

**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
PG71200-2025-01871	5305-14-507-0631	SCREW,MACHINE NAME - ITEM NAME SCREW,MACHINE AAJF - THREAD DIRECTION RIGHT-HAND AASA - THREAD LENGTH 6,0 MILLIMETERS NOMINAL AASB - FASTENER LENGTH 6,0 MILLIMETERS NOMINAL AASK - HEAD STYLE FLAT FILLISTER AASL - HEAD DIAMETER 5,32 MILLIMETERS MINIMUM AND 5,50 MILLIMETERS MAXIMUM AASU - HEAD HEIGHT 1,86 MILLIMETERS MINIMUM AND 2,00 MILLIMETERS MAXIMUM ABQZ - INTERNAL DRIVE STYLE SLOT AHYM - NOMINAL THREAD DIAMETER 3,0 MILLIMETERS CQQR - THREAD PITCH IN MILLIMETERS 0,5 CQWR - EXTERNAL THREAD TOLERANCE CLASS 6G CYAU - SCREW MATERIAL STEEL CYBA - SCREW SURFACE TREATMENT PASSIVATE TEST - TEST DATA DOCUMENT F0110-E27- 003 STANDARD (INCLUDES INDUSTRY OR ASSOCIATION STANDARDS, INDIVIDUAL MANUFACTUREER STANDARDS, ETC.). THSD - THREAD SERIES DESIGNATOR ISO M UKAS - STRENGTH GRADE DESIGNATION 80 INFORMATION: technical drawing (attachment A)	UN	78	\$227,99

PG71200-2025-01913	5340-14-585-3464	<p>ANODE,CORROSION PREVENTIVE NAME - ITEM NAME ANODE,CORROSION PREVENTIVE AARN - FABRICATION METHOD CAST 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 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 INFORMATION: technical drawing (attachment B)</p>	UN	44	\$27.176,47
PG71200-2025-02307	5310-14-283-6828	<p>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 FEAT - SPECIAL FEATURES R: 65/70HB; COUPLE DE SERRAGE: 10,5 MDAN MATT - MATERIAL BRONZE D'ALUMINIUM (BAL 65)</p>	UN	17	\$636,55
PG71200-2025-02332	4330-14-585-2901	<p>FILTER ELEMENT,FLUID NAME - ITEM NAME FILTER ELEMENT,FLUID ABPM - BODY DIAMETER 59,4 MILLIMETERS MINIMUM AND 60,6 MILLIMETERS MAXIMUM ADAS - BODY INSIDE DIAMETER 54,0 MILLIMETERS NOMINAL AZTL - BODY OVERALL LENGTH 86,0 MILLIMETERS MINIMUM AND 86,5 MILLIMETERS MAXIMUM MATT - MATERIAL BRONZE CLASSE 30 STYL - STYLE DESIGNATOR CYLINDRICAL</p>	UN	17	\$6.691,28

		W/OUT CONTAINER SUPP - SUPPLEMENTARY FEATURES POUR TOUTES LES ARETES, CHANFREIN DE 0,5 MM A 45 DEGRES "PAS DE BAVURE"; CONICITE 0,3%.			
PG71200-2025-02340	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	\$599,91
PG71200-2025-02346	5330-14-584-9887	GASKET NAME - ITEM NAME GASKET AAGR - CROSS-SECTIONAL 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	UN	34	\$457,13
PG71200-2025-02348	4130-14-587-9335	FILTER ELEMENT,AIRCONDITIONING NAME - ITEM NAME FILTER ELEMENT,AIR	UN	1	\$133,07

