



Expression of Interest

Pipe Heat Treatment

Hunter Class Frigate Program

Acronyms and Definitions

Abbreviation	Definition
ABN	Australian Business Number
AIC	Australian Industry Capability
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASDEFCON	Australian Standard for Defence Contracting
ASCSB	ASC Shipbuilding
AUD	Australian Dollars
BAE	BAE Systems Australia Limited
BAESMA	BAE Systems Maritime Australia
CDP	Confidentiality Deed Poll
CDRL	Contract Data Requirement List
D&P	Design and Productionisation
DISP	Defence Industry Security Program
EOI	Expressions of Interest
EVMS	Earned Value Management Systems
FOC	First of Class (Ship 1)
GCS-A	Global Combat Ship-Australia
HCFP	Hunter Class Frigate Program
ICN	Industry Capability Network
ILS	Integrated Logistic Support
ISO	International Organization for Standardization
ITAR	International Traffic in Arms Regulations
NDA	Non-Disclosure Agreement
NATA	National Association of Testing Authorities
OQE	Objective Quality Evidence
RAN	Royal Australian Navy
RFT	Request for Tender
RAP	Reconciliation Action Plan
SHE	Safety, Health and Environment
SOW	Scope of Work
SQAM	Supplier Quality Assurance Manual
T26	British Type 26 Global Combat Ship

Table of Contents

Expression of Interest.....	0
1. INTRODUCTION	3
2. SCOPE	3
3. STATEMENT OF WORK	3
4. MATERIALS.....	5
5. PRE-QUALIFICATION QUESTIONNAIRE (GENERIC).....	6
6. PRE-QUALIFICATION QUESTIONNAIRE (SPECIFIC TO THE REQUIREMENTS).....	7
7. PRE-QUALIFICATION REQUIREMENTS	8

1. INTRODUCTION

BAE Systems Maritime Australia are seeking Expressions of Interest (EOI) to supply ships with pipe heat treatment services for the Hunter Class Frigate Program (HCFP).

BAE Systems Maritime Australia has been contracted to design and build nine future frigates for the Royal Australian Navy (RAN). The Future Frigate offering, also known as the Hunter Class GCS-A (Global Combat Ship – Australia) is a variant of the British Type 26 GCS (T26).

The Hunter class frigate is designed for maximum versatility and flexibility in operational roles, from humanitarian and disaster relief operations to high-intensity warfare. Modified to meet Australian requirements, the frigate will be constructed on an acoustically quiet hull and feature unique sonar capabilities, modular digital design and open systems architecture to facilitate through-life support and upgrades as new technology develops.

The Hunter Class Frigates will be built at the BAE Systems Maritime Australia facility in Osborne, South Australia. BAE Systems Maritime Australia are committed to maximising opportunities for Australia industry through the Hunter program, which is the largest surface ship project in the nation's defence history.

Cut Steel for Prototyping took place in December 2020 and First of Class is on schedule to commence in June 2024.

The information provided within your EOI will be used to down select contractors to receive a formal Request for Tender (RFT).

2. SCOPE

The purpose of the Capability Questionnaire is to establish the feasibility of prospective industrial partners to BAE Systems Maritime Australia for the Hunter Class Frigate Program (HCFP).

The HCFP will require maximisation of local content in Australia. Suppliers will be required to supply pipe heat treatment services for spools and pipe fittings that will be installed into the frigate Blocks.

3. STATEMENT OF WORK

Pipe heat treatment services are required for pipe spools and fittings that are to be installed into the frigates. It's expected that our pipe shop will consistently be in production, fabricating parts that which will require heat treatment after cold forming processes.

Heat treatment will be required to relevant sections of AS4458-1997 – Pressure Equipment. The materials, dimensions and typical heat treatment requirements are as below:

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<i>Material</i>	<i>Max pipe size</i>	<i>Temperature</i>	<i>Duration</i>	<i>Treatment</i>
<i>Carbon Steel</i>	168.3 x 8.8	870-930°C	15-30mins	Anneal
<i>CuNi 90/10</i>	323.9 x 5.5	590-820°C	15-30mins	Anneal
<i>Stainless Steel</i>	168.3 x 2.6	1010-1120°C		Solution Anneal (Brine)

Dimensions given are OD x Wall Thickness in mm

It's intended that carbon steel and CuNi fittings will receive localised heat treatment, applied only in vicinity of fittings – ie. at bends/elbows, pulled branch collars, flared flanges. These fittings may still be positioned within a completed, or in-work, pipe spool, so the option to conduct this work at our Osborne site is preferred (but not mandatory) to minimise disruption to fabrication tasks and reduce need for packaging and transportation of pipe to external facilities.

Stainless steel spools will be fully fabricated before heat treatment is applied, so entire spools will need to be solution annealed. Spools come in a range of lengths and configurations however are typically lengths of welded pipe with bends, varying number of branches and mechanical connection points at ends. Lengths of stainless steel spools requiring heat treatment may range from 40mm to 4000mm, and maximum weight 160kg.

The details for the scope of heat treatment will be contained within reports of pipe spool material grade, overall dimensions and characteristics – ie. joints, elbows, branches requiring treatment.

It is expected that suppliers may not be capable of all heat treating services requested. If capable of providing any or all services, please advise which in EOI response.

Spool Heat Treatment Demand

- The monthly demand is expected to grow starting in Q1 23. This demand is dependent on requirements of the Pipe Shop and stage of the build. However, it is expected that the demand will be in the vicinity of 100 spools per month initially and potentially increasing up to a maximum of 430 Spools per month.

