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L A M P I R A N



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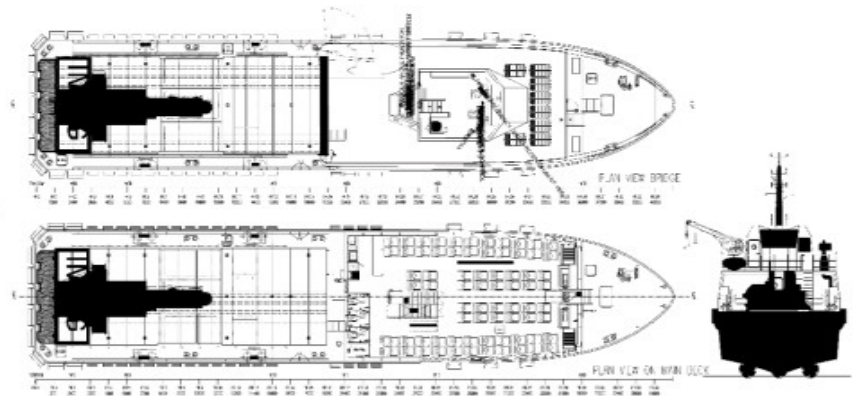
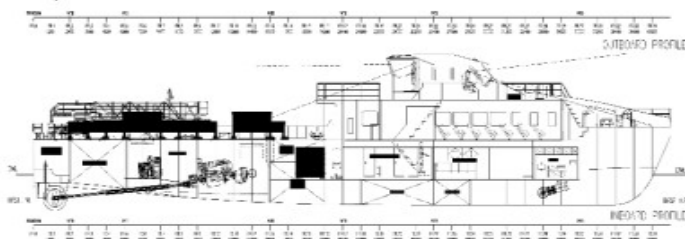
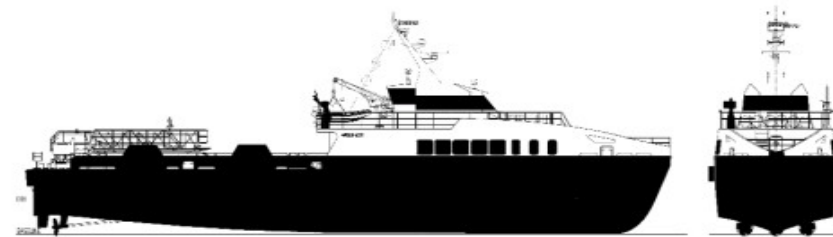
LAMPIRAN I

DAFTAR GAMBAR-GAMBAR

KAPAL ALUMINIUM CREW BOAT

42 M





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PRINCIPAL PARTICULARS

LENGTH-HULL	42.0 m	FUEL	76 800 L
LENGTH WATERLINE DESIGN	40.5 m	FRESH WATER	20 000 L
MAXIMUM MOLDED BEAM	8.0 m	MAIN ENGINES	3 x Baveling 12V60L @ 1465 BHP
DESIGN DRAFT	1.0 m	CREW BOAT	
PAK CAPACITY	72 BUSINESS CLASS	SPEED @ 30 DWT 100% A/C/R	28 kn
CREW	12	(with gateway and gens 1000kw)	

