



DEFENCE

The best thinking
in defence



SAGE Defence

Who we are

When SAGE Automation was founded in Adelaide in 1994, it was focussed solely on the automotive and manufacturing sectors. Since then, it has grown into a nationally-based Small Medium Enterprise (SME) delivering electrical and control systems to clients across the defence, smart transport, utilities and energy sectors.

SAGE Defence began in 2009, with the signing of a Memorandum of Understanding with Navantia and has grown to become a significant sector within the SAGE Automation business. SAGE Defence has built a track record of exceptional delivery, on time and within budget.

SAGE Defence focuses on working with defence Primes, Original Equipment Manufacturers (OEMs) and major sub-contractors such as ASC, Navantia, BAE Systems Australia, Thales, Ultra Electronics, Daronmont Technologies, Chemring and SAAB Systems.



About us

Employees: SAGE employs more than 470 people nationally

Turnover / revenue: FY20 annual turnover \$110M

Type of company: Private Company

Resource pool

- > 184 engineers
- > 33 project managers
- > 65 service technicians
- > 14 site supervisors
- > 12 panel manufacturers
- > 102 executive & support personnel



What we do

SAGE Defence focuses on the delivery of fit-for-purpose, electrical and control systems. We are a system integrator of electrical control systems, most of which are commercial off-the-shelf (COTS).

We'll design a solution tailored specifically to your requirements, using our tried and tested approach:

Design

SAGE Defence has proven capability in designing solutions to suit requirements. We are not afraid to question requirements if we believe there is a better solution available. We believe collaboration is key, and will happily collaborate with you in order to provide the best fit-for-purpose outcome. Additionally, your solution will be designed to be maintainable.



Source

We source the most appropriate components for your project.

With more than 20 years' experience and robust supply chains, SAGE Defence will source the world knowledgeably and acquire the most suitable components for your solution, especially as we are truly vendor independent.

Deliver

We ensure the solution does what was promised.

SAGE Defence utilises global best practice systems and processes. Our rigorous design process, together with a comprehensive testing regime, ensures we deliver what we say we will.



Industrial Control Panel Manufacturing

Why SAGE Manufacturing?

SAGE Manufacturing doesn't just build to your supplied drawings, we have a high level of expertise to identify errors and consult with our customers on any changes required.

We provide recommendations on build improvements, increasing quality and saving time.



We set ourselves apart

- > Our work cell tools, CNC machine and automated cut to length, strip and crimp machine ensures consistent quality terminations of our cabling. Together with our suppliers we are developing our Industry 4.0 capability to integrate advanced "digital twin" technologies for customer sign-off and streamlined production workflows.
- > Our panel technicians and apprentices are certified in IPC/WHMA-A-620A Requirements and Acceptance for Cable and Wire Harness Assemblies. This certification is required to work on control systems for the defence Industry.

- > Initial, internal kick-off meetings are held to review drawings, build materials and standards. Progress reports and photos are sent as required to keep customers up-to-date with build progress. As-built records are kept of each panel we build, including photos and scanned drawings for traceability to deliver quick, accurate turnaround times for replica builds.
- > We carry out detailed Factory Acceptance Testing (FAT) as standard within our internal quality procedures prior to shipping and installation. This is a significant factor as it confirms a panel's functional operation before onsite installation and minimises the commissioning and testing time. It also provides our customers with an excellent opportunity to assess the functionality of the detailed test documentation.



Low Voltage Switchboards

Proven experience

SAGE LV Manufacturing is one of only a few manufacturers that can provide solutions to meet all requirements for custom built and type tested modular switchboard systems. We specialise in the design and manufacture of all types of Electrical switchgear and control-gear assemblies, modular or fabricated; Main Switchboards, Motor Control Centers, Distribution Boards, Pump Control Boards, Mechanical Services Switchboards, Automation & Control Panels, and Power Factor Correction Systems.



Fabricated enclosures can be produced in sheet steel, aluminum or stainless steel.

