



TECHNICAL TEXTILES AND  
NONWOVEN ASSOCIATION

**Presentation to:**  
**Senate Economics Legislation Committee**

August 2004



TECHNICAL TEXTILES AND  
NONWOVEN ASSOCIATION

The Technical Textiles and Nonwoven Association (TTNA) is a national industry association representing the collective interests of the Australian Technical Textiles and Nonwoven industry.

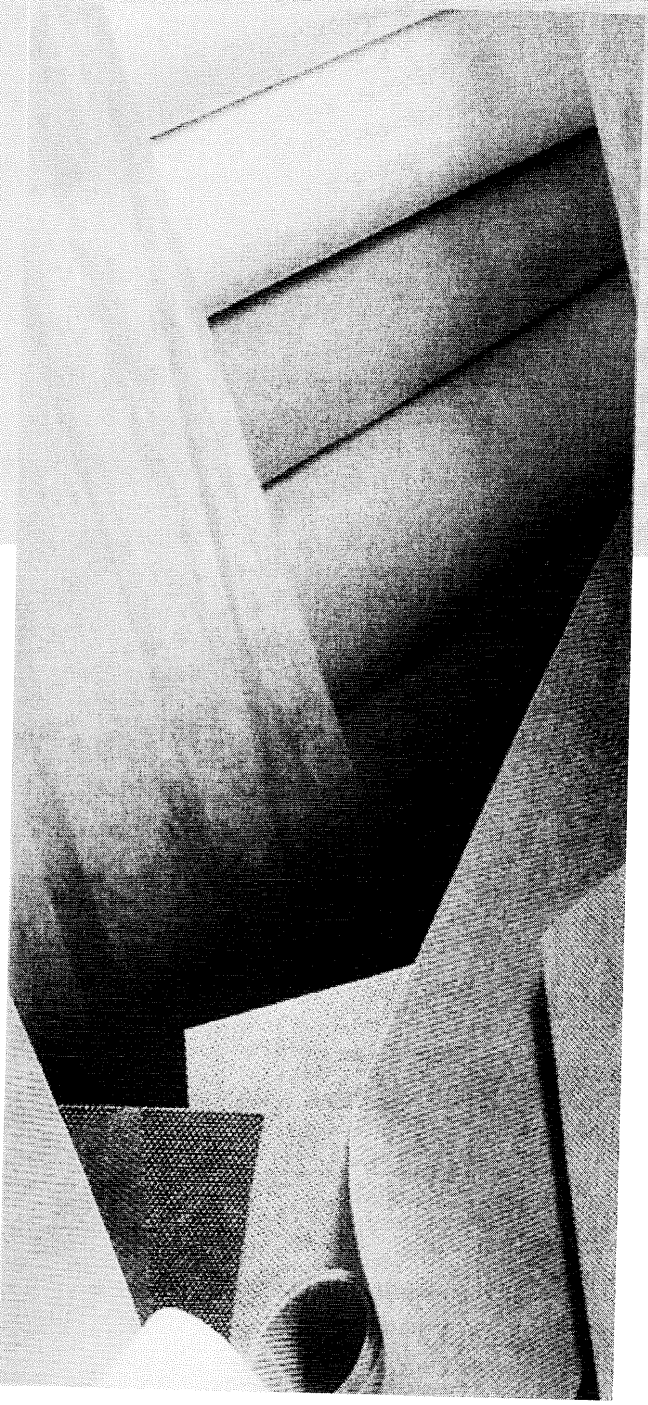
Technical & Nonwoven Textiles are about function not fashion

R&D is critical to the industry

The TTNA recommends the legislation be amended to include R&D for the Technical & Nonwoven Textiles sector.

The TTNA advises all parties to pass the enabling legislation (inclusive of amendments for R&D for the TTN sector) for the post 2005 programs as soon as possible.

# **Industrial Markets & Applications for Nonwoven Technical Textiles**



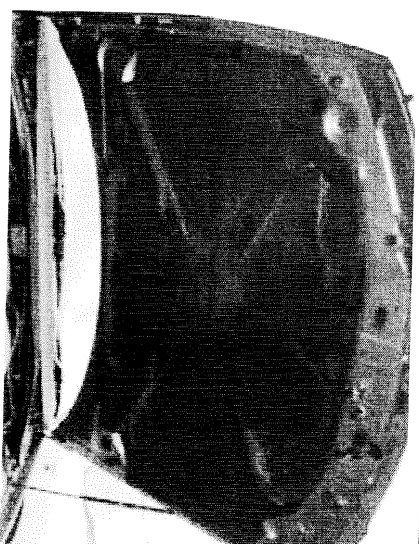
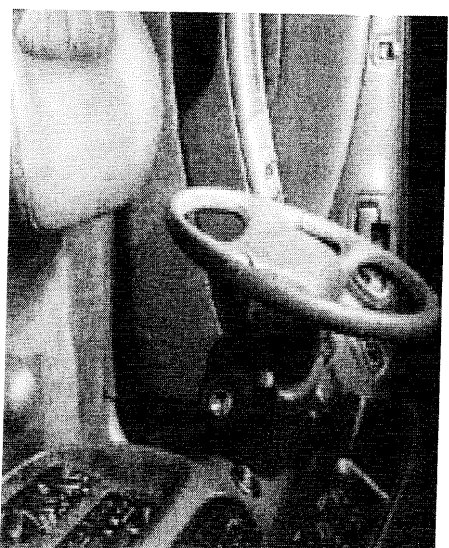


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# Automotive

Used to reinforce automotive interiors and parts, including:

- carpets
- headliners
- bonnet liners
- boot liners
- acoustic barriers
- foam reinforcement in seats
- anti-squeak tapes
- door trim panels

