

**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 class Riachuelo 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
PG71200-2025-02001	5330-14-602-5253	<p style="text-align: center;">GASKET</p> <p>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            CXCY - 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	\$20.448,63
PG71200-2025-02005	2910-14-565-5660	<p style="text-align: center;">FILTER ELEMENT,FLUID</p> <p>NAME - ITEM NAME FILTER            ELEMENT,FLUID            ABPM - BODY DIAMETER 6,0 INCHES            NOMINAL            AZTL - BODY OVERALL            LENGTH 14,0 INCHES NOMINAL            FEAT - SPECIAL FEATURES FILTRATION            2MICRONS            MEDA - MEDIA FOR WHICH            DESIGNED FUEL/OIL, HYDROCARBON            STYL - STYLE DESIGNATOR CYLINDRICAL            W/OUT CONTAINER</p>	UN	6	\$881,60

		SUPP - SUPPLEMENTARY FEATURES ARTICLE DESTINE A LA SEPARATION DE L'EAU DU GASOIL <b>ADDITIONAL INFORMATION: technical drawing (attachment A)</b>			
PG71200-2025-02006	5331-14-568-2189	O-RING NAME - ITEM NAME O-RING ADV N - CROSS-SECTIONAL HEIGHT 3,53 MILLIMETERS NOMINAL ADYT - CENTER HOLE DIAMETER 44,04 MILLIMETERS NOMINAL AGAV - END ITEM IDENTIFICATION FILTRE 42/C.310.268.18	UN	2	\$99,67
PG71200-2025-02008	5310-14-362-0919	WASHER,FLAT NAME - ITEM NAME WASHER,FLAT AAGR - CROSS-SECTIONAL SHAPE STYLE RECTANGULAR AAUB - HOLE DIAMETER 16,1 MILLIMETERS MINIMUM AND 16,9 MILLIMETERS MINIMUM ABMW - PERIPHERAL SHAPE STYLE ROUND ABMX - CENTER HOLE SHAPE STYLE ROUND ABNM - THICKNESS 3,0 MILLIMETERS NOMINAL ADAV - OVERALL DIAMETER 40,0 MILLIMETERS NOMINAL CQFM - HARDNESS RATING 82,0 ROCKWELL B MINIMUM AND 95,0 ROCKWELL B MAXIMUM MATT - MATERIAL COPPER ALLOY CU- AL9NI-FE MDCL - MATERIAL DOCUMENT NF A 53- 709 NATIONAL SPEC SINGLE MATERIAL RESPONSE AND CLASSIFICATION	UN	17	\$1.077,33
PG71200-2025-02010	4330-14-528-1039	FILTER ELEMENT,FLUID <b>ADDITIONAL INFORMATION: technical drawing (attachment B)</b>	UN	2	\$2.214,16
PG71200-2025-02011	2940-14-565-5328	FILTER BODY,FLUID NAME - ITEM NAME FILTER BODY,FLUID AAXX - MOUNTING TYPE THREADED HOLE ABTJ - MOUNTING HOLE QUANTITY 4 ADAU - BODY HEIGHT 26,0 INCHES NOMINAL ADML - MOUNTING FLANGE BOLT HOLE QUANTITY 4 AFQM - DISTANCE BETWEEN MOUNTING HOLE CENTERS 43,0	UN	2	\$1.268,02

