

Engineering | Technology | Training

MEMKO offers products, technologies, training and engineering solutions to assist and support customers in advanced and highly regulated industries.











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MEMKO offers industry specific products, technology, training and engineering solutions to assist and support customers in advanced and highly regulated industries

Established in 2007, MEMKO's primary focus is to bring sustainable and measurable performance improvements to businesses through the integration of technology, training, engineering and process improvements. With its origins in Aerospace, MEMKO has been operating for over fifteen years with year on year growth due its ability to consistently deliver successful projects for its clients.

MEMKO's services span multiple industries with a focus on business processes covering strategy, design and engineering, digital mock-up, product development, virtual process planning and simulation, and digital manufacturing. Additionally, MEMKO is committed to building the workforce of the future, proudly supporting many research and university clients with a combination of industry and market knowledge. MEMKO also delivers training courses for continuing education in aerospace & aviation and official Dassault Systèmes software certification.

Over the years, MEMKO has delivered a range of successful projects for various clients, from small and medium enterprises to large complex and highly regulated businesses. These clients operate across a range of industries including Aerospace & Defence, Construction, Transport & Mobility, Energy & Materials and more.

Whatever your needs, MEMKO is committed to providing quality service to improve your business' performance.

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MEMKO Aviation, Aerospace and Defence Services

- Platform Design, System Integration,
 Test and Aircraft Certification
- Continued Airworthiness
 Management Services
- Aviation and Aerospace Training Courses
- Aerospace and Defence Design & Build Programs
- Aerospace and Defence Consulting

MEMKO Systems Services

- Digital Transformation and Solution Consulting
- Deployment, Support and Upgrade Service
- Digital Twin & MBSE as a Service (SAAS)
- Infrastructure as a Service (IAAS)
- Skilling Enablement, Training and Microcredentials

MEMKO is based in Australia and has staff in mulitple locations throughout Australia, including Melbourne CBD and Tullamarine Airport, as well as a technical development office in India



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Our Mission

MEMKO's mission is to bring sustainable and measurable performance improvements to complex and high performance operating businesses from Aerospace, Aviation and Defence to Architecture, Engineering, Construction, Consumer Packed Goods and Life Sciences through the integration of advanced technology and processes.

Our Values



Maintenance & Improvement

Our business is always keen on providing the best services to our clients



Efficiency

Our business seeks efficient and effective ways to solve problems, better serve customers and to remain responsible



Multinationality

Our multinational team ensures a broad knowledge and enables us to operate internationally in various languages



Knowledge

Our staff have extensive consulting, engineering, quality manufacturing and management capabilities



Organisation

Our business is wellorganised in order to meet all requirements at the highest level

Our Team



Meet our team of highly qualified and experienced engineering and software specialists.

Our staff are skilled in consulting, engineering, quality, manufacturing, software development and management. Each team member brings a unique set of skills to our business, with many having extensive experience working on a variety of projects for a broad range of clients from start-ups to large, complex enterprises.

Our team is technically skilled in using leading technologies, including 3DEXPERIENCE, MATLAB, CATIA, ENOVIA, ABAQUS, Python, C++ and more. We're passionate to see people learn and grow, hence our staff receive continous training to enhance our collective knowledge in the products and services relating to our business.



Quality Management System

MEMKO has implemented the **AS 9100D and ISO 9001:2015 Quality Management System (QMS)**, accredited by TQCSI and utilises the processes, procedures and tools contained within its QMS to drive successful projects of all sizes and complexity



Information Security Management System

MEMKO has been accredited **ISO 27001:2013 Information Security Management System** for the following activities: information security management inproviding products, services and software solutions to businesses



MEMKO has a track record of implementing complex projects in diverse industry sectors with an extensive client base that includes large multinational and well-known organisations as well as Australian small to medium enterprises.







