











### **Content Overview**

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### **ABOUT US**

As a direct manufacturer-to-business entity, we offer extensive capabilities in the production of advanced polymer-based materials and volatile corrosion inhibitors (VCIs). Our integrated partnerships enables us to deliver on-site support throughout the region, ensuring seamless project execution.

With in-house research and development and bespoke manufacturing capabilities, we provide agile and tailored solutions to meet the specific requirements of clients in the energy, infrastructure, marine, aviation, and defence sectors.



#### **Advanced Material Solutions**

Development and production of polymerbased preservation materials and VCIs tailored to extreme operating environments.



#### **Integrated Field Support**

Regional deployment teams for seamless implementation and technical assistance.



### **Project Lifecycle Coverage**

From conceptual engineering (pre-FEED) through commissioning, including operational and supply base preservation systems.



### **Agile Innovation**

In-house R&D and rapid prototyping to meet unique client specifications.



Tufwrap is a leading supplier of industrial services and products, specialising in containment and preservation solutions across **Australia** and **Southeast Asia**. In partnership with our global network, we extend our reach worldwide.

### Tailored for your Challenge

what sets us apart

### **High-Performance Materials**

Proprietary polymer fabrics engineered for strength and environmental resistance

### **Integrated Protection Systems**

Integrated features like dehumidification, weatherproofing, and hazard control.

### **Total Support**

Labour-only or turnkey project delivery to match your needs

### **Cross-Sector Expertise**

Proven performance in energy, marine, infrastructure, and industrial projects.

When performance and protection matter most, Tufwrap delivers.



### **OUR PARTNERS**

Through partnerships with GDI Strategies, Melchers, I.C.E. Professionals, Vickers Oil, and GreenVCI, we strengthen our capabilities in preservation, containment, and asset protection. Together, we deliver reliable solutions that enhance safety and performance across industries in the Asia-Pacific region and beyond.



### I.C.E. Professionals

Experts in governance, compliance, and risk assurance for complex projects.



### **GDI Strategies**

Specialists in strategic project management and defense solutions.



### **Melchers Thailand**

Global trading and services partner with a strong Asia-Pacific presence.



#### **GreenVCI**

Innovators in environmentally friendly corrosion protection solutions.



### Vickers Oil Australia

Trusted supplier of highperformance lubricants and protective oils.

### **TUFWRAP PRODUCTS**

Tufwrap supplies high-quality shrink films, tools, accessories, and corrosion-control products, providing fast, safe, and reliable protection solutions for industries ranging from aviation to construction.











## SMART CONTAINMENT FOR SAFER PROJECTS

Tufwrap designs and manufactures a comprehensive range of containment systems to ensure environmental protection on critical projects across the **infrastructure**, **energy**, and **marine sectors**.

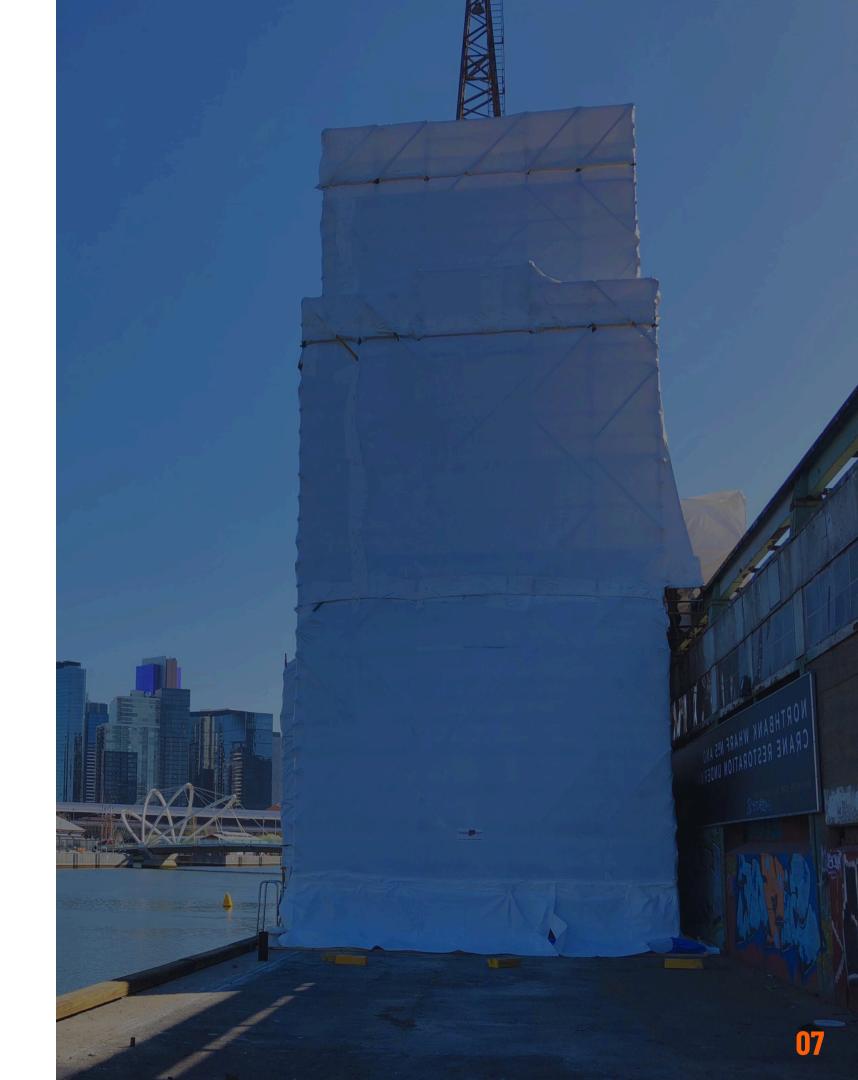
Utilising advanced polymer technology, our containment materials are engineered to be among the strongest and safest in the industry.