		<p>MILLIMETERS MINIMUM AND 77,8 MILLIMETERS MAXIMUM AKBN - MOUNTING FACILITY THREAD DIRECTION RIGHT-HAND CSJC - MOUNTING FACILITY NOMINAL THREAD SIZE 12,0 MILLIMETERS CXZX - FILTERING SYSTEM FOR WHICH DESIGNED FULL FLOW MATT - MATERIAL IRON CAST MATT - MATERIAL PLASTIC ACRYLONITRILE MATT - MATERIAL STEEL MEDA - MEDIA FOR WHICH DESIGNED FUEL/OIL, HYDROCARBON STYL - STYLE DESIGNATOR 42 SUPP - SUPPLEMENTARY FEATURES TEMPERATURE DE SERVICE DU JOINT ENITRILE MOINS 43 PLUS 107 DEGRES. <b>ADDITIONAL INFORMATION: technical drawing (attachment C)</b></p>			
PG71200-2025-02019	5342-14-582-1658	<p>ANODE,IMPRESSED CURRENT,CATHODIC PROTECTION CORROSION PREVENTION NAME - ITEM NAME ANODE,IMPRESSED CURRENT,CATHODIC PROTECTION CORROSION PREVENTION FEAT - SPECIAL FEATURES PROTECTION CATHODIQUE ½ " G POUR GENERATEUR ANR 54/45/4 (ARR 2)</p>	UN	8	\$10.796,37
PG71200-2025-02020	4130-14-593-8730	<p>FILTER ELEMENT,AIRCONDITIONING NAME - ITEM NAME FILTER ELEMENT,AIR CONDITIONING ABMK - OVERALL WIDTH 250,0 MILLIMETERS NOMINAL ADPR - BODY THICKNESS 100,0 MILLIMETERS NOMINAL APGF - DESIGN TYPE NONREUSABLE AZTL - BODY OVERALL LENGTH 370,0 MILLIMETERS NOMINAL CRXW - FILTERING MEDIA DESIGN PLEATED CXCX - PART NAME ASSIGNED MEDIA FILTRANT CLASSE G4 SM309 POUR CADRE TYPE 3B BY CONTROLLING AGENCY MATT - MATERIAL MEDIA SYNTHETIQUE EN FIBRES POLYESTERS THERMOLIEES STYL - STYLE DESIGNATOR RECTANGULAR</p>	UN	2	\$84,88

		(INCL SQUARE) <b>ADDITIONAL INFORMATION: technical drawing (attachment D)</b>			
PG71200-2025-02021	5330-14-601-3088	GASKET NAME - ITEM NAME GASKET ABKV - OUTSIDE DIAMETER 16,0 MILLIMETERS NOMINAL ABVL - APERTURE DIAMETER 10,0 MILLIMETERS NOMINAL ADVM - CROSS-SECTIONAL THICKNESS 2,0 MILLIMETERS NOMINAL AGAV - END ITEM IDENTIFICATION SEPARATOR FILTER - SOUS-MARIN TYPE BRESIL MATT - MATERIAL FIBER STYL - STYLE DESIGNATOR CIRCULAR	UN	4	\$267,67
PG71200-2025-02024	4330-14-568-2210	FILTER ELEMENT,FLUID NAME - ITEM NAME FILTER ELEMENT,FLUID AGAV - END ITEM IDENTIFICATION FILTRE 42/C.310.268.52 CXCX - PART NAME ASSIGNED CARTOUCHE GRADE X BY CONTROLLING AGENCY <b>ADDITIONAL INFORMATION: technical drawing (attachment E)</b>	UN	2	\$1.640,92
PG71200-2025-02025	5330-14-209-0938	GASKET NAME - ITEM NAME GASKET AAGR - CROSS-SECTIONAL SHAPE STYLE RECTANGULAR METAL ABKV - OUTSIDE DIAMETER 44,0 MILLIMETERS NOMINAL ABVL - APERTURE DIAMETER 39,2 MILLIMETERS NOMINAL ADVM - CROSS-SECTIONAL THICKNESS 2,0 MILLIMETERS NOMINAL MATT - MATERIAL COPPER ALLOY CU/A3 MDCL - MATERIAL DOCUMENT NF A 53- 100 NATIONAL SPEC SINGLE MATERIAL RESPONSE AND CLASSIFICATION STYL - STYLE DESIGNATOR CIRCULAR	UN	17	\$553,49
PG71200-2025-02026	5330-14-475-7205	RETAINER,PACKING <b>ADDITIONAL INFORMATION: technical drawing (attachment F)</b>	UN	6	\$98,09
PG71200-2025-02027	5330-14-584-9890	GASKET NAME - ITEM NAME GASKET AAGR - CROSS-SECTIONAL SHAPE STYLE SOLID SINGLE OR COMPOSITION	UN	34	\$482,79