Our Expertise

Core competencies:

- **Professional, Project Delivery** MEMKO has highly skilled and experienced engineers and technical staff, supported by a proven project methodology and quality management systems.
- Problem Solving We have a a track record of solving complex problems for clients, within budget.
- Customer Focus Since inception, a 'can do' attitude and responsive customer culture has been a corner stone of MEMKO's success.
- **Cyber Security** MEMKO's in-house, private cloud environment has been established to fill the gap between on-premise and public cloud software implementations, and is supported by a dedicated team and ISO 27001 cyber security standards.
- **Digital Technology** MEMKO is advanced, experienced and skilled at delivering projects that provide digital continuity for customers, including digital twins for design, optimisation and operations management.
- **Systems Engineering** Systems engineering is one of the most important disciplines to remain competitive into the future and MEMKO is at the centre of this evolution with access to the best technology and subject matter expertise.
- **Workforce of the Future** MEMKO is at the centre of the workforce of the future, working with students, researchers, academia and industry to drive new innovation and help prepare the workforce of the future.

Other Capabilities

- **Industry Collaboration** Collaboration with Primes, SME's and start-ups across Industries to build industry eco-system for design to build capability
- Skilled Resources Capacity to on-board people and enable them on system/solutions to apply within industry



Governance and Risk Management

Governance and risk management are an integral part of MEMKO's quality management system. MEMKO completes a feasibility assessment prior to commencing a project to ensure all risks are identified and that suitable resources are in place to complete the project.

MEMKO maintains a Risks and Opportunities register and works with clients to monitor risks and convert them to opportunities that can add further value to current or future project outcomes.

Customer Service

Adopting Peter Drucker's well-known saying "If you can't measure it, you can't improve it", the monitoring and measurement of business performance via customer feedback is embedded in MEMKO's quality management systems and processes.

Customer service is one of the pillars that MEMKO's culture is built on.

Academia and Workforce of the Future

Workforce of the Future is a key industry topic for Australia and an integral part of MEMKO's vision.

At MEMKO, we are committed to doing our part to build the future workforce and maintain a strong relationship between industry and academia.

As part of our partnerships with universities across Australia, MEMKO regulalry onboards new graduate talent, which we believe will help drive the ecosystem's future. Our graduates receive training and hands-on experience that build resilience and expertise across a range of disciplines including engineering, digital technologies, customer support and more.

MEMKO also helps universities access innovative technology, made available to educators and students who want to experience practices of industry leaders. Years of academia collaboration have led to a flexible, tailored set of learning solutions.



MEMKO, Dassault Systèmes and Deakin University host the Advanced Manufacturing Showcase 2022

Supporter of Advanced Manufacturing and Digital Technology Adoption

MEMKO is proud to support Australian manufacturing, delivering cutting-edge solutions that help SMEs to innovate and explore the unlimited opportunities advanced manufacturing has to offer. This is achieved through the adoption of digital technologies, which help businesses revolutionize their processes by creating seamless automation and connectivity.



MEMKO focuses on delivering practical advice and services directly aimed at causing business outcomes in line with its clients' vision, strategic direction and goals.

With a focus on front-end innovation, design, engineering, product development, manufacturing and sustainment processes, MEMKO has both the skills and experience to deliver successful outcomes for its clients, and has the track record to prove it.



MEMKO Pty Ltd is the official reseller of Dassault Systèmes Software, including 3DEXPERIENCE, DELMIA, CATIA, ENOVIA, NETVIBES & SIMULIA for Australia and New Zealand, Verisurf metrology software for Australia and New Zealand, ICAM for the Asia Pacific region.

Technology for Digital Continuity

Industry 4.0 and IoT open up new opportunities for digital continuity. Seamless connection between businesses processes is now possible, bridging the virtual and physical world in a way that allows for faster and more accurate production.

MEMKO is a **Customer Solutions Partner for Dassault Systèmes** 3DEXPERIENCE platform solutions with a focus on 3D design and engineering, digital mock-up, PLM, process planning, simulation, digital twin and digitial manufacturing.

