

# DEFENCE TASMANIA INDUSTRY DIRECTORY







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**Front cover images**

- Left side: CBG Systems' SolarZShield signature management system
- Top centre: Taylor Bros Marine designed and built 16.3 m landing barge for 'RSV Nuyina' – Image courtesy of Australian Antarctic Division
- Top right: Pivot Maritime International's simulation system
- Bottom right: PFG's 'Sentinel Interdictor I 200' – next generation multi mission tactical watercraft
- Bottom centre: Lighting Protection International's lightning protection products

**Image right**

Taylor Bros Marine medical facility fit-out of Canberra Class Landing Helicopter Dock ships





## Message from Tasmania's Defence Advocate

If you haven't yet experienced the quality and performance of Tasmanian defence capability, componentry and services, now is the time to get on board and make sure you don't get left behind.

You should never underestimate the Tasmanian advantage in innovation, ingenuity and focus on delivering unsurpassed quality and fit-for purpose design and manufacturing.

After 40 years of active and operational service in the Australian Defence Force I know what will work, what is needed and the performance expected from our military hardware and associated services. Tasmanian defence suppliers never fail to impress me and others.

I invite you to find out first-hand just what Tasmania's defence supply sector can do for you.

Tasmania has an impressive range of niche defence industry capabilities and we are well positioned to deliver the solutions and build the capacity that both Australian and international defence forces need to remain at the top of their game.

For the Tasmanian defence supply sector, collaboration is key. Our thinkers, designers, manufacturers, professional service providers, and research and education institutions, work together to innovate and develop specialist solutions that are routinely the best on the market.

We have the infrastructure, workforce, skills and supply chains to support some of the largest militaries, defence companies and projects around the globe.

Tasmania's trusted maritime industry and research organisations have supplied world-class products, systems and services to navies worldwide for decades. More recently our innovations in land, air, space and cyber domains are increasingly being recognised in Australia and by militaries around the world.

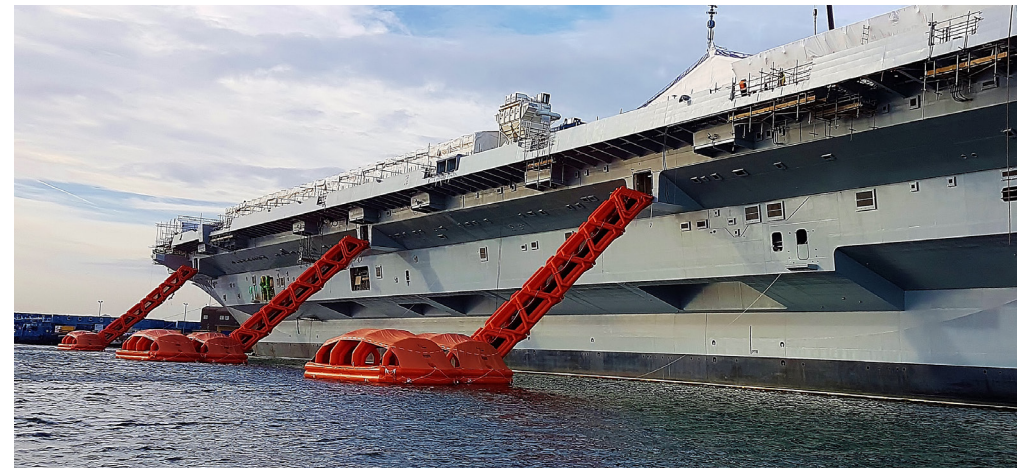
Our cutting-edge designs and high quality products are already enhancing the capabilities and operations of military forces of nations such as Australia, New Zealand, Pacific Island countries, Singapore, Japan, South Korea, the United States of America, Canada, Israel, the United Kingdom, France, Italy, Germany, Spain, Belgium, the Netherlands and Denmark.

I invite you to find out more about Tasmanian defence supply capability and expertise, where it can help you build your next generation force and to connect with Tasmanian defence industry suppliers today.

A handwritten signature in blue ink, likely of Rear Admiral (Rtd) Steve Gilmore AM, CSC.

**Rear Admiral (Rtd) Steve Gilmore AM, CSC**

Tasmanian Defence Advocate



Liferaft Systems Australia Marine Evacuation System installed on the Royal Navy's (UK) Queen Elizabeth class aircraft carriers



# Tasmania's defence advantage

Tasmania has a worldwide reputation for quality which, when coupled with our many competitive advantages, sets our defence suppliers apart.

We have gained the attention of major defence companies, contractors, governments and defence forces around the globe for having systems and products that are more innovative, more durable and more reliable than the competition.

Access to prime industrial and semi-industrial precincts and infrastructure across the state, all with proximity to major maritime and air freight corridors, positions Tasmanian industry favourably for supplying major defence projects.

Tasmania's manufacturers and research and education institutions are closely connected and collaborative, with a proven track record and established capability in national and international defence markets. They have a particularly strong track record in supporting the maritime and heavy vehicle industries.

Many of our major manufacturers supply to global markets and are connected to international supply chains. Local supply chains are well established and provide fabrication and manufactured products and services for varied industrial bases.

These supply chains, coupled with our globally competitive infrastructure and skilled workforce, enable Tasmania to achieve competitive production costs for very high quality products.

Home to a thriving science and research sector, Tasmania is globally recognised as a centre of excellence in product development with this scientific edge supporting both Tasmanian-based and international industries.

The reliable and skilled Tasmanian workforce has evolved over many decades with organisations such as the University of Tasmania's Australian Maritime College, TasTAFE, and the Tasmanian Minerals, Manufacturing and Energy Council's Manufacturing Centre of Excellence working closely with industry to provide targeted and tailored education and training.

The Australian Maritime College is also both the national institute for maritime education, training and research and a strategic partner in the Naval Shipbuilding College, cementing Tasmania as a hub for defence research and education.

The University of Tasmania's new Defence and Maritime Innovation and Design Precinct in Tasmania's north is already drawing significant international attention with major defence contractors partnering with the University to utilise the precinct's unique facilities and expertise in defence science and research, and to further expand the precinct's capabilities.

Organisations such as the University of Tasmania, the Australian Antarctic Division, CSIRO (including the Marine National Facility), the Royal Hobart Hospital's Diving, Hyperbaric and Aerospace Medicine Department and the Centre for Antarctic, Remote and Maritime Medicine, have earned international reputations and continue to make significant advancements in their fields.

It is clear that Tasmania's defence supply industry will continue to be recognised as a supplier of choice, with our leading expertise and innovation in demand globally.

When only the best will do, and when quality and reliability are paramount, the world's defence industry is now looking to Tasmania's niche capabilities.



University of Tasmania's northern campus incorporating the new Defence and Maritime Innovation Design Precinct

# Capability map



## North

1. University of Tasmania's Defence and Maritime Innovation and Design Precinct – Newnham
2. Australian Maritime College (AMC) – Newnham
3. University of Tasmania – Newnham / Inveresk Campuses, Launceston
4. Launceston Airport
5. AMC Marine Fleet Training Centre – Beauty Point
6. Stoney Head Military Training Area
7. Defence Science and Technology Group – Scottsdale Research Facility
8. AM Firefighting Training Facility – Bell Bay
9. Bell Bay Advanced Manufacturing Zone – Bell Bay

## North West / West

10. TMEC's Manufacturing Centre of Excellence – Burnie
11. University of Tasmania – Cradle Coast Campus
12. Kokoda Barracks – Devonport
13. Port of Devonport
14. Oceania Underwater Test and Evaluation Centre

## South

15. Maritime Defence Precinct – Hobart
16. University of Tasmania's Defence Network – Hobart
17. Anglesea Barracks, Navy HQ Tasmania and HQ No 29 SQN RAAF – Hobart
18. International Marine Observing System – Hobart
19. University of Tasmania's Institute of Marine and Antarctic Studies – Hobart
20. CSIRO Marine National Facility – Hobart
21. Southern Ocean Observing System – Hobart
22. Diving, Hyperbaric and Aerospace Medicine Department – Royal Hobart Hospital
23. Derwent Barracks (2 Force Support Battalion and 12/40 Battalion RTR) – Glenorchy
24. Buckland Military Training Area – Buckland
25. Fort Direction Explosive Ordnance Facility – South Arm
26. University of Tasmania AuScope Array – Cambridge
27. Hobart International Airport (Operation SOUTHERN DISCOVERY)
28. Australian Antarctic Division, including Centre for Antarctic, Remote and Maritime Medicine – Kingston
29. University of Tasmania's Southern Skies Space Network, including Bisdee Tier Ground Station and Greenhill Observatory – Melton Mowbray



# Capability descriptions

**Maritime domain** includes ship and watercraft construction, port development and ship operations, specialised systems and equipment, engineering and fabrication, and diving medicine.

**Land domain** includes specialised vehicle manufacturing, specialised systems and equipment (i.e. signature management and composites), engineering and fabrication, and food technology.

**Air domain** includes specialised systems and equipment (i.e. powertrains), engineering and fabrication, and aerospace medicine.

**Space domain** includes space domain awareness, specialised systems and equipment, and aerospace medicine.

**ICT and other key enablers** includes cybersecurity technology, artificial intelligence, Internet of Things, systems technology, systems engineering and professional services.

**Research and education** includes VET and tertiary training and education (including simulation), and research and development.



# Capability index

	Maritime domain	Land domain	Air domain	Space domain	ICT and other key enablers	Research and education	
APCO Engineering.....	✓	✓					8
Astrotec.....	✓	✓			✓		9
Australian Maritime College (AMC).....	✓					✓	10
Biofouling Solutions.....	✓					✓	11
Blundstone Australia.....	✓	✓	✓				12
Castings Tasmania.....	✓	✓					13
CBG Systems.....	✓	✓			✓		14
CLS Oceania.....	✓						15
CPT Engineering.....	✓	✓					16
Crisp Bros. and Haywards.....	✓	✓					17
Cromarty.....	✓	✓			✓		18
CSE Crosscom.....	✓	✓			✓		19
Currawong Engineering.....		✓	✓				20
Definium Technologies.....	✓	✓			✓		21
Delta Hydraulics.....	✓	✓					22
Direct Edge.....	✓	✓	✓				23
Diving, Hyperbaric & Aerospace Medicine.....	✓	✓	✓	✓		✓	24
Elphinstone.....		✓					25
Fiomarine Industries.....	✓						26
Forager Foods.....	✓	✓	✓				27
Fortifyedge.....	✓	✓	✓	✓	✓		28
Foxhole Medals.....	✓	✓	✓				29



	Maritime domain	Land domain	Air domain	Space domain	ICT and other key enablers	Research and education	
HENSOLDT Australia.....	✓	✓	✓	✓	✓		30
Imbros.....	✓						31
Iso Tech Engineering.....	✓	✓					32
Jayben Group.....		✓					33
Liferaft Systems Australia.....	✓						34
Lightning Protection International.....	✓	✓	✓	✓	✓		35
Marine and Coastal Corrosion Solutions.....	✓	✓				✓	36
Muir Engineering.....	✓						37
Norfolk Blinds.....	✓	✓					38
Offshore Unlimited.....	✓						39
Penguin Composites.....	✓	✓					40
PFG.....	✓	✓					41
Pivot Maritime International.....	✓				✓	✓	42
Storemasta.....	✓	✓					43
Tamar Engineering Tasmania.....	✓	✓	✓				44
TasTAFE.....						✓	45
Taylor Bros.....	✓						46
Tidetech.....	✓				✓		47
TMEC Manufacturing Centre.....						✓	48
UTAS Defence & National Security Network.....	✓	✓		✓	✓	✓	49
Veris Australia.....	✓	✓	✓				50

MARITIME

LAND

## Products

- Custom cast and machined components for marine industry in ferrous and non-ferrous metals.
- Specialist hydraulic actuators DNV certified for steering and ride control.
- Range of deck hatches and bulkhead seals.

## Capabilities

- Foundry: cast metals include steel, stainless steel, cast iron, bronze, aluminium, heat and wear resistant metals.
- Machining includes 5 axis CNC machining on Mazak Integrex I400S as well as large capacity, high speed milling on Mazak FJV-60/120 II.
- Full CAD / CAM capability.

## Competitive discriminators

- In-house casting and machining allows us to control the entire manufacturing process from design through to completion, allowing complete control over quality and delivery.

## Key customers and partners

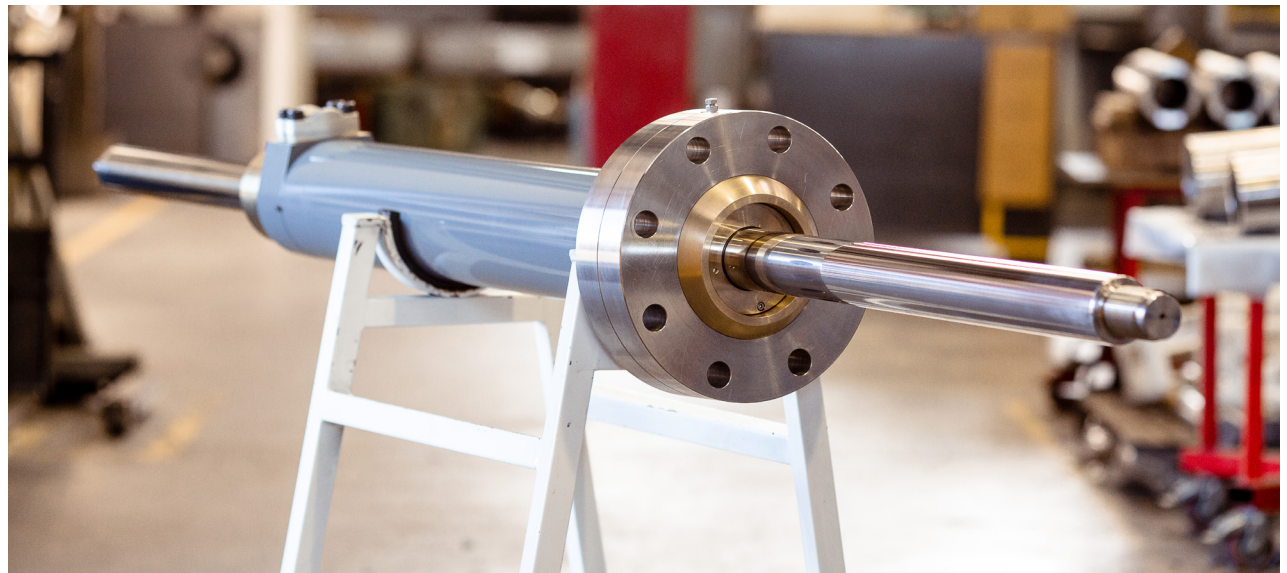
- Commercial marine
- Marine grade hydraulic actuators
- Mining
- Power industry
- US Littoral Combat Ship project



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MARITIME

LAND

ICT

## Products

- High quality electrical design, installation, maintenance and upgrades to the marine, Antarctic, industrial, commercial and healthcare sectors.

## Capabilities

- Installation and maintenance of:
  - shipboard lighting, including searchlights and navigation lights
  - systems designed for Antarctic conditions
  - heating, ventilation and air conditioning (HVAC)
  - general light and power distribution
  - building management systems
  - safety systems and access control
  - data and communications
  - security and closed circuit television (CCTV)
  - medical electrical systems
  - motors and generators
  - cranes and hoists
  - variable speed drives and soft starters
  - backup generators
  - thermal imaging.
- Maintenance and repair includes:
  - three-phase and single-phase motor and machine repairs
  - preventative maintenance systems
  - 24/7 breakdown and maintenance support.
- Body protection and cardiac protection specialists.
- Power analysis.
- Experience in hazardous areas.
- Marina and wharf electrical services.
- Automation and instrumentation.
- Energy consumption monitoring and cost saving measures.
- Test and Tag services.