		<p>ABKV - OUTSIDE DIAMETER 34,0 MILLIMETERS MINIMUM AND 34,3 MILLIMETERS MAXIMUM</p> <p>ABVL - APERTURE DIAMETER 25,7 MILLIMETERS MINIMUM AND 26,0 MILLIMETERS MAXIMUM</p> <p>ADVM - CROSS-SECTIONAL THICKNESS 2,8 MILLIMETERS MINIMUM AND 3,2 MILLIMETERS MAXIMUM</p> <p>CXCX - PART NAME ASSIGNED JOINT BY CONTROLLING AGENCY</p> <p>MATT - MATERIAL RUBBER BUTADIENE-ACRYLONITRILE CLASS NBR</p> <p>MDCL - MATERIAL DOCUMENT NFL17-120, CLASSE 20, S-CLASSE A, CAT 8 NATIONAL STD SINGLE AND CLASSIFICATION</p> <p>MATERIAL RESPONSE</p> <p>STYL - STYLE DESIGNATOR CIRCULAR</p>			
PG71200-2025-02034	5310-14-603-0448	<p>WASHER,KEY</p> <p>NAME - ITEM NAME WASHER,KEY</p> <p>AAUB - HOLE DIAMETER 16,0 MILLIMETERS NOMINAL</p> <p>CXCX - PART NAME ASSIGNED FREIN A AILERON DN16</p> <p>BY CONTROLLING AGENCY</p> <p>MATT - MATERIAL NSPA / LD PROGRAMME STEEL COMP Z2CN18-10</p> <p><b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment G)</b></p>	UN	80	\$4.511,13
PG71200-2025-02036	5331-14-475-7204	<p>O-RING</p> <p>NAME - ITEM NAME O-RING</p> <p>ADV N - CROSS-SECTIONAL HEIGHT 3,53 MILLIMETERS NOMINAL</p> <p>ADYT - CENTER HOLE DIAMETER 53,57 MILLIMETERS NOMINAL</p> <p>CQFM - HARDNESS RATING 90 SH</p> <p><b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment H)</b></p>	UN	6	\$163,95
PG71200-2025-02038	5330-12-400-6499	<p>GASKET</p> <p>NAME - ITEM NAME GASKET</p> <p>ABKV - OUTSIDE DIAMETER 16.0 MILLIMETERS NOMINAL</p> <p>ADV N - CROSS-SECTIONAL HEIGHT 2.0 MILLIMETERS NOMINAL</p> <p>ADYT - CENTER HOLE DIAMETER 10.0 MILLIMETERS NOMINAL</p> <p>MATT - MATERIAL OVERALL COPPER</p>	UN	2	\$100,42

		<b>ADDITIONAL INFORMATION: technical drawing (attachment I)</b>			
PG71200-2025-02039	4130-14-587-9335	FILTER ELEMENT,AIRCONDITIONING NAME - ITEM NAME FILTER ELEMENT,AIR CONDITIONING ABBD - MAXIMUM AIR FLOW RATE 3500 M3/H ABMK - OVERALL WIDTH 548,0 MILLIMETERS NOMINAL ADPR - BODY THICKNESS 100,0 MILLIMETERS NOMINAL AZTL - BODY OVERALL LENGTH 748,0 MILLIMETERS NOMINAL CRXW - FILTERING MEDIA DESIGN PLEATED CXCX - PART NAME ASSIGNED FILTRE PLISSE DEMONTABLE BY CONTROLLING AGENCY STYL - STYLE DESIGNATOR NSPA / LD PROGRAMME RECTANGULAR (INCL SQUARE W/ AIR BAFFLE) <b>ADDITIONAL INFORMATION: technical drawing (attachment J)</b>	UN	1	\$131,52
PG71200-2025-02041	5340-14-598-3736	ANODE,CORROSION PREVENTIVE <b>ADDITIONAL INFORMATION: technical drawing (attachment K)</b>	UN	2	\$15.681,21
PG71200-2025-02045	5331-14-603-0451	O-RING NAME - ITEM NAME O-RING CXCX - PART NAME ASSIGNED LID O RING BY CONTROLLING AGENCY MATT - MATERIAL NSPA / LD PROGRAMME VITON <b>ADDITIONAL INFORMATION: technical drawing (attachment L)</b>	UN	1	\$340,63
PG71200-2025-02050	5310-14-283-6828	NUT,SELF-LOCKING,HEXAGON NAME - ITEM NAME NUT,SELF- LOCKING,HEXAGON AAJF - THREAD DIRECTION RIGHT-HAND AAUM - LOCKING FEATURE BAGUE- RESSORT ACTA - NUT STYLE A14F BZRR - THREAD SERIES ISO M CQJX - NOMINAL THREAD SIZE 16,0 MILLIMETERS CQQR - THREAD PITCH IN MILLIMETERS 2,0 CRTM - BEARING SURFACE TYPE FLAT	UN	17	\$754,88

