

**RBRAZILIAN 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
PG71200-2025-00232	4820-14-594-6894	VALVE A DRAWER ADDITIONAL INFORMATION: technical drawing (attachment A)	UN	3,00	\$51.973,48
PG71200-2025-00233	5330-14-595-6305	GASKET ASSORTMENT UN NAME - ITEM NAME GASKET ASSORTMENT AGAV - END ITEM IDENTIFICATION POMPE CENTRIFUGE 80 160 V MONO CXCY - PART NAME ASSIGNED KIT JOINTS BY CONTROLLING AGENCY SUPP - SUPPLEMENTARY FEATURES NSPA / LD PROGRAMME COMPREND : 1 JOINT TORIQUE 16X2,5; 1 JOINT TORIQUE 172X3; 1 JOINT TORIQUE 14X1,78	UN	1,00	\$283,45
PG71200-2025-00234	5310-33-215-1523	NUT,PLAIN,HEXAGON NAME - ITEM NAME NUT,PLAIN,HEXAGON BZRR - THREAD SERIES M MATT - MATERIAL OVERALL STEEL ACTA - NUT STYLE HEXAGON ADEA - NUT HEIGHT 16.90 MILLIMETERS MINIMUM AND 18.00 MILLIMETERS MAXIMUM ASDB - WIDTH ACROSS FLATS 29.16 MILLIMETERS MINIMUM AND 30.00 MILLIMETERS MAXIMUM CRSQ - COUNTERSINK ANGLE 15.0 DEGREES MINIMUM AND 30.0 DEGREES MAXIMUM	UN	10,00	\$403,83

		<p style="text-align: center;">NUT</p> <p style="text-align: center;">AGAV - END ITEM IDENTIFICATION</p> <p style="text-align: center;">TORNILLERIA PARA PASOS DE CASCO Y CIERRES RESISTENTES SUBMARINOS S-70 / SCREWS FOR THROUGH HULL AND RESISTANT CLOSURES FOR SUBMARINES S-70</p> <p style="text-align: center;">CXCY - PART NAME ASSIGNED</p> <p style="text-align: center;">TUERCA HEXAGONAL / HEXAGONAL NUT</p> <p style="text-align: center;">BY CONTROLLING AGENCY</p> <p style="text-align: center;">CQJX - NOMINAL THREAD SIZE</p> <p style="text-align: center;">20.0 MILLIMETERS</p> <p style="text-align: center;">ZZZK -</p> <p style="text-align: center;">SPECIFICATION/STANDARD</p> <p style="text-align: center;">DATA 19008-ISO4032</p> <p style="text-align: center;">PROFESSIONAL/INDUSTRIAL ASSOCIATION STANDARD</p> <p style="text-align: center;">CQQR - THREAD PITCH IN</p> <p style="text-align: center;">MILLIMETERS 2.50</p> <p style="text-align: center;">AAJF - THREAD DIRECTION RIGHT-HAND</p> <p style="text-align: center;">CRTM - BEARING SURFACE</p> <p style="text-align: center;">TYPE FLAT</p> <p style="text-align: center;">ADDITIONAL INFORMATION:</p> <p style="text-align: center;">technical drawing (attachment B)</p>			
PG71200-2025-00238	5330-14-595-4777	<p style="text-align: center;">GASKET</p> <p style="text-align: center;">NAME - ITEM NAME GASKET</p> <p style="text-align: center;">ABHP - OVERALL LENGTH 47,0</p> <p style="text-align: center;">MILLIMETERS NOMINAL</p> <p style="text-align: center;">CQFM - HARDNESS RATING 70,0</p> <p style="text-align: center;">INTERNATIONAL RUBBER</p> <p style="text-align: center;">HARDNESS DEGREE SCALE</p> <p style="text-align: center;">NOMINAL</p> <p style="text-align: center;">CXCY - PART NAME ASSIGNED</p> <p style="text-align: center;">ISOLANT VANNE</p> <p style="text-align: center;">BY CONTROLLING AGENCY</p> <p style="text-align: center;">MATT - MATERIAL RUBBER</p> <p style="text-align: center;">ETHYLENE-PROPYLENE-DIENE</p> <p style="text-align: center;">CLASS EPDM</p> <p style="text-align: center;">STYL - STYLE DESIGNATOR</p> <p style="text-align: center;">SQUARE</p>	UN	6,00	\$1.383,67
PG71200-2025-00240	5331-12-151-4577	<p style="text-align: center;">O-RING</p> <p style="text-align: center;">NAME - ITEM NAME O-RING</p> <p style="text-align: center;">ABJH - TEMP RATING -35.0</p> <p style="text-align: center;">CELSIUS AND 100.0 CELSIUS</p> <p style="text-align: center;">ADVN - CROSS-SECTIONAL</p> <p style="text-align: center;">HEIGHT 3.0 MILLIMETERS</p> <p style="text-align: center;">NOMINAL</p> <p style="text-align: center;">ADYT - CENTER HOLE</p>	UN	4,00	\$276,56