		<p>CONDITIONING</p> <p>ABBD - MAXIMUM AIR FLOW RATE 3500 M3/H</p> <p>ABMK - OVERALL WIDTH 548,0 MILLIMETERS NOMINAL</p> <p>ADPR - BODY THICKNESS 100,0 MILLIMETERS NOMINAL</p> <p>AZTL - BODY OVERALL LENGTH 748,0 MILLIMETERS NOMINAL</p> <p>CRXW - FILTERING MEDIA DESIGN PLEATED</p> <p>CXCY - PART NAME ASSIGNED FILTRE PLISSE DEMONTABLE BY CONTROLLING AGENCY</p> <p>STYL - STYLE DESIGNATOR RECTANGULAR (INCL SQUARE W/ AIR BAFFLE)</p> <p>INFORMATION: technical drawing (attachment C)</p>			
PG71200-2025-02351	5330-14-593-8734	<p>PACKING,PREFORMED</p> <p>NAME - ITEM NAME</p> <p>PACKING,PREFORMED</p> <p>AAGR - CROSS-SECTIONAL SHAPE STYLE FLANGED</p> <p>ADVN - CROSS-SECTIONAL HEIGHT 5,5 MILLIMETERS NOMINAL</p> <p>ADVT - FLANGED BODY</p> <p>OUTSIDE DIAMETER 17,0 MILLIMETERS NOMINAL</p> <p>ADVW - BODY RECESS DEPTH 2,0 MILLIMETERS NOMINAL</p> <p>ADYT - CENTER HOLE DIAMETER 12,0 MILLIMETERS NOMINAL</p> <p>ADYU - PERIPHERAL DIAMETER 21,5 MILLIMETERS NOMINAL</p> <p>AGAV - END ITEM</p> <p>IDENTIFICATION MAT513-0152;FILTRES POUR AIR HP</p> <p>MATT - MATERIAL PLASTIC POLYAMIDE NYLON</p> <p>MDCL - MATERIAL DOCUMENT PA6.6 MFR REF SINGLE MATERIAL RESPONSE AND CLASSIFICATION</p> <p>INFORMATION: technical drawing (attachment D)</p>	UN	7	\$279,34
PG71200-2025-02352	5330-14-593-9060	<p>GASKET</p> <p>NAME - ITEM NAME GASKET</p> <p>ADUE - APERTURE WIDTH 300.0 MILLIMETERS NOMINAL</p> <p>ADUF - APERTURE LENGTH 400.0 MILLIMETERS NOMINAL</p>	UN	1	\$3.067,65

		<p>ADUV - BEARING SURFACE WIDTH 51.0 MILLIMETERS NOMINAL ADV - CROSS-SECTIONAL THICKNESS 3,0 MILLIMETERS NOMINAL AECS - BOLT HOLE QUANTITY 16,0 BYWW - SMALLEST BOLT HOLE DIAMETER 22,0 MILLIMETERS NOMINAL CXC - PART NAME ASSIGNED JOINT DE BOUCHON DE TROU D'HOMME AVEC VIS REDUIT 300X400 BY CONTROLLING AGENCY FEAT - SPECIAL FEATURES EPAISSEUR DE LA TAPE 5MM MATT - MATERIAL RUBBER ETHYLENE- PROPYLENE-DIENE CLASS EPDM MDCL - MATERIAL DOCUMENT STF 33-07- 02/023 MIL SPEC SINGLE MATERIAL RESPONSE AND CLASSIFICATION STYL - STYLE DESIGNATOR OVAL INFORMATION: technical drawing (attachment E)</p>			
PG71200-2025-02353	5330-14-589-1055	<p>SEAL,PLAIN NAME - ITEM NAME SEAL,PLAIN ABVM - ACCOMMODATED SHAFT DIAMETER 33,4 MILLIMETERS NOMINAL ADUC - SEAL WIDTH 2,88 MILLIMETERS NOMINAL CPCW - HOUSING BORE DIAMETER 28,2 MILLIMETERS NOMINAL CQCF - CONSTRUCTION 3 PIECES FEAT - SPECIAL FEATURES JOINT TORIQUE DIMENSIONS 34,10X3,60 (fr: Joint torique dimensions 34,10x3,60) MATT - MATERIAL SUIVANT STF33-07-02- 019E : NBR 20A8 MATT - MATERIAL X2CRNI18-9 MATT - MATERIAL PLASTIC POLYTETRAFLUOROETHYLENE</p>	UN	14	\$3.083,47
PG71200-2025-02354	5360-14-590-1651	<p>SPRING,HELICAL,COMPRESSION NAME - ITEM NAME SPRING,HELICAL,COMPRESSION AARX - INSIDE DIAMETER 17,5 MILLIMETERS NOMINAL ABQK - END STYLE SPRING END,GROUND ACVU - STOCK DIAMETER 1,4 INCHES MAJOR</p>	UN	1	\$1.902,09