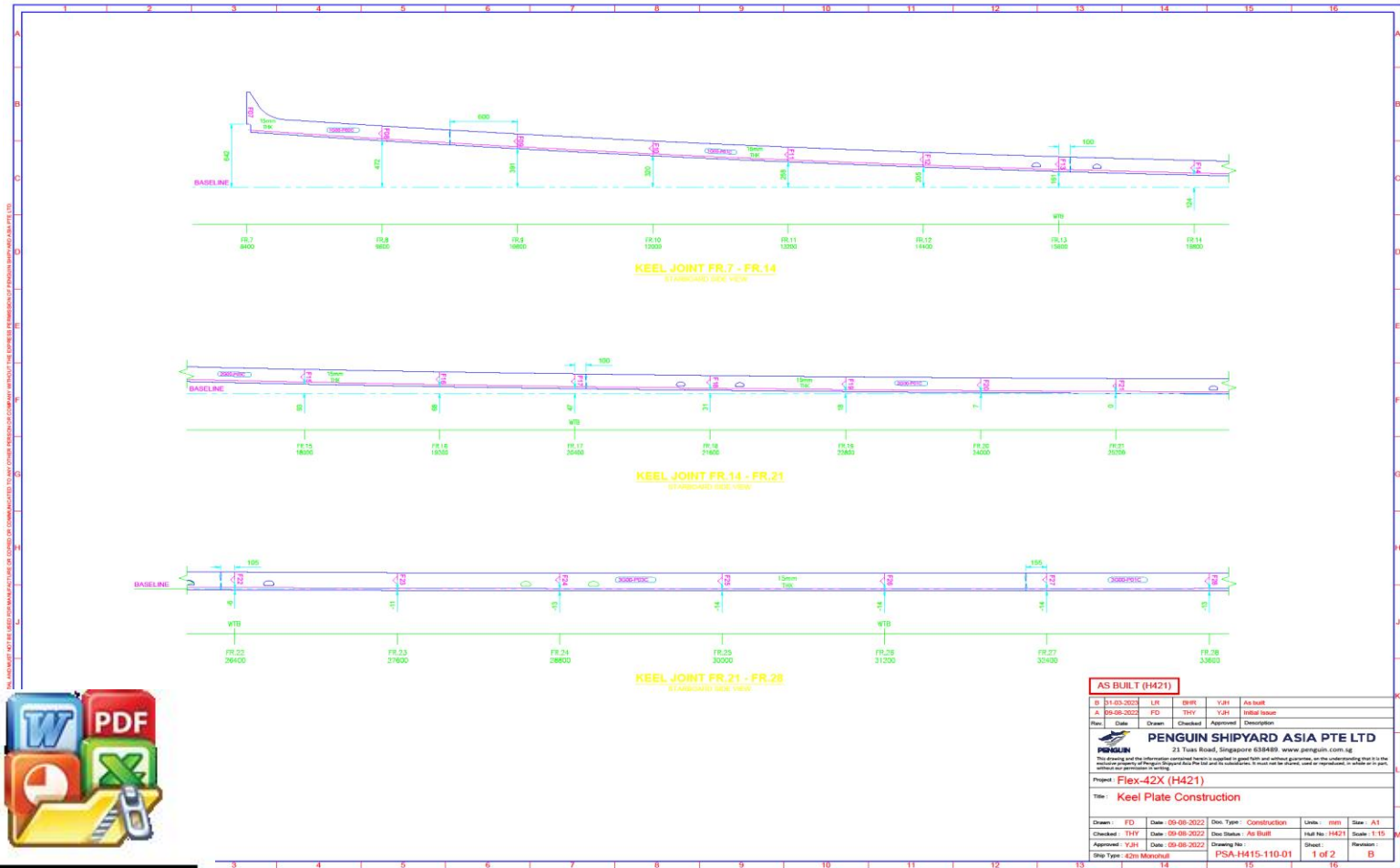
PRINCIPAL FEATURES

DECK AREA	110 m ²
DECK LANDING	25 m ² deck
GLASS	1 X HULL / 1 MACH
SEA AREA	3 (plus water 30%)
FIR 12	

DESIGNED BY: PFI
 CLASS: ABS
 GENERAL ARRANGEMENT: PFI
 PENQUIN SHIPYARD INTERNATIONAL PTE LTD
 21 Tuas Road, Singapore 630461, www.penquin.com.sg

