

**BRAZILIAN NAVY  
NAVY INDUSTRIAL DIRECTORATE  
REVERSE E-AUCTION**

**TERMS OF REFERENCE**

**1 - GENERAL CONTRACTING CONDITIONS**

1.1 - Supply of spare parts for the maintenance of the Submarine Humaitá during the ship docking routine, according to the conditions, quantities and requirements contained in these Terms of Reference:

OUR REFERENCE	NSN	DESCRIPTION	UNIT OF SUPPLY	QUANTITY	ESTIMATED TOTAL PRICE
PG71200-2024-03967	5330-14-593-7398	<p style="text-align: center;">GASKET</p> <p><b>NAME - ITEM NAME GASKET</b>  <b>AAGR - CROSS-SECTIONAL SHAPE STYLE SOLID SINGLE OR COMPOSITION</b>  <b>AAUB - HOLE DIAMETER 11,0 MILLIMETERS NOMINAL</b>  <b>ABHP - OVERALL LENGTH 734,0 MILLIMETERS NOMINAL</b>  <b>ABMK - OVERALL WIDTH 496,0 MILLIMETERS NOMINAL</b>  <b>ADUE - APERTURE WIDTH 634,0 MILLIMETERS NOMINAL</b>  <b>ADUF - APERTURE LENGTH 400,0 MILLIMETERS NOMINAL</b>  <b>ADUY - CENTER TO CENTER DISTANCE BETWEEN BOLT HOLES ALONG WIDTH 93,2 MILLIMETERS NOMINAL</b>  <b>ADUZ - CENTER TO CENTER DISTANCE BETWEEN BOLT HOLES ALONG LENGTH 88,0 MILLIMETERS NOMINAL</b>  <b>ADVD - OUTSIDE EDGE TO BOLT HOLE CENTER DISTANCE ALONG WIDTH 15,0 MILLIMETERS NOMINAL</b>  <b>ADVE - OUTSIDE EDGE TO BOLT HOLE CENTER DISTANCE ALONG LENGTH 15,0 MILLIMETERS NOMINAL</b>  <b>ADVM - CROSS-SECTIONAL THICKNESS 2,0 MILLIMETERS NOMINAL</b>  <b>AECS - BOLT HOLE QUANTITY 26,0</b></p>	UN	1,00	\$3.558,27

		<p>CTRH - OUTSIDE EDGE TO INSIDE EDGE SMALLEST DISTANCE ALONG WIDTH 48,0 MILLIMETERS NOMINAL</p> <p>CTSC - OUTSIDE EDGE TO INSIDE EDGE SMALLEST DISTANCE ALONG LENGTH 50,0 MILLIMETERS NOMINAL</p> <p>CXCX - PART NAME ASSIGNED JOINT</p> <p>BY CONTROLLING AGENCY</p> <p>MATT - MATERIAL RUBBER BUTADIENE-ACRYLONITRILE CLASS NBR</p> <p>STYL - STYLE DESIGNATOR NON-CIRCULAR</p> <p>ADDITIONAL INFORMATION: technical drawing (attachment A)</p>			
PG71200-2024-04244	5340-14-586-4986	<p>STOP,MECHANICAL</p> <p>NAME - ITEM NAME</p> <p>STOP,MECHANICAL</p> <p>ABHP - OVERALL LENGTH 100,0 MILLIMETERS NOMINAL</p> <p>ABMK - OVERALL WIDTH 77,0 MILLIMETERS NOMINAL</p> <p>ABTB - MOUNTING HOLE DIAMETER 17,5 MILLIMETERS NOMINAL AND 18,0 MILLIMETERS NOMINAL</p> <p>ABTJ - MOUNTING HOLE QUANTITY 4</p> <p>ACHY - MOUNTING HOLE TYPE PLAIN</p> <p>AGAV - END ITEM IDENTIFICATION MAT, DCNS CENTRE DE RUELE</p> <p>APGF - DESIGN TYPE IRREGULAR</p> <p>CXCX - PART NAME ASSIGNED BUTEE TRIBORD</p> <p>BY CONTROLLING AGENCY</p> <p>FEAT - SPECIAL FEATURES PIECE MECANO-SOUDE OU MONOBLOC AVEC RAYON D'ANGLE &lt; 5 MM</p> <p>MATT - MATERIAL ACIER COMP X2CRNIMO17-12-3</p> <p>MDCL - MATERIAL DOCUMENT NF EN 10088-2 ASSN STD SINGLE MATERIAL RESPONSE AND CLASSIFICATION</p> <p>SFTT - SURFACE TREATMENT PAINT</p>	UN	1,00	\$6.745,42