		FEAT - SPECIAL FEATURES R: 65/70HB; COUPLE DE SERRAGE: 10,5 MDAN MATT - MATERIAL BRONZE D'ALUMINIUM (BAL 65)			
PG71200-2025-02052	5340-14-525-3823	ANODE,CORROSION PREVENTIVE <b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment M)</b>	UN	14	\$109.768,47
PG71200-2025-02054	5365-14-582-0787	SHIM SET NAME - ITEM NAME SHIM SET AJJW - COMPONENT QUANTITY 6,0 FEAT - SPECIAL FEATURES JEU DE RODELLES DE REGLAGE POUR MONTAGE DES PLOTS ELASTIQUES GENERATEUR ANR 54/45/4 (ARR 2) (fr: Jeu de rodelles de réglage pour montage des plots elastiques GENERATEUR ANR 54/45/4 (ARR 2))	UN	4	\$1.393,67
PG71200-2025-02055	5330-14-591-1274	GASKET NAME - ITEM NAME GASKET ABKG - BOLT CIRCLE DIAMETER 445,0 MILLIMETERS NOMINAL ABKV - OUTSIDE DIAMETER 470,0 MILLIMETERS NOMINAL ADVK - CROSS SECTION INSIDE DIAMETER 405,0 MILLIMETERS NOMINAL ADVL - CROSS SECTION OUTSIDE DIAMETER 470,0 MILLIMETERS NOMINAL ADVM - CROSS-SECTIONAL THICKNESS 3,0 MILLIMETERS MAXIMUM AECS - BOLT HOLE QUANTITY 12,0 BYWW - SMALLEST BOLT HOLE DIAMETER 12,0 MILLIMETERS NOMINAL BYWX - LARGEST BOLT HOLE DIAMETER 12,0 MILLIMETERS NOMINAL CXCX - PART NAME ASSIGNED WELLRINDICTUNG RAPIDO DN 350 BY CONTROLLING AGENCY STYL - STYLE DESIGNATOR CIRCULAR SUPP - SUPPLEMENTARY FEATURES PRESENCE D'UN MEPLAT SUR LE HAUT ET LE BAS DU JOINT	UN	2	\$6.701,03
PG71200-2025-02057	5340-14-598-3748	ANODE,CORROSION PREVENTIVE <b>ADDITIONAL INFORMATION:</b> <b>technical drawing (attachment N)</b>	UN	4	\$40.051,40
PG71200-2025-02060	2940-14-565-5721	FILTER ELEMENT,FLUID NAME - ITEM NAME FILTER ELEMENT,FLUID	UN	2	\$1.265,12