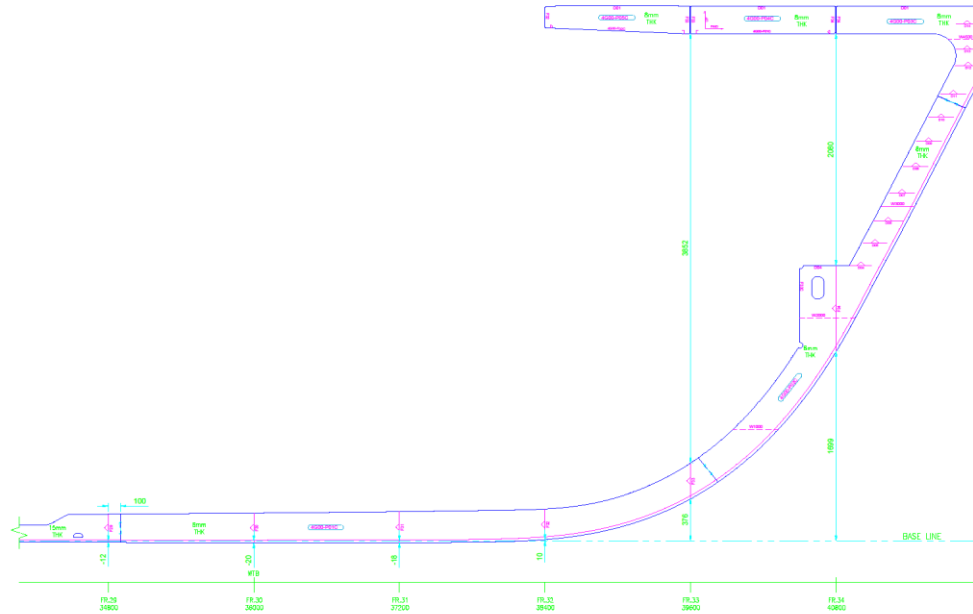
Project: mFlex-42 (H459)
 Title: General Arrangement

Date:	24/01/2023	Rev:	100	Arrangement:	Deck	Rev:	01
Checked:	PFI	Drawn:	PFI	Scale:	1:100	Scale:	1:100
Approved:	PFI	Drawn:	PFI	Scale:	1:100	Scale:	1:100
Rev:	100	Scale:	1:100	Scale:	1:100	Scale:	1:100



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AS BUILT (H421)						
Rev	Date	Drawn	Checked	Approved	Description	
B	01-03-2022	LR	GRK	YJH	As built	
A	09-09-2022	FD	THY	YJH	Initial Issue	
PENGUIN SHIPYARD ASIA PTE LTD 21 Teas Road, Singapore 638489 www.penguin.com.sg						
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Project: Flex-42X (H421)						
Title: Keel Plate Construction						
Drawn	FD	Date	09-09-2022	Doc. Type	Construction	Units
Checked	THY	Date	09-09-2022	Doc. Status	As Built	Scale
Approved	YJH	Date	09-09-2022	Drawing No		Revision
Ship Type	42m Motorship			PSQA-H415-110-01	Sheet	1 of 2
						B



KEEL JOINT FR.28 - FR.34
STARBOARD SIDE VIEW

AS BUILT (H421)

#	11-03-2023	LR		BWR	YJH	As built
A	09-08-2022	FD	THY	YJH		Initial Issue

Rev	Date	Drawn	Checked	Approved	Description
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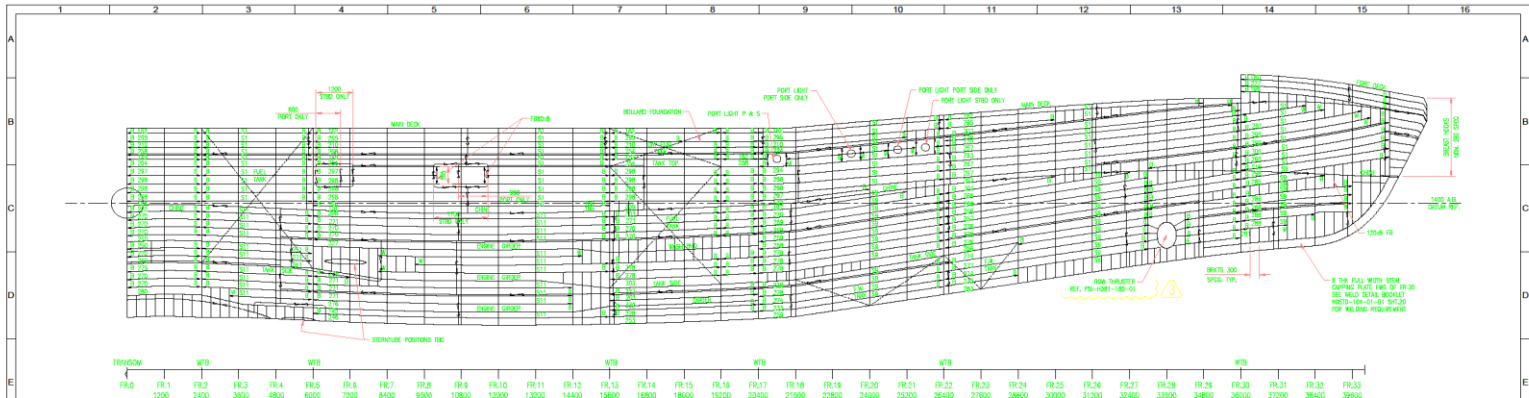
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Project: **Flex-42X (H421)**
Title: **Keel Plate Construction**