MEMKO is also a solutions provider for complimentary technology, including **ICAM** and **Verisurf**.

The Solution

The 3DEXPERIENCE Platform by Dassault Systèmes offers industry specific solutions for digital continuity. Manage multi-discipline projects in one place, from design and simulation through to manufacture.



Software Solutions

Our mission is to add value to enterprises by adopting the following range of software products to support corporate strategies and deliver project excellence.

These best-in-class software solutions can be implemented On-Premise or on Cloud to provide strategic and competitive advantage at an enterprise level, or used on a project basis where MEMKO can operate as part of your team and deliver specific project outcomes. The products have also been pre-configured to meet a range of specific industry solutions.

Dassault Systèmes Brands



3DEXPERIENCE Platform

The 3DEXPERIENCE platform by Dassault Systèmes is a collaborative environment that empowers businesses to innovate in entirely new ways. It provides organizations a holistic, real-time view of their business activity and ecosystem, connecting people, ideas, data and solutions together in a single environment.



Design and Engineering Excellence

CATIA is a product design solution that allows designers and engineers to effortlessly imagine, define and shape products virtually before committing to a prototype. Achieve engineering excellence via its powerful array of social and collaborative 3D modelling and simulation tools.



Digital Manufacturing and Production

DELMIA delivers to all manufacturing communities, from suppliers to the shop floor, a lifelike 3D visualisation experience of the real-world view of a customer's production systems, allowing for optimisation of operations and manufacturing process.



Global Collaborative Innovation

ENOVIA allows companies to connect online communities to share and collaborate on global product information, ensuring that everyone uses a single version of the truth. ENOVIA is the common collaborative platform for all DS brands, together addressing the entire product lifecycle.



Realistic Simulation

SIMULIA delivers realistic simulation applications that enable users to reveal the world we live in. SIMULIA accelerates the process of evaluating the performance, reliability and safety of materials and products before committing to physical prototypes.



Single Digital Environment for Product Development

NETVIBES is the award winning monitoring and analytics platform used by top agencies, brands and enterprises. Well known for its 'dashboard intelligence' NETVIBES has the ability to transform the intangible web and all internal data systems into tangible trends, expert knowledge and business action.

More Brands

CATIA Magic

CATIA Magic is a Visual UML, SysML, BPMN, and UPDM modelling tool with team collaboration support. It offers best-in-class Model-based System Engineering and provides a System of Systems Engineering Solution.

CATIA Composer

CATIA Composer allows you to repurpose existing 3D design data to more rapidly create and update high quality product deliverables including documentation, technical illustrations, animations, and interactive 3D experiences.

DYMOLA

Dymola is a complete physics based application for modeling and simulation of integrated and complex systems for use within automotive, aerospace, energy, renewables, robotics, process and other applications.

► STIMULUS

STIMULUS is an end-to-end requirements based validation solution for embedded systems. STIMULUS extends your MBSE capabilities by enabling users to validate requirements in a single workspace by simulating and debugging specifications

Academia Solutions

For students, educators and professionals, 3DEXPERIENCE offers self-paced learning experiences to fast-track their careers and build a spirit of sustainable innovation

3DEXPERIENCE for Academia is an advanced platform designed for a variety of industries, enabling the new practices of the fourth industrial revolution. It offers the ideal infrastructure for bringing industry practices into learning. Encompassing CAD, CAM, CAE, PLM, manufacturing, robotics and visualisation capabilities, the platform provides powerful solutions for managing collaborative work and joint innovation. Modular, it can be adopted either in full, or just a specific component.





3DEXPERIENCE for Academia - the same software used by industry leaders globally

Other Products



2D and 3D CAD Solution

DraftSight lets you create, edit, view and markup any kind of 2D and 3D DWG file with greater ease, speed and efficiency. Its familiar user interface facilitates a quick transition from your current CAD application.



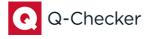
Post-Processing, Simulation and Optimization solution

An advanced and independent single source NC post-processing development, management and deployment technology supporting all major CAD/CAM/PLM systems, CNC controllers and machine tools.



