

**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
PG71200-2024-04038	3040-14-549-9680	<p>RING,ROD,PISTON NAME - ITEM NAME RING,ROD,PISTON AAGR - CROSS-SECTIONAL SHAPE STYLE 1 ACXD - RING STYLE CONCENTRIC ACXF - RADIAL WALL THICKNESS 2,5 MILLIMETERS NOMINAL ACXZ - STANDARD BORE DIAMETER 220,0 MILLIMETERS ADTE - JOINT STYLE DIAGONAL JOINT FEAT - SPECIAL FEATURES DIAMETRE FOND DE GORGE 215MM; LARGEUR DE GORGE 15MM (fr: diametre fond de gorge 215mm; largeur de gorge 15mm) MATT - MATERIAL TURCITE T51 SUPP - SUPPLEMENTARY FEATURES SERIE GP73 (fr: serie GP73) ADDITIONAL INFORMATION: technical drawing (attachment A)</p>	UN	2,00	\$526,00
PG71200-2024-04040	5330-14-550-0828	<p>PACKING ASSEMBLY NAME - ITEM NAME PACKING ASSEMBLY AAGR - CROSS-SECTIONAL SHAPE STYLE DELTA AARX - INSIDE DIAMETER 180,8 MILLIMETERS NOMINAL ABHE - OUTSIDE DIAMETER 193,0 MILLIMETERS NOMINAL HGTH - HEIGHT 9,5 MILLIMETERS NOMINAL MATT - MATERIAL BAGUE</p>	UN	2,00	\$567,11

		<p>D'ETANCHEITE EN TURCON T24 AND JOINT TORIQUE EN CAOUTCHOUC BUTADIENE ACRYLONITRILE CLASSE NBR TMDN - TYPE/MODEL DESIGNATION TURCON DOUBLE DELTA ADDITIONAL INFORMATION: technical drawing (attachment B)</p>			
PG71200-2024-04136	5360-14-587-9978	<p>SPRING,HELICAL,COMPRESSION NAME - ITEM NAME SPRING,HELICAL,COMPRESSION AARX - INSIDE DIAMETER 55,5 MILLIMETERS MINIMUM ABQK - END STYLE SPRING END,GROUND AGEK - SPRING FREE LENGTH 94,49 MILLIMETERS NOMINAL APCN - COIL QUANTITY 4 AXJQ - SPRING SOLID LENGTH 55,0 MILLIMETERS NOMINAL AXLH - COIL HELIX DIRECTION RIGHT- HAND AXLP - SPRING DEFLECTION RATE 34,2 NEWTONS PER MILLIMETER NOMINAL AXLQ - SPRING FREE OUTSIDE 73,0 MILLIMETERS MAXIMUM DIAMETER CXCX - PART NAME ASSIGNED RESSORT EXTERIEUR POUR SOUPAPE TAREE A 79,2 BAR ET 90 BAR STF BY CONTROLLING AGENCY 22-52/B033 MATT - MATERIAL X10CRNI18-8 STYL - STYLE DESIGNATOR CYLINDRICAL</p>	UN	1,00	\$5.266,38
PG71200-2024-04400	4730-14-581-7340	<p>ADAPTER,STRAIGHT,TUBE TO BOSS NAME - ITEM NAME ADAPTER,STRAIGHT,TUBE TO BOSS AHNC - CONNECTION STYLE 85 AWLS - CONNECTION TYPE THREADED EXTERNAL TUBE AWLS - CONNECTION TYPE THREADED EXTERNAL BOSS CQGM - MAXIMUM OPERATING 250,0 BAR PRESSURE CQJX - NOMINAL THREAD SIZE 22,0</p>	UN	8,00	\$5.403,20