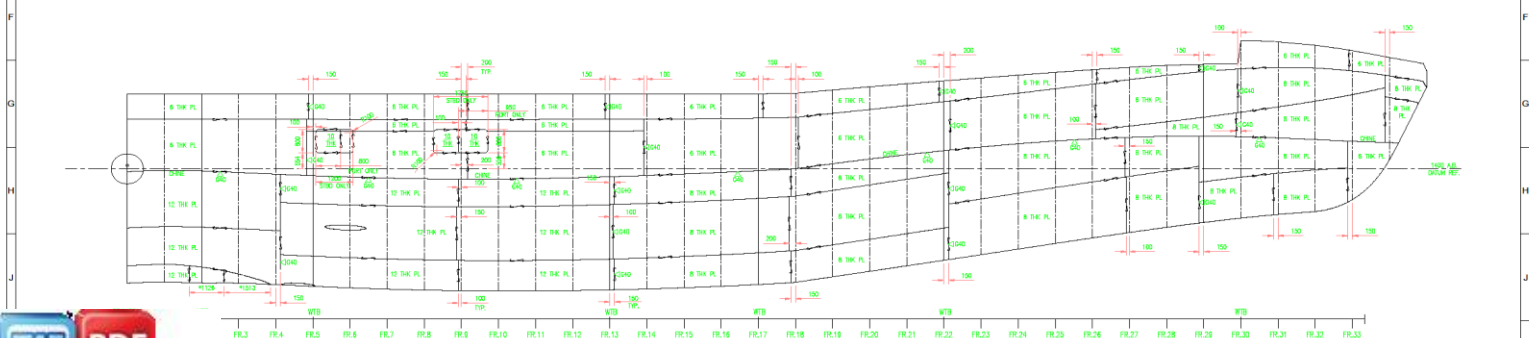
Drawn:	FD	Date:	09-08-2022	Doc. Type:	Construction	Units:	mm	Scale:	A1
Checked:	THY	Date:	09-08-2022	Doc. Status:	As Built	Hull No:	H421	Scale:	1:15
Approved:	YJH	Date:	09-08-2022	Drawing No:		Sheet:		Revision:	
Ship Type:	42m Mound	PSA:	H415-110-01	Sheet:	2 of 2				



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PORT SHELL FRAMING PLAN
SHIPWARD SWELAR