## SMART CONTAINMENT FOR SAFER PROJECTS

With extensive experience and technical expertise, we deliver containment solutions that meet the demands of complex projects—whether through full labour provision or turnkey project management.

Our containment systems enable projects to operate efficiently by mitigating environmental risks such as contamination, overspray, and hazardous fallout.

Additional benefits include integrated dehumidification, weather protection, and enhanced site safety.



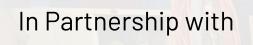
Tufwrap containment systems have been successfully deployed in projects involving:



- Blast and paint operations
- Shipbuilding and refit work
- Module and FPSO construction
- Asbestos, lead paint, and other hazardous material removal

- Worksite safety and segregation
- Weather abatement and climate control
- High-pressure cleaning and decontamination
- Preservation of assets during critical works





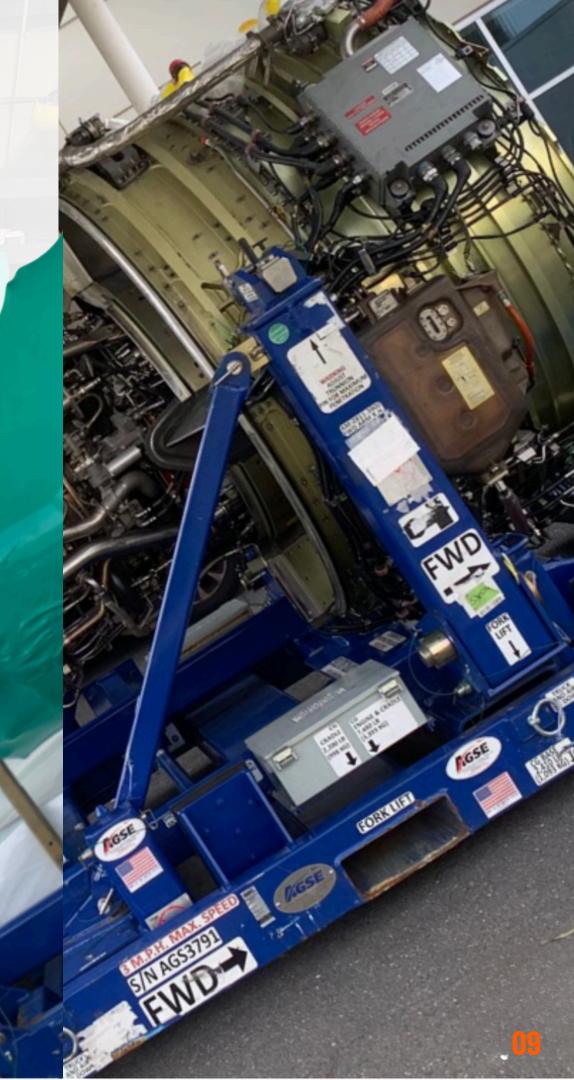


## GREENVCI

Advanced, Sustainable Preservation Solutions

Tufwrap's preservation manufacturing division, **GreenVCI**, is at the forefront of environmentally responsible corrosion protection.