## Competitive discriminators

- Adopt a partnership approach with businesses to assist with reducing workplace risks and increase efficiency and performance.
- Tasmanian owned and operated company with over 30 years' experience installing and maintaining electrical assets.
- Multi-skilled workforce, able to provide tailored solutions within industries such as mining, quarries, concrete plants, aquaculture, water treatment facilities, shipping, and gas generation plants.
- Fast response time, professional, solid electrical advice, integrity, work health and safety, competitive pricing, and punctuality.
- Authorised distributor of Helkama marine approved cables.

## Key customers and partners

- ASP Ship Management – RV Investigator
- Australian Antarctic Division
- Calvary Health Care
- CSIRO
- Hanson Construction
- Ian Harrington Group
- Marine and Safety Tasmania
- PFG
- Salmon Enterprises of Tasmania
- Tasmanian Department of Education
- Taylor Bros



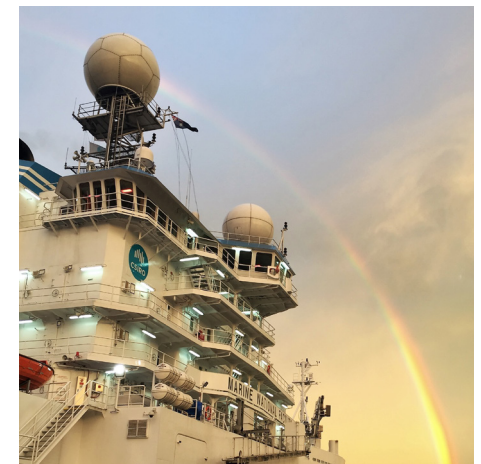
astrotec

ELECTRICAL TECHNICIANS

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## Products

- The Australian Maritime College (AMC), part of the University of Tasmania, is the national institute for maritime education, training and research.
- AMC provides maritime related undergraduate courses, post-graduate courses and research and vocational education and training. More details at [www.utas.edu.au/study](http://www.utas.edu.au/study)
- AMC's training and consultancy division, AMC Search, can deliver services specific to the defence sector.

## Capabilities

- AMC has capabilities in maritime and marine research and development, and test and evaluation (developmental and operational).  
Examples include: maritime renewable energy; naval architecture; fluid dynamics and fluid-structure interactions of ship and submarine structures; cavitation physics and hydro-acoustics; ship, submarine and underwater vehicle manoeuvring and motion prediction; offshore engineering; human centered design; port development; sustainable ports; underwater robotics; maritime safety; logistics and supply chains. More details at [www.amc.edu.au/research](http://www.amc.edu.au/research)
- AMC has specialist research and training facilities.  
Facilities include: Maritime Simulation Centre, Model Test Basin and Towing Tank, Cavitation Research Laboratory, Underwater Collision Research Facility, Autonomous Maritime Systems Laboratory, Emergency Response Centre, Vessels and Watercraft (including AUV / ROV). More details at [www.amc.edu.au/facilities](http://www.amc.edu.au/facilities)
- AMC Search's training and consultancy services for the defence sector include: Maritime simulations, Human factors, Bridge Resource Management and Bridge Team Management, AUV and USV operations and training, Naval Architecture, Offshore and Coastal Engineering, Hydrodynamics testing, Cavitation testing, Ship and port operations, Environmental seabed mapping, Marine energy systems. More details at [www.amcsearch.com.au](http://www.amcsearch.com.au)

## Competitive discriminators

- Extensive connections within the maritime industry.
- Maritime facilities and expertise are unique in Australia.
- Longstanding provider of education and research services to Defence and Royal Australian Navy.

## Key customers

- Australian Department of Defence including Defence Science and Technology (DST)
- Domestic and international maritime industry – ports and shipping, offshore, shipbuilding and repair sectors

## Key partners

- Australian Naval Shipbuilding College and Provider Network
- DST Maritime Division – Maritime Platform Performance, Acoustic Signature Management, and Littoral Autonomy, Sensors and Systems Branches
- Flinders University, Edith Cowan University and Auckland University of Technology (Collaborative 2+2 Bachelor of Engineering (Maritime Specialisation))
- TAFE South Australia, South Metropolitan TAFE (WA) and TAFE NSW – Education pathways programs

## Quality accreditations and awards

- Tertiary Education Quality and Standards Agency (TEQSA) and Australian Skills Quality Authority (ASQA) – RTO ID: 60131
- AMSA, Engineers Australia (EA), Royal Institution of Naval Architects (RINA), International Institute of Marine Engineering, Science and Technology (IMarEST)
- 2020 Defence Industry Awards – Winner – 'Academic Institution of the Year' and 'SME of the Year – Regional' and Finalist 'Prime Contractor of the Year'
- AMC Search – Lloyd's Register QMS to ISO 9001:20015

UNIVERSITY of TASMANIA



Australian Maritime College

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## Products

- Vessel biofouling grooming and / or cleaning tools including:
  - Smart Kart 6 diver-operated hull cleaning machine
  - propeller cleaning and polishing tools
  - niche area treatment and cleaning tools.
- New and novel antifouling coating technologies for managing biofouling in niche areas of vessels.
- BMP+ Biofouling Management Platform to assist industry meet various biofouling management requirements around the world.

## Capabilities

- Vessel inspections for invasive aquatic species.
- Advisory and consultancy services.
- Likelihood and risk assessments.
- New and novel antifouling coatings or treatment solutions.
- Development of biofouling management plans and record books.
- Port baseline surveys and on-going surveillance programs.
- Scientific, research and development services.
- Education and training.

## Competitive discriminators

- Staff collectively have over 50 years' experience managing biofouling and invasive aquatic species.
- Conducted over 1 700 inspections including 58 different vessel types in 24 different countries.
- Biofouling Solutions scientists have PhDs in biofouling and / or invasive aquatic species.
- Staff have been involved in over 50 baseline, port surveys and on-going surveillance programs throughout Australia and New Zealand.

## Key customers

- Aquaculture industry
- Commercial diving companies
- Commonwealth, state / territory marine biosecurity regulators
- Cruise ship industry
- Defence Science and Technology Group
- International Maritime Organization (IMO)
- Oil and gas industry
- Shipping industry

## Awards

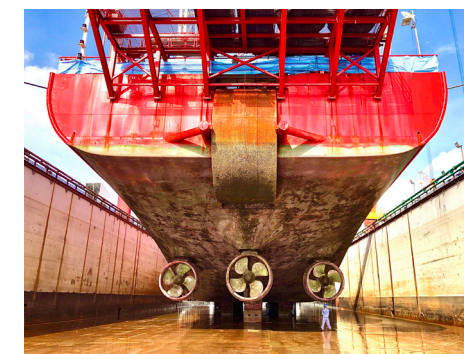
- 2020 Accelerating Commercialisation Program Grant – Australian Government Department of Industry, Science, Energy and Resources.
- 2018 Australian Export Award – National Finalists of the Environmental Solutions Award.
- 2018 Tasmanian Export Award – State Winner of the Environmental Solutions Award.
- 2016 Australian Export Award – National Finalists of the Environmental Solutions Award.
- 2016 Tasmanian Export Award – State Winner of the Environmental Solutions Award.
- 2016 Australian Business Award for Employer of Choice (EOC).
- 2015 Winner of the Excellence in Marine Biosecurity Award – Western Australian Department of Fisheries.
- 2014 Finalist Excellence in Marine Biosecurity Award – Western Australian Department of Fisheries.
- 2013 State Finalist (Both small business and regional business categories) – Telstra Australian Business Awards.



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MARITIME

LAND

AIR

## Products

- Blundstone's products range from the iconic elastic-sided boots, heavy-industrial footwear, lace-up safety footwear for men and women, to gumboots and casual boots.
- The Blundstone range of specialty products include chemical resistant boots, underground mining boots, metatarsal guard and penetration resistant boots and airport-friendly styles.

## Capabilities

- Blundstone boots have been keeping Australians safe since 1870.
- Decades of innovative design and production mean Blundstone now oversees a global supply chain bringing together the best ideas, components and designs to complement a wide range of products.
- Blundstone's products are developed by a team based in Australia who use the best resources available from all over the world to develop footwear that keeps pushing the boundaries.

## Competitive discriminators

- Blundstone is a privately-owned Tasmanian company and their head office and product design centre are based in Hobart. This provides a unique opportunity to interact directly with the product development team at a local level.
- Led by their Hobart based design team, Blundstone research, develop and design new products using resources from all over the world. This allows them to keep pace with market needs and create products that continue to push the boundaries, providing their customers with constant improvement in comfort, protection, performance and aesthetics.
- Blundstone are the pioneer in enhancing comfort in work and safety boots and today they collaborate with world-leading partners to devise the next generation footwear.
- Blundstone developed the patented Shock Protection System (SPS) to reduce fatigue and orthopaedic problems which has now evolved into their revolutionary SPS Max Comfort system, utilising XRD® Technology to provide superior impact absorption with every step.
- Moulded XRD® Technology metatarsal guards.

- The Blundstone Group operates according to a set of values that ensures legal, ethical and responsible policies, practices and processes which are always adopted and put into practice throughout the company.

## Key customers and partners

- Blundstone supply footwear to most of the major mining and construction companies in Australia.

## Quality accreditations and awards

- Quality Endorsed Company to ISO 9001
- Safety footwear is manufactured and accredited to Australian Standard AS 2210.3:2019 and Standard ASTM 2413-18.
- In 2019 Blundstone was awarded a Good Design Award Gold Award in the Design Strategy category in recognition of outstanding design integration and strategy.
- The Blundstone 980 Underground Mining Boot won Best in Category at the 2015 Good Design Awards (Product Design – Commercial and Industrial) and the Museum of Applied Arts and Sciences (Powerhouse Museum) Design Award 2015 for excellence in Australian product design.

**Blundstone®**  
TASMANIA AUSTRALIA · 1870

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MARITIME

LAND

## Products

- Quality Australian made steel and iron castings at competitive prices with short lead times.
- Rail and truck components
- Axle housings
- Bearing housings
- Gear blanks
- Crusher and mill liners
- Heavy equipment track links
- Apron feeder pans
- Rotary breaker liners
- Scrap shredder hammers and liners

## Capabilities

- Capacity: 3 500 dressed tonnes per annum.
- Metal types:
  - Carbon and low alloy quench and tempered steels
  - Manganese steel
  - Stainless and heat resisting steels
  - Alloy white irons
  - Grey and SG iron.
- Solidification simulation before casting using SOLIDCast simulation software or Magmasoft.
- Mass of finished castings range from 50kg to 3 tonne.
- Fast loop moulding – maximum mould size 2.3m x 1.8m– minimum mould size 1.5m x 1.0m.
- Jobbing moulding – maximum mould size 3.3m x 2.7m.
- Induction furnaces – 1 x 5 tonne; 2 x 3 tonne.
- Heat treatment furnaces – 3 x 10 tonne – normalising, water quench and temper, polymer quench and temper.
- In-house non-destructive testing – magnetic particle inspection (including fluorescent particles), ultrasonic testing.

- Access to local subcontractors for NATA certified non-destructive testing including radiography.
- State of the art subcontract CNC machining facilities.

## Competitive discriminators

- Modern plant due to extensive capital expenditure program.
- Stable workforce of 40 employees, many with 20–30 years of experience in the foundry industry.
- Flexible workforce allowing response to urgent requirements.

## Key customers and partners

- Bekaert Wire Rope
- Bluescope Steel
- Bombardier Transportation
- Crown Engineering
- Elphinstone
- FLSmidth
- Grange Resources
- Rio Tinto Aluminium Bell Bay

## Quality accreditations

- ISO 9001:2015 – Quality



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MARITIME

LAND

ICT

## Products

- Thermal insulation and passive fire protection systems:
  - Rapid Access Composite (RAC) – a light weight composite 60 minute fire resisting division
  - Rapid Access Stainless (RAS) – a light weight A60 structural fire protection system
  - A60 or A30 fire protection profile wrap
  - Thermal insulation wrap
  - C–Class division interior fit out systems
  - B–I5 Class panelised interior fitout systems
  - Exhaust and engine insulation systems
  - Fire doors and fire dampers.
- Moonraker HF, UHF, Multi–band, MF and VHF antennas.
- Moonraker lightning protection products.
- SolarΣShield signature management system.

## Capabilities

- Over 40 years' experience in thermal insulation and passive fire protection and design and manufacture of antenna systems.
- Diverse product range combined with R&D capability, flexible manufacturing facilities and short lead times allows fast response and development of customised solutions to complex challenges.

## Competitive discriminators

- Australian made products and services, with a team of highly skilled technicians with experience in commissioning projects worldwide.
- Established track record and assurance of continued lifetime support for all our products. Quality manufacture ensures long service life in extreme environments.
- Design service and support to produce customised solutions to meet customer specifications.
- Experienced defence supplier within Australia and overseas.

## Key customers

- ACMA
- ASC
- Austal, Buquebus
- Australian Army
- BAE Systems
- Damen
- Datron
- Elbit
- Fincantieri
- General Dynamics
- Hanwha Defence
- L3 Harris
- Leonardo / Selex ES
- Navantia
- Raytheon
- Rheinmetall
- Rohde and Schwarz
- Royal Australian Navy
- Saab
- Thales

## Key partners

- 3M
- Centre for Defence Industry Capability
- CSIRO
- Defence Research and Development Canada
- Morgan Advanced Materials
- Rheinmetall Canada
- Unifrax

## Quality accreditations and awards

- ISO 9001:2015 – Quality Accreditation by DNV–GL
- Marine Equipment Directive (MED)
- US Coast Guard (USCG) approved products
- Transport Canada
- 2018 Tasmanian Export Awards – Exporter of the Year



**CBG**Systems

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## MARITIME

### Products

- Metocean consulting services and equipment suppliers specialising in environment and climate monitoring, oceanography, maritime security and fisheries management services.
- Equipment supplied
  - Axys Technologies: manufacturers of wave, current and meteorological buoys.
  - DeepWater Buoyancy: subsea buoyancy products for oceanographic, offshore oil and gas and technology companies.
  - Mooring systems including subsurface flotation devices for the deployment of oceanographic instruments.
  - Biosonics: scientific echo sounder systems for biomass estimation and habitat mapping.
  - Nautilus Marine Services: specialised glass flotation and instrument spheres, specialising in deep water applications.
  - Fluidion: in-situ water quality sampling and autonomous sample collection.
  - RTsys: AUVs, underwater acoustic recorders and seafloor classification systems.
  - RADAC: high-quality radar wave, water level and tide monitoring systems.
  - EdgeTech: specialised acoustic release systems as well as USBL navigation, side scan, sub-bottom and bathymetric sonar systems.
  - Zebra Tech: instrument wipers for use on oceanographic sensors and underwater camera systems.
  - Deep Trekker: high quality portable underwater remote operated vehicles.
  - EcoSub (part of Planet Ocean): supplying inexpensive, high quality AUV systems.
  - CLS Argos and CLS Iridium: oil spill buoy (surface drifters).
  - CLS Triton Advanced Vessel Monitoring System (VMS): hybrid transceiver (Australian Fisheries Management Authority type approved).
  - Multi mission satellite synthetic aperture radar and satellite optical.