		AGAV - END ITEM IDENTIFICATION CLAPET DE NON RETOUR EN CUAL A BRIDES MIXTES POUR CIRCUIT EAU DE MER HP - DN32,NAVAL GROUP,MAT177-0392 AGEK - SPRING FREE LENGTH 41,85 MILLIMETERS NOMINAL APCN - COIL QUANTITY 10 AXJQ - SPRING SOLID LENGTH 25,85 MILLIMETERS NOMINAL AXLH - COIL HELIX DIRECTION RIGHT- HAND AXLQ - SPRING FREE OUTSIDE 21,5 MILLIMETERS NOMINAL DIAMETER MATT - MATERIAL ACIER X10CRNI 18-8 STYL - STYLE DESIGNATOR CYLINDRICAL INFORMATION: technical drawing (attachment F)			
PG71200-2025-02355	5330-14-588-6140	SEAL,PLAIN NAME - ITEM NAME SEAL,PLAIN ABVM - ACCOMMODATED SHAFT DIAMETER 15,0 MILLIMETERS NOMINAL ADUC - SEAL WIDTH 2,12 MILLIMETERS NOMINAL CPCW - HOUSING BORE DIAMETER 18,0 MILLIMETERS NOMINAL CQCF - CONSTRUCTION 3 PIECES CXCX - PART NAME ASSIGNED BAGUE D'ETANCHEITE RUCH DN 15 BY CONTROLLING AGENCY FEAT - SPECIAL FEATURES JOINT TORIQUE DIMENSIONS 23,60X2,65 (fr: Joint torique dimensions 23,60x2,65) MATT - MATERIAL ELASTOMERE NBR 20A8 AN MATT - MATERIAL CUPRO-NICKEL CUNI30MN1FE MATT - MATERIAL PLASTIC POLYTETRAFLUOROETHYLENE	UN	8	\$5.972,33
PG71200-2025-02356	5340-14-594-8763	ANODE,CORROSION PREVENTIVE INFORMATION: technical drawing (attachment G)	UN	8	\$102.529,41
PG71200-2025-02358	4730-14-597-6221	SWIVEL JOINT,TUBE TO BOSS INFORMATION: technical drawing (attachment H)	UN	1	\$9.017,65
PG71200-2025-02360	5330-14-597-4274	GASKET	UN	2	\$928,47

		NAME - ITEM NAME GASKET AAGR - CROSS-SECTIONAL SHAPE STYLE RECTANGULAR METAL ABKV - OUTSIDE DIAMETER 29,0 MILLIMETERS NOMINAL ABVL - APERTURE DIAMETER 22,5 MILLIMETERS NOMINAL ADVM - CROSS-SECTIONAL THICKNESS 1,5 MILLIMETERS NOMINAL CXCX - PART NAME ASSIGNED JOINT PLAT EN CUIVRE RECUIT 22,5X29X1,5 NORME NF R93-920 STF 33-07- BY CONTROLLING AGENCY 02/021E MATT - MATERIAL CUIVRE RECUIT STYL - STYLE DESIGNATOR CIRCULAR			
PG71200-2025-02363	5330-14-601-1420	GASKET NAME - ITEM NAME GASKET ABKV - OUTSIDE DIAMETER 17,5 MILLIMETERS NOMINAL ABVL - APERTURE DIAMETER 6,2 MILLIMETERS NOMINAL ADVX - CROSS SECTION INSIDE DIAMETER 6,2 MILLIMETERS NOMINAL ADVL - CROSS SECTION OUTSIDE DIAMETER 17,5 MILLIMETERS NOMINAL ADVM - CROSS-SECTIONAL THICKNESS 2,0 MILLIMETERS NOMINAL CXCX - PART NAME ASSIGNED FLAT SEAL 6,2X17,5X2 COPPER BY CONTROLLING AGENCY MATT - MATERIAL COPPER STYL - STYLE DESIGNATOR CIRCULAR	UN	1	\$239,47
PG71200-2025-02364	5310-14-603-0448	WASHER,KEY NAME - ITEM NAME WASHER,KEY AAUB - HOLE DIAMETER 16,0 MILLIMETERS NOMINAL CXCX - PART NAME ASSIGNED FREIN A AILERON DN16 BY CONTROLLING AGENCY MATT - MATERIAL NSPA / LD PROGRAMME STEEL COMP Z2CN18-10 INFORMATION: technical drawing (attachment I)	UN	80	\$3.413,94
PG71200-2025-02370	5365-14-582-0787	SHIM SET NAME - ITEM NAME SHIM SET AJJW - COMPONENT QUANTITY 6,0	UN	4	\$1.837,84