		<b>ADDITIONAL INFORMATION: technical drawing (attachment B)</b>			
PG71200-2024-04277	5310-14-596-0165	<p>WASHER,FLAT  NAME - ITEM NAME  WASHER,FLAT  AAGR - CROSS-SECTIONAL  SHAPE STYLE RECTANGULAR  AAUB - HOLE DIAMETER 21,0  MILLIMETERS MINIMUM AND  21,33 MILLIMETERS MAXIMUM  ABMW - PERIPHERAL SHAPE  STYLE ROUND  ABMX - CENTER HOLE SHAPE  STYLE ROUND  ABNM - THICKNESS 2,88  MILLIMETERS MINIMUM AND  3,12 MILLIMETERS MAXIMUM  ADAV - OVERALL DIAMETER 35,38  MILLIMETERS MINIMUM AND  36,0 MILLIMETERS MAXIMUM  CQFM - HARDNESS RATING 160,0  VICKERS OR FIRTH DIAMOND  PYRAMID MINIMUM AND 250,0  VICKERS OR FIRTH DIAMOND  PYRAMID MAXIMUM  CXCX - PART NAME ASSIGNED  RONDELLE PLATE ETROITE Z 20  160HV GRADE A ZINGUE PASSIVE  SANS  BY CONTROLLING AGENCY  CHROME VI NF E25-514  MATT - MATERIAL OVERALL  STEEL  SFTT - SURFACE TREATMENT ZINC  PASSIVE SANS CHROME VI  OVERALL  STDC - SURFACE TREATMENT  GUIDE 14G1 CODE ZU MIL SPEC  SINGLE TREATMENT RESPONSE  DOCUMENT AND  CLASSIFICATION OVERALL  UKAS - STRENGTH GRADE  DESIGNATION  160 HV  <b>ADDITIONAL INFORMATION:  technical drawing (attachment C)</b></p>	UN	500,00	\$616,47
PG71200-2024-04299	5340-14-586-5001	<p>STOP,MECHANICAL  NAME - ITEM NAME  STOP,MECHANICAL  ABHP - OVERALL LENGTH 100,0  MILLIMETERS NOMINAL</p>	UN	1,00	\$6.745,42