### Services provided

- Space IOT: Argos satellite data collection and location service and Iridium Value Adder Reseller (SBD, RUDICS, CSD).
- Global satellite and terrestrial automatic identification system (AIS).
- Long Range Identification and Tracking (LRIT) data centre and application service provider.
- Maritime Awareness System (CLS MAS) – data fusion and intelligence platform.
- UAV-based multi-purpose maritime / land surveillance services.

### Capabilities

- Deployment and recovery of equipment.
- Service and repair on most equipment sold.
- Recognised service centre for EdgeTech acoustic releases.

### Competitive discriminators

- Together with CLS Southern Africa, CLS Oceania has worked in over 50 countries around the world engaged in oceanographic measurement for the offshore and other sectors.
- With over 30 years of experience as a service provider and equipment supplier, CLS Oceania is a global leader for ocean monitoring and surveillance.

### Key customers

- Aquaculture sector
- Education, science, environment and research organisations
- Fisheries authorities
- Marine / hydrographic surveyors
- Oil and gas / offshore renewables sectors
- Port and harbour authorities
- Royal Australian Navy
- Seismic acoustic monitoring end users
- State government departments
- Subsea construction sector



### Contact details

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MARITIME

LAND

## Products

- Deliver world-class manufacturing and fabrication services, with leading edge technology including 2D and 3D laser cutting, CNC machining, architectural metalwork, CAD / CAM, sheet metal, repetition engineering, heavy and specialised fabrication.
- Diverse range of in-house capability make CPT Engineering an efficient option for prototyping and perfect for volume supply to industry and commercial operations across Australia.

## Capabilities

- Sheet metal – utilise latest technology to provide high-quality products for local, national and overseas markets. Services include: laser cutting, CNC punching, CNC panel bender, CNC Brake press up to 300 tonne x 4m bed, powder coating, and custom pressing.
- 3D and 2D Laser cutting – 5-axis laser cutting technology provides fabrication for metal parts and sheets with automatic precision and efficiency for even the most complex parts.
- 3D tube laser cutting is available for stainless steel on any shape material, up to 12m in length and up to 406mm in diameter.
- 2D fibre laser cutting is available for stainless steel, aluminium, brass or copper, up to 16mm plate and with automatic sheet loading and unloading.
- Robotic welding – a range of robotic welding equipment, experience and capability is available. Experienced welders are qualified to meet specific customer requirements to relevant global standards.
- Fabrication – extensive range of on-site equipment, technologies and expertise mean various fabrication jobs can be undertaken. A full-service solution is available from concept design and engineering to fabrication, assembly and install.
- Precision machining – utilising multiple CNC mills and lathes, singular or large volume orders can be catered for. Manual machines are available in addition to an extensive range of CNC capabilities.
- Tube bending – fully automated CNC tube bending is available of sizes up to 75mm diameter with end-formed to various shapes and sizes.

- Repetition engineering – machinery meet criteria of efficiency on short and long runs of production, allowing for automation, flexibility and versatility. We integrate redundancy into processes so supply can be guaranteed.
- Prototyping and CAD / CAM Design – a full range of design, modelling, drafting and prototyping services are available.

## Competitive discriminators

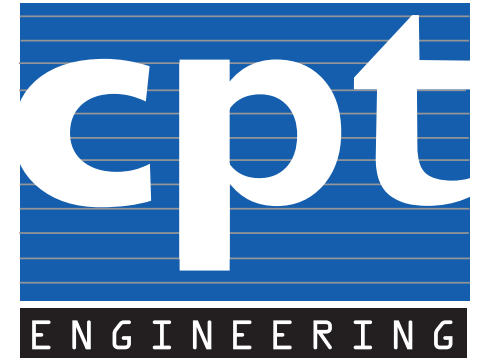
- Combines generations of experience with the newest of technologies to manufacture and supply components and prototypes to meet large industrial requirements or boutique one-off orders.
- The most efficient technology and processes are utilised to ensure clients are provided with high levels of service and support while receiving superior quality products.
- CPT Engineering is large enough to be efficient, yet small enough to be flexible and manage specialist requirements.

## Key customers and partners

- Austech
- DUX
- Elphinstone
- Fiomarine
- Incat Australia
- ResiLift
- Rinnai
- RioTinto
- TasNetworks
- Timber Link

## Quality accreditations and awards

- ISO 9001:2015 – Quality
- AS / NZS 4801:2001 Safety
- Tasmanian Chamber of Commerce Excellence in Manufacturing Award



## Contact details

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MARITIME

LAND

## Products

- Deliver unsurpassed structural steel fabrication for marine and civil projects across four operational sites (Hobart shipyard, Kings Meadows, Western Junction, and Wynyard).
- Shipyard facility at Margate near Hobart has experience, capabilities, and resources to undertake construction of new vessels including design, manufacture (steel, aluminium and stainless steel) fit-out, mechanical, electrical and sand blasting / painting. Also undertakes slipping, survey, maintenance and general repairs.
- Recent projects include plate bridge girders, wind towers, sports stadiums, pressure vessels, tanks, bins and hoppers, conveyor systems, underground crushing plants, fabrication of structural steel buildings, manufacturing of equipment, stainless steel and aluminium fabrication, and general structural steelwork in architectural applications.

## Capabilities

- Hobart shipyard facility has a total of 8 070m<sup>2</sup> consisting of:
  - a separate fabrication hall with complete overhead gantry crane coverage of 13x5 tonne cranes
  - a dedicated enclosed blasting / painting bay and a separate outfitting hall
  - 15 tonne per metre capacity slipway, 125m long with capacity to slip vessels with 3.95m draft
  - 25 tonne capacity wharf, 63m long with 8.7m water depth at end of wharf
  - boat ramp.
- Kings Meadows site has a 4 500m<sup>2</sup> total fabrication space, Haywards Western Junction has a total 11 000m<sup>2</sup> fabrication facility plus 300m<sup>2</sup> prep area and Wynyard has a total 1 485m<sup>2</sup> fabrication space plus 300m<sup>2</sup> prep area.
- Steel detailing, surface treatment and site construction / erection in complex and difficult projects.
- Other services and capabilities include:
  - electrical design, installation and service
  - hydraulic design, installation and servicing
  - surface preparation – blasting, painting and galvanizing
  - vessel outfitting
  - mechanical installation and servicing.

## Competitive discriminators

- Well-earned reputation for quality workmanship and for delivering difficult projects in tight timeframes.
- Professional management of projects from initial design stage through to the final installation and commissioning.
- Assisting clients during the conceptual stage of a project.
- Providing practical solutions and innovative design ideas using up-to-date construction methods.
- Providing insight into project planning and budgeting.
- Professional approach and determination to provide personal customer service, no matter the size of the project at hand.
- Owned and operated by a team of passionate shareholders and managers.

## Key customers

- Aquaculture industry for Australia and New Zealand
- Cruise vessels
- Ferries
- Offshore shipping

## Quality accreditations

- ISO 9001:2015 – Quality
- AS / NZS 4801:2001 – Safety
- AS / NZS ISO 3834 Part 2 – IIW Manufacturer Certification Scheme
- SCA-099 – Steelwork Compliance Australia



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MARITIME

LAND

ICT

## Products

- High quality operational technology solutions for electrical automation and business improvement systems in industrial manufacturing, process plants and utilities.
- Cromarty have implemented thousands of solutions for clients ranging from simple single measurement solutions to highly complex integrated automation and reporting systems including ship information management systems.

## Capabilities

- DCS / SCADA / PLC automation systems design and programming
- Instrument and electrical design
- Renewable energy (AEMO semi dispatch)
- Interfacing with enterprise resource planning systems
- Plant upgrade projects in automation and control
- Industrial networking
- Manufacturing Execution Systems (MES)
- Radio / telemetry / WAN communications
- Instrumentation service
- TUV machine safety
- Hazardous area engineering
- Turnkey project capability
- High end IT / OT networking design capability
- In-house 24/7 support capability

## Competitive discriminators

- Operating for over 30 years with headquarters in Tasmania and offices in mainland Australia, employing over 100 people including highly experienced and skilled engineers and technicians.
- Reputation for delivering quality results ranging from simple instrumentation and control solutions through to high end business system integration.
- Focused on maintaining and growing relationships with clients through partnerships, best practice, technical expertise, ethical values and customisable solutions.
- Extensive quality accreditations and awards including DNV-GL.

## Key customers

- Australian Antarctic Division
- BioMar
- Dulux
- Huon Aquaculture
- Incat
- Lion Nathan
- Merredin Energy
- North Queensland Gas Pipeline
- Nystar
- Ross River Solar Farm
- Simplot
- Skretting
- Tasmanian Alkaloids
- Tasmanian Gas Pipelines
- Waterloo Wind Farm

## Quality accreditations

- ISO 9001 – Quality
- ISO 14001 – Environment
- AS 4801 – Safety
- DNV-GL
- JAS-ANZ
- TUV SUD
- ABB Value Provider (instrumentation, drives, UPS and Robotics)
- Advanced Data Analytics
- Vision Systems Specialist
- Ignition Premier Integrator
- Schneider Electric Master Alliance Partner
- Omron Certified Integrator
- Rockwell Recognised System Integrator
- PILZ System Partner



## Contact details

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MARITIME

LAND

ICT

## Products

- Provider of specialist marine electronics communication systems including collision avoidance radar, and offshore monitoring technology.
- Provide product and support services to commercial and professional users of radio communications and maritime electronics.
- Products include:
  - Digital radio systems
  - Maritime electronics
  - CCTV
  - Body ware cameras
  - LTE broadband
  - LAN / WAN
  - Microwave
  - Fleet management locations systems (Land and Sea)
  - SCADA
  - Telemetry
  - Paging
  - RFID
  - Public Address General Alarm (PAGA).

## Capabilities

- CSE Crosscom supplies, designs, installs, and commissions communications solutions tailored to customer requirements utilising world class technology.
- Servicing the major commercial, industrial, government, defence, transport and security sectors Australia wide, we put the technologies in place to provide continuous operability and improved performance.
- We are vendor neutral which means our customers benefit from the choice of equipment, choice of supplier and continuous innovation.

## Competitive discriminators

- CSE Crosscom has 150+ employees throughout Australia and New Zealand.
- Offices in every state in Australia and New Zealand.
- Full turnkey system design, install, commission, training ongoing maintenance.
- Flexible purchase options including leasing.
- Full Range of Professional Services.

## Key customers

- BHP
- Conoco Phillips
- Department of Justice – Tasmania
- Department of Justice – Victoria
- ExxonMobil Australia
- Grange Resources
- Port of Melbourne
- RioTinto
- Santos
- Victorian Regional Channel Authority

## Key partners

- Furuno
- Icom
- JN Taylor
- JVC Kenwood
- Motorola
- Pivot Maritime International

## Quality accreditations

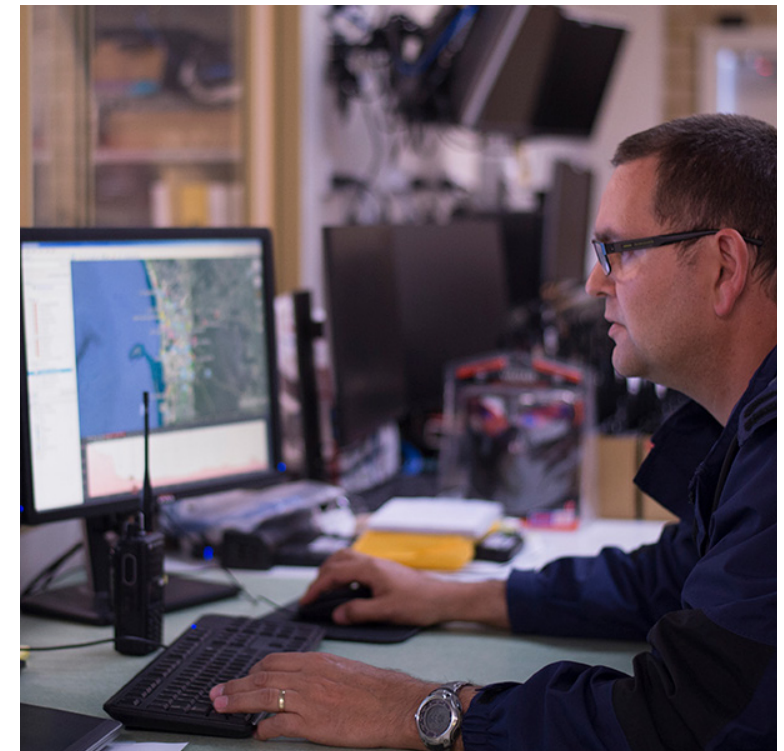
- ISO 9001 – Quality
- ISO 14001 – Environment
- OHSAS 18001 – Health and Safety
- ARCIA accredited



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LAND

AIR

## Products

- World leader in engine powertrain systems for unmanned aerial vehicles.
- Product offerings include the Corvid-29 and Corvid-50 engines equipped with Currawong's well proven electronic fuel injection system, custom crankcase, throttle body, exhaust, generator and power generation and conditioning system (including remote starting).
- Currawong engines offer customers a highly reliable powertrain solution as well as a complete turnkey system for ease of integration.
- Currawong recently expanded its product range into Electronic Speed Controllers (ESC). The ESC Velocity provides high power, high reliability motor control for UAV systems. To date over 1 000 ESCs have been sold locally and internationally.
- Currawong also provides specialist engineering consulting expertise to a range of industries. It recently worked with Sypaq Systems to develop a concept design for a man-portable generator under the Defence Innovation Hub.

## Capabilities

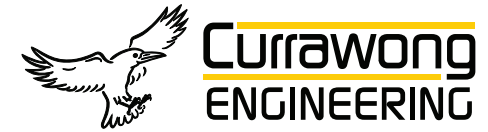
- With its team of engineers, well-equipped factory including two 5-axis milling machines and electronics assembly equipment, Currawong can design and manufacture prototypes in a timely manner. It can also manufacture aerospace grade metal parts for use in its own branded products plus it offers contract machining services to external customers.
- Currawong prides itself on developing successful long term relationships with its customers. Its team of talented engineers has a strong focus on research and development to respond to customer requests.
- Currawong is currently in the final stages of testing a hybrid gasoline / electric powertrain system, which will offer greater design flexibility and a dramatic increase in endurance for multirotor platforms.
- Over 16 years of operation, with 16 employees at its manufacturing facility located 15 minutes south of Hobart.

## Competitive discriminators

- Currawong's EFI system is a very mature product which underpins the reliability of its engine systems.
- To date, the Corvid-29 engine has been integrated into 10 different airframes worldwide.