		FEAT - SPECIAL FEATURES JEU DE RODELLES DE REGLAGE POUR MONTAGE DES PLOTS ELASTIQUES GENERATEUR ANR 54/45/4 (ARR 2) (fr: Jeu de rondelles de réglage pour montage des plots elastiques GENERATEUR ANR 54/45/4 (ARR 2))			
PG71200-2025-02371	6145-14-584-6383	BRAID,WIRE NAME - ITEM NAME BRAID,WIRE AAGR - CROSS-SECTIONAL SHAPE STYLE C11 ADVN - CROSS-SECTIONAL HEIGHT 1,5 MILLIMETERS MINIMUM AND 2,5 MILLIMETERS MAXIMUM ADWH - CROSS-SECTIONAL WIDTH 15,0 MILLIMETERS MINIMUM AND 17,0 MILLIMETERS MAXIMUM CXCW - CONDUCTOR FORM BRAID, FLAT CXCX - PART NAME ASSIGNED TRESSE PLATE EN CUIVRE ETAME 16X2MM BY CONTROLLING AGENCY CXDM - CONDUCTOR CROSS- SECTIONAL SHAPE RECTANGULAR MATT - MATERIAL CUIVRE ETAME	MR	100	\$3.227,40
PG71200-2025-02372	5305-14-586-0563	SCREW,SHOULDER NAME - ITEM NAME SCREW,SHOULDER AAJF - THREAD DIRECTION RIGHT-HAND AASA - THREAD LENGTH 17,0 MILLIMETERS NOMINAL AASB - FASTENER LENGTH 45,0 MILLIMETERS NOMINAL AASK - HEAD STYLE HEXAGON ABQZ - INTERNAL DRIVE STYLE W/O INTERNAL DRIVE AHYM - NOMINAL THREAD DIAMETER 14,0 MILLIMETERS CXCX - PART NAME ASSIGNED VIS AJUSTEE L=45 BY CONTROLLING AGENCY MATT - MATERIAL STEEL THSD - THREAD SERIES DESIGNATOR ISO M UKAS - STRENGTH GRADE DESIGNATION 8.8 INFORMATION: technical drawing (attachment J)	UN	9	\$4.362,87
PG71200-2025-02374	5307-14-593-7135	STUD,PLAIN NAME - ITEM NAME STUD,PLAIN AAJF - THREAD DIRECTION RIGHT-HAND AASA - THREAD LENGTH 28,0 MILLIMETERS NOMINAL	UN	34	\$11.317,65

		<p>ABHP - OVERALL LENGTH 115,0 MILLIMETERS NOMINAL</p> <p>AKYN - FURNISHED ITEMS AND QUANTITY ECROU HEXAGONAL, 2</p> <p>CQJX - NOMINAL THREAD SIZE 16,0 MILLIMETERS</p> <p>CQQR - THREAD PITCH IN MILLIMETERS 2,0</p> <p>CXCY - PART NAME ASSIGNED ELEMENTS DE FIXATION EN ACIER INOXYDABLE X4CRNIMO16-5-1 + QT900 BY CONTROLLING AGENCY M16X115</p> <p>MATT - MATERIAL ACIER COMP X4CRNIMO16-5-1 (1.4418) + QT900</p> <p>MDCL - MATERIAL DOCUMENT SPECIFICATION FABRICANT, MATIERE UNIQUE NAVAL GROUP STF 22- AND CLASSIFICATION 52/B015E</p> <p>THSD - THREAD SERIES DESIGNATOR ISO M</p> <p>INFORMATION: technical drawing (attachment K)</p>			
PG71200-2025-02375	5330-14-589-1057	<p>SEAL,PLAIN</p> <p>NAME - ITEM NAME SEAL,PLAIN</p> <p>ABVM - ACCOMMODATED SHAFT DIAMETER 21,34 MILLIMETERS NOMINAL</p> <p>ADUC - SEAL WIDTH 2,88 MILLIMETERS NOMINAL</p> <p>CPCW - HOUSING BORE DIAMETER 17,25 MILLIMETERS NOMINAL</p> <p>CQCF - CONSTRUCTION 3 PIECES</p> <p>FEAT - SPECIAL FEATURES JOINT TORIQUE DIMENSIONS 23,00X3,60 (fr: Joint torique dimensions 23,00x3,60)</p> <p>MATT - MATERIAL SUIVANT STF33-07-02- 019E : NBR 20A8</p> <p>MATT - MATERIAL X2CRNI18-9</p> <p>MATT - MATERIAL PLASTIC POLYTETRAFLUROETHYLENE</p>	UN	7	\$1.372,66
PG71200-2025-02376	5330-14-590-1634	<p>GASKET</p> <p>INFORMATION: technical drawing (attachment L)</p>	UN	1	\$1.052,45
PG71200-2025-02377	5340-14-598-3736	<p>ANODE,CORROSION PREVENTIVE</p> <p>INFORMATION:</p>	UN	2	\$15.592,82