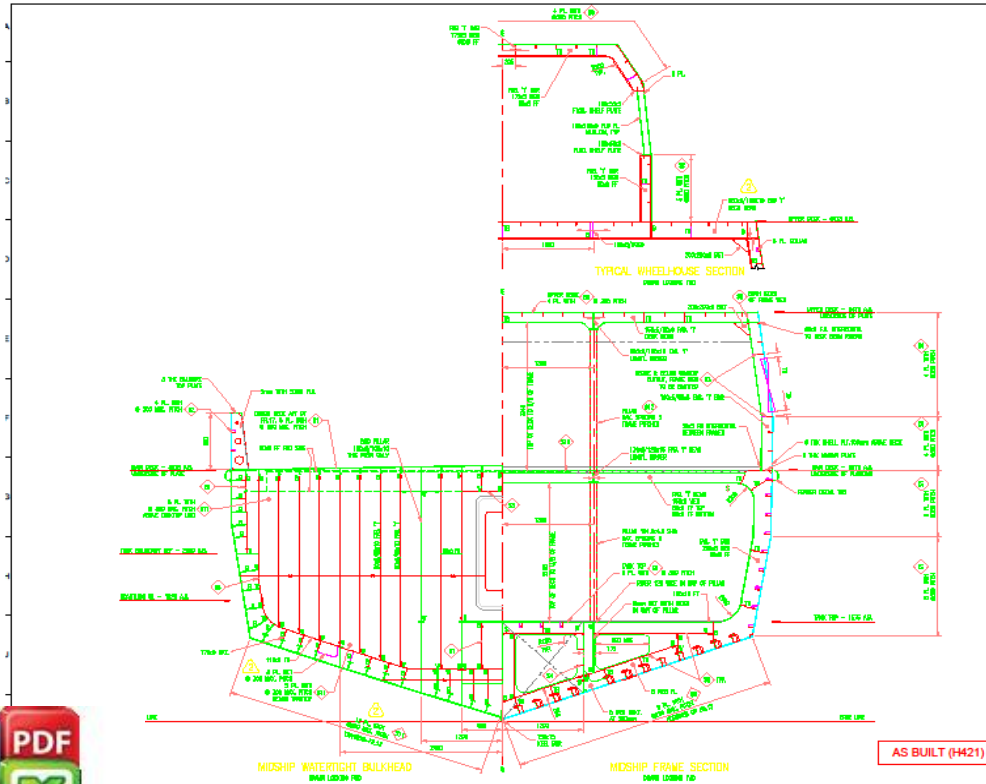
PORT SHELL EXPANSION
SHIPWARD SWELAR

(*) DENOTES SEAM JOINT EXPANSION JOINT ON STIFF TO AVOID OTHER SEAM JOINT INTERFERENCE



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1	LAYERS AS SHOWN	NO/NO	01	OK	FR
2	SET FOR TANKS LIGHTS & AIR SIGN LIGHT SIGNAL	NO/NO	02	OK	FR
3	EXPANSION	1	03	OK	FR
 PENGUN SHIPVARD ASIA PTE LTD 21 Tuas Road, Singapore 638015. www.pengun.com.sg					
 BMT Nigel Gee Project Manager: MIDDLETON, PETER (A/C) (P/01)					
Title: SHELL EXPANSION					
Customer Design No.	Checked By: P/01	Checked Date:	FR.18	FR.18	FR.18
Drawn By: B/01	Scale: 1:50	Drawn Date:	FR.18	FR.18	FR.18



PRINCIPAL DIMENSIONS

LOWER BULKHEAD	44.8 m
LOWER DECKING BULKHEAD	44.8 m
SLC OVERHEAD BULK	8.0 m
BULKHEAD SUPPORTS	200 mm
SLC OVERHEAD BULK	21 mm
DECKING BULK	5.00 m
FRAME SPACING	3.0 m
OFFICAL POSITION OF BULKHEAD	1.0 m
SLC OVERHEAD BULK	4.0 m
FRAMING SPACING	7.0 m

CLASSIFICATION PARTICULARS

CLASSIFICATION: HULL - BULK HEAD
 CLASSIFICATION: HULL - BULK HEAD (10)
 CLASSIFICATION: HULL - BULK HEAD (10)

