# Expression of Interest Metals for Manufactured Parts

Hunter Class Frigate Program





## Acronyms and Definitions

Abbreviation	Definition
AIC	Australian Industry Capability
ASCS	ASC Shipbuilding
AUD	Australian Dollars
BAE	BAE Systems Australia Limited
DIA	Diameter
EOI	Expressions Of Interest
GCS-A	Global Combat Ship-Australia
HCFP	Hunter Class Frigate Program
OQE	Objective Quality Evidence
RAN	Royal Australian Navy
RAP	Reconciliation Action Plan
T26	British Type 26 Global Combat Ship

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#### 1. INTRODUCTION

ASC Shipbuilding are seeking Expressions of Interest (EOI) to supply ships with Metals for Manufactured Parts for the Hunter Class Frigate Program (HCFP).

ASC Shipbuilding has recently been down selected to design and build nine future frigates for the Royal Australian Navy (RAN). The BAE Systems 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 Frigates will be built at the ASC Shipbuilding Facility in Osborne, South Australia and will require maximisation of local content in Australia.

Cut Steel for Prototyping is planned for December 2020 and First of Class in December 2022. This EOI is initially for Prototyping with the potential to supply into First of Class. A Request for Tender (RFT) will be sent to down selected parties that express interest.

#### 2. SCOPE

The purpose of the Capability Questionnaire is to establish the feasibility of prospective industrial partners to provide metals for parts that are manufactured in-house by ASC Shipbuilding for the HCFP.

Steel variations are to be manufactured to Naval Standards. European grades will be required with the **possibility of providing Australian substitutes.** Examples of material grades required include:

- DH36
- EH36
- S275
- S275J
- S275JR
- S275 JR+AR
- S355

- S355 J2
- S355 J2H
- S355J0+AR
- S355J2+M
- S355J2N
- Lloyds Grade A

Test certifications, possible Lloyd's Register certification and certificates of conformance will be required as OQE.

#### **3. INDICATIVE QUANTITIES**

Indicative quantities, sizes and material grades for Prototyping is listed below. Please note quantities and sizes could change before a Request for Tender is issued to down selected parties.

Material	Thickness				Circa Metres squared	
Grade	Range (mm)	Min Length (m)	Max Length (m)	Min Width (m)	Max Width (m)	
DH36	4 - 65	3.4	4	1.975	3	925

EH36	20 - 46					10
	Small quantities of aluminium, wire mesh and stainless steel will be required					

Material Grade	Range of Channel Section Profiles (mm)	Circa Total Metres
	76 x 38 x 6000	
S355 J2	100 x 50 x 10 x 6000	
	125 x 65 x 15 x 6000	2 160
	150 x 75 x 18 x 6000	2,169
	150 x 90 x 24 x 6100	
	200 x 75 x 23.4 x 6000	

Material Grade		
S355 J2H	60.3 x 3.2 x 6000 114.3 x 6.3 x 6000	14
S275 J	76.2 x 12.7 x 6000	2
S355	42.4 x 4.0 x 6000	8

Material Grade	Range of HEA Beams (mm)	Circa Total Metres
S355 J2+M	120 x 6000 120 x 6000	17
DH36	100 x 13000	27

Material Grade	Range of Universal Beams (mm)	Circa Total Metres
S355 J2	305 x 165 x 40 x 13000 203 x 133 x 30 x 13000	29
DH36	152 x 152 x 30 x 6000	14

Material Grade	Range of Angle Bars (mm)	Circa Total Metres
	25 x 25 x 3 x 6000	
S275 JR	70 x 70 x 6 x 6000	143
	80 x 80 x 6 x 6000	
S355 J0+AR	50 x 50 x 3 x 6000	56
Lloyds Grade A	40 x 40 x 6 x 6000	1243

Material Grade	Range of Equal Angles (mm)	Circa Total Metres
	70 x 70 x 6 x 6000	
	70 x 70 x 8 x 6000	
	60 x 60 x 6 x 6000	
	80 x 80 x 8 x 6000	
	100 x 100 x 8 x 6000	
DUDC	120 x 120 x 10 x 6000	2 500
DH36	150x150x10 x 6000	3,589
	150 x 150 x 15 x 6000	
	60 x 60 x 10 x 6000	
	100 x 100 x 12 x 6000	
	80 x 80 x 6 x 6000	
	40 x 40 x 5 x 6000	
	50 x 50 x 5 x 6800	
	50 x 50 x 6 x 6800	2 222
S355 J2N	50 x 50 x 5 x 6000	2,332
	100 x 100 x 8 x 6000	
S355 J2	120 x 120 x 12 x 6000	4

Material Grade	Range of Unequal Angles (mm)	Circa Total Metres
	75 x 50 x 6 x 6000	
	80 x 60 x 6 x 6000	
DH36	150 x 90 x 10 x 6000	411
DU20	100 x 75 x 8 x 6000	411
	100 x 65 x 7 x 6000	
	100 x 75 x 12 x 6000	
	100 x 75 x 10 x 6000	
	125 x 75 x 12 x 6000	
S355 J2	150 x 75 x 10 x 6000	119
	200 x 100 x 10 x 6000	
	60 x 30 x 6 x 6000	
S275 JR	75 x 50 x 6 x 6000	10