With a strong history of innovation, we develop and deliver eco-friendly volatile corrosion inhibitor (VCI) products and systems tailored to the specific needs of OEMs and manufacturers.



### GREENVCI

### **Advanced, Sustainable Preservation Solutions**

Our dedicated research, development, and manufacturing centre in Seoul provides world-class capabilities in product testing, formulation, and bespoke development—ensuring every solution meets the highest standards of performance and sustainability.

Green VCI systems are engineered to ensure operational readiness of critical assets in any environment. Our comprehensive, lifecycle-focused solutions are designed to extend asset life during transport, long-term storage, decommissioning, or project layup, particularly in harsh or unpredictable conditions.



Through advanced technology, customised manufacturing, and expert technical support, **GreenVCI** has earned its position as a **trusted leader in asset preservation** across all industries.

# RESEARCH & DEVELOPMENT CENTRE

At the heart of Tufwrap's innovation is our dedicated Research & Development program, driven by strategic partnerships and continuous technological advancement.

Our R&D teams work closely with internal stakeholders and incorporate feedback from completed projects to refine solutions for complex challenges such as corrosion prevention, material degradation, and long-term asset preservation.

With ongoing development in **corrosion control, polymer formulation, and specialised manufacturing**, our R&D capabilities allow Tufwrap to deliver customised, science-backed solutions that evolve with industry demands.









## CORROSION LABORATORY GREENVCI

Tufwrap's GreenVCI Corrosion Laboratory plays a critical role in advancing our asset preservation technologies.

With government-approved and equipped with stateof-the-art analytical tools, the lab enables our specialists to replicate real-world environmental conditions to test the performance of corrosion inhibitors, protective coatings, and preservation systems.

### **CORROSION LABORATORY**

### **GREENVCI**

Through rigorous, data-driven testing protocols, we gain valuable insight into material performance under stress, allowing us to:

- Design precision corrosion control programs
- Validate and optimise new technologies
- Offer evidence-based recommendations tailored to specific environments

The Corrosion Lab also supports continuous product improvement, ensuring Tufwrap and Green VCI remain leaders in corrosion management and asset integrity.



### MANUFACTURING EXCELLENCE

The final stage in our product development journey focuses on manufacturing optimisation.

Leveraging advanced machinery and smart production systems, we ensure maximum efficiency, material yield, and consistent quality across all products.

Tufwrap's commitment to excellence in material selection and process refinement enables us to deliver high-performance solutions that meet the stringent requirements of industries such as energy, marine, aviation, infrastructure, and defence.

Our manufacturing operations are designed to **support agile production and scalable delivery**—ensuring reliability, speed, and technical precision.

**Energy** 

**Marine** 

viation

Infrastracture

**Defence** 











# TUFWRAP & I.C.E PARTNERSHIP



A strategic partnership between Tufwrap and I.C.E creates a powerful synergy that enhances the successful delivery of complex, high-value projects across multiple industries.

By combining **Tufwrap**'s industry-leading expertise in **containment**, **corrosion control**, **and asset preservation** with **I.C.E**'s proven capabilities in **project risk assurance** and **operational governance**, clients gain access to a <u>comprehensive</u>, end-to-end solution.

### TUFWRAP & I.C.E PARTNERSHIP

This partnership ensures that critical assets are not only physically protected through advanced materials and preservation systems but also safeguarded through robust risk identification, mitigation, and management frameworks.

Together, Tufwrap and I.C.E provide a unified approach that drives project certainty, reduces downtime, improves safety and environmental compliance, and ensures alignment with stakeholder expectations.



The integration of physical protection with strategic project oversight positions clients to achieve superior lifecycle outcomes, protect capital investment, and deliver projects on time, within budget, and with sustained operational integrity.

## TUFWRAP & I.C.E PARTNERSHIP

In 2024, Tufwrap and I.C.E. (Brunel) formed a strategic alliance to deliver integrated services.

By joining forces from the early stages of projects, ICE and Tufwrap commit to enhancing equipment longevity and delivery, ensuring safety at every stage - from transportation and warehousing to commissioning.