		<p>DIAMETER 82.0 MILLIMETERS NOMINAL CQFM - HARDNESS RATING 72.0 SHORE DUROMETER A NOMINAL MATT - MATERIAL RUBBER BUTADIENE-ACRYLONITRILE CLASS NBR MDCL - MATERIAL DOCUMENT 72NBR/872, D2480 MFR REF SINGLE MATERIAL RESPONSE AND CLASSIFICATION ADDITIONAL INFORMATION: technical drawing (attachment C)</p>			
PG71200-2025-00262	5305-14-537-6901	<p>SCREW,CAP,SOCKET HEAD NAME - ITEM NAME SCREW,CAP,SOCKET HEAD AAJF - THREAD DIRECTION RIGHT- HAND AASA - THREAD LENGTH 20,0 MILLIMETERS NOMINAL AASB - FASTENER LENGTH 20,0 MILLIMETERS NOMINAL AASK - HEAD STYLE 48 AASL - HEAD DIAMETER 9,78 MILLIMETERS MINIMUM AND 10,0 MILLIMETERS MAXIMUM AASU - HEAD HEIGHT 5,7 MILLIMETERS MINIMUM AND 6,0 MILLIMETERS MAXIMUM ABQZ - INTERNAL DRIVE STYLE 5 AHYM - NOMINAL THREAD DIAMETER 6,0 MILLIMETERS ASDB - WIDTH ACROSS FLATS 5,0 MILLIMETERS NOMINAL CQBC - MINIMUM TENSILE STRENGTH 800,0 MEGAPASCALS CQHQ - MINIMUM YIELD STRENGTH 600,0 MEGAPASCALS CQQR - THREAD PITCH IN MILLIMETERS 1,0 CQWR - EXTERNAL THREAD TOLERANCE CLASS 6G FEAT - SPECIAL FEATURES ACIER INOXYDABLE A FAIBLE TENEUR EN CARBONE N'EXCEDANT PAS 0,03% MATT - MATERIAL OVERALL ACIER COMP A4L SFTT - SURFACE TREATMENT PASSIVATE</p>	UN	1,00	\$100,00