STRUCTURAL OPERATIONAL LIMITS

MAX. DEFLECT	< 4.0 m
MIN. DEFLECT	4.0 m
MAX. DEFLECT	4.0 m
MIN. DEFLECT	4.0 m
MAX. DEFLECT	4.0 m
MIN. DEFLECT	4.0 m

MATERIAL SPECIFICATIONS

ALUMINIUM ALLOY TEMPS	TEMPERATURE	
	20°C	100°C
PLATE	3003	3003
WELDED JOINTS	4043	4043

SECTION SPECIFICATIONS

SECTION	PLATE	THICKNESS	TEMPERATURE	CLASSIFICATION	CLASSIFICATION
(01)	T	8.00 m	3003-T6	3003-T6	3003-T6
(02)	I	8.00 m	3003-T6	3003-T6	3003-T6
(03)	I	8.00 m	3003-T6	3003-T6	3003-T6
(04)	I	8.00 m	3003-T6	3003-T6	3003-T6
(05)	I	8.00 m	3003-T6	3003-T6	3003-T6
(06)	I	8.00 m	3003-T6	3003-T6	3003-T6
(07)	I	8.00 m	3003-T6	3003-T6	3003-T6
(08)	I	8.00 m	3003-T6	3003-T6	3003-T6
(09)	I	8.00 m	3003-T6	3003-T6	3003-T6
(10)	I	8.00 m	3003-T6	3003-T6	3003-T6
(11)	I	8.00 m	3003-T6	3003-T6	3003-T6
(12)	I	8.00 m	3003-T6	3003-T6	3003-T6
(13)	I	8.00 m	3003-T6	3003-T6	3003-T6
(14)	I	8.00 m	3003-T6	3003-T6	3003-T6
(15)	I	8.00 m	3003-T6	3003-T6	3003-T6
(16)	I	8.00 m	3003-T6	3003-T6	3003-T6
(17)	I	8.00 m	3003-T6	3003-T6	3003-T6
(18)	I	8.00 m	3003-T6	3003-T6	3003-T6
(19)	I	8.00 m	3003-T6	3003-T6	3003-T6
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(22)	I	8.00 m	3003-T6	3003-T6	3003-T6
(23)	I	8.00 m	3003-T6	3003-T6	3003-T6
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(28)	I	8.00 m	3003-T6	3003-T6	3003-T6
(29)	I	8.00 m	3003-T6	3003-T6	3003-T6
(30)	I	8.00 m	3003-T6	3003-T6	3003-T6

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BMT Nigel Gee

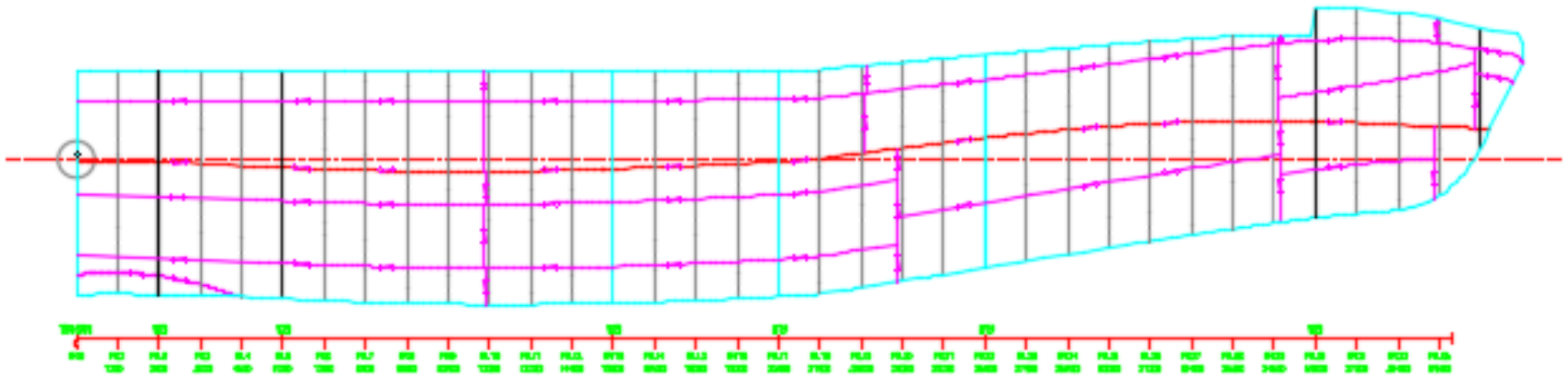
Project: PROJECT MATRIA RELOADING - PHU-420 (H421)
 Title: TYPICAL MIDSHIP SECTION