## Key customers

- Bluebird Aero Systems (Israel)
- Fuji-Imvac (Japan)
- Power4Flight (US partner / distributor)
- Threod Systems (Estonia)



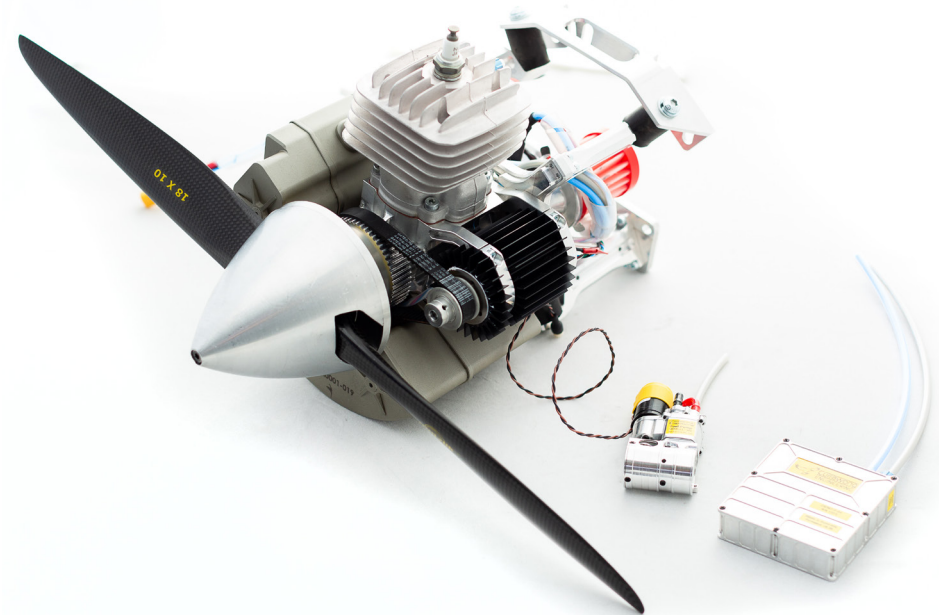
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MARITIME

LAND

ICT

## Products

- Design and manufacture custom electronics to solve a wide variety of problems, from remote asset monitoring through to vehicle fuel system conversion.
- Products include:
  - LoRaWAN personal tracking device with environmental monitoring, impact detection, GPS and Bluetooth.
  - LoRaWAN electrical grid monitoring devices with single and three-phase energy meters.
  - LoRaWAN vehicle tracker with vehicle battery health monitoring (for vehicles in-use or in storage).
  - LoRaWAN earth leakage detector, energy meter, and environmental monitor for communications cabinets, traffic lights, and other critical infrastructure.
  - LoRaWAN / Cellular (LTE) platform for environmental monitoring (weather stations, soil moisture, solar radiation etc.).
  - LoRaWAN / Cellular (LTE) remote water / oil pipe management device with flow metering and automated valve open / close (including emergency shut-off).

## Capabilities

- Full surface-mount electronics assembly facility that routinely assembles thousands of devices with process validation using automated optical inspection and x-ray inspection machines.
- Hardware design and software development happens in tandem with rapid prototyping cycles leveraging our in-house manufacturing facility; this agility allows us to trial devices in the field faster and feed any data we capture back into the final product design.
- Deployed or helped deploy numerous Internet of Things (IoT) radio networks, including a state-wide LoRaWAN network in Tasmania and multiple remote IoT networks around Australia.

## Competitive discriminators

- Extensive experience with all types of IoT technologies with thousands of custom-made devices in the field.
- Remain agnostic to all technologies, incorporating whichever solution best solves the problem at hand – without artificial constraints.

## Key customers

- Brisbane City Council, Australia
- Brunstedt and Lambert Systems, USA
- Coates Hire, Australia
- Compass Group Australia
- ICT International, Australia
- SafetyCulture, Australia
- Viotel, NZ
- Vinnie Rossi, USA

## Key partners

- Avnet Asia
- ICT International
- Semtech Corporation
- SUBA Engineering
- University of Tasmania



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MARITIME

LAND

## Products

- Hydraulic cylinders
- Double and single acting telescopic hydraulic cylinders
- Annular ported double acting telescopic hydraulic cylinders
- Intelligent hydraulic cylinders with velocity and position sensor feedback
- Hydraulic manifolds
- Hydraulic hoses

## Capabilities

- Hydraulic cylinders: 2D and 3D design, metal cutting, friction welding a wide range of metal types in both solid and hollow bar, rotary welding a wide range of metal types in both solid and hollow bar, CNC lathe and milling machining, manual lathe machining, gun drilling internal ports, skiving and burnishing of metal tube, metal grinding, induction hardening of a wide range of metals, hard chrome plating, ceramic chrome treatments, fitment of velocity and position sensors.
- Hydraulic cylinder assembly and testing, clean room assembly and testing of cylinders and manifolds, painting, quality gates in all processes.
- Hydraulic hoses: design, cut rubber hose, skive rubber hose, clean, orient hydraulic couplings, crimp hydraulic couplings, quality gates in all processes.

## Competitive discriminators

- 100% in-house end-to-end manufacturer of hydraulic cylinders and related products, from design, prototyping and manufacture.
- Ability and willingness to undertake specialist customised low volume products.
- Clean room assembly of hydraulic cylinders and manifolds.
- Significant capability and experience in the manufacture of hydraulic cylinders to operate in harsh environments such as mining, shipbuilding, oil and gas exploration and waste management.

## Key customers

### Defence and maritime:

- ASC Pty Ltd (formerly Australian Submarine Corporation)
- Austal
- Hydro Tasmania
- Thales Australia
- TMJ Marketing Pte Ltd (on-sold to Ministry of Defence, Singapore)

### Mining:

- Caterpillar Inc
- Caterpillar (Thailand) Ltd
- Komatsu Mining Corp
- Sandvik

### Transport:

- Hercules Engineering
- Roc Services
- Transport Hydraulic Solutions (New Zealand)

### Waste management:

- Bucher Municipal
- JJ Richards
- Superior Pak Pty Ltd

## Quality accreditations

- ISO 9001:2015 – Quality
- ASC accredited clean room
- Caterpillar Bronze SQEP (Supplier Quality) Certified for hydraulic cylinders and Caterpillar silver SQEP Certified for hydraulic hoses



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MARITIME

LAND

AIR

## Products

- Direct Edge is a national leader in sophisticated sheet metal manufacturing. Utilising machinery such as the world's fastest three-dimensional sheet metal processor we provide an unparalleled cut, fold, punch, fabricate and powdercoat / painted service at extremely competitive rates.
- Development and maintenance of systems, processes and capabilities to manufacture, weld and process components for Defence enables Direct Edge to supply sheet metal brackets, cabinets, enclosures and any associated components for integration into new platforms including the Rheinmetall Boxer CRV and BAE Hunter Class program.
- Servicing the defence, mining, emergency vehicles, marine and food industries; cutting edge technology delivers world class optimal and cost effective solutions along with a certificate of compliance.

## Capabilities

- With modern technology and adaptable production capabilities available Direct Edge are in the position to add value and drive competitive advantage into any supply chain.
- Specialists in working with mild steel, stainless steel, aluminium, galvanised steel, titanium, copper, brass, timber, acrylics, polyethylene, polycarbonates, rubber and aluminium composite.
- Employing a fully integrated enterprise resource planning system to control quality, workflow, product identification, delivery and resource allocation, Direct Edge's production line and workflow has been built around creating multiple products with various batch quantities whilst still providing a quality product on time into a global market.

## Competitive discriminators

- Fully integrated ERP system to control quality, material, flow, product identification and resource allocation.
- Low to high volume production batches.
- Latest CNC automated technology ensures reduced lead time and guaranteed precision.

- Diverse range of finishes including painting, powder coating, galvanised plating, engraving or electro polishing.
- International Welding Specialist and Welding Inspectors onsite.
- Welding of Sheetmetal to ISO 3834-2 and DIN 2303:2007.

## Key customers

- BAE Systems
- CAT Underground Mining
- Incat Australia
- Mader International
- Rheinmetall
- Taylor Bros
- William Adams

## Key partners

- Bluescope Steel Australia
- Capral Aluminium
- Hi-Tech Metrology and Trumpf Group
- ISOTech Engineering
- Maltec Engineering
- Stirlings Australia

## Quality accreditations

- ISO 9001:2015 – Quality
- ISO 14001:2015 – Environment
- AS / NZS 4801:2001 – Safety
- ISO 45001:2018 – OH&S
- DIN 2303:2007
- ISO 3834 Part 2

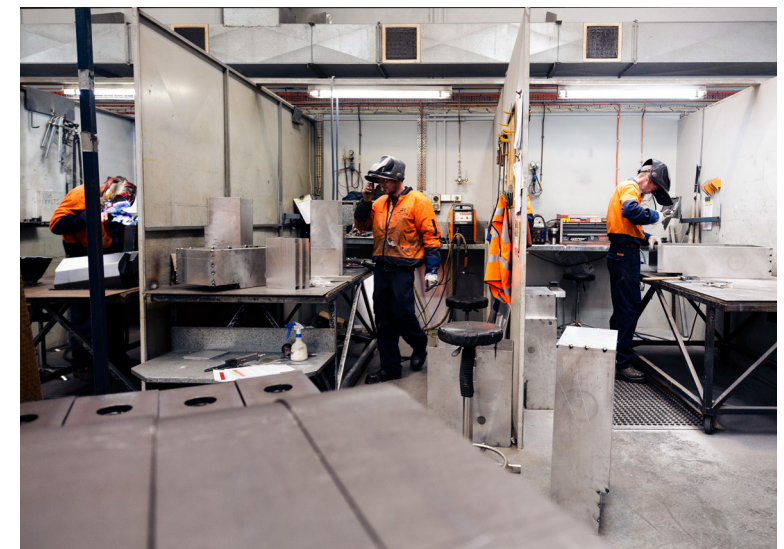


**DIRECT EDGE**  
MANUFACTURING

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MARITIME

LAND

AIR

SPACE

R and E

## Products

The Department of Diving, Hyperbaric and Aerospace Medicine at the Royal Hobart Hospital (RHH) provides the following products and services.

- Round-the-clock state-wide consultation service for diving and hyperbaric emergencies.
- Assessment and management of diving-related illnesses and injuries.
- Provision of hyperbaric oxygen therapy for appropriate diving and medical conditions (e.g. complex wounds, trauma, radiation injury).
- Full in-chamber intensive care life-support capability.
- Acute and chronic wound care.
- Diving and aviation medical examinations.
- Technical support for forensic investigation of diving deaths.
- Education and training for medical, nursing and technical personnel.
- Research in human physiological responses to extreme environments.

## Capabilities

- Dual-function hyperbaric / hypobaric chamber.
- Operational pressure range from 608 kPa (6 atmospheres) to 1 kPa (0.01 atmospheres).
- Transcutaneous oximetry and other physiological monitoring.
- Full resuscitation and intensive care life-support capabilities.

## Competitive discriminators

- The Department of Diving, Hyperbaric and Aerospace Medicine at the RHH operates the only human-rated, dual-function hyperbaric / hypobaric chamber in the southern hemisphere.
- Extensive clinical experience in diving, maritime, Antarctic, aviation and wilderness expedition medical operations.
- Military, civilian (commercial and scientific), and humanitarian operational expertise.
- PEGASUS EnviroLab (the Physiology of Extreme Geographic, Aviation, Space and Under Sea Environments Laboratory) – multi-environment simulation (pressure, temperature, isolation and confinement, circadian rhythm, microgravity) existing or in development.

## Key customers and partnerships

- Australian and New Zealand College of Anaesthetists
- Australian Antarctic Division
- Australian Defence Force
- Centre for Antarctic, Remote and Maritime Medicine
- Commercial and scientific diving industries in Tasmania
- Defence Research and Development (Canada)
- Hyperbaric Technicians and Nurses Association
- Office of Naval Research (USA)
- South Pacific Underwater Medicine Society
- University of Tasmania

## Quality accreditations

Accredited by the following organisations to provide training:

- Diploma of Advanced Diving and Hyperbaric Medicine
  - Australian and New Zealand College of Anaesthetists
- Diploma of Diving and Hyperbaric Medicine
  - South Pacific Underwater Medicine Society
- Special Skills training (Diving and Hyperbaric Medicine)
  - Australian and New Zealand College of Anaesthetists
  - Australasian College for Emergency Medicine
  - Australian College of Rural and Remote Medicine
  - Royal Australian College of General Practice
- Monoplace Hyperbaric Chamber Operator Course
  - Hyperbaric Technicians and Nurses Association
- In-Chamber Nurse Attendant Course
  - Hyperbaric Technicians and Nurses Association

**TASMANIAN  
HEALTH  
SERVICE**



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## LAND

### Products

Elphinstone specialises in the design, manufacture, and support of quality equipment for the global underground, surface mining and rail maintenance industries. Products include:

- Haulmax 3 900 Series, 80 tonne off-highway haulage truck
- Elphinstone underground motor graders
- Elphinstone WR810 Series underground support vehicles:
  - WR810 Scissor Lift
  - WR810 Water Cannon
  - WR810 Fuel and Lube
  - WR810 Agitator 6m<sup>3</sup>
  - WR810 Delivery (with crane)
  - WR810LP Fuel and Lube Truck
- Elphinstone WR820 Series underground support vehicles:
  - WR820 Agitator (8m<sup>3</sup> and 10m<sup>3</sup>)
  - WR820 Water Tank
- Heavy duty wiring harnesses for underground and surface mining products.

### Capabilities

- In-house product development capability including technicians, designers, draftsmen, mechanical engineers, mechatronics engineers and software engineers.
- Heavy metals processing and manufacturing including profile cutting, pressing and robot welding.
- Large paint and blast facilities.
- Wiring harness manufacturing.
- Procurement, warehousing and logistics.
- Global sales and marketing, and product support presence.
- Large scale proving grounds / machine testing facilities.
- Lean production systems enabled, including simulated work environment for hands on training.

### Competitive discriminators

- Elphinstone has been designing, manufacturing and supplying heavy-duty equipment to the global mining industry for over 45 years.
- Authorised Caterpillar OEM, selling globally through the Caterpillar dealer network.
- Global leader in Lean production systems with a culture of innovation, waste reduction and continuous improvement.
- World-class manufacturing facilities.
- Vertically integrated business from product development to sales and product support.
- Global presence.
- Internationally recognised brand synonymous with exceptional product quality and after sales support.
- Supported by the Elphinstone Group.

### Key customers and partners

- Key customers include Freeport McMoran, IAMGold, Newmont, BHP, Rio Tinto, Newcrest, Vedanta (Hindustani Zinc), Glencore, Byrnes Group, Caterpillar, Orica, MMG Limited, Peabody Energy, Barrick, Ivanhoe, Nevada Gold Mines.
- Key partners include Caterpillar, Orica, Precision Buses, the global Cat Dealer Network, our supply chain.

### Quality accreditations and awards

- Elphinstone has been the recipient of several small business and export awards and is currently working towards ISO 9001:2015 accreditation for its consolidated manufacturing operations.
- Elphinstone is a wholly owned subsidiary of Elphinstone Group (Aust) Pty Ltd, which employs almost 3 000 people across nine countries, with revenues exceeding \$1.3 billion.

**ELPHINSTONE**

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## Products

- Fiomarine manufactures and markets worldwide the 'Fiobuoy®', a robust submersible marine marker buoy and retrieval system specifically designed for military and research applications where sensitive or valuable equipment needs to be deployed underwater without a tell-tale surface marker, diver or an ROV for retrieval.
- Fiobuoy is security coded, programmable and deployable to depths up to 200m. It can be triggered into action by pre-set time / date or via coded acoustic command signal. At that time, it releases from its underwater mooring or payload mass and floats unwinding its way to the surface to fulfil its marking function.
- Fiomarine also acts as representative in Australia and New Zealand for International Submarine Engineering [ISE] based in Canada. ISE is a world leader in the design and integration of autonomous and remotely operated robotic vehicles and terrestrial robotics for military, research and general markets.