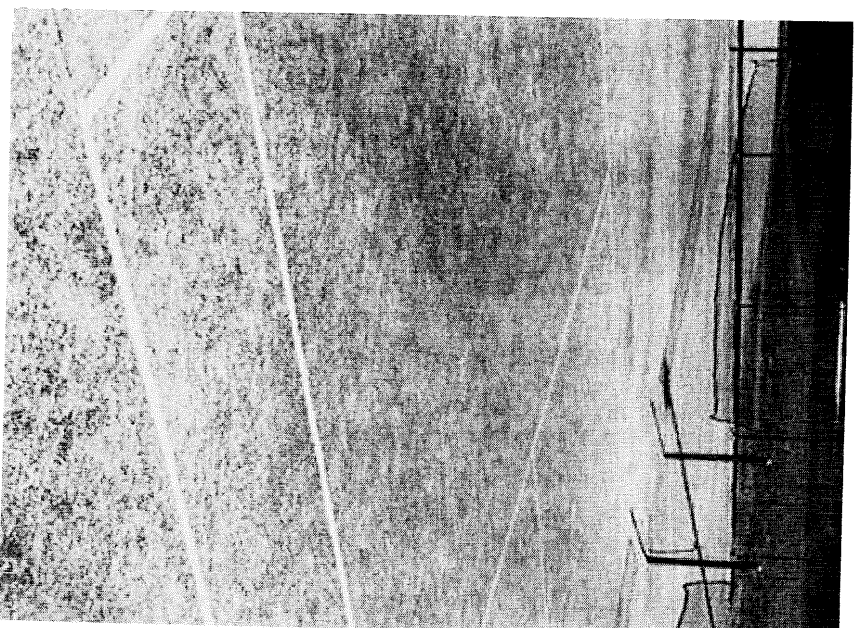
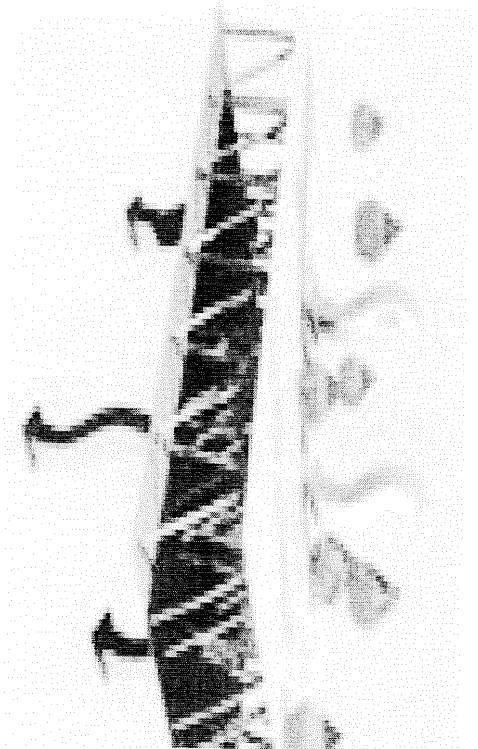




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# Artificial Sports Surfaces

Used as joining tapes,  
cushioning underlay and  
drainage barriers to maintain a  
level & firm playing surface

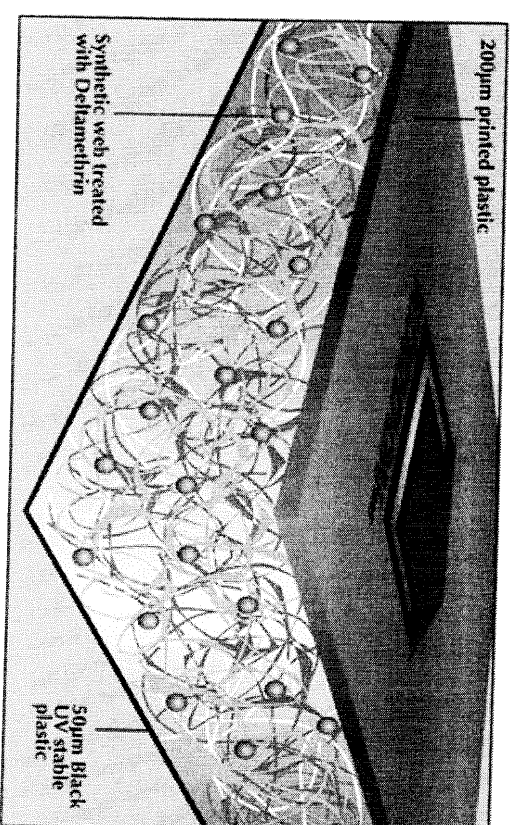
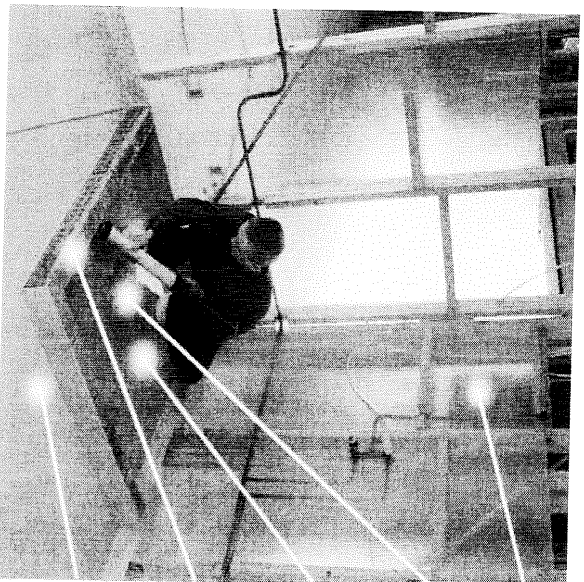




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# Building: Termite Barriers & Waterproofing Membranes

Termite barriers – prevents termites from destroying timber framed houses



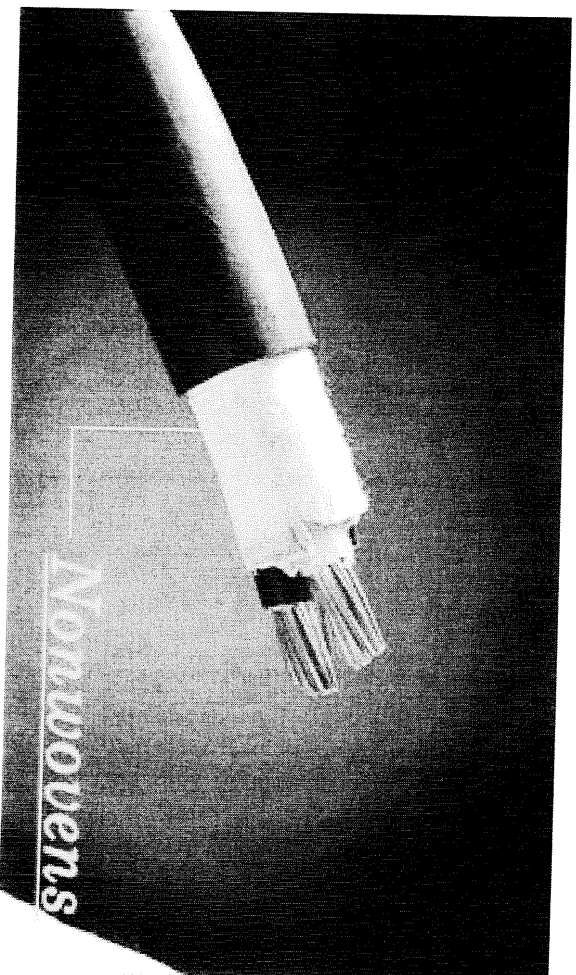
Waterproofing membranes – prevents moisture from damaging timber in residential & commercial buildings



