



BUMI ARMADA BERHAD GROUP

**PURCHASING REQUISITION**

PROJECT NO.: <b>BAB 21002</b>	REF. NO.: <b>APK000-10-0145</b>
ACCOUNT CODES: <b>573110</b>	DATE OF ISSUE: <b>06-May-10</b>
	ROS DATE: _____

PR TITLE: <b>EXPORT HOSE CONSUMABLE SPARES.</b>		Critical Level <b>P2</b>	ATTACHMENTS	DOC NO.
SECTION	OFFLOADING SYSTEM		Technical Spec :	
PLANT	CARGO LINE SYSTEM		Data Sheet :	
EQUIPMENT	OFFLOADING HOSE		Drawings :	
TYPE/MODEL			Spare Parts List :	
SERIAL No.			Others (please state)	
MAKER				
COMPONENT CODE	35-17-OH			

**BRIEF DESCRIPTION OF PURPOSE AND JUSTIFICATION:**  
**Export hose spares**

S/N	Description of Items	Specifications	Quantity
1	Bolt type bow schackle( By Crosby G-2130) Galv. with split pin SWL-6.5 T	IMPA-234234	10 Nos.
2	Bolt type bow schackle( By Crosby G-2130) Galv. with split pin SWL-8.5 T	IMPA-234235	10 Nos.
3	Bolt type bow schackle( By Crosby G-2130) Galv. with split pin SWL-9.5 T	IMPA-234236	5 Nos.
4	Master link A-32-10 Dia- 1-1/4 Inches	IMPA-234405	4 Nos.
5	Master link A-32-10 Dia- 1-1/2 Inches	IMPA-234406	4 Nos.
6	Lock-A-lov A-337 ( alloy connecting wisser link by Crosby) for chain size 22 mm (7/8 Inch)	IMPA- 234436	10 Nos.
7	Alloy chain Spectrum-8, size 22 mm (7/8 Inches)	IMPA- 234447	100 Feet
8	Split pins stainless steel, Nominal size 4 mm Length-60 mm	IMPA-69-58-	50 Nos.
9	Split pins stainless steel, Nominal size 5 mm Length-60 mm	IMPA-69-58-	50 Nos.
10	Split pins stainless steel, Nominal size 6 mm Length-70 mm	IMPA-69-58-	50 Nos.
11	Split pins stainless steel, Nominal size 7 mm Length-70 mm	IMPA-69-58-	50 Nos.
12	Split pins stainless steel, Nominal size 8 mm Length-70 mm	IMPA-69-58-	50 Nos.
13	Split pins stainless steel, Nominal size 9 mm Length-70 mm	IMPA-69-58-	50 Nos.
14	Split pins stainless steel, Nominal size 10 mm Length-100 mm	IMPA-69-58-	50 Nos.

Note:-1) Item no. 1 to 7 will not be accepted without valid certificate.

2) Scanned copy of relevent IMPA pages attached for quick reference.

Recommended vendors for bidding 1)  
2)  
3)

**M.T. ARMADA PERKASA**  
**3E0ES PANAMA**  
**OFF. NO: 36510-PEXT**  
**G.T: 32665**  
**N.T: 18855**  
**B.J.L.P: 11469**

<b>REQUESTED BY :</b>  Department: Marine Name: Jasbir Singh Position: Marine Supv. Date: 6th May 2010	<b>CONFIRMED BY :</b>  Department: Maintenance Name: Vincenzo Morana Position: Maintenance Supt. Date: 6th May 2010	<b>APPROVED BY :</b>  Department: Management Name: Sudesh Pathre Position: OIM Date: 6th May 2010	<b>CLIENT'S ACKNOWLEDGEMENT:</b>  Department: Marine Name: Ian Simpson Position: C.A.R. Date: 6th May 2010 <b>Approved Afren C.A.R.</b> <b>73110</b>
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<b>VERIFIED BY :</b> _____ Commercial Department Name: _____ Date: _____	<b>BUDGET AVAILABLE:</b> _____
<b>TYPE OF ITEMS:</b> <input type="checkbox"/> Fixed Asset <input type="checkbox"/> Inventory <input type="checkbox"/> Maintenance <input type="checkbox"/> Others (Please specify)	<input type="checkbox"/> <b>APPROVED</b> <input type="checkbox"/> <b>NOT APPROVED, Please state reason</b>
PROJECT DIRECTOR / CFO / CEO	Date