## Capabilities

- Fiomarine can tailor Fiobuoys to meet the emerging needs of its clients.
- Its hollow casing makes it possible for it to become a subsea equipment platform where a customer's equipment can be incorporated inside e.g. data-loggers, environmental sensors, acoustic communications networks or homing beacons and listening devices.
- The technology can be configured to interact with a customer's payload equipment.
- Assistance can be provided in developing new concepts in ocean equipment retrieval which is normally sacrificial or too costly.
- Fiomarine is currently developing a small version of the Fiobuoy suitable for deployment by divers.
- Two way hydro-acoustic communication system incorporated into the Fiobuoy which is one of the smallest, with the lowest power requirements in the world. It can be modified to suit the customer's application and requirements also.

## Competitive discriminators

- An all-in-one retrieval device combining acoustic-release, timer-release, flotation, surface marker, retrieval line and line storage and anti-tangle pay-out into one complete subsea retrieval solution.

## Key customers

- Belgian Navy
- Customisable subsea equipment platform
- Hydrographic sector
- Mine counter-measures
- Royal Australian Navy
- Singapore University
- US Navy

## Key partners

- BAE Systems
- Defence Science and Technology Group
- International Submarine Engineering

## Quality accreditations

- Australian Defence Recognised Supplier



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MARITIME

LAND

AIR

## Products

- Freeze dried ready to eat meals
- Freeze dried rices, meats and dairy
- Freeze dried fruit and vegetables

## Capabilities

- Leading Australian freeze-drying business.
- Development and manufacturing of light weight ready to eat nutritional meals and other freeze drying products.

## Competitive discriminators

- Forager Foods has Australia's largest freeze-drying food capacity. It utilises a vast network of skill sets including chefs, product developers, nutritionists, engineers and research facilitators. Managing Director, John Ranicar is an inaugural member of the steering committee that set up and advises the Centre for Food Innovation, a joint venture between the University of Tasmania, CSIRO and Department of Defence.
- Utilising its vast network, Forager Foods has embraced the principle of continuous improvement, which drives all its product development and manufacturing programs.
- Forager Foods has a mandate to source, where possible, Australian made or grown produce, much of which is grown locally in Tasmania. This ensures continuity of supply and consistency of quality and price. It also ensures that the raw materials used in our foods are sustainably produced without illegal chemicals or contamination. A strict product testing and release program is followed for all products prior to release to consumers.
- Freeze dried foods are lightweight, have long shelf life with very little degradation of the product over time, are shelf stable (can be held at any temperature) and upon rehydration, retain all nutrients and flavour of the fresh product.
- Freeze dried food products have potential uses for defence across army, navy and airforce, on land, in the air and at or under the sea.

## Key partners

- CSIRO
- Department of Defence
- University of Tasmania

## Quality accreditations

The Forager Food factory is fully accredited as a food manufacturing facility and employs a permanent Quality Assurance Manager to oversee all production and testing and holds following accreditations:

- HACCP accreditation – Certificate FSAU17/9236
- Kosher – Certificate KC#226573
- NASAA Organic Registration – 7136P



redefining the food experience

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MARITIME

LAND

AIR

SPACE

ICT

## Products

- Zero Trust Identity and Authentication Software for Wearables, IoT, mobiles that can operate in a (D3) denied deployed intermittent latent network deprived tactical edge environment (joint solution with Thales Australia / Microsoft Defence).
- Fortifyedge Operator Dashboard – 'birds-eye view' tactical squad real-time dashboards for tactical deployments – personnel and device monitoring, alerts and AI powered analytics.
- Smart bases / facility: e-Tag, track and locate for people and asset movement.
- FIDO based Authentication Software with Integration to Active Directory, WearOS, Android OS, ARM Microcontrollers.
- AuthBadge – Smart Authenticator Name Badges for clothing such as uniforms.

## Capabilities

- Cybersecurity – Zero Trust Identity and Authentication. Seamless Authentication for warfighters and operators and Continuous Access Evaluation Protocol (CAEP) with Tiny Machine Learning continuous authentication algorithms.
- TinyMLOps End Point Edge Technology – Tiny Machine Learning models optimized for embedded devices used in 280B microcontrollers such as Wearables, IoT, mobile devices, AR / VR, autonomous vehicles.

## Competitive discriminators

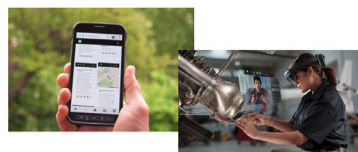
- Seamless and Continuous Authentication utilizing body movement to prove who you are.
- 'Reduced friction for warfighters' – continuous and seamless authentication.
- 'Proof of presence' – is it who they say they are?
- TinyMLSecOps for Defence– Hacking4Defence, Cybersecurity, Data Science, TinyML and DevOps for agile continuous deployment to Tactical Edge Solutions.

## Key partners

- Thales Australia / Microsoft Defence
- Australian Department of Defence (Centre for Defence Industry Capability)
- ARM Endpoint AI, Microsoft Partner Programs
- United States Air Force Accelerator Alumni 2019 powered by TechStars

## Awards

- NIST Public Safety Communications Research Division Public Safety Challenge Award Winner
- TasICT Award for Best Customer Service or Solution in an ICT Business 2019
- 2019 TechConnect Defense Innovation Award



**Movement Authentication**  
user's activities bound to device

**Imposter Detection**  
movement anomalies

**Mobility**  
works anywhere



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MARITIME

LAND

AIR

## Products

- High quality replica military and civil medals for Australia, New Zealand, United Kingdom, and United States of America.
- Superior medal mounting services.
- Medal rotary and flat engraving.
- Ribbon bars and citations.
- Custom design, production, and supply services for challenge coins, awards, medals, medallions, metal rank insignia.
- Specialist consultancy services for design, manufacturing, supply, and on-going long-term delivery of award and recognition systems.

## Capabilities

- In-depth knowledge of Australian Honours and Awards system, and specifically production guidelines and order of wear for Australian and international awards.
- Global supply chain for sourcing and / or producing highest quality componentry and products.
- High grade computer rotary and diamond drag engraving machine for personalising awards and custom products.
- In-house graphic design services for custom medal products.
- Proven skill in design, production, and delivery of holistic awards systems with major consideration of short and long term economy of production.
- Maximum 48 hour turnaround for express medal mounting service.
- Maximum 15 business day turnaround for standard medal mounting service.
- Maximum 42 day turnaround for production and supply of custom challenge coins, awards, medals, medallions with design confirmed.
- Maximum 84 day turnaround for advice, consultation and finalising of design, production and supply of custom products.

## Competitive discriminators

- Privately-owned Tasmanian company with modern warehouse facility located five minutes from Hobart Airport.

- Foxhole director is ex-Australian Army and Royal Australian Navy with over 14 years of Defence experience and a further 18 years experience in the medal industry.
- Lifetime guarantee on all products and workmanship.
- Entire Foxhole team commitment to supreme customer satisfaction as reflected in testimonials.
- Perpetual refining of existing products like shorter brooch bar pin on medal mounting bars.
- Innovation of new ideas to pre-empt and / or keep pace with market needs ideas such as joining of multiple ribbon bars and multiple citations.

## Key customers and partners

- Ambulance Tasmania
- Australian Defence Force
- Australian Federal Police
- Corrective Services Tasmania
- Police Association of Tasmania
- Returned and Services League of Australia (sub-branches)
- Tasmania Fire Service



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MARITIME

LAND

AIR

SPACE

ICT

## Products

- Space Domain Awareness radars and systems.
- Defence and commercial maritime integrated bridge systems and navigation sensors.
- Comprehensive radar portfolio from land based systems, through to full scope maritime applications and airborne surveillance systems.
- Electromagnetic protection and electronic combat systems.
- Hydrogen power storage and distribution systems.
- Situational awareness C2 / C4 systems including deployable counter unmanned aerial system.

## Capabilities

- Systems integration and engineering
- Design, manufacture and assembly
- Project delivery
- Sustainment services
- Repair, overhaul and calibration services
- Research and Development
- Onsite and remote operations
- Training

## Competitive discriminators

- Sovereign business operations and control.
- Innovation incubator and commercialisation.
- Project management (ASDEFCON+ / ACAT2)
- Supply support, warehousing, procurement.
- Secure workshops (technical, electronic and heavy mechanical).
- Field service operators, technicians and maintainers.
- Third party repairs.

## Key customers

- |                             |                              |
|-----------------------------|------------------------------|
| • Australian Border Force   | • NSM Australia              |
| • BAE Systems               | • Raytheon                   |
| • Leonardo                  | • Royal Australian Air Force |
| • Lockheed Martin           | • Royal Australian Navy      |
| • New Zealand Defence Force | • Royal New Zealand Navy     |

## Key partners

- |   |                               |
|---|-------------------------------|
| • Australian Association for Unmanned Systems | • HENSOLDT group of companies |
| • Australian Maritime College                 | • Tasmanian Government        |
|   | • The University of Tasmania  |

## Quality accreditations and awards

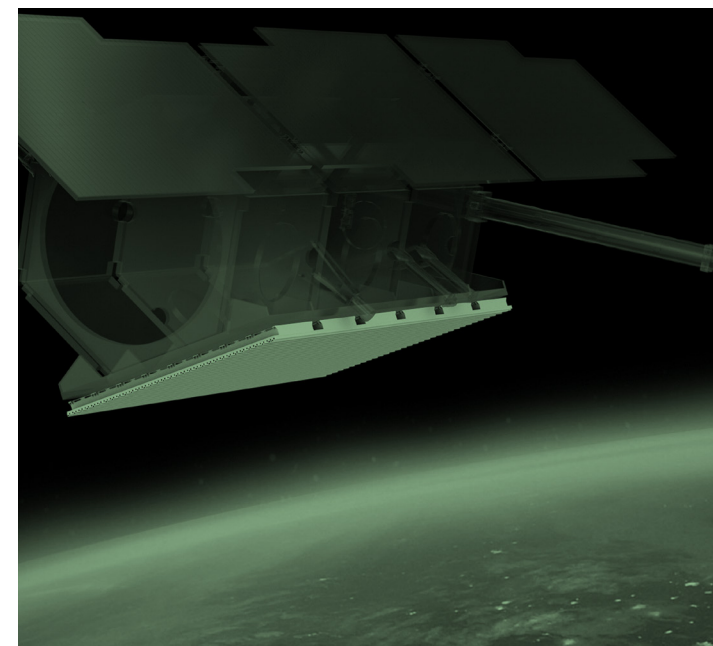
- Quality Approved ISO 9001
- Safety Approved ISO 45001
- Environmental Approved ISO 14001
- JAS-ANZ registered Organisation
- Defence security accreditation (DISP)
- Finalist, 2020 Prime Minister's Veterans' Employment Awards in the Veterans' Employer of the Year – Small category
- Small Business Exporting to Asia (ACT) award in 2013, 2014, 2015 and 2016 and Small Business Exporter of the Year (ACT), 2017



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## MARITIME

### Products

- Supply and support of scientific instrumentation, equipment, and consumables.
- Provision of a wide range of laboratory equipment and supplies to government, research, industry, and education organisations.
- Specialist supplier of subsea instrumentation for defence, oceanography, coastal marine science, environmental monitoring, industry, research, and education.
  - Precision subsea measurement and recording sensors for defence, hydrographic, and other environmental requirements. Subsea parameters include physical, optical, chemical, gaseous, optical radiation, and nuclear radiation. Complementary above-water parameters are also offered.
  - Physical sampling systems for seawater, seabed material, and other particles / organisms.
  - Underwater acoustic monitoring and recording systems.
  - Underwater acoustic data telemetry and control systems.
  - Surface data buoys, with full instrumentation and data telemetry.
  - Underwater cables, electro and electromechanical, for hi-speed ethernet, multi-conductor, high-tension tow / deployment uses.
  - Ship winches and LARS for scientific deployed packages, towed systems, and ROV / AUV requirements.
  - Underwater ROV and AUV systems for observation and monitoring functions.
  - High-resolution underwater video / stills cameras and lighting.

### Capabilities

- Full in-house engineering service, support and calibration.
- Cable and connector moulding and manufacture.
- Specialist instrumentation design and systems integration.
- Training support for all customers.

### Competitive discriminators

- Privately-owned Tasmanian company with office and engineering facilities in Hobart, close to Hobart Airport.
- Continuous operation in the Australian scientific fields for over 45 years offering only highest-level equipment.
- Supporting customers throughout Australia, New Zealand, and South East Asia.
- Facilitation of factory-based training for sales and engineering staff to ensure up-to-date knowledge of all equipment offered.

### Key customers

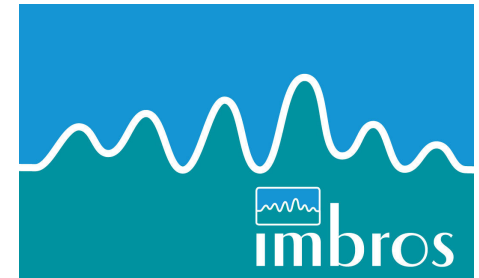
- Australian Antarctic Division
- Australian Institute of Marine Science
- Australian Maritime College
- CSIRO
- Defence Science and Technology Group
- International Marine Observing Systems (IMOS)
- Mining companies including Rio Tinto, Woodside, Inpex, BHP, GHD, RPS, SKM
- Port authorities and shipping industry
- State departments of environment
- Universities

### Key partners

- |                                      |                        |
|--------------------------------------|------------------------|
| • Falmat and Winchester Interconnect | • Ocean Test Equipment |
| • HYDRO-BIOS                         | • Sea-Bird Scientific  |
| • NKE Instrumentation                | • Sequoia Scientific   |
|                                      | • VideoRay ROVs        |

### Quality accreditations

- Working towards ISO 9001 accreditation



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MARITIME

LAND

## Products

- Specialists in CNC machining, manufacturing components from a range of materials for various industries including food processing, mining (part of Caterpillar's supply chain), aquaculture, marine and transport.
- Products and services include: CNC and manual machining flame type profile cutting of plate; and fabrication of small to medium parts and painting.
- Finished components are packaged to customer specifications including VCI and Intercept to enable long shelf life and protection during transport and storage.

## Capabilities

- CNC vertical machining centres have a 4-axis milling envelope of: X – 1 050mm; Y – 570mm and Z – 510mm.
- CNC horizontal live tool lathes have a 3-axis operating envelope of: maximum turning diameter – 460mm (X); maximum turning length – 658mm (Z); and bar working diameter – 81mm.
- Profile Cutting – Oxy fuel profile cutting of plate from 16mm to 230mm.
- Fabrication – MIG and TIG fabrication of small to medium components to requirements, weld procedures and pre-heat processes.

## Competitive discriminators

- Triple ISO certified for Quality, Environment and Safety.
- Management team has a combined 70 years of experience in the CNC manufacturing space with an additional 10 years of experience in quality systems and data management.
- On time ship and rejected parts per million statistics for the past 12 months for a major global customer: On time ship = 90%, rejected parts/million = 0.
- Team is committed to a safe work culture with over 2 500 days lost time injury free.
- Reputation for achieving complex multi-process manufacturing projects that others simply will not attempt. Developed strong relationships with partners offering hardening, plating, chroming and cylindrical grinding of parts produced.

- Utilise the latest CAD / CAM systems available including BricsCAD 3D and GibbsCam.
- Developed own in-house ERP and compliance software systems, providing a competitive advantage as no need to conform with off-the-shelf systems. Ability to adapt software hand in hand with business processes.
- Proactively manage continuous improvement and eliminating waste.