3D Metrology Software, Training and CMMs

Metrology software provides a common platform for product data management. Verisurf offers a powerful, efficienct and competitively priced Model Based Definition (MBD) software suite, bringing measurement metrology to the paperless factory.



Product Data Quality Management System

When operated already from the early beginning in the design process, Q-checker will support and enhance cross-engineering as well as model reuse. The product allows statistical assessments to establish a continuous improvement process for PDO.

Engineering Services

MEMKO is a leader in sustaining engineering support including airline operations, aircraft maintenance and aerospace design and production. If you're an Airline, Regional Charter, Special Purpose Operations, Aerospace or Defence organisation, our engineering knowledge and capability can deliver high quality and cost effective solutions to your business.

Our engineering staff have a significant track record in the international aviation and aerospace industry. Prior experience with leading OEM's such as Boeing, Lockheed Martin, Airbus and Bombardier ensures that MEMKO is the benchmark in contemporary design and manufacturing and support solutions.

Our expertise across all engineering disciplines will ensure a successful and seamless implementation of the most complex engineering assignments including:

- Engineering and Technology Services
- Digital Twins for Asset Management
- Continued engineering, regulatory and technical training
- Software applications for design, engineering, product development, simulation and digital manufacturing

Certification and Airworthiness Requirements

MEMKO is appointed by the Australian Civil Aviation Safety Authority under CASR 21 Subpart M to approve design modifications to Australian registered aircraft. Our knowledge of the civil aviation airworthiness regulations and understanding of design and certification requirements positions MEMKO as the right choice to support your organisation.

Additional engineering services offered are:

- Technology and Capability Planning
- R&D Funding applications
- R&D Project management
- Technology Acquisition
- Facility Plan Development
- Equipment and Tooling Plan Development



Quality

At MEMKO we provide comprehensive aviation, aerospace and defence quality support services. We understand that the systematic monitoring and evaluation of businesses process and products is paramount in all businesses.

Our quality management services include:

- Quality management system design
- Development of policies and procedures
- Project Management of Accreditation under ISO9001, AS9100, EASA Part 145/147, FAA Part 145/147
- Assessment of performance issues
- · Corrective and Preventive action
- Continuous Process Improvement methods

Aerospace & Aviation Training

MEMKO is offering short courses to provide continuing education and training for engineers. Our training courses cover an increasing need for skills in design, manufacturing and repairing of composite structures for commercial and military aircraft.

- CASA Design & Airworthiness Approval Regulations
- Aircraft Damage Tolerance Evaluation
- CASA Aircraft Weight and Balance
- Design and Analysis of Composite Structures
- Composite Manufacturing Practices
- Composite Structure Damage Analysis, Substantiation and Repair
- ISO 9001 and AS9100 for aerospace and defence suppliers.

All attendees receive a certificate of completion and training is recognised as Continuing Professional Development in accordance with Engineers Australia guidelines.

Training can be tailored to your needs and delivered in-house at our Melbourne Head Office or onsite at your facility.

Software Courses

Dassault Systèmes certification is in continuously increasing demand as a skill differentiator required by the industry.

MEMKO is a Dassault Systemes' certified training partner and can deliver training on a range of PLM solutions including CATIA (all versions), DELMIA, ENOVIA and the latest 3DEXPERIENCE solutions.