SAGE LV Manufacturing is a licensed assembler of Tabula, Cubic, ABB Pro E, Rittal Ri4 Power and B&R Signature modular switchboard assemblies. The Modular systems are extensively type tested to AS/NZS61439.1 and provide for computer-aided design, verifiable quality assurance, economical engineered solutions, and shorter lead times.

The modular system of today is the result of continuous development - switchboard systems with maximum safety and functionality, within cost limits. We pride ourselves on the quality of work delivered by SAGE's LV Manufacturing team. We don't leave things up to chance - we persevere to ensure work is correct the first time around.



Certifications

SAGE Automation carries out its electrical installation work in accordance with Australian Standard AS3000 - Electrical Installations (Australian and New Zealand Wiring Rules). All electrical panels are built in accordance with AS3439.1 - Electrical Panel Building and Testing Standards.

All work is underpinned by SAGE Automation's Integrated Management System which is certified to ISO 9001 (Quality), ISO 14001 (Environment) and AS/NZS 4801 (Health and Safety) standards.



SAGE Defence

Project experience

- > **ASC** Collins Class, Chilled Water PLC replacement
- > **ASC** Collins Class, ISCMMS stay safe control system upgrade
- > **BAE Systems Australia** Paluma Class PMS upgrade
- > **BAE Systems Australia** HMAS Paluma PMS control system upgrade
- > **BAE Systems Australia** LHD, communication enclosures
- > **BAE Systems Australia** LHD, Zone 8 set to work & commissioning support for the Integrated Platform Management System (IPMS)
- > **BAE Systems Australia** Wedgetail, ground support power distribution system
- > **Chemring** Managing contractor, automated Countermeasure Manufacturing Plant
- > **Daronmont Technologies** Mechanical / electrical fit out of portable Mobile Control and Reporting Centres (MCRC)
- > **Cold Logic** HMAS Choules chiller upgrade
- > **Navantia** AOR IPMS control panel build
- > **Navantia** AWD, IPMS control panels construction and simulator installation / integration
- > **Navantia** LHD, set to work and commissioning support for the IPMS
- > **RAAF** Airfield lighting systems for 6 airbases
- > **TKMS** HMAS Sirius, sewage treatment plant control upgrade
- > **Thales** Mulwala high explosive facility control upgrade
- > **Ultra Electronics** AWD, control panels for the integrated Sonar System
- > **Ultra Electronics** Power Distribution Unit (PDU)
- > **Intract** RAAF Darwin & Robertson Barracks PV solar HV augmentation
- > **Tiwi Partners** RAAF Darwin fuel SCADA controls upgrade

Our capability

Capability

SAGE Defence has proven capability in delivering agile, innovative and fit-for-purpose electrical and control systems for defence Primes, OEMs and other SMEs.

Being truly vendor independent, with more than 25 years' experience and robust worldwide supply chains, you can rest assured we source only the best-fit components to suit any requirement.

We proudly embrace sector diversity, allowing cross pollination of the 'best thinking in engineering - enabling us to not only 'meet' the industry's rigorous demands, but exceed them.

As a system integrator we utilise, where possible, commercial off-the-shelf (COTS) components, to deliver appropriate and maintainable solutions.

Key Customers

- > **ASC**
- > **AWD Alliance**
- > **BAE Systems Australia**
- > **Chemring**
- > **Navantia**
- > **Thales**
- > **Ultra Electronics**
- > **SAAB**

Discriminators

- > Proven track record in supporting global defence companies delivering projects and services
- > Reliable and robust with a comprehensive supply chain built from more than 25 years' experience
- > Expertise to collaborate with you and recommend the best solution for your requirements
- > Robust quality and management systems underpinning the entire SAGE business
- > Established critical mass with great breadth and depth of in-house skills, and a can-do attitude

Key Partnerships

- > **Detegasa**
- > **Navantia**
- > **Siemens**
- > **Schneider Electric**

Through Life Support (TSL)

- > URDEF works
- > Warranty works
- > Minor Capex works
- > Preventative maintenance
- > Compliance sign-off works
- > Subsystem support works
- > IPMS support works
- > Platform training support



CONTACT US

**We'd love to hear
from you.**

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**SAGE is a proven, trusted and reliable
defence sub-contractor**