## Key customers

- Botanical Resources
- Castings Tasmania
- CAT
- Direct Edge Manufacturing
- Elphinstone
- Simplot

## Key partners

- A Class Metal Finishers
- Australian Surface Technologies
- Direct Edge Manufacturing
- Global Metals
- Sandvik
- Tufwrap
- Voestalpine

## Quality accreditations

- ISO 9001 – Quality
- ISO 14001 – Environment
- AS 4801 – Safety



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## LAND

### Products

- Specialists in the design, manufacture and global distribution of axles, drive-shafts, yokes and associated drivetrain products.
- Products are manufactured for towed, self-propelled and tele-operated vehicles and operate in the construction and mining industries with potential being pursued in the defence sector.

### Capabilities

- Product development and management from concept engineering through to sustainment. Our program for Product Lifecycle Management (PLM) ensures we can control complex engineering and manufacturing projects.
- Concurrent engineering practices ensure we capture the voices of the market, engineering and manufacturing for efficient and cost-effective development.
- Systems engineering using MathWorks Simulink for control systems and vertically integrated vehicle platform engineering and manufacturing.
- Manufacturing locations in South Australia and Tasmania, including CNC machining, fabrication, paint, driveline assemble and balance, plastics molding, electrical harness and vehicle assembly.
- With a strong culture of safety, quality and environmental considerations, Jayben Group is delivering competitive solutions by relentlessly focusing on continuous improvement and quality customer outcomes.

### Competitive discriminators

- 94 years in manufacturing off highway drivetrain products and 20 years in vehicle product development.
- Land 129 Phase 3 participant: recently signed a Memorandum of Agreement (MOA) with Insitu Pacific, subsidiary of Boeing for integrated vehicle design and manufacturing services for UAV launch and retrieval operations.
- Global supply arrangements with premium component manufacturers including driveline, hydraulics, hardware, electronics and other relevant Tier 1 vehicle suppliers. These relationships allow Jayben Group to specialise in low volume production while retaining globally competitive pricing.

- Long history of collaboration with original equipment manufacturing partners through provision of applications engineering services. Jayben has been a trusted Caterpillar supplier, providing through life support for 20 years and shipping to six facilities worldwide.
- Having been in operation since 1927, Jayben Group will always be there to stand behind their products and has a proven record of managing complex global supply chains and meeting their customer commitments by supporting the product well beyond the initial sale.
- Over the past 10 years the company has manufactured over 200 vehicles and thousands of drivetrains and have applied a sustained program of research and design and innovation.

### Key customers and partners

- Boeing / Insitu Pacific
- Caterpillar
- Grange Resources
- Walterscheid Powertrain

### Quality accreditations

- ISO 9001:2015 – Quality



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# Liferaft Systems Australia

## MARITIME

### Products

- LSA are designers and manufacturers of inflatable inclined slide Marine Evacuation Systems (MES) providing direct liferaft access.
- Variants of the LSA system now include MES evacuation slides from 9 to 22 metres in association with 115, 100 and 50 person life rafts.

### Capabilities

LSA MES have many features which provide advantages for military vessels.

These include:

- being compact and light weight
- the ability to safely and rapidly transfer all personnel, with approved system ready to use in less than 60 seconds
- the ability to evacuate injured personnel including stretcher cases
- the ability to evacuate 600 persons per MES station in less than 30 minutes
- the ability to operate in all environments, with successful testing for functionality in temperatures ranging from -30C to +65C
- a reduced radar signature.

### Competitive discriminators

- Easy to install, simple to use, cost effective to own.
- No requirement for any winches, electrical supply or complicated hydraulics.
- Installations tailored to the unique requirements of each vessel and customer.
- Over 25 years designing, refining, manufacturing and installing MES.

### Key customers

- BAE Systems
- Royal Navy (UK)
- Royal Netherlands Navy
- Royal New Zealand Navy
- US Navy

### Key partners

BAE Systems

### Quality accreditations and awards

- ISO 9001:2015 – Quality
- Full SOLAS Type approvals from:
  - DNV including EC Marine Equipment Directive approvals
  - USCG
  - Transport Canada.

Marine Evacuation Systems and large capacity liferafts



**LIFERAFT SYSTEMS AUSTRALIA**

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MARITIME

LAND

AIR

SPACE

ICT

## Products

- Direct-strike lightning protection for structures, open areas and vessels.
- Wide range of earthing / grounding products.
- Powerline surge protection, including shunt protection and series filters.
- Data and signal line surge protection.
- Lightning warning system.

## Capabilities

- Design and manufacture of lightning protection solutions.
- Provision of suitable technology and standards compliance depending on the application and exposed risk factors.
- Design capabilities for placement of direct-strike protection, depending on the application and international standards.
- Professional consultancy services for lightning risk analysis and mitigation in compliance with international standards.
- Earthing designs and testing in compliance with international standards.
- CDEGS modelling of lightning impacts on structures and behaviour underground.
- Certification and testing of lightning protection systems.

## Competitive discriminators

- One of very few companies in the world that is able to offer a range of innovative technologies suitable for lightning protection, together with compliance to international standards.
- Only company globally possessing a patented lightning down conductor cable able to withstand 500 kV. This innovation provides competitive advantages when providing customer solutions for sensitive and high-risk applications, such as protection for vessels.
- Extensive R&D and field and laboratory testing of products has made it possible to offer solutions for extreme conditions in high-lightning areas. LPI was the first company to test corona effects on air terminal in a high-altitude, outdoor, high-voltage test facility.
- Total solutions under a single brand – direct strike, earthing and surge protection – most of which are manufactured in LPI's own state-of-the-art, advanced manufacturing centre.
- Customers are located in more than 85 countries in some of the most lightning prone areas of the world.

## Key customers

- Malaysian Police Academy
- Oil and gas or petrochemical facilities
- Singapore Police Coast Guard
- Telecommunication operators in Asia, Africa, Central and South America and Australia (including Telstra, Vodafone, Optus and NBN Co.)

## Key partners

- Budapest University of Technology and Economics, Hungary
- Instituto Tecnológico de la Energía (ITE), Spain
- Istituto Nazionale di Fisica Nucleare, Italy
- Monash University
- National Engineering Laboratory for Ultra High Voltage Technology (NELUHV), China
- Swinburne University

## Quality accreditations and awards

- ISO 9001 – Quality
- ISO 14001 – Environment
- Winner of Tasmanian Exporter of the Year 2006
- Winner of Tasmanian Export Awards (various categories) in 2006, 2007, 2009 and 2019.
- High Commendation at the Australian Engineering Excellence Awards (Engineers Australia) in 2016.



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MARITIME

LAND

R and E

## Products

- Consultancy, design, documentation and specifications for corrosion protection systems, shore power protection, marine growth preventive systems (MGPS) and speciality coatings.
- Inspection, reporting and surveying services to certify and verify protection systems for new and existing vessels, and land based systems.
- Research and education programs.

## Capabilities

- Forensic engineering investigations, trouble-shooting complex technical problems in the field under challenging conditions.
- Expert independent advice for new or existing vessels and land-platforms. Advice and experience that can save thousands of dollars in maintenance, or premature failure.
- Design of cathodic protection systems for new builds or review of existing systems.
- Vessel and ROV inspection services and reports for maintenance and insurance purposes.
- Antifouling solutions for internal piping systems. Provide inspection service and maintenance on most impressed current cathodic protection (ICCP) and anti-corrosion systems on the market.
- Expert marine drafting services with AutoCAD 2D & Rhino3D licences.
- Expanding capability to include training in cathodic protection with support from AMC and TasTAFE. Past experience delivering training to commercial ferry operators.

## Competitive discriminators

- Niche and specialist consultant service with a group of industry partnerships built across Australia and internationally and strong linkages with the Royal Institution of Naval Architects.
- 22 years' experience in commercial fast ferry and the wider maritime industry including as a Structural Engineer at Incat Tasmania / Revolution Design designing high-speed light craft to class society DNV-GL.
- Specialist in Finite Element Analysis, experience in design of full-scale one-off prototypes.
- Key input into all Incat Tasmania military vessel concepts that were subsequently used in multiple theatres of operation and humanitarian relief deployments.

## Key customers

- Crisp Bros and Haywards
- De Bruyn's Transport
- HUON Aquaculture
- Incat Tasmania
- Offshore Unlimited
- PFG Group
- Tasmanian Parks and Wildlife Service
- Tassal
- Taylor Bros Marine

## Key partners

- Australasian Corrosion Association
- Australasian Corrosion Consultants
- Australian Stainless Steel Development Association
- Biofouling Solutions
- Cathodic Anodes Australia
- EMCS Industries Ltd
- Fibredur®
- Hempel (Wattyl paints protective paint and marine coatings)
- Megasorber®
- Nyalic®
- Southern Ocean Subsea (SOSUB)



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## MARITIME

### Products

- Muir designs, manufactures and supplies anchoring systems, chain management systems and mooring equipment to leading commercial shipyards, navies and coastguards globally.
- Muir has set industry standards and benchmarks for heavy-lift anchoring systems internationally, based on practical experience, uncompromising engineering principles and quality Australian input materials.

### Capabilities

- Muir works closely with naval architects, builders, and engineers to design and manufacture complete anchoring systems for naval and commercial vessels up to 160 metres.
- Anchoring systems are comprehensively tested to Class or Type Approval when required.
- Proven and tested designs that can be customised to suit specific customer requirements.
- Continued focus on R&D, which has seen the progression and expansion of high power to weight ratio equipment that is dependable.

### Competitive discriminators

- For over 50 years Muir has been designing and manufacturing anchoring systems that have withstood the test of time, and the test of nature, as Tasmania's harsh and challenging marine environment means that anything made here must be made well. And it must be made to last.
- With a comprehensive quality assurance system to ensure durability and safety, Muir's winches, windlasses and deck equipment are respected for their design, quality and performance.
- Leading recreational and commercial maritime brands including Riviera, Maritimo, Telwater and Feadship use Muir's equipment exclusively.
- Muir's equipment has been approved and certified by all of the leading classification societies including Lloyds, Bureau Veritas, DNV and American Bureau of Shipping.
- National network of experienced sales managers and a trusted international distribution network.
- Service is covered on a global scale with service agents in the US, Europe and Asia ensuring a smooth flow of spares and ongoing support.
- All manufacturing is completed in our Hobart, Australian factory by our skilled craftsmen using highest quality materials with our proven designs.

### Key customers

- Austal Ships (Royal Australian Navy, Australian Border Force)
- Incat
- Larsen and Toubro (Indian Coastguard)
- Luerssen Australia (OPV Project)
- US Coastguard (87' Protector Class)

### Key partners

- Muir works collaboratively with naval architects, Australian and international shipbuilders on a range of projects.
- Defence projects include: the Guardian Class Pacific Patrol Boats (21 vessels), the Armidale Class Patrol Boat (14 vessels), Cape Class Patrol Boat (10 vessels) and earlier Pacific Patrol Boat (22 vessels).
- Muir has also completed projects internationally in India, Indonesia, South Africa, Pacific Islands, Canada, UAE, Oman, Turkey and with the US Coast Guard.
- Muir works closely with all major classification societies.

### Quality accreditations

- ISO 9001:2015 – Quality



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MARITIME

LAND

## Products

- Norfolk Blinds manufacture marine anti-glare blinds and screen solutions for both the accommodation and bridge / navigation areas of ships and also for civil uses.
- DNV Type approved anti-glare blinds for ships bridges.
- Range of anti-glare roller screens.

## Capabilities

- Internationally certified product available in Tasmania.
- Over 30 years' experience in manufacturing.

## Competitive discriminators

- Australian made product manufactured for extreme conditions.
- Fast local service.
- Advantage of local maintenance.
- Lean manufacturing practitioners.

## Key customers

- Incat
- Richardson Devine Marine

## Quality accreditations

- In the process of obtaining DNV Certification
- Externally audited to meet or exceed NBQA-2 000 standards
- Lean manufacturing practitioners



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



## Products

- High speed support vessels and marine crew.
- Offshore support tugs and marine crew.

## Capabilities

- Supply of modern vessels and certified crews to support defence and offshore operations, survey, search and rescue, crew and stores transfers.
- Vessels available throughout Australian ports.

## Competitive discriminators

- New Australian built vessels, high speed, locally trained crews.
- Local management, support facilities in Hobart and Exmouth.

## Key customers

- Hydrographic survey organisations
- Oil and gas industry
- Other customers available on request

## Key partners

- Australian geophysical and geotechnical survey companies
- Australian oil and gas majors
- Australian ROV and AUV operators
- Royal Australian Navy HydroScheme Industry Partnership Program operators

## Quality accreditations

- ISO 9001:2015 – Quality
- ISO 14001:2015 – Environment
- ISO 45001:2018 – Safety
- ISN HSE A Grade



## Contact details

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Director

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MARITIME

LAND

## Products

- Penguin Composites has the capability to manufacture in a variety of processes including hand–layup, resin infusion, resin transfer moulding and filament winding.
- Products include:
  - glass reinforced plastics, composite laminates
  - vehicle panels for defence
  - special applications i.e. mast bases, pressure vessels, escape slides, carbon fibre laminates
  - fire shields, piping
  - weight reduction ideas
  - marine structure rehabilitation
  - special purpose structures such as extreme climate and lightweight shelter kits
  - bespoke architectural items such as louvres and panels.
- Services offered by the company include composite design, prototyping, tooling, part production and repairs.

## Capabilities

- Composite fabrication
- Hand–layup
- Resin infusion
- Resin transfer moulding
- Filament winding
- Metal fabrication and electrical installation
- APAS painting

## Competitive discriminators

- Design capability
- Tooling
- Fabricate small to medium volume parts
- Aftermarket support
- Internal governance structures, ERP software, internal quality plans and standard work procedures
- Focus on Lean manufacturing

## Key customers

- Airport Maintenance Systems
- Caterpillar Underground Mining (since 2000)
- Elphinstone Group (since 1990)
- EOS (maritime and land gun shields)
- Fusion Capital Group – Fusion Transport
- Grange Resources
- Thales Australia (Hawkei project)

## Key partners

- Allnex Resins
- Australian Maritime College
- Composites Australia
- Productivity Improvers
- USQ Centre for Future Materials

## Quality accreditations

- ISO 9001 – Quality



## Contact details

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MARITIME

LAND

## Products

- PFG has near 40 years' experience in the design, manufacture and sales of polymer and marine products to the maritime security, aquaculture, mining and civil construction sectors.
- PFG's fast response vessels are a mature and proven platform with 100 plus vessels currently operating and can have various configurations including hard and soft collars.
- PFG's Sentinel tactical watercraft constructed from high-density polyethylene (HDPE) has industrial strength, is positively buoyant, will not corrode and absorbs vibration and impact forces.
- Designed to carry military personnel at high speed and in rough seas, Sentinel RHIBs are adaptable to multiple mission sets and can be powered by outboard or jet propulsion and is capable of in excess of 47 knots.
- The Sentinel range can be fitted with warfare capabilities i.e. weapon / effector mounts and sensor systems, ammunition lockers and a bow-mounted non-lethal sonic boom weapon.

## Capabilities

- 25 years' experience building the world's toughest workboats for emergency and security services.
- Specialist expertise in polymers and advanced material science.
- Largest manufacturer in Oceania of fabricated polymer vessels.
- Developed own welding standards for the maritime environment, now adopted by AMSA.
- Unrivalled supply chain and raw materials sourced.