Customer: Duglas
 Drawn By: PHLD
 Scale: 1:25 @ A1
 Checked By: GGCR
 Date: 09/10/11
 Drawn Date: 10/02/11
 Issue: 3
 Sheet: 1 of 1



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Bukaan Kulit 40ft



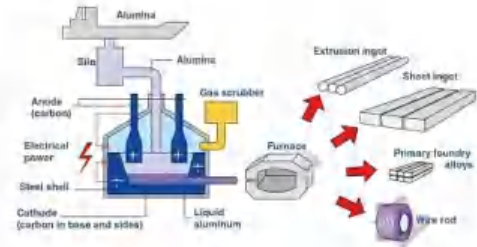
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Brosur pelat 20ft dan 40ft

Home	About us	Products ▾	News ▾	Contact us
Temper	H12,H14,H16,H18,H20,H22,H24,H26,H28,H32,H36,H38,HO,H111,H112,H114,H116,H118,H321, etc.			
Packing	Standard Export Packing (Inside: Water proof paper, Outside: Steel covered with strips and pallets)			
Container Size	20ft GP:5898mm(Length)x2352mm(Width)x2393mm(High)			
	40ft GP:12032mm(Length)x2352mm(Width)x2393mm(High)			
	40ft HC:12032mm(Length)x2352mm(Width)x2698mm(High)			

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Aluminum is a silver-white light metal, relatively soft, density 2.7g/cm³, melting point 660 4°C, boiling point 2467°C. aluminum and aluminum alloys have many excellent physical properties, has been very widely used. Aluminum has good reflection performance of light, reflecting ultraviolet light is stronger than silver, the purer aluminum is, its reflection ability is better, and the method of vacuum aluminum plating is commonly used to make high-quality mirrors.



Vacuum aluminized film combined with polysilicon film becomes a cheap and lightweight solar cell material. Aluminum powder can maintain a silvery luster, often it, commonly known as silver powder. Pure aluminum conducts heat well, and is used in the electric power industry.

Aluminum alloy has some better properties than pure aluminum, which greatly expands the application range of aluminum. For example, pure aluminum is soft