INTERNATIONAL MARINE PURCHASING ASSOCIATION



CODE	Safe Working Load Tons	Dimensions in Millimeters					Weight Pounds Each	Unit Per Pc.
		B	C	D	K	R		
23 43 21	75	105.0	54.0	70.0	93.0	465.0	99	
22	125	130.0	65.0	80.0	110.0	576.0	161	
23	200	150.0	85.0	105.0	137.5	757.5	500	
24	300	185.0	101.5	133.4	160.3	949.8	811	
25	400	220.0	131.0	160.0	185.0	985.0	1,041	
23 43 26	500	250.0	142.0	180.0	225.0	1,085.0	1,378	
27	600	275.0	153.5	200.0	247.5	1,200.0	1,833	
28	700	300.0	167.5	215.0	270.0	1,274.5	2,446	
29	800	325.0	182.5	230.0	277.5	1,323.0	3,016	
30	900	350.0	197.5	250.0	292.5	1,372.5	3,436	
23 43 31	1,000	380.0	211.5	270.0	307.5	1,405.0	4,022	

Name of Mfr. : Crosby

23

**Clevis Sling Hook**

**A-339**

Gancho de Clevis Sling  
クレビススリングフック 吊鉤



A-339

Alloy steel quenched and tempered. Pin locking requires no special tools.

CODE	Hook Size Inch	Working Load Limit, Lbs.	Weight Pounds	Unit Per Pc.
23 43 51	1/4	3,500	1.5	
52	3/8	7,100	2.1	
53	1/2	12,000	4.2	
54	5/8	18,100	8.4	
55	3/4	28,300	11.5	
23 43 56	7/8	34,200	17.7	

Name of Mfr. : Crosby

**Clevis Grab Hook**

**A-338**

Gancho de Clevis Grab  
クレビスグラブフック 起重鉤



A-338

Alloy steel quenched and tempered. Pin locking requires no special tools.

CODE	Chain Size inch	Working Load Limit, Lbs.	Weight Pounds	Unit Per Pc.
23 43 61	1/4	3,500	0.62	
62	3/8	7,100	1.26	
63	1/2	12,000	3.45	
64	5/8	18,100	5.64	
65	3/4	28,300	10.10	

**Eye Foundry Hook**

**A-329**

Gancho de Fundición  
アイファンドリーフック 鑄造吊鉤 (帶眼)



A-329

Alloy steel quenched and tempered.

CODE	Chain Size inch	Working Load Limit, Lbs.	Weight Pounds	Unit Per Pc.
23 43 71	1/4	3,500	2.4	
72	3/8	7,100	4.5	
73	1/2	12,000	7.1	
74	5/8	18,100	12.2	
75	3/4	28,300	19.3	
23 43 76	7/8	34,200	26.3	

Name of Mfr. : Crosby

**Latching Eye Hook**

**S-315A**

Gancho con Seguro  
ラッチングアイフック  
鑄造彈簧鎖型掛鉤 (帶眼)



S-315A

Hook is forged alloy steel, quenched and tempered with integrated heavy duty latch.

CODE	Chain Size mm	Working Load Limit Tons	Overall Length mm	Weight Lbs	Unit Per Pc.
23 43 81	6	1	113.5	0.56	
82	7 - 8	2	155.5	1.31	
83	10	3	199.9	2.60	
84	13	5	242.6	4.70	
85	16	7	301.0	8.55	

Name of Mfr. : Crosby

**Master Link**

**A-342**

Anillas Maestra  
マスターリンク 通用吊環



A-342

Made of a solid, weldless alloy.

CODE	Diam. Inches	Working Load Limit, Lbs	Weight Pounds	Unit Per Pc.
23 44 01	1/2	7,000	0.83	
02	5/8	9,000	1.03	
03	3/4	12,300	2.22	
04	1	24,360	5.00	
05	1-1/4	36,000	9.77	
23 44 06	1-1/2	54,300	19.10	
07	1-3/4	81,000	28.65	

**Weldless Sling**

**G-341, S-341**

Eslabones de Forma de  
スリングリンク 無縫

Forged from a special alloy bar steel. Weldless self coloured (Black) (S) (G) alloy steel.

CODE	Chain Size inch	Unit Per Pc.
G-341 (Galv)	S-341 (Black)	
23 44 11	23 44 21	
12	22	
13	23	
14	24	
15	25	
23 44 16	23 44 26	
17	27	1
18	28	1

Name of Mfr. : Crosby

**Lock-A-Loy**

**A-337**

Maleta de Unión Lock-A-Loy  
ロックスロイ 連接環

Alloy connecting link sleeve allows for simple special tools.