Aerospace & Defence

Boeing, Airbus Group Australia, BAE Systems, Quickstep, ASC, Australian Government Department of Defence, Air Nauru, Solomons Airlines, Rheinmettal, Shoal, Alauda Aeronautics, Astro Aero, Jetstar, Qantas

Architecture, Engineering and Construction

AR-MA and Energy Catalyst

Aviation

Jetstar, Qantas, Solomon Airlines, Air Nauru, Skippers Aviation and Royal Flying Doctor Service

Transport & Mobility

Toyota, Performance Wholesale, Bosch, APA, MTM, Seeing Machines, Hyzon Motors, Premcar, Systra, Savic Motorcycles

Business Services

Deloitte, ARPANSA and Zinniatek

High-Tech

Weidmuller, Hysata, Cablex, SKA Observatory, Fivecast, Scan-Xpress, Allied Data Systems and Allied Data Systems

Industrial Equipment

Bambach Cables, Conflux Technology, Kellogg Brown and Root, Axiom Precision Manufacturing, Hosico Engineering and Mackay

Life Sciences & Healthcare

Footwork and SDI

Academia

RMIT, Deakin University, Swinburne University, Monash University, ANU, University of Southern Queensland, University of Newcastle, Australian Defence Force Academy, University of Auckland, Federation University

Energy & Materials

South East Water, Suez and Optimal Group

Testimonials



"We've been able to realign, rationalize and improve our workflows with ENOVIA on the 3DEXPERIENCE platform"

- KIEREN DALE Production Engineering Lead at Quickstep ∴ <u>Bambach</u>

"DELMIA Ortems will allow us to improve our DIFOT performance and increase our throughput whilst concurrently easing the time pressure for our planning staff"

- NICK COUSINS Chief Operating Officer at Bambach



"SKAO used No Magic in the early design phase of our project. We are glad to be able to return to the product as we enter our manufacturing and assembly phase, to create MBSE models of our observatory to support visibility and traceability into the future"

- LUCIO TIRONEA Low AIV Lead Engineer and Deputy Project Manager at SKAO

Success Story: Quickstep

Problem

Aerospace composite manufacturer Quickstep needed a modern platform to bring greater efficiencies to its engineering processes and ease compliance with the strictest industry standard

Solution

Using the 3DEXPERIENCE platform, Quickstep has moved from a paper-based, manual approach to automated workflows

Benefits

All data and knowledge is stored centrally and the company follows set processes for reviews and approvals to ensure all quality and customer requirements are met.



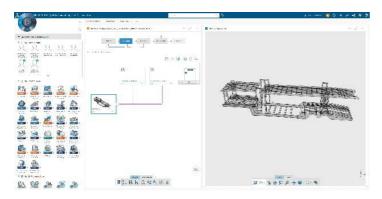




MEMKO has delivered many business and digital transformation projects for its clients. The following is a high-level overview of recently completed projects without the naming of clients due to their competitive and sensitive nature.

- ▶ 3D modelling of a complex ceiling panel project utilising aerospace grade CAD and data management tools to deliver advanced project features within extremely tight timeframes including automation to eliminate repetitive design, advanced parametrics, 2D documentation linked to the 3D model, and input to fabrication from the 3D model.
- ▶ 4D simulation of a proposed manufacturing operation including ability to run 'what if' analysis and optimise all processes prior to construction of the facility.
- Implementation of an enterprise wide specification management and formula optimisation system for a large food and beverage company.
- Implementation of product development and product lifecycle management solution for multiple customers in multiple industries, including aerospace, defence, asset management and manufacturing
- ▶ Project management of the preparation of training manuals for a consortium involving the defence force, major defence contractor and tertiary institution.
- Design, engineering and oversight of the modification and fit-out of commercial and defence aircraft multiple projects.
- ▶ Development of an industry policy for Aviation, Aerospace and Defence.
- ▶ Customisation and implementation of an engineering document management system for the maintenance of a geographically diverse set of assets for a government department.
- ▶ Consulting for start-up business in the commercialisation of additive manufacturing technology.
- ▶ Design, engineering and construction of a UAV

Other Projects



3D model for transport design using 3DEXPERIENCE CATIA



Bathroom Pod Template Design for manufacturing with 3DEXPERIENCE CATIA



Contact Us

MEMKO is a Melbourne based business with staff located in several locations across Australia. In addition, MEMKO has a technical development office in India, which enhances MEMKO's ability to deliver projects in Australia and internationally.

To find out more about our products and services please contact us to speak to one of our staff members

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