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# Cablewrap

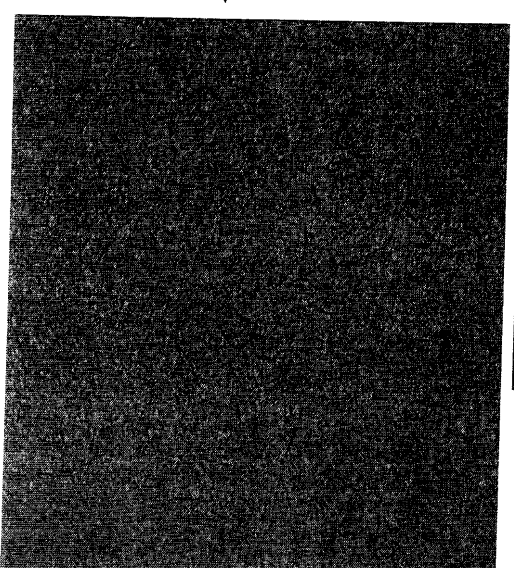
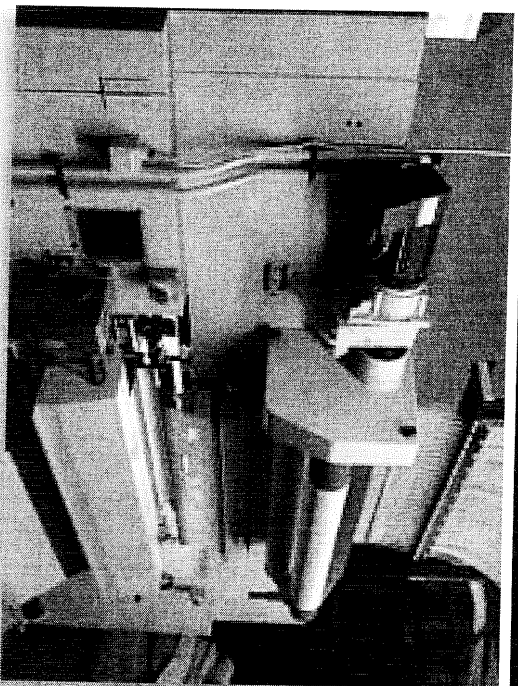
Used to insulate electrical & telecommunications  
cables and electronic circuitry





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# Carpet



Primary & secondary carpet backing – used as a tufting substrate to manufacture automotive, residential carpets & commercial carpet tiles and as a secondary substrate on the base of these products

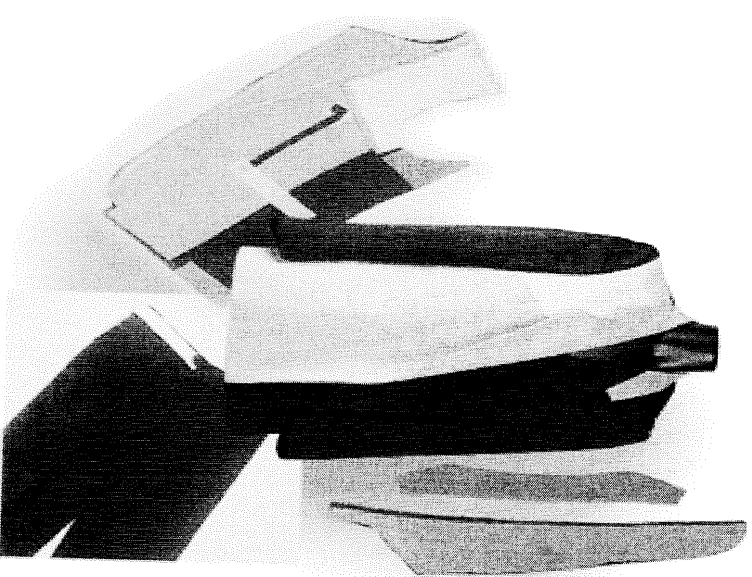
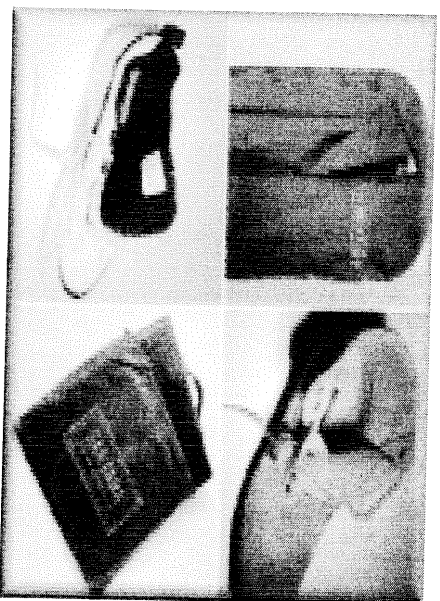




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# Clothing, Footwear & Luggage

- Shoe lining & reinforcement.
- Clothing interlining and stiffening aids.
- Lining & reinforcement of luggage.
- Protective apparel