		<p>ABPM - BODY DIAMETER 6,0 INCHES NOMINAL</p> <p>AZTL - BODY OVERALL LENGTH 7,0 INCHES NOMINAL</p> <p>MEDA - MEDIA FOR WHICH DESIGNED FUEL/OIL, HYDROCARBON</p> <p>STYL - STYLE DESIGNATOR CYLINDRICAL W/OUT CONTAINER</p> <p>SUPP - SUPPLEMENTARY FEATURES ARTICLE DESTINE A LA SEPARATION DE L'EAU DU GASOIL</p> <p><b>ADDITIONAL INFORMATION: technical drawing (attachment O)</b></p>			
PG71200-2025-02061	5331-14-602-1827	<p>O-RING</p> <p>NAME - ITEM NAME</p> <p>O-RING</p> <p>CXCY - PART NAME ASSIGNED JOINT TORIQUE POUR LA CARTOUCHE BY CONTROLLING AGENCY</p> <p><b>ADDITIONAL INFORMATION: technical drawing (attachment P)</b></p>	UN	2	\$303,81
PG71200-2025-02062	4210-14-599-2572	<p>FILTER ELEMENT,FLUID</p> <p>NAME - ITEM NAME FILTER ELEMENT,FLUID</p> <p>ABPM - BODY DIAMETER 24,0 MILLIMETERS NOMINAL</p> <p>ADNH - FILTRATION RATING IN 600,0 NOMINAL MICRONS</p> <p>ADNK - FLOW DIRECTION OUTSIDE IN</p> <p>ADPR - BODY THICKNESS 2,5 MILLIMETERS NOMINAL</p> <p>AGAV - END ITEM</p> <p>IDENTIFICATION BUSE BROUILLARD D'EAU - SOUS-MARIN TYPE BRESIL</p> <p>APGF - DESIGN TYPE REUSABLE</p> <p>CRXW - FILTERING MEDIA DESIGN MESH</p> <p>CXCY - PART NAME ASSIGNED FILTRE POUR BUSES LECHLER BY CONTROLLING AGENCY</p> <p>MATT - MATERIAL STEEL CORROSION RESISTING</p> <p>MEDA - MEDIA FOR WHICH DESIGNED WATER</p> <p>STYL - STYLE DESIGNATOR ROUND (BASICALLY FLAT)</p> <p><b>ADDITIONAL INFORMATION: technical drawing (attachment Q)</b></p>	UN	7	\$413,73
PG71200-2025-02063	4130-14-603-3419	<p>FILTER ELEMENT,AIRCONDITIONING</p> <p>NAME - ITEM NAME FILTER ELEMENT,AIR</p>	UN	2	\$61,95

		<p>CONDITIONING</p> <p>ABMK - OVERALL WIDTH 400,0 MILLIMETERS NOMINAL</p> <p>ADPR - BODY THICKNESS 20,0 MILLIMETERS NOMINAL</p> <p>AZTL - BODY OVERALL LENGTH 300,0 MILLIMETERS NOMINAL</p> <p>CRXW - FILTERING MEDIA DESIGN GRILLAGE ET MEDIA FILTRANT EN FIBRE SYNTHETIQUE</p> <p>CXCY - PART NAME ASSIGNED FILTRE PLAN</p> <p>BY CONTROLLING AGENCY</p> <p>MATT - MATERIAL CADRE METALLIQUE EN TOLE ELECTOZINGUEE OU INOX AND MEDIA PLAT</p> <p>SYNTHETIQUE AVEC GRILLAGES GALVANISES (OU INOX)</p> <p>STYL - STYLE DESIGNATOR RECTANGULAR (INCL SQUARE)</p> <p><b>ADDITIONAL INFORMATION: technical drawing (attachment R)</b></p>			
PG71200-2025-02065	5340-14-598-3731	<p>ANODE,CORROSION PREVENTIVE</p> <p><b>ADDITIONAL INFORMATION: technical drawing (attachment S)</b></p>	UN	8	\$62.724,84
PG71200-2025-02072	5330-14-596-9981	<p>RETAINER,PACKING</p> <p>NAME - ITEM NAME RETAINER,PACKING</p> <p>AGAV - END ITEM</p> <p>IDENTIFICATION FILTRE; 42/C.320.234.10</p> <p>CXCY - PART NAME ASSIGNED BAGUE 1/4G</p> <p>BY CONTROLLING AGENCY</p> <p>MATT - MATERIAL</p> <p>NSPA / LD PROGRAMME</p> <p>ACIER INOX</p> <p><b>ADDITIONAL INFORMATION: technical drawing (attachment T)</b></p>	UN	1	\$183,72
PG71200-2025-02075	5340-14-596-2292	<p>ANODE,CORROSION PREVENTIVE</p> <p>NAME - ITEM NAME GASKET</p> <p>ABKW - OVERALL HEIGHT 5,0 MILLIMETERS NOMINAL</p> <p>CQFM - HARDNESS RATING 60,0 SHORE DUROMETER A NOMINAL</p> <p>FEAT - SPECIAL FEATURES JOINT DE BOITE HYDROREFRIGERANT EP.5MM 60 SHORE POUR</p> <p>GENERATEUR ANR 54/45/4 (ARR 2)</p> <p>MATT - MATERIAL NITRILE NBR</p> <p><b>ADDITIONAL INFORMATION: technical drawing (attachment U)</b></p>	UN	4	\$29.920,19
PG71200-2025-02077	5330-14-582-1654	GASKET	UN	8	\$12.320,93