		technical drawing (attachment M)			
PG71200-2025-02378	5330-14-594-4608	SEAL, NONMETALLIC SPECIAL SHAPED SECTION INFORMATION: technical drawing (attachment N)	UN	2	\$3.229,06
PG71200-2025-02379	5340-14-594-8765	ANODE, CORROSION PREVENTIVE INFORMATION: technical drawing (attachment O)	UN	2	\$6.591,27
PG71200-2025-02381	5330-14-605-4599	SEAL, PLAIN NAME - ITEM NAME SEAL, PLAIN ABHE - OUTSIDE DIAMETER 150.0 MILLIMETERS NOMINAL CPCW - HOUSING BORE DIAMETER 145.0 MILLIMETERS NOMINAL CXCX - PART NAME ASSIGNED BAGUE ANTI EXTRUSION MASSIVE FENDUE BY CONTROLLING AGENCY MATT - MATERIAL PLASTIC POLYTETRAFLUOROETHYLENE SUPP - SUPPLEMENTARY FEATURES EPAISSEUR 1,9MM	UN	70	\$2.584,54
PG71200-2025-02384	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	\$1.212,65
PG71200-2025-02388	5330-14-590-0640	GASKET NAME - ITEM NAME GASKET AGAV - END ITEM IDENTIFICATION DETECTEUR DE NIVEAU A ULTRASONS SUR BRIDE ISO PN16 CXCX - PART NAME ASSIGNED JOINT PLAT	UN	3	\$59,61

		BY CONTROLLING AGENCY INFORMATION: technical drawing (attachment P)			
PG71200-2025-02390	5307-14-594-4537	STUD,PLAIN INFORMATION: technical drawing (attachment Q)	UN	44	\$9.227,06
PG71200-2025-02394	5307-14-605-1339	STUD,PLAIN NAME - ITEM NAME STUD,PLAIN ABHP - OVERALL LENGTH 90.0 METERS NOMINAL AKYN - FURNISHED ITEMS AND QUANTITY ECROU H, 2 CQJX - NOMINAL THREAD SIZE 16,0 MILLIMETERS CQQR - THREAD PITCH IN MILLIMETERS 3,0 MATT - MATERIAL ACIER INOXYDABLE THSD - THREAD SERIES DESIGNATOR ISO M	UN	28	\$3.299,30
PG71200-2025-02395	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 INFORMATION: technical drawing (attachment R)	UN	1	\$890,92
PG71200-2025-02397	5342-14-582-1658	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)	UN	8	\$10.448,75
PG71200-2025-02398	4330-14-584-9905	FILTER ELEMENT,FLUID NAME - ITEM NAME FILTER ELEMENT,FLUID ADAS - BODY INSIDE DIAMETER 33,2 MILLIMETERS MINIMUM AND 34,2 MILLIMETERS MAXIMUM AZTL - BODY OVERALL LENGTH 51,5 MILLIMETERS MINIMUM AND 52,5 MILLIMETERS MAXIMUM CXCX - PART NAME ASSIGNED TAMIS BY CONTROLLING AGENCY MATT - MATERIAL TOILE METALLIQUE	UN	1	\$1.903,62