This collaboration combines ICE's Project Risk Assurance processes with Tufwrap's preservation techniques, setting new standards in project execution and operational excellence, delivering exceptional value to our clients from the very start.



# TUFWRAP & I.C.E PARTNERSHIP

Together we aim to enhance asset longevity and safety from transportation and warehousing to commissioning, setting new standards in project execution and operational excellence.

This partnership is a game-changer, mitigating risks and ensuring equipment integrity for all project stakeholders.



### **Project Risk Assurance**

Ensuring project integrity and reliability



#### **Preservation & Corrosion Control**

Utilizing shrink wrapping and corrosion-inhibiting technologies



### **On-Site Capabilities**

Providing hands-on support and training



### Complete Product Management & Delivery

Offering end-to-end solutions



### **Consultation & Technical Writing**

Delivering expert advice and documentation

### PROCESS FLOW DIAGRAM

#### 01: Concept / FEED Phase

- I.C.E: Project Risk Reviews, Readiness Planning, Preservation Philosophy
- Tufwrap: Preservation Risk Assessment (for FEED deliverables)

#### 02: Detailed Engineering & Procurement

- I.C.E: Vendor Package Reviews, Assurance Plans, Inspection Test Plan (ITP) Alignment
- Tufwrap: Preservation Procedures, Specification of Materials, VCI Selection

#### 03: Fabrication / Manufacturing

- I.C.E: QA/QC Oversight, Factory Acceptance Test (FAT) Support
- Tufwrap: Onsite Asset Wrapping, Moisture Control, Transportation Protection

#### 04: Transport & Warehousing

- I.C.E: Logistics Risk Management, Systemization Support
- Tufwrap: Secure Enclosures, Preservation Condition Monitoring, Records Management

#### **05: Site Construction**

- I.C.E: Mechanical Completion Support, Punch list Closure Oversight
- Tufwrap: Onsite Encapsulation (where applicable), Supervision, Preservation Compliance Checks

#### **06: Pre-Commissioning/Commissioning**

- I.C.E: CSU Execution, Flushing / Energization Oversight, ITR Sign-off
- Tufwrap: De-preservation Strategy, Verification of Equipment Condition

#### 07: Startup & Handover to Operations

- I.C.E: Start-Up Assurance, Operations Readiness Verification
- Tufwrap: Final Preservation Reporting, Lessons Learned for Lifecycle Support

The strategic alliance between International Commissioning & Engineering (I.C.E) and Tufwrap introduces a fully integrated approach to asset preservation across the life cycle of major capital projects.

By embedding Tufwrap's advanced preservation solutions directly into I.C.E's Project Risk Assurance (PRA) framework, the partnership ensures assets are protected from environmental, handling, and storage-related risks—thereby increasing equipment lifespan, enhancing commissioning outcomes, and reducing project risk.

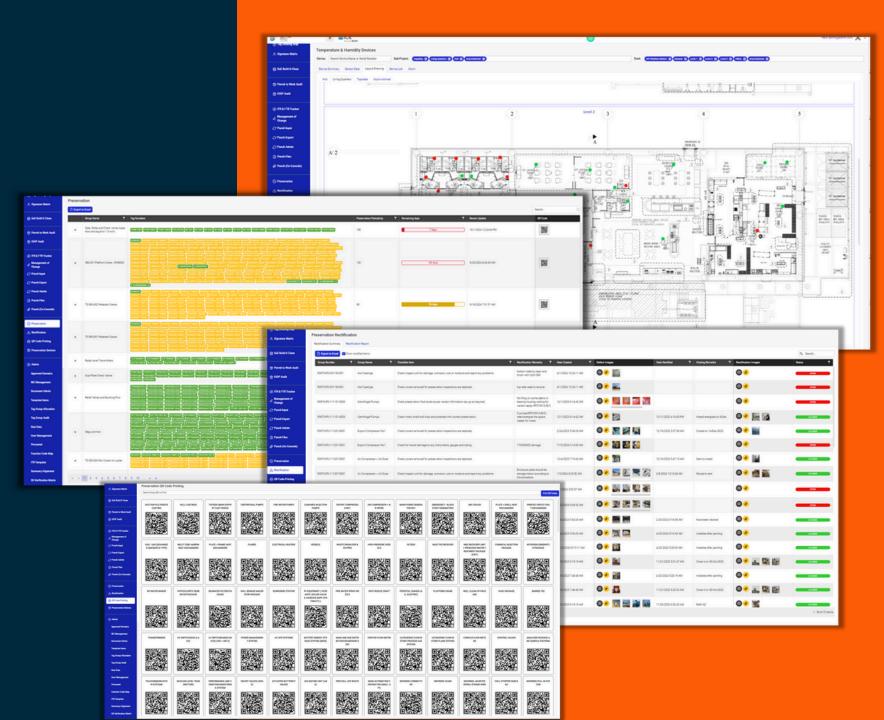
Through proactive planning, secure encapsulation, and continuous oversight, this integrated model de-risks delivery across critical phases—engineering, fabrication, logistics, storage, construction, commissioning, and handover—aligning with I.C.E's integrated PRA execution model and digital traceability tools.