Lloyds

- To meet Lloyds rules and regulations Ref [8] (Rules for the Manufacture Testing and Certification of Materials, Chapter 13, Section 7 Austenitic and duplex stainless steel – Specific requirements) the heat treatment contractor shall have separate tanks for stainless steel spools from any other materials to prevent cross contamination of the

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316L Stainless steel with any ferrous materials (ie. if other projects/customers are using same tanks and solution).

- Segregation of tooling for Carbon Steel and CuNi pipe fittings must also be maintained unless suitable alternative demonstrated and agreed.

Material Marking

- Parts will be clearly labelled identifying the part/spool when sent to the Contractor. Contractor is to ensure labelling is maintained. Product marking should be in accordance with BAE SYSTEMS Maritime Australia Supplier Quality Assurance Manual (SQAM) Ref [6] Section 7.12.

Transportation

Unless negotiated otherwise,

- BAESMA will be responsible for the transport from Shipyard to Contractor (if applicable)
- Contractor will be responsible for the transport from Contractor to Shipyard.

4. MATERIALS

Services must be compliant to the heat treatment requirements as identified by the applicable Technical documentation which will be issued to down selected suppliers during the formal RFT phase.

5. PRE-QUALIFICATION QUESTIONNAIRE (GENERIC)

1. Does your website provide a detailed description of your Company's capability? If yes, provide the appropriate link.
2. Are you an Australian registered company? If yes, provide your ABN details.
3. Are you an Indigenous company and registered with Supply Nation? If yes, provide a link to your profile on the Supply Nation Website or other supporting evidence.
4. Do you have a Reconciliation Action Plan (RAP) in place? If yes, please attach evidence.
5. How many Indigenous/Aboriginal/Torres Strait Islanders are employed within your organisation? Stipulate whether the employees are Full Time or Part Time.
6. Provide details of the company's management organisation structure and full time headcount. Attach evidence/organisation structure.
7. State level of Professional Indemnity, Product and Public Liability and Work Cover Insurance coverage.
8. Please state what quality certification and accreditations you hold? Please attach evidence.
9. Please state what environmental certifications and accreditations you hold? Please attach evidence.
10. Do you hold Defence Industry Security Program (DISP) Membership? Yes / No
 - a. If YES, confirm level of membership and years held.
 - b. If NO, would you be willing to commence the application for membership if down selected for the formal RFT phase?
 - i. Note: DISP membership is mandatory for all contracts. Refer to the [DISP Webpage](#) on information regarding DISP Membership and how to apply.
11. On Time Delivery – Are you able to consistently provide on time guarantee service to agreed time frames?
12. How do you self-evaluate and analyse your performance? Please provide any data / reports you have examples of?
13. Have you updated your ICN company profile with the your trading name, contact details, website, ABN, number of employees, annual turnover, export details (if applicable) and ANZSIC codes? This information will be used in assessing this EOI.

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14. Does your company comply with all relevant Anti-Slavery, Anti-Bribery, and Corruption legislation in your jurisdiction? Please provide a copy of your relevant policies and include details of the relevant legislation.

6. PRE-QUALIFICATION QUESTIONNAIRE (SPECIFIC TO THE REQUIREMENTS)

1. Do you have capability to perform heat treatment at Osborne Naval Shipyard and/or at your company facility?
2. Where is your company/service centre performing work located?
3. Are you capable of performing heat treatment for Carbon Steel/CuNi/Stainless Steel in accordance with section 3 guidelines?
4. Provide full details including value and location of previous major defence, maritime or commercial projects in which your company has delivered heat treatment of piping systems, please provide evidence/references if possible.
5. Do you have capability to provide pipe heat treatment services locally in Australia? If yes, please provide examples of local content. If not, please provide country of origin and estimated percentage of Australian Industry Capability content.
6. Provide details of how your company can support BAE Systems Maritime Australia's commitment to support AIC. Detail if the labour to complete the SOW will be provided by Australian permanent residents.
7. Do you have the capability to provide the totality of the services in-house or will you need to subcontract portions of the work? If so, please provide details of your capability and on any outsourced components.
8. Do you have access / subscription to all Standards? (Australian, European, British and DEF Standards).
9. Do you have experience with heat treatment per AS4458? Do you currently heat treat or manufacture in accordance with AS4458 or other quality standards? Advise which standards you currently operate to.
10. Do you have Handling equipment to safely manage the size and weight of pipe spools identified? Please provide overview of how material will be handled.
11. Do you have storage facilities and operational processes to ensure Pipes spools are stored and handled in a manner that ensures there is no cross contamination of materials? Please provide an overview

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12. Have you had previous experience providing Contract Data Requirements List (CDRL) and Objective Quality Evidence (OQE) documentation to a Defence Program? Please provide examples of experience.
13. Stipulate any further competitive discriminators currently not identified.
14. Please provide the internal dimensions of furnaces and/or solution baths to be utilised for the heat treatment work.
15. Is your capability able to be scaled to increase plant capacity and/or throughput as heat treatment demand increases through the life of HCF program?
16. Do you have warehouse capabilities to safely store materials offsite along with the ability to deliver to BAE Systems Maritime Australia sites only when required, as per an agreed schedule?

7. PRE-QUALIFICATION REQUIREMENTS

1. Acknowledgement in writing that the information contained in the EOI documentation is proprietary to BAE Systems Maritime Australia and is made available for the recipient on the express understanding that it is to be treated as confidential for information purposes only and that it may not be copied, used or disclosed to others in whole or in part for any purpose except as authorised in writing by BAE Systems Maritime Australia.
2. Review and understand the requirements of the BAE Systems Maritime Australia Supplier Quality Assurance Manual (SQAM) available online via the following link - [Supplier Quality Assurance Manual](#).
3. Down selected suppliers will be required to sign a HCFP Non-Disclosure Agreement (NDA) prior to RFT release.

Closing date for Expression of Interest:

3rd February 2023

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