## Competitive discriminators

- PFG vessels are highly durable and reliable with the oldest having been in service for 25 years providing superior total cost of ownership.
- The Sentinel provides for reduced levels of personnel fatigue and muscular-skeletal issues as HDPE absorbs vibration due to the vessel's design to plough through oncoming waves rather than bounce over them.
- HDPE does not suffer from electrolysis or corrosion, resists fouling and has high levels of UV protection, maximising operational availability as the level of maintenance required for the vessel is low.

- Highly stable platform due to HDPE's positive buoyancy and vessel design, reducing occurrences of roll over.
- The use of skegs inward and below the collars allows the vessel to turn at full speed without sliding, which makes the turns tighter and the turning outgoing speed much higher.
- The Sentinel is manufactured to ISO and NSCV, and is ballistically tested to NIJ standard 09108.01 without modification.

## Key customers

- Key customers include: Queensland and Tasmania Police, Western Australia Department of Fire and Emergency Services, Victorian Parks, Birkenhead Marina, Dampier Ports Authority, Rufus King Fishery Shark Patrol, Inland Fisheries Tasmania, Tassal Group Limited, Huon Aquaculture, CSIRO and Hydrowood.

## Key partners

- One2Three Naval Architects
- AMI Marine
- Australian Maritime College (AMC) and University of Tasmania
- Dotmar

## Quality accreditations and awards

- ISO 9001:2015 – Quality
- 2020 Ausmarine, Best RIB Patrol Boat
- 2019 Ausmarine, Best Patrol Boat
- 2016 Australian International Marine Export Group, Commercial Innovation Award
- 2016 Ausmarine, Best Aquaculture Support Vessel
- 2015 Workboat World, Best Survey Vessel Builder
- 2014 and 2012 Ausmarine, Best Specialty Boat Builder



## Contact details

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MARITIME

ICT

R and E

## Products

- Manufacturers of specialist maritime simulation systems, ranging from small-craft RHIB simulators to full mission multipurpose bridge navigation and shiphandling simulators.
- They can be easily customised to meet client specifications, from dedicated purpose-built simulation facilities to highly portable and transportable systems.
- Pivot simulators are used for operations requiring a high level of accuracy and realism:
  - mission rehearsals
  - vessel familiarisation
  - operational efficiency and safety risk assessments
  - competency assessments
  - ship design and ship performance evaluations.
- Pivot's specialty: portable simulators designed for use onboard vessels, where the actual ship and its operating environment are modelled with scientific accuracy and visual realism.

## Capabilities

- Pioneers and leaders in flexible and cost-effective maritime simulation systems.
- Proven track record in areas requiring high-end simulation: ship design, operational limits testing, major port design, accident assessments, and safety risk and competency assessments in high-risk operational areas.
- Through ongoing research into simulation technology and mathematical precision, Pivot are able to offer clients intelligent and accurate simulation environments, with an extensive database of sophisticated ship models and port / sea areas and artificial intelligence learning.
- Pivot's goal is to keep people in peak performance, wherever they may be.
- This means two things:
  - creating simulation systems that are intelligent, accurate and realistic so that the simulation environment faithfully mimics the real environment, providing a high degree of confidence in simulation results.
  - giving these systems global reach: by configuring them into compact units for ready transport to any location, and by making them accessible on the cloud, using real-time data, through fast and reliable internet connections.

## Competitive discriminators

- The only Australian manufacturer of maritime simulators.
- Producer of robust intelligent simulators for use on land or any ship to keep people in peak performance, wherever they may be.
- Specialty: Portable Simulation Systems.

## Key customers

- Commercial shipowners
- Defence including navies of Singapore, Korea, Japan, India, Germany, Denmark, Turkey, Israel and New Zealand
- Maritime ancillary service providers
- Maritime regulators
- Maritime training institutions
- Military training institutions
- Port engineering consultants
- Ports and port authorities

## Key partners

- Furuno for navigational systems.
- University consortia for defence and industry research.

## Quality accreditations and awards

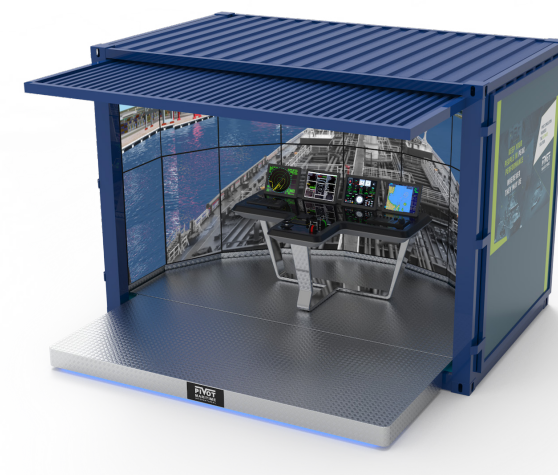
- ASQA Quality and Risk Management Accreditation
- Pacific 2015 Maritime Industry Innovation Awards (Civil SME), 2015
- Australian Export Awards (SME), 2009, 2010



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MARITIME

LAND

### Products

- STOREMASTA® helps organisations reduce risk and improve efficiencies in the storage and management of dangerous goods and hazardous chemicals. STOREMASTA® leads the Australian and New Zealand dangerous goods storage industry.
- Our innovative team craft an extensive range of industrial storage solutions such as flammable cabinets and chemicals storage containers. All our solutions are based on our profound knowledge of the Australian Dangerous Goods Standards and Regulations.

### Capabilities

- Tasmanian made: STOREMASTA® products are manufactured at our warehouse in Burnie, on the north west coast of Tasmania. Our expert team continually innovate to offer flexible solutions of the highest quality. You'll receive all deliveries quickly due to our efficient distribution network.
- Custom solutions: With in-house design engineers we can design, manufacture and deliver one of a kind products which solve your dangerous goods storage problems and ensure compliance with regulations. All custom solutions maximise efficiency and minimise risk.
- Legislative knowledge: All STOREMASTA® products meet Australian safety standards and have an ISO 9001 quality certification. Our team is made up of experts in dangerous goods legislation, with a thorough knowledge of national regulations, industry applications and material handling solutions.
- Service excellence: STOREMASTA® is a family owned and operated company with an excellent history and reputation. We live and breathe dangerous goods storage, and love working with people and organisations to minimise risk. With a strong culture of applying Lean manufacturing principles, we are committed to service excellence.

### Competitive discriminators

- Providing flexibility in design in dangerous goods storage solutions that fit requirements.
- Australian manufactured, with an established and stable history for over 25 years.
- Providing a holistic approach to individual dangerous goods solutions.
- STOREMASTA® are experts in dangerous goods legislation and industry requirements. Holding a long term commitment to innovation and design.
- Manufacturing to ISO 9001 from stainless steel, polyethylene, and mild-steel.
- Proven distribution model, along with a long term partnership with TNT. Stock held in seven key locations.

### Key customers and partners

- Australian Army bases
- Australian Federal Police
- BAE systems
- BHP Billiton
- Keller
- Price Waterhouse Coopers
- Royal Australian Air Force bases
- Royal Australian Navy ships and bases
- Rio Tinto
- UNSW
- USG Boral

### Quality accreditations

In process of recertification of ISO 9001

## STOREMASTA®

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MARITIME

LAND

AIR

## Products

- As a division of Tamar Hydro Pty Ltd, Tamar Engineering Tasmania has over 40 years' experience in pump overhauls including strip, inspect and reporting, new castings / material improvement and mechanical engineering support.
- Specialists in mechanical design and drafting, electrical design and drafting, precision fitting and machining, fabrication and welding, electrical switchboard manufacturing, design and construct control systems, project management and pump refurbishment.

## Capabilities

- Availability of 1 200m<sup>2</sup> floor space, multiple overhead cranes with up to 10 tonne lifting capacity and a large range of plant and equipment.
- 3D modelling software that can be used in conjunction with component and system design, complex calculations and an accurate bill of materials. With dedicated areas Tamar Engineering can provide ETR and FAT documentation supported by electrical and control engineers with experience in PLC control, HMI screens and remote monitoring.
- Experienced in fabricating complex structures which encompasses a variety of construction materials including steel, mild and hi-tensile, stainless steel, bronze and dissimilar metals.
- Specialised welding in MIG, TIG and MMAW processes are also amongst our expertise, including pressure pipe and vessels.
- Live tapping of under pressure water mains 80mm to 600mm.
- Pump test tank facility.

## Competitive discriminators

- Building on Tamar Hydro's turnkey capability to design, manufacture and install / commission hydro-electric turbines, Tamar Engineering has developed a niche market in bespoke engineering projects.
- Industrial pumping department with significant experience in repair, upgrades and refurbishments.
- Offer complete machine replacement, re-engineering of components and systems, valve refurbishments and modernized control systems.
- Specialty marine pumps.
- Lightweight portable transfer pumps.
- Bilge manifolds and marine valves.

- Under pressure water main tapings.
- Pelton, Turgo Impulse, Francis and Kaplan hydro turbines.

## Key customers

- Australian Army
- Australian Border Force
- Department of Primary Industries, Parks, Water and Environment
- Energy Power Systems (sub-contractor to Austal Ships for the Cape Class patrol boat)
- Melbourne Water, S.A. Water and TasWater
- Pipers Brook Winery
- Royal Australian Navy
- River Power Tasmania and Nietta Hydro

## Key partners

- Complete Tapping Service (AVK)
- Electrologix
- Turcomp

## Quality accreditations

- ISO 9001:2008 – Quality
- ISO 14001 – Environmental
- AS / NZS 4801 – Safety
- TÜV Rheinland®: A Committed and Dedicated Team of TÜV Accredited Functional Safety Engineers for Machinery IEC 62061 and ISO 13859, and Safety Instrumented Systems IEC 61508 and IEC 61511



## Contact details

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Tamar Hydro Pty Ltd)  
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## Products

- Nationally recognised qualifications and specific skills sets including:
  - metal trades and engineering apprenticeships
  - plumbing apprenticeships and traineeships
  - building and construction apprenticeships and traineeships in the construction and allied trades industry
  - electrotechnology apprenticeships and traineeships
  - automotive apprenticeships and traineeships
  - business and information communication and technology (ICT) courses. More details available at [www.tastafe.tas.edu.au/courses](http://www.tastafe.tas.edu.au/courses)
- Short courses and skill sets are offered in a wide range of areas including metal trades, construction / plumbing / allied trades and electrotechnology. These focus on licensing, accreditation and certification for specific activities being undertaken in workplaces and worksites. More details available at [www.tastafe.tas.edu.au/shortcourses](http://www.tastafe.tas.edu.au/shortcourses)

## Capabilities

- A network of campuses and training facilities statewide, including specialist training facilities for automotive, metal engineering, plumbing and electrotechnology and around 200 courses and qualifications available.
- Metals training facilities state-wide specialising in delivering courses in the metal trades industry areas.
- Dedicated teaching teams who hold professional qualifications, including industry competency and currency.
- Works closely with industry to enable employers to multi-skill their workforce, improve productivity and expand workforce capability.

## Competitive discriminators

- Tasmania's largest vocational education and training provider.
- Dedicated workforce development focus and customised training available for business and industry.
- Close working relationship with Tasmania's manufacturing industry, including a number of validated industry linkages.
- Help deliver the highest apprenticeship completion rates in Australia.
- Highest student satisfaction rates nationally at 91%.

## Key customers

- Aurora Energy
- Australian Antarctic Division
- Hydro Tasmania
- Incat Australia
- Nyrstar
- Tas Networks

## Key partners

- Civil Contractors Federation
- National Electrical and Communications Association (NECA) Electrical Contracting Industry Liaison (ECIL)
- Tasmanian Minerals, Manufacturing and Energy Council
- University of Tasmania

## Quality accreditations and awards

- Recent reaccreditation for seven years from the national regulator (ASQA)
- Tasmanian Large Training Provider of the Year – 2020
- Apprentice of the Year and Vocational Student of the Year – 2020 Australian Training Awards



## Contact details

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## MARITIME

### Products

- Marine and offshore engineering products and services, specialising in accommodation solutions for defence, oil and gas and general marine applications.
- A multi-discipline engineering company with a highly-skilled, innovative and flexible workforce, Taylor Bros can manage project delivery locally, nationally, internationally and offshore.

### Capabilities

- Outfit accommodation
- Marine engineering
- General engineering
- Design, engineering and naval architecture
- Finite element analysis
- Diesel engine services
- Mobile accommodation
- Shipping services
- Ship conversions and modifications
- Ship refits
- Project management
- Quality assurance and configuration management
- Integrated logistic support services

### Competitive discriminators

- Multi-skilled workforce to conduct work locally, nationally, internationally and offshore.
- BOSIET certification allowing employees to work offshore in the oil and gas industry.
- Prefabrication techniques used to reduce fabrication required onboard or at shipyard during build or maintenance, increasing efficiency and productivity.
- Engineering, naval architecture and design through to manufacture, installation and in-service support of a wide variety of marine facilities, equipment and systems.
- Experienced provider of class and Royal Australian Navy approved facilities, equipment and systems.

### Key customers and partners

- ASC Shipbuilder Pty Ltd (AWD Project)
- ASP Ship Management
- Atlantic and Peninsula Australia
- Australian Government – Australian Antarctic Division
- Australian Government – Customs and Border Protection
- Australian Government – Department of Defence – Capability and Sustainment Group
- BAE Systems – Australia (LHD Project)
- CSIRO – Marine National Facility
- Damen Group
- Delegaciones Reunidas Novofri S.A
- Diamond Offshore
- Farstad Solstad
- Gabadi S.L.
- Leurssen Australia (OPV Project)
- Modec
- Navantia S.A. (AOR Project)
- Origin Energy
- P&O Maritime
- SeaForce
- Staco Co Ltd
- Thales – Australia
- Trelleborg Marine Systems

### Quality accreditations

ISO 9001:2015 – Quality



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MARITIME

ICT

## Products

- Detailed, accurate and validated oceanographic and meteorological data, including global weather, waves, sea temperature, ocean and tidal currents.
- Web map services, data services via Application Programming Interface.
- Numerical models of tidal elevations, currents, storm and tide surges.

## Capabilities

- Constructing and operating hydrodynamic models which output tidal elevations, currents, storm and tide surges.
- Scientific assessment of third party meteorological and oceanographic datasets.
- Construction and management of cloud-based data platforms to handle large scale, complex meteorological and oceanographic datasets.

## Competitive discriminators

- Tidetch's primary scientific expertise lies in constructing and running numerical models which output tidal elevations, currents, storm and tide surges.
- Tidetch's scientists are former United Kingdom Government researchers who were the expertise behind the world's first operational tide-surge model.
- Tidetch can produce new models for anywhere in the world, for specific purposes or as required.
- Tidetch provide a comprehensive catalogue of accurate and detailed high-resolution meteorological data products unmatched elsewhere.
- Scientific output can be accessed by third party software and systems providers for use in proprietary solutions.