		NAME - ITEM NAME GASKET ABKW - OVERALL HEIGHT 5,0 MILLIMETERS NOMINAL CQFM - HARDNESS RATING 60,0 SHORE DUROMETER A NOMINAL FEAT - SPECIAL FEATURES JOINT DE BOITE HYDROREFRIGERANT EP.5MM 60 SHORE POUR GENERATEUR ANR 54/45/4 (ARR 2) MATT - MATERIAL NITRILE NBR			
PG71200-2025-02081	5310-33-215-1523	NUT,PLAIN,HEXAGON NAME - ITEM NAME NUT,PLAIN,HEXAGON BZRR - THREAD SERIES M MATT - MATERIAL 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 AGAV - END ITEM IDENTIFICATION TORNILLERIA PARA PASOS DE CASCO Y CIERRES RESISTENTES SUBMARINOS S-70 / SCREWS FOR THROUGH HULL AND RESISTANT CLOSURES FOR SUBMARINES S-70 CXCX - PART NAME ASSIGNED TUERCA HEXAGONAL / HEXAGONAL NUT BY CONTROLLING AGENCY CQJX - NOMINAL THREAD SIZE 20.0 MILLIMETERS ZZZK - SPECIFICATION/STANDARD DATA I9008-ISO4032 PROFESSIONAL/INDUSTRIAL ASSOCIATION STANDARD CQQR - THREAD PITCH IN MILLIMETERS 2.50 AAJF - THREAD DIRECTION RIGHT-HAND CRTM - BEARING SURFACE TYPE FLAT <b>ADDITIONAL INFORMATION:  technical drawing (attachment V)</b>	UN	1	\$91,40
PG71200-2025-02090	5330-14-584-9887	GASKET NAME - ITEM NAME GASKET AAGR - CROSS-SECTIONAL	UN	34	\$553,24

		SHAPE STYLE SOLID SINGLE OR COMPOSITION ABKV - OUTSIDE DIAMETER 70,0 MILLIMETERS MINIMUM AND 70,3 MILLIMETERS MAXIMUM ABVL - APERTURE DIAMETER 53,7 MILLIMETERS MINIMUM AND 54,0 MILLIMETERS MAXIMUM ADVM - CROSS-SECTIONAL THICKNESS 2,8 MILLIMETERS MINIMUM AND 3,2 MILLIMETERS MAXIMUM CXCX - PART NAME ASSIGNED JOINT BY CONTROLLING AGENCY MATT - MATERIAL RUBBER BUTADIENE-ACRYLONITRILE CLASS NBR MDCL - MATERIAL DOCUMENT NFL17- 120, CLASSE 20, S-CLASSE A, CAT 8 NATIONAL STD SINGLE AND CLASSIFICATION MATERIAL RESPONSE STYL - STYLE DESIGNATOR CIRCULAR			
PG71200-2025-02101	4330-14-394-6054	FILTER ELEMENT,FLUID NAME - ITEM NAME FILTER ELEMENT,FLUID ADNH - FILTRATION RATING IN 3,0 ABSOLUTE MICRONS ADNK - FLOW DIRECTION OUTSIDE IN ADNQ - DIFFERENTIAL PRESSURE 10,0 BAR APGF - DESIGN TYPE NONREUSABLE AZKQ - TEMP RATING M43,0 CELSIUS MINIMUM AND 107,0 CELSIUS MAXIMUM AZTL - BODY OVERALL LENGTH 13,0 INCHES NOMINAL CRXW - FILTERING MEDIA DESIGN SPUN AND CORRUGATED CRXW - FILTERING MEDIA DESIGN SHEETING AND WOVEN FEAT - SPECIAL FEATURES CONDITIONS PALL Y943(CONTROLE UNITAIRE POINT BULLE -JOINT CONDITIONNE SUIVANT NORMES NFL17- 102,103 ; MARQUAGE DES NNO,DEFINITION EFFICACITE FILTRATION)- MATT - MATERIAL COUPELLE D'EXTREMITE ET NOYAU CENTRAL ACIER	UN	3	\$1.043,32