CODE	Chain Size inch	Unit Per Pc.
23 44 31	1/4	
32	3/8	
33	1/2	
34	5/8	
35	3/4	
23 44 36	7/8	

Name of Mfr. : Crosby

**Alloy Chain**

**Spectrum 8**

Cadena Grado 8  
スペクトラム 8 鑄造鏈

Made from a heat treated alloy steel, self coloured and permanent (Crosby Group) and 8 (C)

CODE	Trade Size, Inches	Unit Per Pc.
23 44 41	1/4	
42	5/16	
43	3/8	
44	1/2	
45	5/8	
23 44 46	3/4	

ON



PROFESSIONALISM GIVES - QUALITY - SAVES COSTS

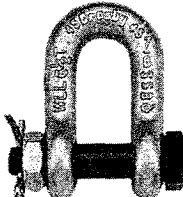
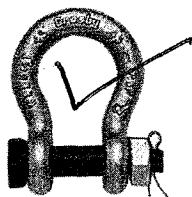
**Bolt Type Anchor & Chain Shackle**

**G-2130, S-2130, G-2150, S-2150**

Grilletes Tipo Perno con Pasador y de Ancla

ボルト止型ハウ及びストレートシャックル

鍛造U形錨鏈鉤 (帶螺帽)



G-2130, S-2130  
Anchor Shackle

G-2150, S-2150  
Chain Shackle

G-2130, S-2130  
Anchor Shackle

**Anchor Shackle**

Safe Working Load Tons	Unit Per Pc.	
	Weight Pounds Each	Code
1/3	0.06	G-209, S-209
1/2	0.10	
3/4	0.19	
1	0.31	
1/2	0.38	
2	0.72	
1/4	1.37	
3/4	2.35	
1/2	3.62	
1/2	5.03	
1/2	7.41	
12	9.50	
3-1/2	13.53	
17	17.20	
25	27.78	

Note: G - Galvanized, S - Self Coloured (Black).  
Name of Mfr. : Crosby

**Chain Shackle**

Safe Working Load Tons	Unit Per Pc.		Nominal Shackle Size Inches	Safe Working Load Tons	Weight Pounds Each
	Weight Pounds Each	Code			
1/2	0.18	G-2150 (Galv)	1/2	2	0.75
3/4	0.18	S-2150 (Black)	5/8	3-1/4	1.47
1	0.28		3/4	4-3/4	2.52
1-1/2	0.38		7/8	6-1/2	3.85
2	0.71		1	8-1/2	5.55
3-1/4	1.50		1-1/8	9-1/2	7.60
4-3/4	2.32		1-1/4	12	10.81
6-1/2	3.43		1-3/8	13-1/2	13.75
8-1/2	5.00		1-1/2	17	18.50
9-1/2	6.97		1-3/4	25	31.40
12	9.50		2	35	46.75
13-1/2	13.25		2-1/2	55	85.00
17	17.20		3	85	124.25
25	29.40				

Note: G - Galvanized, S - Self Coloured (Black).  
Name of Mfr. : Crosby

**Anchor Shackle**

**Forged Alloy Bolt Type**

**G-2140, S-2140**

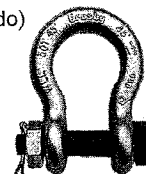
Grillete Lira de Ancla Crosby (Acero Forjado)

G-2140 S-2140

ハウシャックル鍛造合金ボルト止型

鍛造U形錨鏈鉤 (帶合金螺帽)

Meets the performance requirements of Federal Specification RR-C-271D, Type IVA, Grade B, Class 3. Quenched and tempered alloy bows and alloy bolts.



G-2140, S-2140

CODE		Nominal Shackle Size Inches	Safe Working Load Tons	Weight Pounds Each
G-2140 (Galv)	S-2140 (Black)			
23 43 01	23 43 11	1-1/2	30	20.8
02	12	1-3/4	40	33.9
03	13	2	50	52.0
04	14	2-1/2	80	96.0
05	-	3	110	178.0
23 43 06	-	3-1/2	140	265.0
07	-	4	175	338.0

Note: G - Galvanized, S - Self Coloured (Black).  
Name of Mfr. : Crosby

**Anchor Shackle**

**Cast Alloy Bolt Type G-2140**

Grillete Lira de Ancla (Acero Aleado) G2140

鍛造合金ボルト止型 鑄造U形錨鏈鉤



G-2140

CODE		Nominal Shackle Size Inches	Safe Working Load Tons	Weight Pounds Each
23 43 16				
17		5	250	600
18		6	300	775
19		7	400	1,102

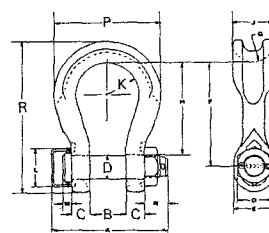
Name of Mfr. : Crosby

**Wide Body Shackle**

**G-2160**

Grillete de Eslinga Crosby G-2160

ワイドボディ シャックル 寛幅U形鏈鉤



G-2160

Greatly improves the durability of wire rope slings. The increase in shackle bow radius provides a 58 % gain in the sling bearing surface and eliminates the need for a thimble. Increases the usable sling strength 15 %. Forged alloy steel from 75 through 300 metric tons, and cast alloy steel from 400 through 1,000 metric tons.