		<p>OVERALL TEST - TEST DATA DOCUMENT 19008-ISO 3506-1 STANDARD (INCLUDES INDUSTRY OR ASSOCIATION STANDARDS, INDIVIDUAL MANUFACTUREER STANDARDS, ETC.).</p> <p>THSD - THREAD SERIES DESIGNATOR ISO M UKAS - STRENGTH GRADE DESIGNATION 80</p> <p>ADDITIONAL INFORMATION: technical drawing (attachment D)</p>			
PG71200-2025-00263	5340-14-585-3464	<p>ANODE,CORROSION PREVENTIVE NAME - ITEM NAME ANODE,CORROSION PREVENTIVE AARN - FABRICATION METHOD CAST</p> <p>ABGG - RADIUS 20,0 MILLIMETERS NOMINAL AKMH - CORE DIAMETER 17,5 MILLIMETERS NOMINAL AKML - CORE THICKNESS 8,0 MILLIMETERS NOMINAL AKMM - CORE HOLE DIAMETER 12,0 MILLIMETERS NOMINAL</p> <p>ANNQ - MATERIAL AND LOCATION BR> ZINC A 99,98%; ARQS - CONSTRUCTION SOLID STYL - STYLE DESIGNATOR D SECTION WITH PIPE CORE WGHT - WEIGHT 0,021 KILOGRAMS</p> <p>ADDITIONAL INFORMATION: technical drawing (attachment E)</p>	UN	24,00	\$14.823,53
PG71200-2025-00266	5330-14-582-0169	<p>SEAL,PLAIN NAME - ITEM NAME SEAL,PLAIN AGAV - END ITEM IDENTIFICATION 2040-14-571- 2945; WATERTIGHTNESS MODULE ROTOR, SAGEM DEFENSE SECURITE - GROUPE SAFRAN, 261093011</p> <p>CXCY - PART NAME ASSIGNED WATERTIGHTNESS MODULE SEAL BY CONTROLLING AGENCY</p> <p>ADDITIONAL INFORMATION: technical drawing (attachment F)</p>	UN	2,00	\$11.032,31
PG71200-2025-00267	5331-14-584-3085	O-RING	UN	10,00	\$4.094,12

		<p>NAME - ITEM NAME O-RING ADYT - CENTER HOLE DIAMETER 158,0 MILLIMETERS NOMINAL AGAV - END ITEM IDENTIFICATION 261529149; SLIP RING ASSEMBLY ADDITIONAL INFORMATION: technical drawing (attachment G)</p>			
PG71200-2025-00268	4320-14-585-9940	<p>SEAL ASSEMBLY,SHAFT,SPRING LOADED NAME - ITEM NAME SEAL ASSEMBLY,SHAFT,SPRING LOADED AGAV - END ITEM IDENTIFICATION 43-25-B25; ELECTROPOMPE FEAT - SPECIAL FEATURES POMPE TYPE 80-160-V MONO ADDITIONAL INFORMATION: technical drawing (attachment H)</p>	UN	1,00	\$5.679,84
PG71200-2025-00273	5330-14-595-8372	<p>PACKING,PREFORMED NAME - ITEM NAME PACKING,PREFORMED AAGR - CROSS-SECTIONAL SHAPE STYLE D ADVN - CROSS-SECTIONAL HEIGHT 7,0 MILLIMETERS NOMINAL ADYT - CENTER HOLE DIAMETER 70,0 MILLIMETERS NOMINAL ADYU - PERIPHERAL DIAMETER 94,0 MILLIMETERS NOMINAL MATT - MATERIAL RUBBER NEOPRENE ADDITIONAL INFORMATION: technical drawing (attachment I)</p>	UN	1,00	\$11.518,82
PG71200-2025-00276	5331-14-597-8659	<p>O-RING NAME - ITEM NAME O-RING ADVN - CROSS-SECTIONAL HEIGHT 2,7 MILLIMETERS NOMINAL ADYT - CENTER HOLE DIAMETER 13,6 MILLIMETERS NOMINAL MATT - MATERIAL ELASTOMERE FLUOROCARBONE FPM 80 DF801</p>	UN	10,00	\$4.490,59
PG71200-2025-00280	5342-14-594-5835	<p>MECHANICAL FUSE ADDITIONAL INFORMATION: technical drawing (attachment J)</p>	UN	1,00	\$674,86

PG71200-2025-00282	5130-14-594-3390	BLADE, HYDRAULIC CUTTER ADDITIONAL INFORMATION: technical drawing (attachment K)	UN	1,00	\$5.948,64
PG71200-2025-00283	5340-14-569-7211	MECHANICAL FUZE ADDITIONAL INFORMATION: technical drawing (attachment L)	UN	1,00	\$1.212,94
				Total	\$113.896,64

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:

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.

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 113.896,64, 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.

11 - GENERAL INFORMATION

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

Rio de Janeiro, RJ, 08th October 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
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Approved by:

MARCELO ANTONIO ROCHA AFONSO
Captain
Expenditure Authorising Officer