		<p>ANTI-CORROSION  MATT - MATERIAL MICROFIBRES  INORGANIQUES INERTES LIEES PAR  RESINE EPOXYDE  MEDA - MEDIA FOR WHICH  DESIGNED FUEL/OIL, HYDROCARBON  STYL - STYLE DESIGNATOR CYLINDRICAL  W/OUT CONTAINER  <b>ADDITIONAL INFORMATION:  technical drawing (attachment W)</b></p>			
PG71200-2025-02105	5330-14-596-7017	<p>GASKET  NAME - ITEM NAME GASKET  AAGR - CROSS-SECTIONAL  SHAPE STYLE 21  ABKV - OUTSIDE DIAMETER 26,0  MILLIMETERS NOMINAL  ABVL - APERTURE DIAMETER 21,2  MILLIMETERS NOMINAL  ADVM - CROSS-SECTIONAL  THICKNESS 1,5 MILLIMETERS NOMINAL  CXCX - PART NAME ASSIGNED JOINT PLAT  EN CUIVRE RECUIT 21,2X26X1,5 NON  NORMALISE POUR  BY CONTROLLING AGENCY  IMPLANTATION PAS DU GAZ STF 33-07-  02/021E  MATT - MATERIAL COPPER  STYL - STYLE DESIGNATOR 1</p>	UN	4	\$328,12
PG71200-2025-02107	5340-14-598-3742	<p>ANODE,CORROSION PREVENTIVE  <b>ADDITIONAL INFORMATION:  technical drawing (attachment X)</b></p>	UN	2	\$14.960,09
PG71200-2025-02109	5340-14-594-8765	<p>ANODE,CORROSION PREVENTIVE  <b>ADDITIONAL INFORMATION:  technical drawing (attachment Y)</b></p>	UN	2	\$6.404,49
PG71200-2025-02112	4330-14-603-0454	<p>FILTER ELEMENT,FLUID  NAME - ITEM NAME  FILTER ELEMENT,FLUID  CXCX - PART NAME ASSIGNED FILTER  ELEMENT  BY CONTROLLING AGENCY  MATT - MATERIAL  NSPA / LD PROGRAMME  CUAL-C  <b>ADDITIONAL INFORMATION:  technical drawing (attachment Z)</b></p>	UN	1	\$8.835,99
PG71200-2025-02118	4310-14-579-7019	SEPARATOR,SLUDGE,COMPRESSOR	UN	4	\$12.179,91
PG71200-2025-02123	4730-14-605-9439	<p>SPRAYING NOZZLE  NAME - ITEM NAME  SPRAYING NOZZLE  CXCX - PART NAME ASSIGNED BUSE  BROUILLARD D'EAU A DIFFUSION 140</p>	UN	7	\$4.361,49