Early adoption of preservation practices translates into smoother start-ups, reduced rework, enhanced safety compliance, and cost efficiencies for owners, EPCs, and OEMs

# I.C.E PROGRAM DIGITAL TOOLS

PCMSPro is a completions management system that offers a project platform to track and manage completion status from preservation, construction, pre-commissioning, and commissioning to start-up for handover.

- Project System Configurations
- Automated Commissioning System designed by Engineers
- Mechanical Completions, Pre-Commissioning & Commissioning
- Consolidated Punch List Management
- Preservation Systems
- Automated ITR to Tag Assignment & Printing
- Digital ITR and interface capabilities
- Tagging Specification Validation
- Complete Project Management Reporting



## SUPPLY BASED ASSET MANAGEMENT

Our experts assess the full cycle of each asset from supplier to end user covering:



**Shipping** 



**Fabrication** 



Storage



**Project Site** 



**Commissioning** 

### I.C.E CASE STUDIES



Client Santos Pty Ltd

Project Duration February 2022 - Ongoing

#### **Barossa FPSO Project**

Serving as Technical Authority for the EEHA/MEHA Assurance Program for the Barossa FPSO Project. This includes verifying Hazardous Area Installation, Classification and Inspection to IEC60079 standards.

Assuring compliance in Engineering, Procurement, Fabrication, Installation and Inspection to project standards and specifications. Responsible for developing assurance events and audits, as well as providing support for technical clarifications.



Client

Project Duration Apr-2023 - Ongoing

Modec

#### Sangomar FPSO / Uauru FPSO

Provision of Construction & Site Management to facilitate expedited delivery of the FPSO Facilities.



Client McDermott / ESSO

Project Duration August 2010 - May 2013

### **Kipper Tuna Turrum Project**

Marlin "B" Platform, Connecting Bridge Structure & West Tuna Riser Access Tower

Providing HUC Management Services, including planning, coordination and execution of HUCS cope in Batam and offshore Australia. This involves managing personnel, vessels and subcontractors offshore for a Lump Sum HUC campaign under extreme time and budget constraints. Additionally, managing, coordinating and supervising all onshore and offshore Australia inspections to AS/NS60079 standards.



Client Shell Sabah Petroleum Company / MMHE / MISC

Project Duration January 2012 - June 2016

#### **Gumusust Kakap FPS**

- Provision, management and coordination of CSU Team for Onshore/Offshore Mechanical.
- Completion/ Pre-commissioning execution.
- Offering commissioning and start-up support through offshore operations.
- Managing and supervising Quality Inspections work-scope related to onshore construction and offshore work execution.
- Providing EEHA inspectors during yard phase fabrication/ MC through facility delivery at the offshore location for EEHA inspections, verification of design/ procurement, and installation.
- Compiling the Hazardous Area (HA) Dossierto IEC60079 Standards.

### **OUR SERVICES**

- Corrosion Audits & Condition Assessments
- Development of Corrosion Control Programs
- Application of Corrosion Inhibitors
- Preservation Analysis & Strategy
- Preservation Program Design & Engineering
- Critical Spares & Inventory Management
- Project Execution & Preservation Support





### TUFWRAP SERVICES AND COMPETENCIES



















- Shrink wrapping
- Corrosion control
- Climate/humidity control
- Environmental monitoring
- Cleaning and surface preparation
- Asset inspection and documentation
- Mothballing programs
- Project laydown management
- Technical expertise
- Customisation capability
- Mobility and onsite delivery
- Regulatory compliance
- Project coordination

