

ABOUT

XTEK Ltd is the market leader in high-quality security products to protect and sustain the Defence Forces, Police Forces and other Government Agencies.

XTEK has key management and staff with distinguished military and police backgrounds and extensive experience in the Homeland Security sector; thus ensuring professional, reliable and expert service delivery to clients.

XTEK has the following accreditations:

QMS ISO 9001-2015
 DoD – DMO Registered Technical Support Agency
 Member of the Defence Industry Security Program
 Defence Recognised Supplier of Strategic Capabilities

CAPABILITY STATEMENT

XTEK offers a unique suite of solutions from in-house developed technologies to address current and emerging needs in the defence and homeland security markets. The Company is working to commercialise these solutions to a global market with the objective of significantly growing revenue and profit from these endeavours.

FACILITIES

The XTEK head office is located in Canberra, Australian Capital Territory, Australia, situated close to our largest customers, the Australian Government. XTEK Canberra is primarily focused on corporate and executive management functions, project management, engineering, customer service, and sustainment. The Canberra facility houses a sophisticated electronics workshop and a composite repair facility to provide in-house through life support for the equipment it provides. The Canberra facility is also responsible for the company's storage and freight activities and is XTEK's logistics hub for coordinating the import, export, and distribution of XTEK's specialist solutions.

The XTEK engineering facility in Adelaide, South Australia, is home to our XTclave manufacturing center. In Adelaide, the primary focus is on the development of XTclave and lightweight composite technologies. The facility provides XTclave, CNC machining, fabrication and injection moulding capabilities for the company.

PRODUCTS

XTEK offers a suite of products / solutions from a network of exclusive reseller partnerships and in-house developed technologies to address current and emerging needs in the defence and homeland security markets.

XTEK provides these solutions through the following business units:

- Composites (Lightweight Composites)
- EOD (Explosive Ordnance Disposal)
- Forensics
- SUAS (Small Unmanned Aerial Systems)
- Tactical (Tactical and Protective Solutions)

The XTEK Logistic Engineering Business Unit provides lifetime support to all our products with dedicated technicians, service, maintenance, training. The business unit scope includes compliance analysis, freight, warehousing, inventory control and all aspects of Through Life Support (TLS). In-country support for a range of OEM products covers repairs, maintenance, and training, focussed on electronic / electro-mechanical equipment.

KEY FACTS

- + In 1998, XTEK established it's logistics hub in Moorebank, Sydney, Australia for the management and distribution of it's specialised solutions.
- + In 2005 XTEK established it's research facilities in Adelaide, Australia. This site was and still is established as XTEK's armour research hub.
- + The Company was listed on the Australian Securities Exchange (ASX:XTE) on the 15th of September 2005.
- + XTEK is Australia's only publicly listed Homeland Security Company.
- + XTEK acquired Simmerison Holdings Pty Limited in September 2015 to Commercialise their technology - spatially accurate real-time 3D visual impact analysis software and associated services to build geospatially accurate 3D simulations. The technology will also help develop solutions to exploit imagery from SUAS platforms and other aerial systems.

PARTNERS



ABOUT XTEK

XTEK Ltd is the market leader in high-quality security products to protect and sustain the Defense Forces, Police Forces and other Government Agencies. Their mission is to deliver the lightest, thinnest and highest performing armour products to protect and sustain our service personnel and assets.

XTEK's highly skilled engineering team is the key to the company's innovative product range and process development. The company offers a suite of products from a network of exclusive reseller partnerships and in-house developed technologies to address current and emerging needs in the defense and homeland security markets.

BALLISTIC SOLUTIONS

XTEK continues to advance the commercialization of its advanced XTclave enabled ballistic solutions, primarily the Small Arms Protective Insert (SAPI) plates and combat ballistic helmets. In addition, XTEK has been progressing the evaluation of the Company's helmet shells' performance, in conjunction with the US Government's Combating Terrorism Technical Support Office (CTTSO).

XTEK's new commercial-scale XTclave manufacturing facility has been fitted out with a number of machines and is on track to go live in early 2020.

PROCESSING SPECS

Consolidation Pressure:
300 bar / 4300+ psi

Consolidation Temperatures:
Up to 200 DegC / 390+ DegF

Consolidation Process:
Uniform Hydro-Isostatic

XTCLAVE TECHNOLOGY

The XTclave™ is a composite curing and consolidation technology that was initially developed as manufacturing process for ballistic protection laminates, specifically Small Arms Protective Inserts (SAPI). The XTclave cycles of ultra high isostatic pressure (up to 300bar) at elevated temperatures (up to 200 degC) to achieve composite curing and/or consolidation in thermoset and thermoplastic resin systems.



Whilst autoclave systems impart isostatic pressure to consolidate composites, the magnitude of pressure is significantly less (usually 6-10 bar) and often inadequate for moulding complicated and detailed geometry. Closed moulding in a press in RTM processes with expensive tooling can apply similar pressures (axially) but often have high and low-pressure regions within the composite arising from geometry.

The XTclave makes it possible to manufacture lighter, stronger and stiffer composite articles by the isostatic pressure effect and high efficiency heat exchange using a heat transfer fluid fiber content by volume of up to 75% has been achieved for structural components using thermosets without surface dryness or void content through thickness.

CONTACT

For more information about ballistic XTclave solutions please contact: sales@highcomarmor.com or highcomarmor.com