		<p>MILLIMETERS CQJX - NOMINAL THREAD SIZE 24,0 MILLIMETERS CQQR - THREAD PITCH IN MILLIMETERS 2,0 CTTC - THREAD TOLERANCE CLASS 4H EXTERNAL CWCN - NOMINAL WIDTH ACROSS FLATS 27,0 MILLIMETERS CWFD - NOMINAL OUTSIDE DIAMETER TUBE ACCOMMODATED 10,2 MILLIMETERS CWFR - NOMINAL OVERALL LENGTH 60,5 MILLIMETERS CXCX - PART NAME ASSIGNED VIS SUR CAPACITE POUT TUYAUQ INOX DE10.2 OU TUYAUX CUIVRE DE10 BY CONTROLLING AGENCY HP/BP PRESSION DE REFERENCE 250 BAR FEAT - SPECIAL FEATURES AVEC HEXAGONE CENTRAL PERMETTANT L USAGE D UNE CLE MATT - MATERIAL CUIVRE ALLIE CU- AL10NI5FE4 MEDA - MEDIA FOR WHICH DESIGNED WATER THSD - THREAD SERIES DESIGNATOR ISO M</p>			
PG71200-2024-04404	5340-14-597-2859	<p>FLANGE ATTACHMENT,M ADDITIONAL INFORMATION: technical drawing (attachment C)</p>	UN	4,00	\$23.018,88
PG71200-2024-04435	4730-14-593-7182	<p>ADAPTER,STRAIGHT,TUBE TO BOSS NAME - ITEM NAME ADAPTER,STRAIGHT,TUBE TO BOSS AHNC - CONNECTION STYLE GASKET SEAL (TUBE) AWLS - CONNECTION TYPE MALE AVEC FILETAGE CQJX - NOMINAL THREAD SIZE 22,0 MILLIMETERS CQJX - NOMINAL THREAD SIZE 27,0 MILLIMETERS CQQR - THREAD PITCH IN MILLIMETERS 2,0 CTTC - THREAD TOLERANCE CLASS 4H EXTERNAL CWCN - NOMINAL WIDTH ACROSS FLATS 30,0 MILLIMETERS CWFD - NOMINAL OUTSIDE DIAMETER TUBE</p>	UN	4,00	\$2.120,19

		<p>ACCOMMODATED INOX, MILLIMETRES 13,72 ET CUIVRE, MILLIMETRES 14 CWFR - NOMINAL OVERALL LENGTH 60,5 MILLIMETERS CXY - PART NAME ASSIGNED VIS SUR CAPACITE POUR TUYAU INOX DE13,72 OU TUYAU CUIVRE DE14 BY CONTROLLING AGENCY HP/BP PRESSION DE REFERENCE 250 BAR MATT - MATERIAL CUPRO-ALUMINIUM CUAL10NI5FE4 MDCL - MATERIAL DOCUMENT SPECIFICATION FABRICANT, MATIERE UNIQUE STF 22-55/B004-2 AND CLASSIFICATION STYL - STYLE DESIGNATOR LONG W/ OFFSET WRENCHING FACILITY THSD - THREAD SERIES DESIGNATOR ISO M</p>			
PG71200-2024-04447	5330-14-602-5253	<p>GASKET NAME - ITEM NAME GASKET ABHP - OVERALL LENGTH 479,0 MILLIMETERS NOMINAL ABMK - OVERALL WIDTH 287,0 MILLIMETERS NOMINAL ADUE - APERTURE WIDTH 227,0 MILLIMETERS NOMINAL ADUF - APERTURE LENGTH 419,0 MILLIMETERS NOMINAL ADVM - CROSS-SECTIONAL THICKNESS 3,0 MILLIMETERS NOMINAL AECS - BOLT HOLE QUANTITY 18,0 AHNX - BOLT HOLE DIAMETER 12,0 MILLIMETERS NOMINAL CXY - PART NAME ASSIGNED JOINT DE BRIDE 384X192 BY CONTROLLING AGENCY STYL - STYLE DESIGNATOR NON- CIRCULAR SUPP - SUPPLEMENTARY FEATURES SUIVANT PLAN QKJE- 420.00 (JE EN MINUSCULE) (fr: SUIVANT PLAN QKje- 420.00 (je EN MINUSCULE))</p>	UN	6,00	\$15.048,84
Total					\$ 51.950,59

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: 01/2026

b) Date of approval of addition to the PAR: 08/12/2025

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, according to the justifications contained in the Preliminary Technical Studies.

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:

Country of origin	FCA	FOB
AUSTRIA	-	HAMBURG
BELGIUM	-	HAMBURG
DENMARK	-	HAMBURG
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.

5.8 - For items classified as perishable, elastomeric, chemical or with defined shelf-life, the supplier must also provide the following information:

- a) Lot/Batch Number;
- b) Date of manufacture - DOM;
- c) Expiration Date or Shelf-Life

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 51.950,59, 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.

Rio de Janeiro, RJ, 15th December 2025.

SAINT-CLAIR DANTAS OLIVEIRA SANTOS
Captain
Submarine Project Management Chief of Department

LEANDRO BRILHANTE REGLY
Lieutenant-Commander
Supply Advisor

BRUCE ENGLE FRÓES
Lieutenant
Ship Manager Auxiliary

Approved by:

MARCELO ANTONIO ROCHA AFONSO
Captain
Expenditure Authorising Officer