## Key customers

- Austal
- Class NK Napa
- Deep Sea Technologies
- Wärtsilä

## Key partners

- CSIRO Kickstart
- DNV GL Veracity

## Quality accreditations

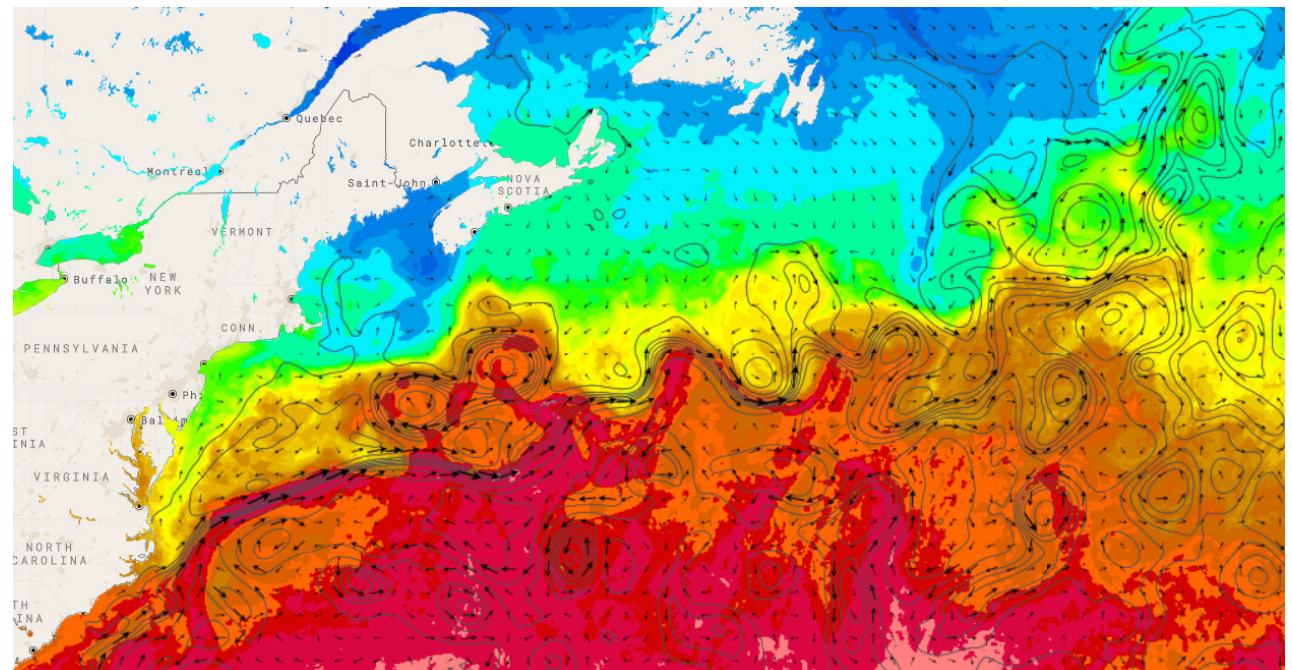
ISO 27001 – Information Security Management (pending)

***tidetch***  
Applied Oceanography

## Contact details

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## R and E

### Products

- TMEC is a membership-based organisation representing the state's manufacturing and energy sectors, mining exploration, extraction and processing businesses, and associated supply chains.
- TMEC has developed the Tasmanian advanced manufacturing portal, which is an online directory of Tasmanian advanced manufacturing companies.
- The annual TMEC industry conference is attended by delegates from across Tasmania, and creates opportunities for industry development, collaboration and sharing of innovative ideas.
- TMEC's Manufacturing Centre for Excellence provides facilities, training spaces and equipment designed to develop workers' and students' skills in advanced manufacturing.

### Capabilities

The Manufacturing Centre of Excellence includes:

- A Simulated Work Environment (SWE), owned and operated by the Elphinstone Group and provides Lean manufacturing and continuous improvement training. It is the largest SWE in the southern hemisphere, providing interactive and practical training for groups of at least 17 participants.
- The Advanced Welding Training Centre (AWTC) with five portable virtual-reality simulators that mimic real welding experiences and are compatible with live welding equipment. The AWTC is Australia's only industry led advanced welding centre and Tasmania's only Weld Australia testing facility, and is therefore able to train, test and certify welders. The AWTC includes Soldamatic and Linchon simulated and augmented technologies.
- Tasmania's only provider of IWB, Cert 10 and IWS welding Inspection Training.
- Leadership training, which is aimed at Tasmanian industry members who are transitioning from roles as 'workers' to 'leaders'.
- Insights tours, coordination of these tours allow key industry members to visit other world class businesses and learn in a collaborative and supportive environment.
- A variety of meeting rooms and training spaces with audio visual equipment and WIFI available for TMEC industry member hire.

### Competitive discriminators

- The SWE training is based on Elphinstone production systems methods and draws on Lean principles. Continuous improvement is encouraged with an emphasis on collaboration and team communication. Courses are delivered by Productivity Improvers and the Elphinstone Group and are suitable for any industry.
- The AWTC simulators provide statistical feedback on weld quality, accuracy and comparative improvements in technique. Welding skills and techniques are developed in a safe learning environment, and training is faster and less expensive than traditional learning methods.
- The AWTC, as Australia's only industry-led advanced welding centre and Tasmania's only Weld Australia Testing Facility, is able to train, test and certify welders and welds.
- TMEC offers Tasmania's only Welder Inspector Training.

### Key customers

TMEC members range from small to medium enterprises, to major national and international organisations including diverse industrials such as the Elphinstone Group, Jayben, Muir Engineering, Ignite Digi, William Adams, Definium, along with over 50 other manufacturing members.

### Key partners

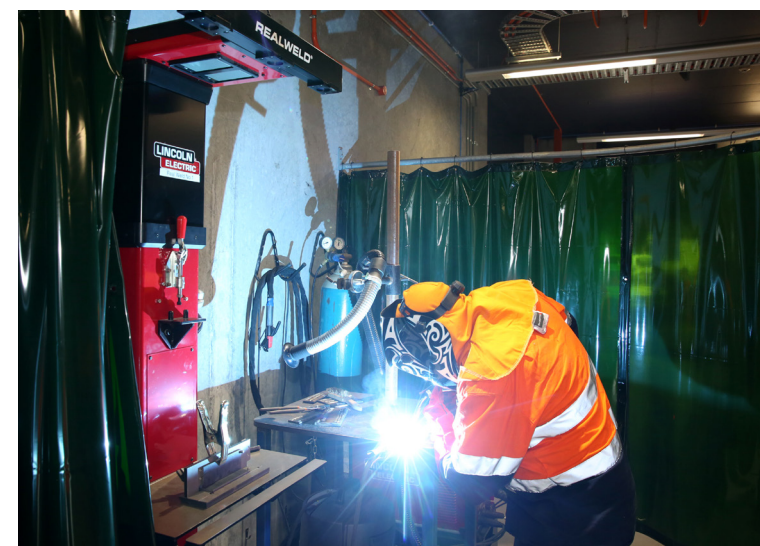
- Mineral Resources Tasmania
- Other registered training organisations
- Tasmanian Government
- TasTAFE
- University of Tasmania



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MARITIME

LAND

SPACE

ICT

R and E

## Products

- The University of Tasmania's Defence and National Security Network connects academia with industry to enhance Australia's defence capability. It aligns significant research and workforce development resources and facilities with national defence interests and national security science and technology priorities.
- The Defence and National Security Network focusses research and innovation on three core themes maritime platforms and infrastructure, enhanced human performance and security and operating environments.

## Capabilities

Leveraging a new Defence and Maritime Innovation and Design Precinct centred at Launceston and on the Australian Maritime College, the Defence and National Security Network has capabilities across its three thematic areas.

- Maritime platforms and infrastructure: improved design, operation and performance, materiel availability, survivability (susceptibility, vulnerability, and recoverability), and sustainment of surface and sub-surface vessels, and coastal, offshore and subsea maritime structures.
- Enhanced human performance: improved physical and cognitive ability, survivability, and resilience of personnel in remote, isolated, stressful, and hazardous operational and environmental conditions and incorporation of human factors in materiel systems design.
- Security and operating environments: improved sense, decision, and policy making through advanced geo-physical survey methods, remote environmental sensing and signal processing, astronomical exploitation, intelligent ICT systems and artificial intelligence techniques, geo-political assessment, and investigation of future national energy needs and technologies.

## Competitive discriminators

- A strong track record of technological defence innovation.
- First placing in Australia's university sector by Defence market share for 2018.
- 2019 Eureka Prize – Outstanding Science in Safeguarding Australia

- An Australian top 10 university for research excellence with the highest number of research training centres of any Australian university.
- World-class institutes including the Centre for Food Innovation, the Australian Centre for Research on Separation Science and Australian Maritime College (AMC).
- Tertiary Education Quality and Standards Agency (TEQSA) accredited.

## Key customers

- Australian Government, including Department of Defence (particularly Defence Science and Technology (DST).
- Integrated Marine Observing System (IMOS) – hosted by UTAS in partnership with CSIRO, BoM and other Universities.
- Recipient of Multidisciplinary University Research Initiative (MURI) administered by the US Department of Defense.
- Repeat recipient of US Office of Naval Research (ONR) funding.
- Seven Australian Research Council Research Training Centres including the Training Centre for Naval Design and Manufacturing.

## Key partners

- Australian Government, including Department of Science and Technology and Austrade
- Australian Marine Environment Protection Association
- Australian Space Agency
- Defence Science Institute
- Grey Innovation
- Incat
- National Centre for Research Infrastructure
- Serco
- Thales Australia

UNIVERSITY of  
**TASMANIA** 

## Contact details

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Coordinator)

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MARITIME

LAND

AIR

## Products

- Hydrographic surveys: bathymetry, volume calculations, safety of navigation, infrastructure inspection.
- Aerial and drone mapping: large area LiDAR and photogrammetry surveys using multi-rotor and fixed wing drones.
- Terrestrial surveys: cadastral, detail pickup, and subsurface surveys.
- Mobile laser scanning: vehicle based roadway data acquisition and imagery.
- Metrology: micron-level precision surveys and alignments of machinery.
- GIS and geospatial: spatial analysis, map production and web portal development.

## Capabilities

- Bathymetry surveys: using multibeam sonars to capture detailed information on the seafloor.
- Underwater infrastructure inspection: using scanning sonar technology to inspect underwater assets for scour or damage.
- Above and below water combined data capture and analysis: ability to capture data simultaneously from multiple sensors.
- 3D modelling team: able to create detailed solid models from survey data capture.
- GIS and charting products: GIS team to deliver online data delivery and presentation.
- 3D web visualisation: 3D data visualisation through a web-browser for asset management.
- Artificial Intelligence and Machine Learning: feature extraction from 3D data for insights and asset management.

## Competitive discriminators

- Unique combination of skills allows for the delivery of specialised products.
- Wide-range of experience both locally and overseas.
- Full range of spatial 3D capture technologies.
- Data capture and integration both above and below water.
- 3D visualisation and machine learning for feature extraction.

## Key customers

- GHD
- Heron Construction
- Hydro Tasmania
- Pitt & Sherry
- Tasmanian Department of State Growth
- Tasmanian Ports Corporation

## Key partners

- Australian Maritime College

## Quality accreditations and awards

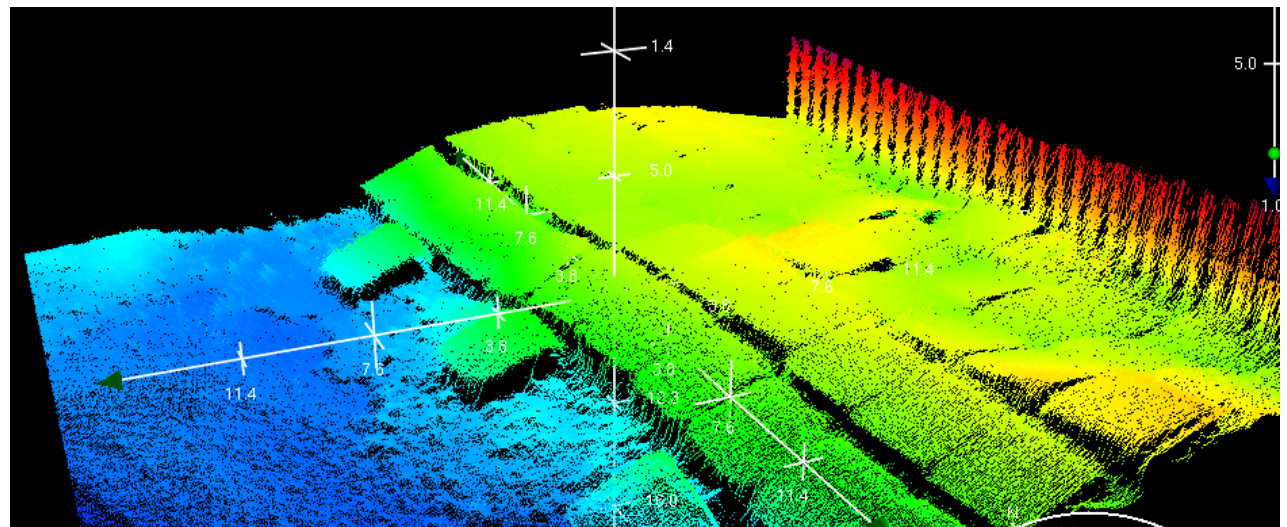
- ISO 9001 (2016): Quality
- ISO 14001 (2016): Environment
- ISO 45001 (2001): OH&S
- APSEA Technical Excellence Award 2020
- APSEA Innovation and Commercialisation Award 2020

# veris

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# Virtual facility tours

Take a virtual tour through a selection of Tasmania's defence industry companies by accessing the QR codes.

CBG Systems



PFG Group



Crisp Bros and Haywards



Taylor Bros



Muir Engineering



# Industry associations and networks

## AIDN – Tasmania

AIDN–Tasmania is an industry initiative with the primary objective of generating business opportunities for its members from defence related projects.

### Contact details

Diane Edgerton  
AIDN – Tasmania President  
Phone: +61 (03) 6434 0500  
Diane@directedge.com.au  
www.aidn.org.au



## Tasmanian Minerals, Manufacturing and Energy Council

The Tasmanian Minerals, Manufacturing and Energy Council (TMEC) is a membership–based organisation representing the state's manufacturing and energy sectors, mining exploration, extraction and processing businesses, and associated supply chains.

### Contact details

Kent Wyllie  
TMEC General Manager  
+61 (0) 400 634 963  
advman@tasminerals.com.au  
www.tasminerals.com.au  
www.tasmanianmanufacturing.com.au (Manufacturing portal)



## Tasmania Maritime Network

The Tasmania Maritime Network (TMN) is Tasmania's leading maritime grouping comprising various companies and organisations of exceptional expertise and leading edge products, services, technologies and skills. Members supply both the commercial and defence markets.

### Contact details

Dr Jeff Hawkins  
TMN Chair  
Phone: +61 (0) 419 368 082  
jhawkins@pivotmaritime.com  
www.tmn.org.au



## Tasmanian Polar Network

The Tasmanian Polar Network (TPN) is a group of businesses and scientific organisations based in Tasmania, that all have a common focus on serving commercial and scientific activity in the Antarctic, sub–Antarctic and Southern Ocean.

### Contact details

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TPN Chair  
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## Distance and air travel times

	Distance (approximate)	Air travel time
Hobart – Melbourne	598 km	One hour and 15 minutes
Hobart – Sydney	1 058 km	One hour and 45 minutes
Hobart – Brisbane	1 790 km	Two hours and 40 minutes
Hobart – Adelaide	1 161 km	Two hours
Hobart – Perth	3 009 km	Four hours and 55 minutes
Launceston – Melbourne	444 km	One hour and 5 minutes
Launceston – Sydney	914 km	One hour and 35 minutes
Launceston – Brisbane	1 642 km	Two hours and 30 minutes

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