		DEGRES BY CONTROLLING AGENCY <b>ADDITIONAL INFORMATION: technical drawing (attachment AA)</b>			
PG71200-2025-02133	5340-14-597-2853	FLANGE ATTACHMENT,M <b>ADDITIONAL INFORMATION: technical drawing (attachment AB)</b>	UN	4	\$29.000,93
PG71200-2025-02134	5330-14-594-8390	GASKET NAME - ITEM NAME GASKET ADUE - APERTURE WIDTH 300,0 MILLIMETERS NOMINAL ADUF - APERTURE LENGTH 400,0 MILLIMETERS NOMINAL ADUV - BEARING SURFACE WIDTH 38,0 MILLIMETERS NOMINAL MATT - MATERIAL RUBBER BUTADIENE- ACRYLONITRILE CLASS NBR STYL - STYLE DESIGNATOR OVAL <b>ADDITIONAL INFORMATION: technical drawing (attachment AC)</b>	UN	6	\$3.972,35
PG71200-2025-02135	4320-99-307-3087	PUMP,ROTARY NAME - ITEM NAME PUMP,ROTARY AHZT - OPERATION METHOD POWERED AAXX - MOUNTING TYPE BASE FEAT - SPECIAL FEATURES REPLACEMENT PUMP ASSEMBLY FOR R134A/O2 SENSOR ASSEMBLY;W/4 MTG HOLES AGAV - END ITEM IDENTIFICATION DAMS DETECTORS CXCX - PART NAME ASSIGNED PUMP MODULE BY CONTROLLING AGENCY	UN	1	\$5.305,99
PG71200-2025-02158	5307-14-598-0675	STUD,CONTINUOUS THREAD NAME - ITEM NAME STUD,CONTINUOUS THREAD ABHP - OVERALL LENGTH 160,0 MILLIMETERS NOMINAL CQJX - NOMINAL THREAD SIZE 16,0 MILLIMETERS CXCX - PART NAME ASSIGNED BOUT FILETE BY CONTROLLING AGENCY MATT - MATERIAL STEEL SFTT - SURFACE TREATMENT REVETEMENT NON ELECTROLYTIQUE DE LAMELLES DE ZINC (FLZN) UKAS - STRENGTH GRADE DESIGNATION NSPA / LD PROGRAMME	UN	32	\$1.727,80

		8.8			
PG71200-2025-02160	7330-14-587-9368	FILTER,COOKING GREASE NAME - ITEM NAME FILTER,COOKING GREASE ABHP - OVERALL LENGTH 600,0 MILLIMETERS NOMINAL ABKW - OVERALL HEIGHT 20,0 MILLIMETERS NOMINAL ABMK - OVERALL WIDTH 450,0 MILLIMETERS NOMINAL AESE - FILTER MATERIAL TRICOT METALLIQUE GALVANISE BTLT - FILTRATION RATE 1600 M3/H CXCX - PART NAME ASSIGNED FILTRE A GRAISSE BY CONTROLLING AGENCY FEAT - SPECIAL FEATURES NSPA / LD PROGRAMME FILTRE A TRICOT GALVANISE,CHEVRONNE,DISPOSE EN COUCHES SUPERPOSEES ENTRECROISEES ET GRILLAGE.EFFICACITE 88% GRAVIMETRIQUE.INOX 304L <b>ADDITIONAL INFORMATION:          technical drawing (attachment AD)</b>	UN	2	\$597,67
Total					\$416.069,01

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 class Ria-chuelo, 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 class Riachuelo, 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:

<b>Country of origin</b>	<b>FCA</b>	<b>FOB</b>
AUSTRIA	-	HAMBURG
BELGIUM	-	HAMBURG
DENMARK	-	HAMBURG
FINLAND	-	HAMBURG
FRANCE	PARIS (LE BOURGET)	LE HAVRE
GERMANY	-	HAMBURG

<b>Country of origin</b>	<b>FCA</b>	<b>FOB</b>
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 416.069,01 , 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: 91535, 91536, 91537, 91530, 91534 UGE: 40015;
- b) Funding source: 3050000144, 1050000144, 1000000000;
- c) Work program: 236871, 236885;
- d) Item of expenditure: 339030;
- e) Internal plan: P.3DR.HU, P.3X1.HU, P.3X2.HU, P.3X3.HU, P.3X4.HU, P.3X1.RI , P.3X3.RI , P.3X4.RI, P.3DR.TO, P.3X1.TO, P.3DR.RI.

Rio de Janeiro, RJ, 8<sup>th</sup> April 2026.

SAINT-CLAIR DANTAS OLIVEIRA SANTOS

Captain (Ret.)

Submarine Project Management Chief of Department

LEANDRO BRILHANTE REGLY

Lieutenant-Commander

Supply Advisor

FELIPE GOMES FONTES  
Lieutenant-Commander  
Ship Manager

Approved by:

MARCELO ANTONIO ROCHA AFONSO  
Captain  
Expenditure Authorising Officer