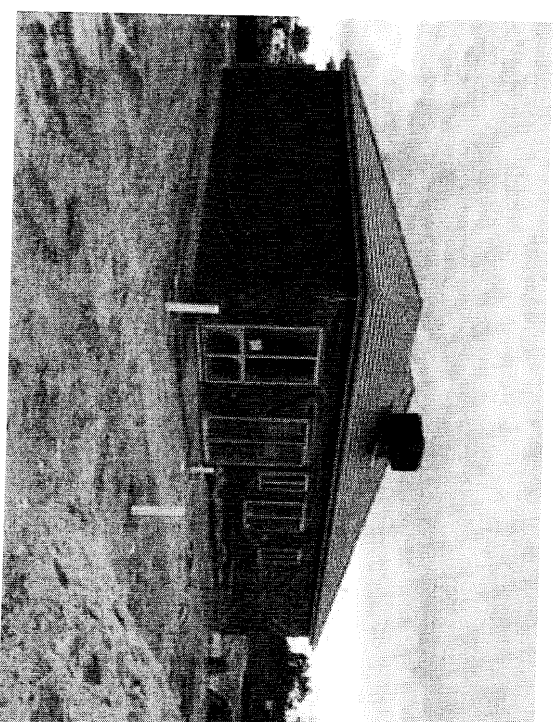
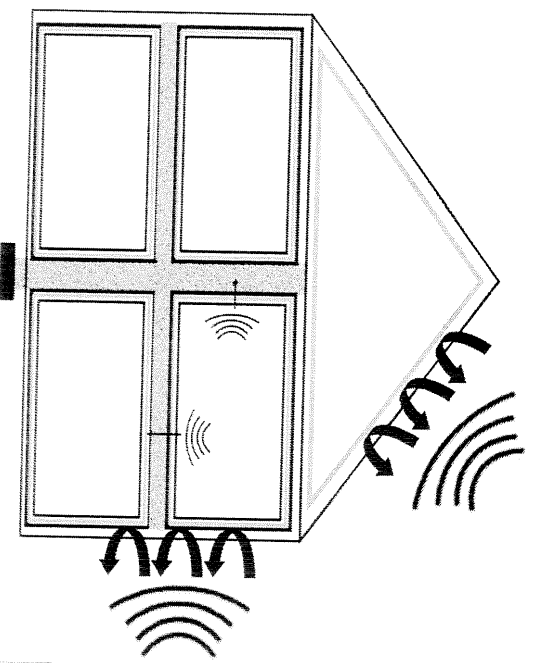




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# Building & Construction

- Housewrap
- Roofing underlay
- Wallpaper

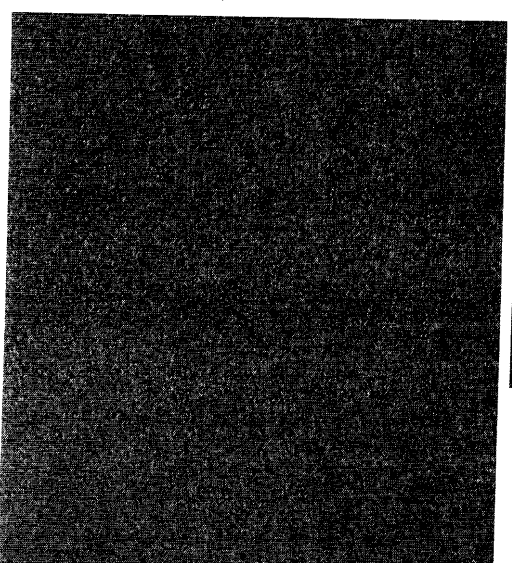
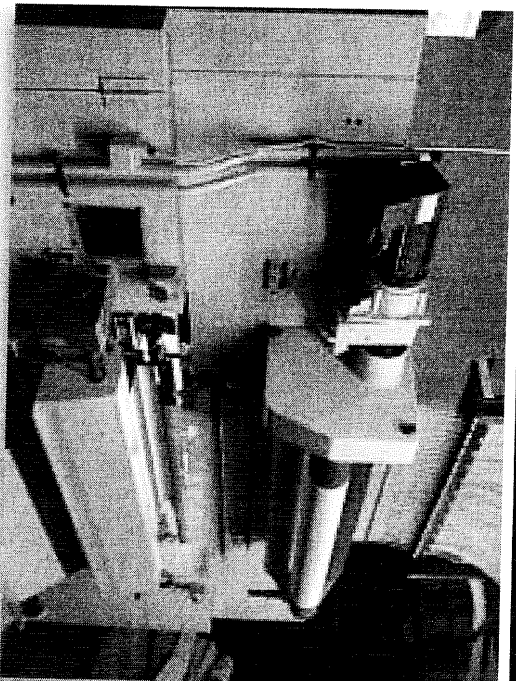


Acoustic & thermal insulation



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# Carpet



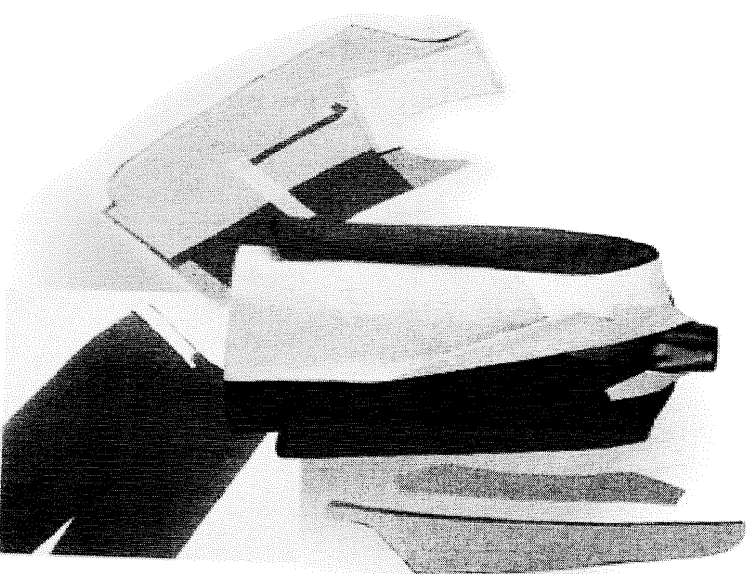
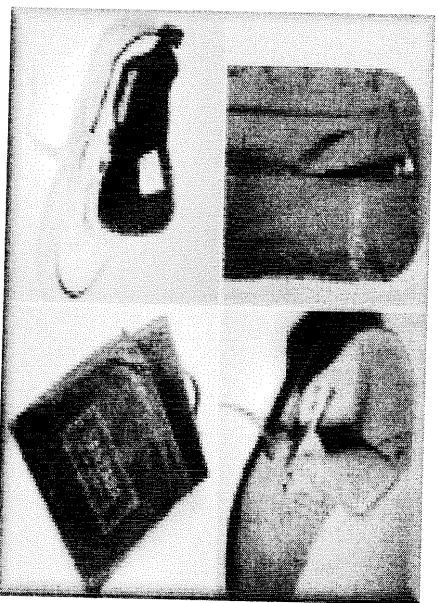
Primary & secondary carpet backing – used as a tufting substrate to manufacture automotive, residential carpets & commercial carpet tiles and as a secondary substrate on the base of these products