23

PROFESSIONALISM GIVES - QUALITY - SAVES COSTS

**Weldless Sling Link**

G-341 S-341

Motones de Forma de Pera  
無縫吊環

Made from a special quality carbon and alloy steel. Weldless and available in a self coloured (Black) (S) or dip galvanized steel.



G-341, S-341

Unit Per Pc.

CODE	Diam. Inches	Working Load Limit Single Pull, Lbs	Weight Pounds
23 44 21	3/8	1,800	0.23
23 44 22	1/2	2,900	0.55
23 44 23	5/8	4,200	1.06
23 44 24	3/4	6,000	1.88
23 44 25	7/8	8,300	2.75
23 44 26	1	10,800	4.35
23 44 27	1-1/4	16,750	7.60
23 44 28	1-3/8	20,500	11.30

Name of Mfr. : Crosby

**Lock-A-Loy**

A-337

Motones de Union Lock-A-Loy

ロックアロイ 接続環

Alloy connecting link. An exclusive locking sleeve allows for simple assembly without any special tools.



A-337

Unit Per Pc.

CODE	Chain Size inch	Working Load Limit, Lbs.	Weight Pounds
23 44 31	1/4	3,500	0.28
32	3/8	7,100	0.73
33	1/2	12,000	1.67
34	5/8	18,100	2.86
35	3/4	28,300	5.00
23 44 36	7/8	34,200	7.50

Name of Mfr. : Crosby

**Alloy Chain Spectrum 8**

Cadena Grado 8

アロイチェーン 鑄造鏈

Made from a heat treated alloy steel. Finished self coloured and permanently embossed with CG (Crosby Group) and 8 (Grade).



Unit Per Mtr

CODE	Trade Size, Inches	Working Load Limit, Lbs.	Feet Per Drum	Weight /100 Feet Pounds
23 44 41	1/4	3,500	500	72
42	5/16	4,500	500	114
43	3/8	7,100	500	148
44	1/2	12,000	300	243
45	5/8	18,100	200	351
23 44 46	3/4	28,300	100	584
47	7/8	34,200	100	705

Name of Mfr. : Crosby

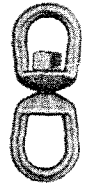
**Forged Regular Swivel**

G-402

Eslabón Giratorio Regular

鍛造レギュラースイベル 鍛造通用型旋環

Quenched, tempered and hot dip galvanized.



G-402

Unit Per Pc.

CODE	Body Size Inches	Safe Working Load-Pounds	Weight Pounds Each
23 44 51	1/4	850	0.21
52	5/16	1,250	0.39
53	3/8	2,250	0.71
54	1/2	3,600	1.32
55	5/8	5,200	2.49
23 44 56	3/4	7,200	4.02
57	7/8	10,000	6.25
58	1	12,500	8.95
59	1-1/4	18,000	16.37
60	1-1/2	45,200	45.79

Name of Mfr. : Crosby

**6. Cargo Blocks**

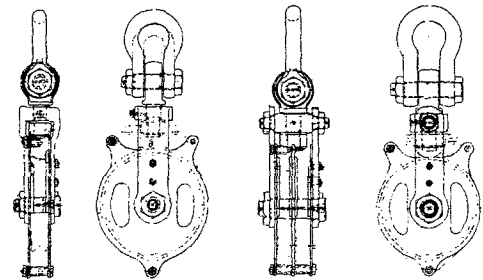
**Steel Cargo Blocks**

without Becket

(Ref. JIS F 3421-1989)

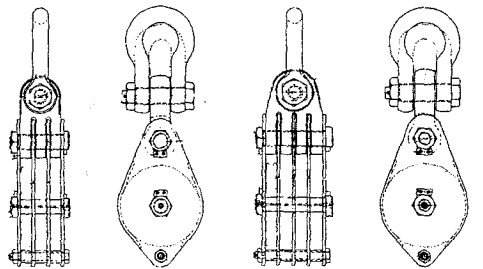
Motones de Carga sin Arraigado Tipo Japonés F-3421

船用荷役鋼製滑車 船用鋼製吊貨用滑車



1A

2A



3A

4A

**How to order : CODE**

Cargo block, steel, without becket, TYPE, NO. of SHEAVE and SHEAVE DIA.