		<p> <b>ABMK - OVERALL WIDTH 77,0  MILLIMETERS NOMINAL</b>  <b>ABTB - MOUNTING HOLE  DIAMETER 17,5 MILLIMETERS  NOMINAL AND 18,0  MILLIMETERS NOMINAL</b>  <b>ABTJ - MOUNTING HOLE  QUANTITY 4</b>  <b>ACHY - MOUNTING HOLE TYPE  PLAIN</b>  <b>AGAV - END ITEM  IDENTIFICATION MAT, DCNS  CENTRE DE RUELLE</b>  <b>APGF - DESIGN TYPE IRREGULAR</b>  <b>CXCY - PART NAME ASSIGNED  BUTEE BABORD</b>  <b>BY CONTROLLING AGENCY</b>  <b>FEAT - SPECIAL FEATURES PIECE  MECANO-SOUDE OU MONOBLOC  AVEC RAYON D'ANGLE &lt; 5 MM</b>  <b>MATT - MATERIAL ACIER COMP  X2CRNIMO17-12-3</b>  <b>MDCL - MATERIAL DOCUMENT NF  EN 10088-2 ASSN STD SINGLE  MATERIAL RESPONSE  AND CLASSIFICATION</b>  <b>SFTT - SURFACE TREATMENT  PAINT</b>  <b>ADDITIONAL INFORMATION:  technical drawing (attachment D)</b> </p>			
PG71200-2024-05195	5315-12-345-5999	<p> <b>CYLINDRICAL PIN ISO 8734-B4X12</b>  <b>NAME - ITEM NAME  PIN,STRAIGHT,HEADLESS</b>  <b>AAGZ - FIRST END STYLE  CHAMFERED</b>  <b>ACHT - PIN OVERALL LENGTH 12.0  MILLIMETERS NOMINAL</b>  <b>ACHU - PIN OVERALL  DIAMETER 4.0 MILLIMETERS  NOMINAL</b>  <b>AMCS - FIRST END TAPER  LENGTH 0.63 MILLIMETERS  NOMINAL</b>  <b>CBBL - FEATURES PROVIDED  HARDENED</b>  <b>CQBB - SECOND END  RELATIONSHIP WITH FIRST  END IDENTICAL</b>  <b>CQFM - HARDNESS RATING  OVERALL 550.0 VICKERS  MINIMUM AND 650.0 VICKERS</b> </p>	UN	500,00	\$308,24

		<p>MAXIMUM  CRMG - FIRST END TAPER  ANGLE 15.0 DEGREES NOMINAL  CSYM - SURFACE FINISH  OUTSIDE DIAMETER 0.8 MICRONS  MATT - MATERIAL OVERALL STEEL  MDCL - MATERIAL DOCUMENT  ISO 8734, TYP A ASSN STD SINGLE  MATERIAL RESPONSE  AND CLASSIFICATION  OVERALL  SFTT - SURFACE TREATMENT  OVERALL LUBRICANT  ADDITIONAL INFORMATION:  technical drawing (attachment E)</p>			
PG71200-2024-05197	6150-14-586-4813	<p>LEAD,ELECTRICAL  NAME - ITEM NAME  LEAD,ELECTRICAL  ADVN - CROSS-SECTIONAL  HEIGHT 2,0 MILLIMETERS  NOMINAL  ADWH - CROSS-SECTIONAL  WIDTH 15,0 MILLIMETERS  NOMINAL  AGTK - CENTER TO CENTER  DISTANCE BETWEEN  TERMINAL HOLES 340,0 METERS  NOMINAL  AKRZ - TERMINATION TYPE COSSE  A SERTIR  CXCW - CONDUCTOR FORM  BRAID, FLAT  CXCX - PART NAME ASSIGNED  TRESSE DE MASSE  BY CONTROLLING AGENCY  CXFY - TERMINAL LUG STYLE  E5  CXGG - TERMINAL  324047  MANUFACTURER IDENTIFYING  REFERENCE NUMBER  CXGN - TERMINAL  COMMERCIAL AND  GOVERNMENT ENTITY CODE  F0286  FEAT - SPECIAL FEATURES  SECTION DE LA TRESSE: 16 MM2  MATT - MATERIAL COPPER  SFTT - SURFACE TREATMENT TIN  ADDITIONAL INFORMATION:  technical drawing (attachment G)</p>	UN	33,00	\$9.968,33

