul when one bridge merely buckled a little under a load of more than 1300kg! Another went on to gently spring out of shape at 475kg. The results prompted Eric to run a calibration test to check the validity of the readings – but yes, the tiny bridges were really that strong!

The students' design brief was simple – build a bridge weighing no more than 1.5kg, and with a length of at least 30 cm, with a decking for vehicles.



Top: Testing Officer Eric Paul with students Jye Earnshaw (left) and Jordan Blackberry.

Rising energy costs may signal change for Australian furniture manufacturing

Energy costs are on a roller-coaster ride, high for six months, then a return to more normal levels. But the overall trend is almost certainly upwards, and that may have important implications for the future of Australia's furniture industry, if experience in the United States is any guide.

Some economists are suggesting that higher international shipping costs are forcing a re-examination of regionalization in manufacture, a turn-around from the current Australian practice of sending unprocessed timber and other raw resources to China and India, and buying back finished items, along with components for such things as office chairs.

In the United States, the New York Times has reported that with rising transportation costs, more wood is now going to traditional domestic furniture manufacturing centres in North Carolina and Virginia, where the globalization practices of the past several decades had all but wiped out the domestic industry. The Swedish international furnishing giant Ikea in May this year opened a manufacturing plant in Virginia, in an area hit hard by the outsourcing of production to Asia.

Even that icon of all things American, La-Z-Boy, has commenced manufacturing a new product line out of North Carolina, instead of taking the overseas production route.

Economists have a term for the trend back to domestic manufacture. It's called the neighbourhood effect. In its pure form, instead of seeking supplies from wherever they can be bought cheapest, regardless of location, and then outsourcing the assembly of products all over the world, manufacturers instead would concentrate on performing as many activities as close to their target marketplace as possible, minimizing transport costs.

The neighbourhood effect has its pluses. It will probably mean that China buys more iron ore from Australia, the short-haul being far cheaper than shipping from Brazil, its other major source. According to CIBC World Markets, a Canadian investment bank, in a report released earlier this year, the surge in fuel prices for shipping already had amounted to the equivalent of a nine per cent tariff on trade. As we now know, the early months of 2008 were at the lower end of the eventual rise in fuel costs.

In summary, CIBC says rising fuel costs are effectively offsetting the trade liberalization efforts of the past three decades.



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Standards under discussion

CS-088 (commercial furniture)/ CS-091 (domestic furniture) convened in Furntech-AFRDI's Launceston headquarters in November. Over two days, discussions covered:

- Finalisation of AFRDI Standard 149, covering stability of furniture used by children up to and including the age of five. The Standard addresses safety and stability issues in bookcases, shelves, wardrobes and chests of drawers
- Adoption (with possible Australian modifications) of BS 1729.1 and .2, for school and educational furniture
- Amendment and re-issue of AS/NZS 4688.1 Part One. This addresses ergonomics and general requirements for fixed height chairs

The committee convenes again at AFRDI in February.



From left: Ashwini Sharma (Standards Australia), Dr David Nelson (Australia Post), Ken Payne (Sebel) **Right front:** Ian Burton (Technical Manager Furntech-AFRDI), Bob Panitzki (CEO Furntech-AFRDI), Adrian O'Connell (Standards Australia).

Skin rash from contaminated leather furniture likely to have costly compensation ramifications

Furniture retailers, importers and distributors in the United Kingdom are facing litigation for compensation as the result of a number of customers suffering skin irritation after contact with leather sofas imported from China. The problem has sent a shiver through the Australian market, even though no similar cases have been reported here.

British legal firm, Lawson-West, has been pursuing a class action on behalf of 45 clients. In mid-October, two of the three defendants admitted full liability, opening the way for multiple compensation claims, thought to number around 1500.

Lawson-West says the severe allergic reactions have been caused by an anti-mould agent used in sachets placed within the sofas. The agent, dimethyl fumarate (DMF) turns from liquid to gas when heated, and becomes absorbed in the leather sofa covering. Contact with leather impregnated with DMF can cause severe skin reactions including blistering, burns, sores and rashes.

Wikipedia describes DMF in this manner: dimethyl fumarate has been found to be a sensitizer at very low concentrations, producing extensive, pronounced eczema that is difficult to treat. Concentrations as low as 1 part per million (ppm) may produce allergic reactions. There are only a handful of equally potent sensitizers.

Meanwhile, Furntech-AFRDI is in the process of strengthening AFRDI Standard 146, which deals with leather.

However, while the Standard itself will have more 'teeth', detecting inclusion of post-manufacture anti-fungal sachets – such as in the UK incident – will not be included in 146. This problem will only be alleviated through vigilance by dealers, distributors, and an informed public.

AFRDI is also now offering a batch testing and/or auditing program on leather. For details contact Paul, paul@furntech.org.au or (03) 6326 6155

Your feedback on this bulletin is welcome. Please contact Julian Ridgers julian@furntech.org.au or call (03) 6326 6155