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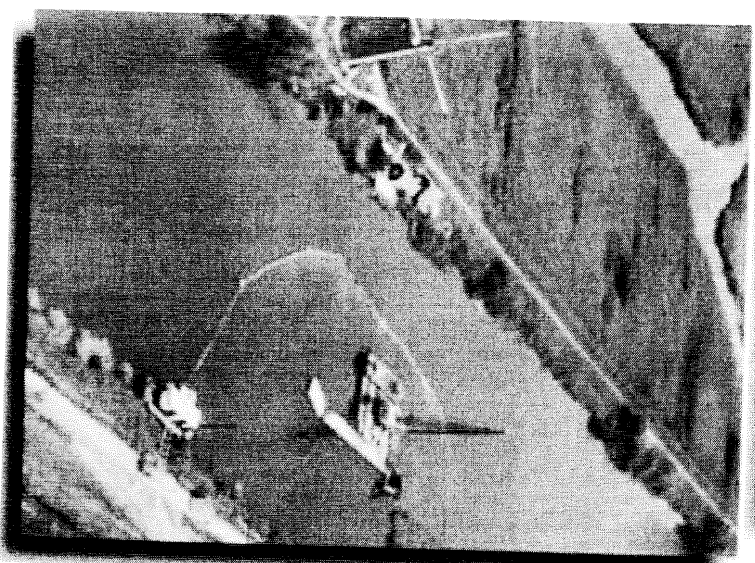
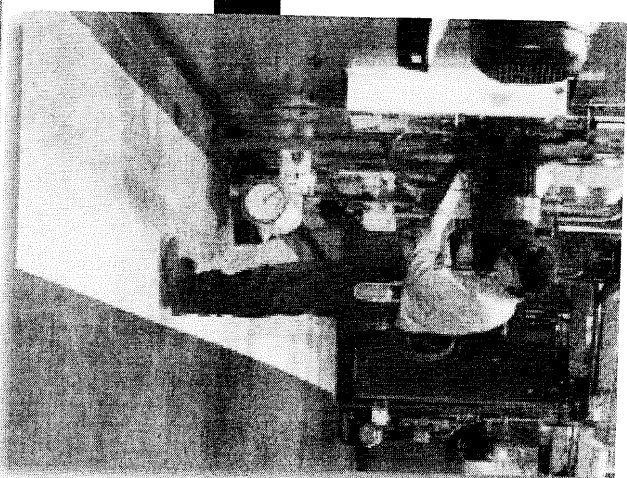




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# Environmental

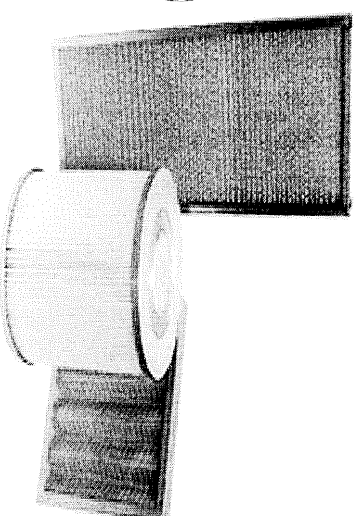
Oil & chemical absorbents –  
used to clean up spills in  
factories, in rivers & ocean



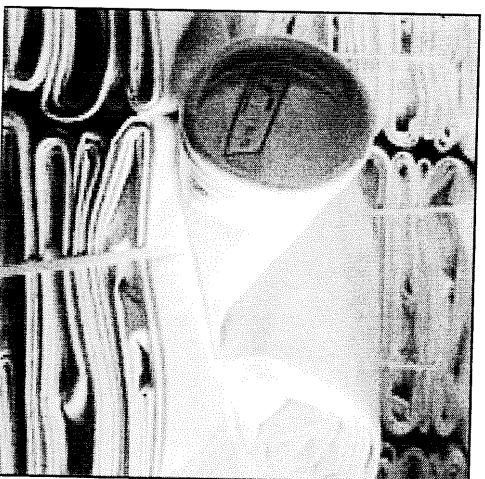


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## Filtration – Air & Gas



Dust & gas masks – filters dust, mist & odours in industrial & medical applications



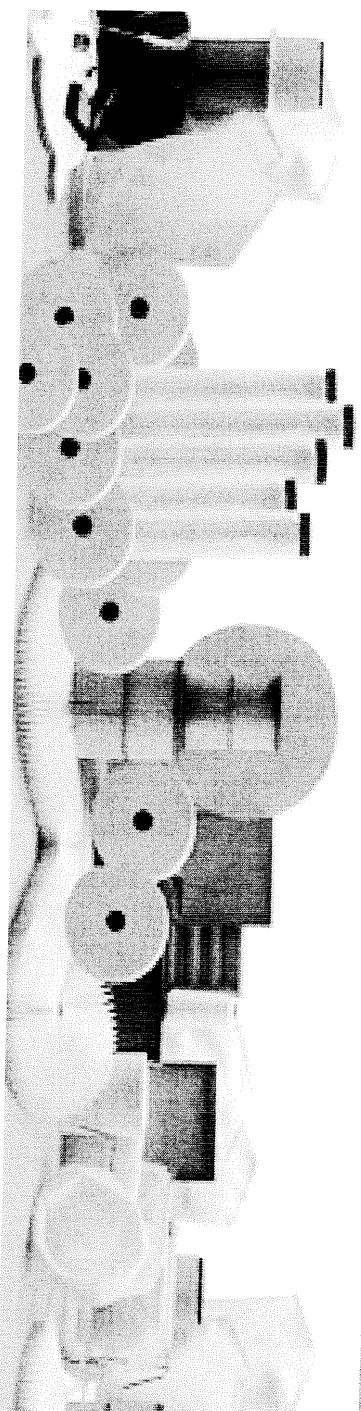
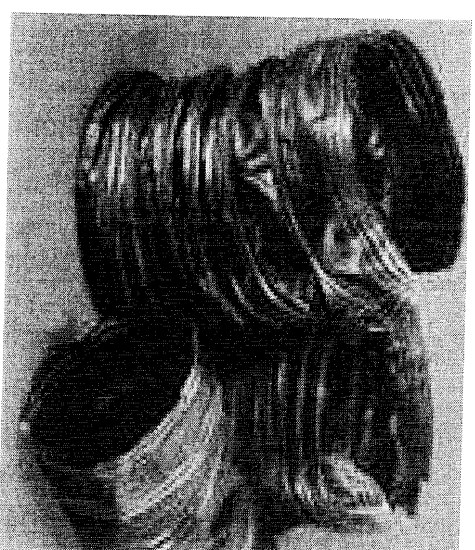
Cartridge & bag filters – hundreds of applications including automotive air filters, building air-conditioning systems, industrial filtration systems & vacuum cleaners