PG71200-2024-05218	5305-14-469-4953	<p>SCREW,CAP,SOCKET HEAD  NAME - ITEM NAME  SCREW,CAP,SOCKET HEAD  AAJF - THREAD DIRECTION RIGHT-HAND  AASA - THREAD LENGTH 7,3 MILLIMETERS MINIMUM  AASB - FASTENER LENGTH 10,0 MILLIMETERS NOMINAL  AASK - HEAD STYLE FLAT COUNTERSUNK  AASL - HEAD DIAMETER 8,0 MILLIMETERS MINIMUM AND 8,4 MILLIMETERS MAXIMUM  AAUH - SPLINE MINOR DIAMETER 2,85 MILLIMETERS NOMINAL  AAUJ - SPLINE MAJOR DIAMETER 3,95 MILLIMETERS NOMINAL  ABQZ - INTERNAL DRIVE STYLE TORX  AHYM - NOMINAL THREAD DIAMETER 4,0 MILLIMETERS  CQQR - THREAD PITCH IN MILLIMETERS 0,7  CQWR - EXTERNAL THREAD TOLERANCE CLASS 6G  CRSQ - COUNTERSINK ANGLE 90,0 DEGREES NOMINAL  MATT - MATERIAL OVERALL STEEL  SFTT - SURFACE TREATMENT ZINC AND CHROMATE OVERALL  STDC - SURFACE TREATMENT MA-E25-27 CODE CM MIL SPEC SINGLE TREATMENT RESPONSE DOCUMENT AND CLASSIFICATION OVERALL  SUPP - SUPPLEMENTARY FEATURES  FINITION JAUNE IRISE 0,5 A 1,5GM2  TEST - TEST DATA DOCUMENT F0110-E25-100 STANDARD (INCLUDES INDUSTRY OR ASSOCIATION STANDARDS, INDIVIDUAL MANUFACTUREER STANDARDS, ETC.).</p>	UN	200,00	\$2.465,88
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		<b>THSD - THREAD SERIES  DESIGNATOR ISO M  UKAS - STRENGTH GRADE  DESIGNATION 8.8  ADDITIONAL INFORMATION:  technical drawing (attachment I)</b>			
PG71200-2024-05480	5310-14-503-1231	<b>NUT,SELF-LOCKING,HEXAGON  AUTOTRAVANTE  NAME - ITEM NAME NUT,SELF-  LOCKING,HEXAGON  AAJF - THREAD DIRECTION RIGHT-  HAND  AAUM - LOCKING FEATURE  PREVAILING TORQUE WITH  NONMETALLIC INSERT  ACTA - NUT STYLE HEXAGON  ADEA - NUT HEIGHT 12,6  MILLIMETERS NOMINAL  ASDB - WIDTH ACROSS FLATS  15,73 MILLIMETERS MINIMUM  AND 16,00 MILLIMETERS  MAXIMUM  BZRR - THREAD SERIES  ISO M  CQJX - NOMINAL THREAD SIZE  10,0 MILLIMETERS  CQQR - THREAD PITCH IN  MILLIMETERS 1,5  CRTM - BEARING SURFACE  TYPE CHAMFERED  CTTC - THREAD TOLERANCE</b>	UN	24,00	\$1.054,16
<b>Total</b>					<b>\$31.462,19</b>

1.2 - The object of the tender is not a luxury item.

1.3 - Considering that the spare parts, required for the maintenance of Submarine Humaitá, have standard codes in the cataloging system adopted by NATO with recognised and usual specifications in the market, it is understood that the items object of the tender are of a common nature for the purpose of using the tender modality reverse e-auction.

1.4 - The Purchase Order will remain in force until receipt of the order and payment.

## 2 - DESCRIPTION AND JUSTIFICATION FOR PROCUREMENT

2.1 - This document is regarding requests for the supply of items for the Navy Supply System for use during the maintenance periods foreseen in the General Maintenance Program (PROGEM).

2.2 - The PROGEM is a planning document prepared by the Operations Sector, according to the cycle of activities of each Ship, for a period of four years, and with the purpose of providing the naval, air-naval and Marine forces with full operational capacity.

2.3 - The maintenance periods are scheduled in the PROGEM, as a way to enable maintenance activities to be carried out.

2.4 - Maintenance is defined as the set of technical and administrative activities carried out in order to keep something in proper condition for use with reliability, safety and at appropriate cost and, in case of malfunctions, to bring it back to proper condition.

2.5 - Properly performed maintenance increases the useful life of equipment, reduces the need for supplies and allows saving resources to serve other purposes.

