

# THE AUSTRALIAN TECHNOLOGY SHOWCASE

## LIGHT WEIGHT STRUCTURES ADVISORY SERVICE



### Fluid Structural Interface

The Light Weight Structures Advisory Service specialises in the design and engineering of tensile membrane structures, utilising shade cloth, PVC and PTFE fabrics for domestic and export markets.

The Advisory Service has developed an innovative technological process to assist with safe, effective and timely manufacturing of tensile membrane structures.

The Fluid Structural Interface (FSI) process allows for the importation and exportation of a structural model from Finite Element Analysis (FEA) software to Computational Fluid Dynamics (CFD) software. The benefits of FSI are two fold. Firstly, the process precisely imports the reaction data from the CFD software to FEA software, reducing errors. Secondly it reduces the time needed by an engineering professional to analyze a structural model.

The Advisory Service has a distinct advantage over other engineering companies, due to its core focus on designing and engineering tensile membrane fabric structures. In developing value-creating processes for its clients, the Advisory Service combines industry experience with leading-edge technologies. Further, the Service provides technical expertise to offer its customers high-quality and cost-effective tensile membrane project solutions.

Due to its hands-on understanding of both fabric and steel fabrication and project installation, the Service's design team understands the unique flexible dynamics of the light weight

### Light Weight Structures Advisory Service is looking for:

- Steel Fabricator Joint Venture Partners

structural product. This knowledge of the individual components within a built tensile project is reflected in the design and engineering documentation of every completed structure.

From concept through to engineered design, the Light Weight Structures Advisory Service is committed to assisting clients with developing cost effective projects built on time and within budget. The design and engineering systems are guaranteed to assist in creating the most cost-efficient, profitable project outcomes.



### Contact details

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The Australian Technology Showcase (ATS) is designed to promote leading-edge, Australian innovative technologies globally. The ATS also aims to increase exports and attract foreign and local venture capital.

The Australian and Queensland Governments have been keen supporters of the ATS since its inception in April 1997. The focus of the ATS demonstrates the Australian and State Governments' commitment to the promotion of Australian science, engineering and technology internationally, and also serves to increase awareness of Australia's capacity in leading-edge skills and technologies.

**Visit the ATS website to:**

- Read about Queensland and Australian innovation and ingenuity
- Buy something from the showcase for use in your business
- Get a licence to manufacture or distribute one of the technologies in a new market
- Invest in a company or join a joint venture
- Gain access to the know-how that gave rise to the technology

A panel of independent experts in each state or territory rigorously assesses all applicant technologies to ensure they are clearly innovative and leading-edge. Membership of the Showcase is reliant upon the technology meeting certain criteria for eligibility. The technology must be:

**Clearly innovative** and represent a significant step forward in the technology itself or its utilisation

**Scientifically credible** based on secure principles and understanding

**Of significant local content** in terms of intellectual property or embodied skills

**Demonstrably marketable** with an identified existing or potential market advantage and a substantial identified market

**Commercially attractive** and likely to appeal to international investors and/or offering opportunities for joint venturing

**Socially and environmentally beneficial** by meeting community needs or standards

**Useful and related web sites**

[www.qld.gov.au](http://www.qld.gov.au)

[www.qmisolutions.com.au](http://www.qmisolutions.com.au)

[www.ausindustry.gov.au](http://www.ausindustry.gov.au)

[www.invotech.com.au](http://www.invotech.com.au)

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