		N°35, X2CRNI 19-11 STYL - STYLE DESIGNATOR CYLINDRICAL W/OUT CONTAINER INFORMATION: technical drawing (attachment S)			
PG71200-2025-02399	4130-14-587-9346	FILTER ELEMENT,AIRCONDITIONING NAME - ITEM NAME FILTER ELEMENT,AIR CONDITIONING ABBD - MAXIMUM AIR FLOW RATE 720 M3/H ABMK - OVERALL WIDTH 438,0 MILLIMETERS NOMINAL ADPR - BODY THICKNESS 20,0 MILLIMETERS NOMINAL AZTL - BODY OVERALL LENGTH 488,0 MILLIMETERS NOMINAL CXY - PART NAME ASSIGNED FILTRE A ODEUR BY CONTROLLING AGENCY MATT - MATERIAL FIBER SYNTHETIC STYL - STYLE DESIGNATOR RECTANGULAR (INCL SQUARE) INFORMATION: technical drawing (attachment T)	UN	3	\$266,82
PG71200-2025-02400	5340-14-589-3388	PLATE,MENDING INFORMATION: technical drawing (attachment U)	UN	2	\$3.535,41
PG71200-2025-02407	5330-14-595-8374	GASKET NAME - ITEM NAME GASKET AAUB - HOLE DIAMETER 22.0 MILLIMETERS NOMINAL ABKG - BOLT CIRCLE DIAMETER 304.0 MILLIMETERS NOMINAL ABKV - OUTSIDE DIAMETER 346,0 MILLIMETERS NOMINAL ABVL - APERTURE DIAMETER 262,0 MILLIMETERS NOMINAL ADVM - CROSS-SECTIONAL THICKNESS 3,0 MILLIMETERS NOMINAL AECS - BOLT HOLE QUANTITY 13,0 MATT - MATERIAL RUBBER BUTADIENE- ACRYLONITRILE CLASS NBR STYL - STYLE DESIGNATOR CIRCULAR INFORMATION: technical drawing (attachment V)	UN	1	\$1.574,91
PG71200-2025-02410	5331-14-603-0451	O-RING NAME - ITEM NAME O-RING CXY - PART NAME ASSIGNED LID O RING BY CONTROLLING AGENCY MATT - MATERIAL	UN	1	\$245,85

		NSPA / LD PROGRAMME VITON INFORMATION: technical drawing (attachment W)			
PG71200-2025-02415	5331-14-568-2189	O-RING NAME - ITEM NAME O-RING ADVN - 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 INFORMATION: technical drawing (attachment X)	UN	1	\$74,01
PG71200-2025-02418	4330-14-528-1039	FILTER ELEMENT,FLUID INFORMATION: technical drawing (attachment Y)	UN	1	\$1.147,61
PG71200-2025-02419	4730-14-583-9483	ADAPTER,STRAIGHT,TUBE TO BOSS NAME - ITEM NAME ADAPTER,STRAIGHT,TUBE TO BOSS AHNC - CONNECTION STYLE 85 AHNC - CONNECTION STYLE B71 AWLS - CONNECTION TYPE THREADED EXTERNAL TUBE AWLS - CONNECTION TYPE THREADED EXTERNAL BOSS CQGM - MAXIMUM OPERATING 250,0 BAR PRESSURE CQJX - NOMINAL THREAD SIZE 33,0 MILLIMETERS CQJX - NOMINAL THREAD SIZE 39,0 MILLIMETERS CQQR - THREAD PITCH IN MILLIMETERS 2,0 CTC - THREAD TOLERANCE CLASS 4H EXTERNAL CWCN - NOMINAL WIDTH ACROSS FLATS 46,0 MILLIMETERS CWFD - NOMINAL OUTSIDE DIAMETER TUBE ACCOMMODATED 21,34 MILLIMETERS CWFR - NOMINAL OVERALL LENGTH 79,0 MILLIMETERS CXC - PART NAME ASSIGNED VIS SUR CAPACITE POUR TUYAUX INOX "DE21,34" OU TUYAUX CUIVRE BY CONTROLLING AGENCY DE25HP PRESSION DE REFERENCE 250 BAR. (fr: Vis sur capacité pour tuyaux inox "DE21,34" ou tuyaux cuivre DE25HP	UN	4	\$2.523,88

		<p>pression de référence 250 bar.) FEAT - SPECIAL FEATURES AVEC HEXAGONE CENTRAL PERMETTANT L USAGE D UNE CLE MATT - MATERIAL CUAL10NI5FE4 MDCL - MATERIAL DOCUMENT STF22- 55/B004-2 MFR REF SINGLE MATERIAL RESPONSE AND CLASSIFICATION THSD - THREAD SERIES DESIGNATOR NSPA / LD PROGRAMME ISO M</p>			
PG71200-2025-02420	5330-14-584-2849	<p>GASKET NAME - ITEM NAME GASKET AGAV - END ITEM IDENTIFICATION SOUPAPE TYPE 911 A BRIDES MN. CXCX - PART NAME ASSIGNED JOINT DE CLAPET BY CONTROLLING AGENCY MATT - MATERIAL RUBBER FLUOROCARBON CLASS FPM STYL - STYLE DESIGNATOR CIRCULAR</p>	UN	1	\$638,59
PG71200-2025-02421	5330-14-584-9890	<p>GASKET NAME - ITEM NAME GASKET AAGR - CROSS-SECTIONAL SHAPE STYLE SOLID SINGLE OR COMPOSITION ABKV - OUTSIDE DIAMETER 34,0 MILLIMETERS MINIMUM AND 34,3 MILLIMETERS MAXIMUM ABVL - APERTURE DIAMETER 25,7 MILLIMETERS MINIMUM AND 26,0 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</p>	UN	34	\$564,65
PG71200-2025-02422	5315-14-586-2086	KEY,MACHINE	UN	7	\$2.237,68