2.6 - Planned maintenance is carried out in a systematic and scheduled manner and takes into consideration all the necessary elements for performance: labour, material and time.

2.7 - The maintenance periods have their duration defined, in principle, by the Ship class or type. However, planning of the service, schedule and monitoring will only be efficient if the necessary spare parts are available at the Service Provider Military Organization at the right time.

2.8 - The absence of, or delay in obtaining the spare parts will cause increased costs, inefficient use of labour and delays in completing maintenance among other inconveniences, in addition to the Ship's unavailability to fulfill the Brazilian Navy's constitutional duties of public interest.

2.9 - All Military Organizations within the Brazilian Navy are responsible for maintenance since the scope includes all the infrastructure of the Navy.

2.10 - The object of the tender is in the Resource Application Program (PAR), as detailed below:

a) PAR code: 01/2025

b) Date of approval of addition to the PAR: 14/01/2025

c) Economic activity: 339030

### **3 - DESCRIPTION OF THE SOLUTION AS A WHOLE CONSIDERING THE OBJECT LIFE CYCLE AND THE PRODUCT SPECIFICATION**

3.1 - The supply of spare parts is for use on the Selective Restricted Availability for maintenance of the Submarine Humaitá, ensuring the ability of the Brazilian Navy to perform its missions.

3.2 - The object of the tender is divided into items with the aim of increasing competitiveness, the basic principle of the tender process, and to allow tenderers to present individualized proposals for each one of them, and the decision is to be made in relation to each item, which usually results in more beneficial prices.

3.3 - Proposals must meet all quality requirements in order to enable the selection of the most advantageous one through competitive tendering.

3.4 - Every spare part has a lifespan, which is an estimate of the useful life of a product based on technical conditions.

3.5 - The specifications, characteristics and models contained in the list of items indicate in detail the quality of the items able to meet the requests and, therefore, decrease or eliminate the possibility of acquisition of less durable items, which are likely to create a need for new replacement.

## **4 - REQUIREMENTS**

### **Sustainability**

4.1 - The Supplier must conduct business in accordance with the principle of sustainable development and adhere to internationally recognised fundamental standards for occupational health and safety, environmental protection, labour and human rights as well as responsible corporate governance.

### **Indication of brands or models**

4.2 - In this tender, the indication of brands, characteristics and models are permitted due to the need to maintain standardisation and compatibility with technical and performance specifications required by the Brazilian Navy.

### **Subcontracting**

4.3 - Subcontracting will not be allowed.

### **Performance guarantee**

4.4 - The need of a performance guarantee is specifically associated with the complexity of the object and the potential risks of execution of the Purchase Order. Given the low complexity of the object, there is no need for a performance guarantee, as its adoption would only increase the price.

## **5 - TYPE OF DELIVERY**

### **Delivery terms**

5.1 - According to INCOTERMS 2020:

<b>Country of origin</b>	<b>FCA</b>	<b>FOB</b>
AUSTRIA	-	HAMBURG
BELGIUM	-	HAMBURG
DENMARK	-	HAMBURG

<b>Country of origin</b>	<b>FCA</b>	<b>FOB</b>
FINLAND	-	HAMBURG
FRANCE	PARIS (LE BOURGET)	LE HAVRE
GERMANY	-	HAMBURG
GREAT BRITAIN	LONDON DEPOT	LONDON DEPOT
ITALY	-	GENOVA (LA SPEZIA)
LIECHTENSTEIN	-	HAMBURG
NETHERLANDS	-	HAMBURG
NORWAY	-	HAMBURG
PORTUGAL	-	LISBON
SPAIN	-	BARCELONA
SWEDEN	-	HAMBURG
SWITZERLAND	-	HAMBURG

5.2 - Alternatively, and for countries of origin not listed above, delivery shall be CIP/CIF Rio de Janeiro, Brazil.

5.3 - The Purchase Order provides further details of the rules that apply in relation to delivery.