Material	Range of Flat Bar	Circa
Grade	(mm)	Total Metres
DH36	100 x 10 x 6000 100 x 12 x 6000	1,985

	100 x 15 x 6000	
	100 x 5 x 6000	
	100 x 6 x 6000	
	100 x 8 x 6000	
	120 x 10 x 6000	
	120 x 25 x 6000	
	120 x 6 x 6000	
	120 x 8 x 6000	
	130 x 8 x 6000	
	130x10 x 6000	
	150 x 10 x 6000	
	150 x 12 x 6000	
	150 x 8 x 6000	
	200 x 15 x 6000	
	30 x 5 x 6000	
	30 x 6 x 6000	
	40 x 6 x 6000	
	50 x 5 x 6000	
	50 x 6 x 6000	
	60 x 10 x 6000	
	60 x 6 x 6000	
	70 x 6 x 6000	
	70 x 8 x 6000	
	75 x 6 x 6000	
	75 x 8 x 6000	
	80 x 6 x 6000	
	80 x 8 x 6000	
	80 x 10 x 6000	
	180 x 6 x 6000	
	25 x 3 x 6000	
C275 1D	250 x 6 x 6000	1 172
S275 JR	50 x 8 x 6000	1,173
	65 x 10 x 6000	
	80 x 5 x 6000	
	50 x 3 x 6000	
S275 JR+AR	25 x 5 x 6000	33
	40 5 6000	107
S275	40 x 5 x 6000	127

Material	Range of Square Hollow Section	Circa
Grade	(mm)	Total Metres
S355 J2H	100 x 100 x 8 x 6000	2,542

120 x 120 x 8 x 6000	
150 x 150 x 10 x 6000	
70 x 70 x 5 x 6000	
80 x 80 x 6.3 x 6000	
60 x 60 x 3.2 x 6000	
60 x 60 x 5 x 6000	
100 x 100 x 10 x 6000	
60 x 60 x 6.3 x 6000	

Material Grade	Range of Solid Round Bar (mm)	Circa Total Metres
DH36	100 Dia x 12000 50 Dia x 6000	3
S275 JR	16 Dia x 6000 10 Dia x 6000 6 Dia x 6000	223
S355 J2	24 Dia x 6000	14

Material Grade	Range of Bulb Flat (mm)	Circa Total Metres
DH36	60 x 4 x 6000	
	80 x 5 x 8000	82
	100 x 5 x 8000	
	120 x 6 x 13000	
	140 x 7 x 13000	
	160 x 7 x 13000	
	180 x 8 x 13000	
	200 x 8.5 x 13000	
	180 × 10 × 13000	

#### 4. PRE-QUALIFICATION QUESTIONNAIRE (GENERIC)

- 1. Does your website provide a detailed description of your Company's capability? If yes then provide the appropriate link.
- 2. Are you an Australian registered company? 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 provide 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.
- 7. State your Professional Indemnity, Product and Public Liability and Work Cover Insurance coverage.
- 8. Please state what quality certification and accreditations you hold? Please provide evidence.
- Do you hold Defence Industry Security Program (DISP) Membership? If so, please state what membership level you hold.
   Refer to the <u>DISP Website</u> for information about DISP Membership and how to apply.
- On Time Delivery Are you able to consistently provide on time guarantee service to agreed time frames?
  How do you self evaluate and analyse your performance? Do you have data / reports you could provide examples of?

## 5. PRE-QUALIFICATION QUESTIONNAIRE (SPECIFIC TO THE REQUIREMENTS)

- 1. Provide full details including value and location of previous major defence, maritime or commercial projects in which your company has delivered Steel?
- 2. Can you manufacture and test steel in Australia? Fully, partially or total import?
- 3. Advise what type of steel you can supply against each type below. If you are able to supply, indicate whether you can manufacture/stock locally or would need to import.
  - a. Plate (DH36, EH36)
  - b. Bulb Flat Profile (DH36)
  - c. Flat Bar Profile (DH36, S275 JR, S275 JR+AR, S275, S355 J2)
  - d. Equal Angle Profile (DH36, S355 J2N, S355 J2)
  - e. Unequal Angle Profile (DH36, S355 J2, S275 JR)
  - f. Angle Bar Profile (S275 JR, S355 J0+AR, Lloyds Grade A)
  - g. Square Hollow Section Profile (S355 J2H)
  - h. Circular Hollow Section Profile (S355 J2H, S275 J, S355)
  - i. Channel Section Profile (S355 J2)
  - j. Universal Beam (S355 J2, DH36)
  - k. HEA Beam (S355 J2+M, DH36)
  - I. Solid Round Bar (DH36, S275 JR, S355 J2)
- 4. Please add any text here if needed to explain your capabilities further in relation to Question 3.

- 5. Can you provide Australian readily accessible alternatives to the material grades listed in the Scope above? If so, what grades can you provide as an alternative and what certifications can you offer?
- 6. Does your organisation have an understanding and ability to test in accordance with Lloyd's Registers rules for surface ships? If Yes then please elaborate.
- 7. Please provide details and location of your warehousing capability?
- 8. Stipulate any further competitive discriminators currently not identified.

## Closing date for Expression of Interest: 2<sup>nd</sup> October 2020