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# Filtration - Airconditioning

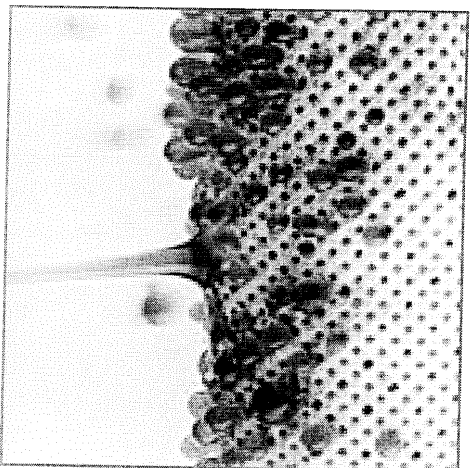
Ducting – used as filters & acoustic  
dust barriers in air-conditioning  
ductwork



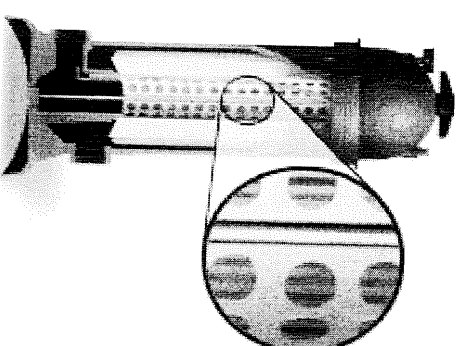
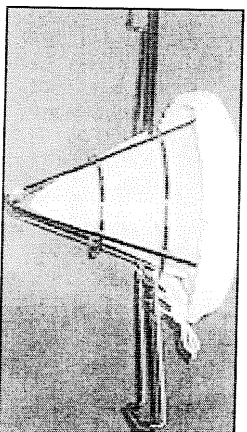


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# Filtration – Liquid



- Industrial coolant filtration
- Pool & spa filters
- Frying oil filters in fast food outlets
- Milk filtration
- Water filtration
- Tea & coffee bags
- Metal swarf filtration

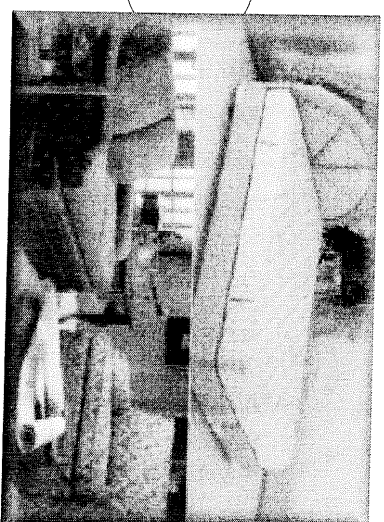






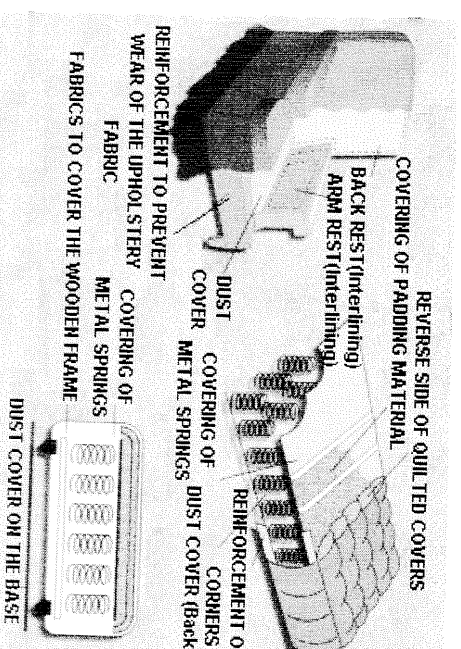
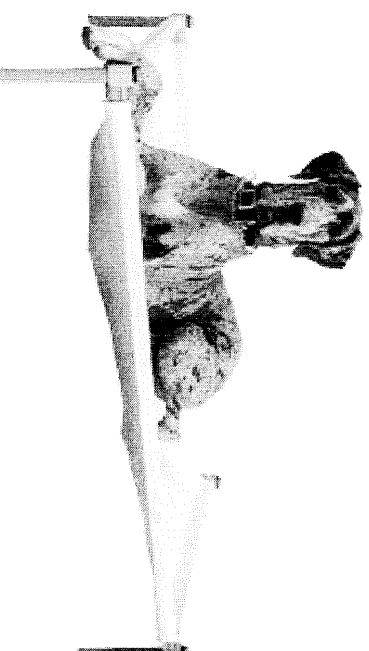
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# Furniture & Bedding



Used in many different areas of a bed  
or piece of furniture, including:

- quilt backing
- spring & cushion protectors
- dustcovers
- cushion inserts
- couch platforms
- flange
- padding
- pet products
- anti-slash / fire retardant barriers in  
train & bus seats to reduce the  
damage caused by vandals