		<p>NAME - ITEM NAME KEY,MACHINE ABHP - OVERALL LENGTH 27,0 MILLIMETERS NOMINAL ABKW - OVERALL HEIGHT 7,0 MILLIMETERS NOMINAL ABMK - OVERALL WIDTH 8,0 MILLIMETERS NOMINAL AGAV - END ITEM IDENTIFICATION PARTIE MOBILE A RACCORD RUCH AVEC CNR INCORPORE POUR CHASSE HP AUX BALLASTS, INGENIERIE CONSTRUCTIONS NEUVES, MAT425- 0605E CXCX - PART NAME ASSIGNED CLAVETTE BY CONTROLLING AGENCY MATT - MATERIAL X6CRNIT18-10 INFORMATION: technical drawing (attachment Z)</p>			
PG71200-2025-02423	5330-14-589-1056	<p>SEAL,PLAIN NAME - ITEM NAME SEAL,PLAIN ABVM - ACCOMMODATED SHAFT DIAMETER 26,67 MILLIMETERS NOMINAL ADUC - SEAL WIDTH 2,88 MILLIMETERS NOMINAL CPCW - HOUSING BORE DIAMETER 22,6 MILLIMETERS NOMINAL CQCF - CONSTRUCTION 3 PIECES FEAT - SPECIAL FEATURES JOINT TORIQUE DIMENSIONS 26,20X3,60 (fr: Joint torique dimensions 26,20x3,60) MATT - MATERIAL SUIVANT STF33-07-02- 019E : NBR 20A8 MATT - MATERIAL X2CRNI18-9 MATT - MATERIAL PLASTIC POLYTETRAFLUROETHYLENE INFORMATION: technical drawing (attachment AA)</p>	UN	30	\$1.033,62
PG71200-2025-02425	5330-14-594-7144	<p>GASKET NAME - ITEM NAME GASKET AGAV - END ITEM IDENTIFICATION MAT451-0042;PANNEAU DEMONTABLE BALLAST MATT - MATERIAL RUBBER BUTADIENE- ACRYLONITRILE CLASS NBR STYL - STYLE DESIGNATOR NON-CIRCULAR INFORMATION: technical drawing (attachment AB)</p>	UN	1	\$6.566,82

PG71200-2025-02429	5330-99-471-7881	PARTS KIT,SEAL REPLACEMENT,MECHANICAL EQUIPMENT NAME - ITEM NAME PARTS KIT,SEAL REPLACEMENT,MECHANICAL EQUIPMENT AJJW - COMPONENT QUANTITY 2 AJJZ - DOCUMENT TYPE MFR DRAWING AYDS - END ITEM NAME SINGLE CYLINDER ASSEMBLY WITH DIP TUBE AJJX - COMPONENT DOCUMENT ORIGIN INDUSTRIAL AJJY - DOCUMENT SOURCE K0187 AYDR - DOCUMENT IDENTIFICATION 300519 AND 300521 FTLD - FUNCTIONAL DESCRIPTION O-RING AND BACKING RING FOR 4IN. THD PRPY - PROPRIETARY CHARACTERISTICS NPAC	UN	24	\$4.268,66	
					Total	\$269.245,20

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:

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

Country of origin	FCA	FOB
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 269.245,20 , 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, 17th March 2026.

SAINT-CLAIR DANTAS OLIVEIRA SANTOS

Captain (Ret.)

Submarine Project Management Chief of Department

LEANDRO BRILHANTE REGLY

Lieutenant-Commander

Supply Advisor

BRUCE ENGLE FRÓES

Lieutenant-Commander

Ship Manager Auxiliary

Approved by:

MARCELO ANTONIO ROCHA AFONSO
Captain
Expenditure Authorising Officer