#### **Goods warranty**

5.4 - A certificate of warranty of at least 12 months from the date of delivery will be required from the Supplier.

5.5 - The Supplier undertakes to substitute, at no expenses to the Navy, any goods found to be defective due to incorrect design, faulty material or workmanship. This warranty is valid if the goods have been properly handled and used in accordance with instructions from the Supplier. Notification of any defect must be made promptly upon any defect arising and before the warranty period expires.

5.6 - The faulty goods, where applicable, will be returned by the Navy to the Supplier at the Supplier's expenses.

5.7 - At the Supplier's expense, the faulty goods will be returned to the Navy repaired, or identical working items will be supplied to replace them.

#### **6 - MONITORING AND SUPERVISION OF PERFORMANCE**

6.1 - A representative will be appointed to monitor and supervise the delivery of the goods, making notes in a proper register of all occurrences related to performance and determining what is necessary to correct the flaws or defects found.

6.2 - The inspection referred to in this item does not exclude or reduce the Supplier's liability, including in relation to third parties, for any irregularity, even if resulting from technical imperfections or latent defects.

6.3 - The representative of the Navy will record in the appropriate register all occurrences related to the supply, indicating the day, month and year, as well as the name of the employees eventually involved, determining what is necessary to correct the observed flaws or defects and forwarding the notes to the competent authority for the appropriate measures.

## **7 - RECEIPT AND PAYMENT**

### **Receipt of the order**

7.1 - The goods must be delivered according to INCOTERMS 2020 and instructions contained in the Purchase Order.

7.2 - The goods will be provisionally received for the purpose of subsequent verification of conformity with the specifications.

7.3 - The goods may be rejected, in whole or in part, when not in accordance with the specifications and must be replaced at the Supplier's expense.

7.4 - Final receipt of the goods will be after quality and quantity check and consequent acceptance.

### **Validation of expenditure**

7.5 - A duly signed original commercial invoice with full bank details is required for validation of the expenditure.

### **Payment terms**

7.6 - As specified in the Purchase Order, payment will be made against the original commercial invoice within 30 days after delivery through bank transfer to the account indicated by the Supplier.

## **8 - SUPPLIER SELECTION METHOD AND CRITERIA**

### **Proposal selection method and evaluation criteria**

8.1 - The Supplier will be selected through a tender process, in the reverse e-auction format, based on the lowest price per item.

### **Qualification requirements**

8.2 - For purposes of qualification, the tenderer must submit the following documents:

## **Legal qualification**

8.3 - Certificate of incorporation of equivalent document. If the document has already been presented at the time of registration with the BNCE, submission may be waived.

## **Technical, economic and financial qualification**

8.4 - The submission of documents related to the company's technical, economic, and financial records is waived because the acquisition is to be made through a Purchase Order.

## **9 - ESTIMATED PRICES**

9.1 - The estimated total price is USD 31.462,19, according to the prices shown in table in item 1.1.

## **10 - BUDGET ADEQUACY**

10.1 - The expenses arising from any eventual Purchase Order will be supported by specific financial resources included in this year's General Budget of the Brazilian Government, as detailed below:

- a) Operation/Unit: 0001 / UGR: 91536 e UGE: 40015;
- b) Funding source: 3050000144;
- c) Work program: 236871;
- d) Item of expenditure: 339030;
- e) Internal plan: P.3DR.HU e P.3X6.HU.

## **11 - GENERAL INFORMATION**

11.1 - The information contained in this Terms of Reference is not classified as confidential.

Rio de Janeiro, RJ, 18<sup>th</sup> September 2025.

SAINT-CLAIR DANTAS OLIVEIRA SANTOS

Captain

Submarine Project Management Chief of Department

LEANDRO BRILHANTE REGLY

Lieutenant-Commander

Supply Advisor

LEANDRO JUSTINO DE ABREU  
Lieutenant-Commander  
Ship Manager

Approved by:

MARCELO ANTONIO ROCHA AFONSO  
Captain  
Expenditure Authorising Officer