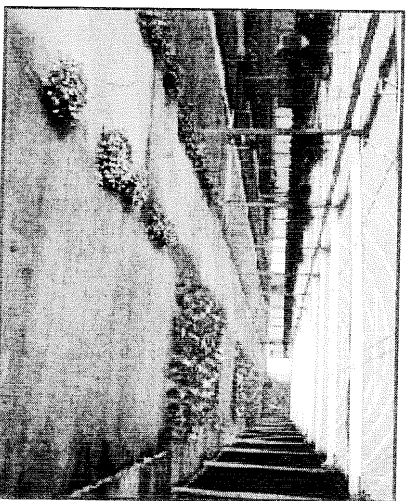




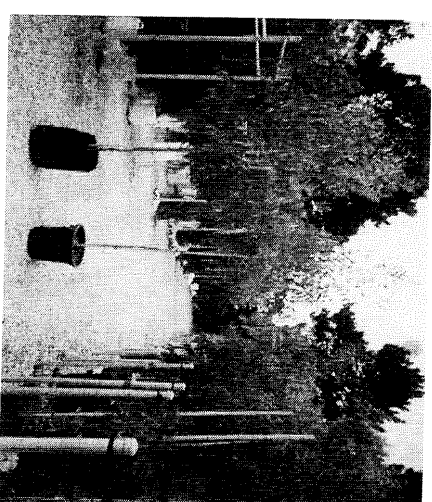
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# Horticulture & Landscaping

Crop covers – protects vegetables, fruit and plants from frost damage and reduces insect damage reducing plant growing seasons and increasing yield



Root control bags - to promote healthy root growth & reduce transplanting failures



Capillary mats – used to reduce wasteful overhead watering systems & promote healthy plant growth

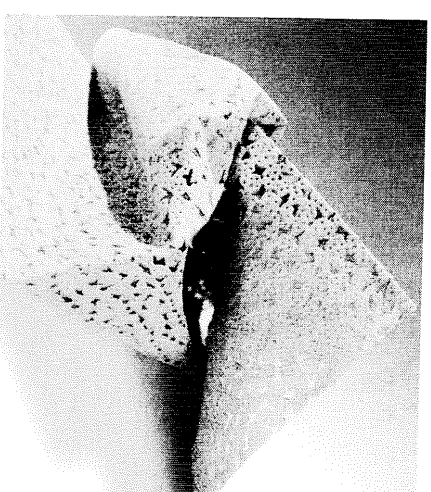
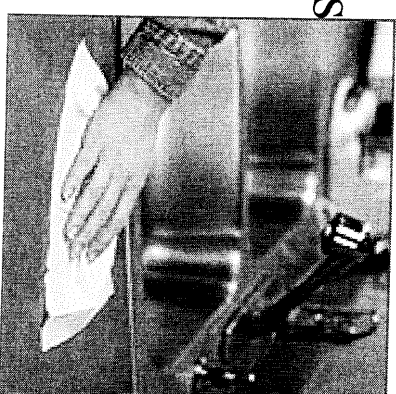


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# Hygiene



- Used as moisture barriers  
& absorbents and  
cleaning wipes in:
- nappies
  - baby & facial wipes
  - cosmetic cleaning cloths
  - glass & lens cleaners
  - kitchen cloths
  - glove liners

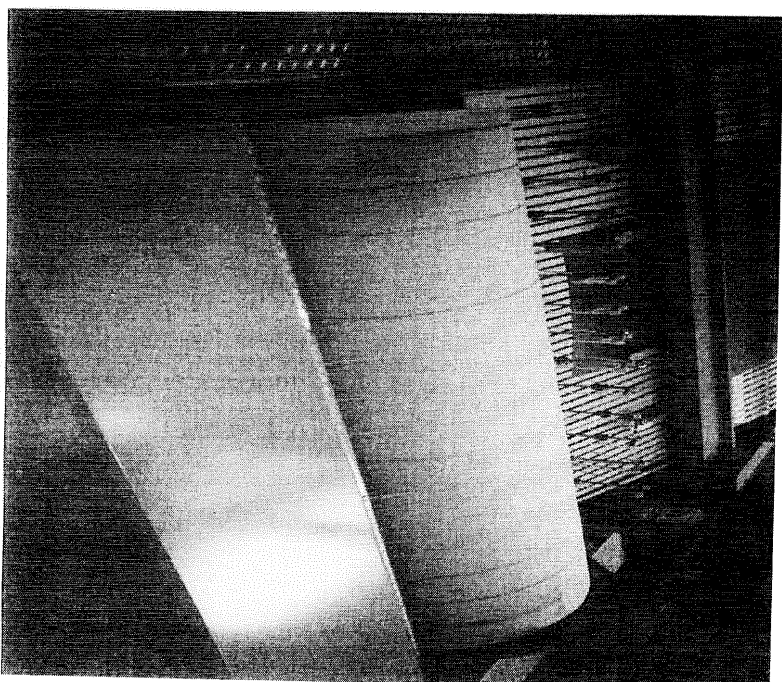




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# Industrial Laundries

Used to protect and insulate laundry  
clothes presses and wide width linen  
ironers



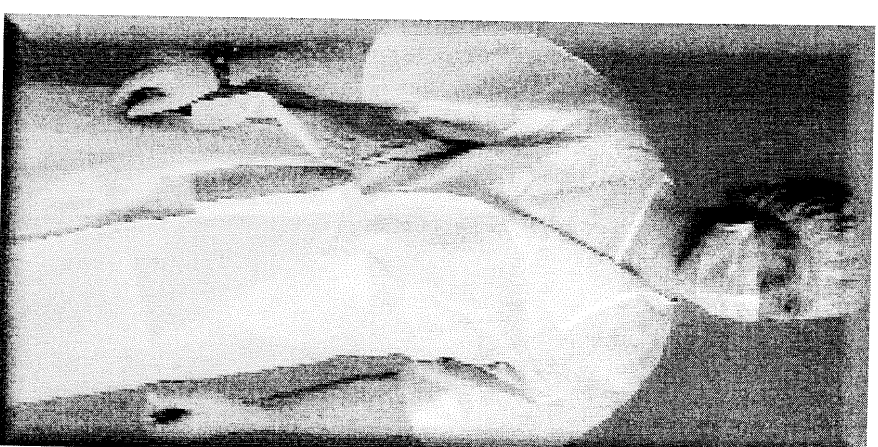


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# Medical

Used as barriers, filters and surgical aids in hospitals, aged care facilities & emergency services:

- face masks
- head protectors
- surgical gowns
- incontinence blankets & pads
- footwear covers
- bed protectors
- patient warming blankets

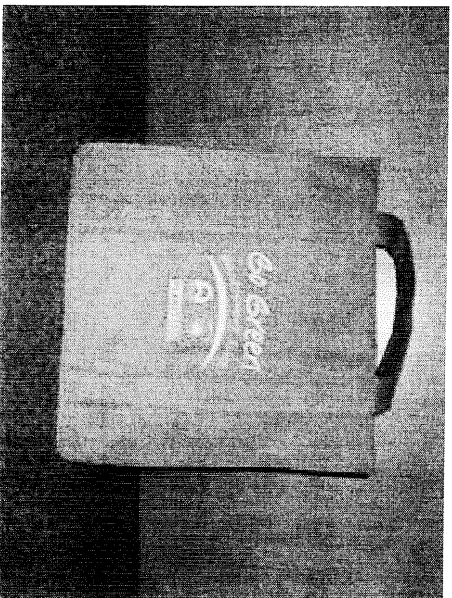




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# Packaging

Absorbent packaging used in the food industry to maintain freshness & colour



Re-usable shopping bags, flower wrapping, luggage bags & compact disc sleeves





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## R&D is critical to the industry

- The TTNA recommends the legislation be amended to include R&D for the Technical & Nonwoven Textiles sector
- R&D creates employment
- There is a strong correlation between R&D investment & GDP per capita amongst OECD countries
- Australia's Business Expenditure on Research & Development (BERD) does not compare favourably with other countries. **Canberra must feed the BERD!**
- Innovation provides companies with the capacity to become market leaders – it drives long term growth
- The TTN sector believes that is has been discriminated against for being good industry citizens, by having R&D entitlements eroded in favour of those sectors of the industry that are unlikely, haven't or won't reinvest!



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## **R&D is critical to the industry**

- **The Technical & Nonwoven Textiles industry is CSIRO's (TFT division) largest private commercial customers**
- **CSIRO has invested in excess of A\$10 million in technical and nonwoven textiles equipment and pilot lines to facilitate R&D in this sector**
- **CSIRO have recently made 23 positions redundant**
- **The CSIRO and Technical & Nonwoven Textiles industry has the opportunity to develop globally competitive innovative products**





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## **Economic significance of the industry (membership survey)**

- The industry's investment in capital expenditure
  - A\$66M in 2000/01
  - A\$57M in 2001/02, and
  - an estimated A\$84 in 2002/03
- \$1.7 billion annual manufacturing turnover
- Average turnover per employee is between \$250,000 and \$400,000
- Approximately \$200 million in exports
- R&D expenditure:
  - A\$18.6M in 2000/01
  - A\$20.4M in 2001/02 and
  - an estimate of A\$19.8M in 2002/03
- Regional economic significance
  - Dandenong, VIC, Gosford, NSW, Albury, NSW, Stawell, VIC, South Port, QLD



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## Characteristics:

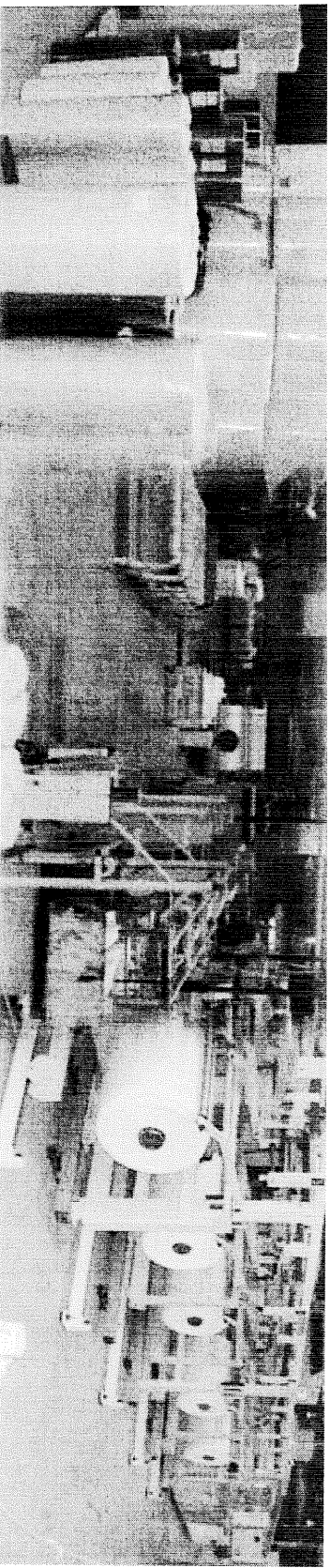
- A highly skilled workforce
- Highly capital intensive, requiring large investments in
  - Research and Development
  - Innovation
  - Product Development and
  - Production Facilities
- Transition of traditional textiles and fibre producers into technical textiles
- Significant investor in environmentally sound production and end product applications
- The Strategic Investment Program (SIP) is an important program to the industry



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## Characteristics (cont):

- **A highly skilled workforce**
  - Average turnover per employee is between \$250,000 and \$400,000
- **Highly capital intensive, requiring large investments in**
  - Research and Development
  - Innovation
  - Product Development and
  - Production Facilities





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## **The Technical Textiles and Nonwoven industry has responded positively**

- The industry has undertaken fundamental structural change
- The WTO Agreement on Textiles and Clothing (ATC) will continue to drive change for some time
- Over A\$200 million invested since 2000



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## The Strategic Investment Programme (SIP)

- SIP has been the catalyst for investment in research & development
- SIP is the catalyst for investment in capital equipment
- SIP has assisted traditional firms reinvest in order to produce more technical products



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## Conclusion

- The industry has undertaken fundamental structural change
- The WTO Agreement on Textiles and Clothing (ATC) will continue to drive change for some time
- Therefore the industry will need to further invest in capital equipment and R&D to address the structural change
- **The TTNA advises all parties to pass the enabling legislation (inclusive of amendments for R&D for the TTN sector) for the post 2005 programs**
- Given the delay in the legislation being passed and the impact on investment the TTNA recommends a seamless transition between the current and post 2005 programmes