LAMPIRAN II

DOKUMENTASI PERAKITAN

BLOK LAMBUNG KAPAL



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LAMPIRAN III

PERHITUNGAN BERAT



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Hull Structure Frame 0-2		Massa jenis Aluminium		2.723		Kg/m ³		0.00000001		mm ³ to m ³			
		Long Frame											
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)			
				Breath (mm)	Thickness (mm)								
		SB-F/				B1/SB-F/							
	ne Portside	LF/Ps/				B1/SB-F/							
	ne Portside Bottom	B/				B1/SB-F/							
	l/Ps/B	1	B1/SB-F/	100x65	6	2057	954	1962378	0.0053	5.344			
	2 LF1/Ps/B	2	B1/SB-F/	100x65	6	2327	954	2219958	0.0060	6.045			
	3 LF1/Ps/B	3	B1/SB-F/	100x65	6	2353	954	2244762	0.0061	6.112			
	4 LF1/Ps/B	4	B1/SB-F/	100x65	6	2353	954	2244762	0.0061	6.112			
	5 LF1/Ps/B	5	B1/SB-F/	100x65	6	2354	954	2245716	0.0061	6.115			
	6 LF1/Ps/B	6	B1/SB-F/	100x65	6	2355	954	2246670	0.0061	6.118			
	7 LF1/Ps/B	7	B1/SB-F/	100x65	6	2355	954	2246670	0.0061	6.118			
	8 LF1/Ps/B	8	B1/SB-F/	100x65	10	1192	151629.78	1516297.8	0.0041	4.129			
	9 LF1/Ps/B	9	B1/SB-F/	100x65	10	1194	163412.65	1634126.5	0.0044	4.450			
	10 LF1/Ps/B	10	B1/SB-F/	100x65	10	1194	163412.65	1634126.5	0.0044	4.450			
	b. Girder Rudder Foundation												
	Side Web Plate 1		B1/SB-F/	-	6	-	1960425.98	5693363.96	0.0155	15.503			
	Side Web Plate 2		B1/SB-F/	-	8	-	1338597.7	10708781.6	0.0292	29.160			
	Side Face Plate 1		B1/SB-F/	100	12	1158	1200	1389600	0.0038	3.784			
	Side Face Plate 2		B1/SB-F/	100	12	2176	1200	2611200	0.0071	7.110			
	Side Face Plate 3		B1/SB-F/	-	15	-	473963.928	7109458.92	0.0194	19.359			
	Side Face Plate 4		B1/SB-F/	-	15	-	197600.691	2964010.365	0.0081	8.071			
	Braket		B1/SB-F/	60	6	428	360	154080	0.0004	0.420			
	Midle Web Plate 1		B1/SB-F/	-	6	-	2911025.4	8494765.35	0.0231	23.131			
	Midle Web Plate 2		B1/SB-F/	-	8	-	412111.325	3296890.6	0.0090	8.977			
	Midle Web Plate 3		B1/SB-F/	-	8	-	1372010.079	10976080.63	0.0299	29.888			
	Midle Face Plate 1		B1/SB-F/	100	12	-	617819.38	4006889.6	0.0109	10.911			
	Midle Face Plate 2		B1/SB-F/	100	12	-	407022.1275	4884265.53	0.0133	13.300			
	Midle Face Plate 3		B1/SB-F/	100	12	702	1200	842400	0.0023	2.294			
	Midle Face Plate 4		B1/SB-F/	100	12	1150	1200	1380000	0.0038	3.758			
	Midle Face Plate 5		B1/SB-F/	-	15	-	719257.596	10788863.94	0.0294	29.378			
	Braker		B1/SB-F/	80	8	1070	640	684800	0.0019	8.865			
	Rudder Foundation												
	Web Plate 1		B1/SB-F/	-	6	-	573521.81	3441130.86	0.0094	9.370			
	Web Plate 2		B1/SB-F/	-	6	-	219787.08	1318722.48	0.0036	3.591			
	Web Plate 3		B1/SB-F/	-	10	-	133631.747	1336317.47	0.0036	3.639			
	Face Plate		B1/SB-F/	100	12	772	1028	793616	0.0022	2.161			
	Braket		B1/SB-F/	-	8	-	-	-	-	17.95			
	c. Rudder Foundation Top Plate		B1/SB-F/	-	10	-	676953.76	6769537.6	0.0184	18.433			
	d. Braket Foundation												
	Web Plate 1		B1/SB-F/	-	15	1848	540073.608	8101104.12	0.0221	22.059			
	Web Plate 2		B1/SB-F/	-	15	1848	540073.608	8101104.12	0.0221	22.059			
	Web Plate 3		B1/SB-F/	150	15	-	162900	1080000	0.0029	2.941			
	Tanktop Braket Foundation 1		B1/SB-F/	-	10	-	241610.327	1071773.79	0.0029	2.918			
	Tanktop Braket Foundation 2		B1/SB-F/	-	15	-	380180.796	2646962.39	0.0072	7.208			
	Tanktop Braket Foundation 3		B1/SB-F/	-	15	-	328585.106	2027749.4	0.0055	5.522			
	e. Braket Foundation Mid												
	Web Plate 1		B1/SB-F/	-	15	1848	554140.2747	8312104.12	0.0226	22.634			
	Web Plate 2		B1/SB-F/	-	15	1848	554140.2747	8312104.12	0.0226	22.634			
	Web Plate 3		B1/SB-F/	150	15	-	72000	1080000	0.0029	2.941			
	Tanktop Braket Foundation 1		B1/SB-F/	-	10	-	107177.379	1071773.79	0.0029	2.918			
	Tanktop Braket Foundation 2		B1/SB-F/	-	15	-	176646.1593	2646962.39	0.0072	7.208			
	Tanktop Braket Foundation 3		B1/SB-F/	-	15	-	125849.96	1887749.4	0.0051	5.140			



Nama	Material	Sub Code	Long Frame			Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)	
			Kode	Penampang Profil (mm)							
				Breath (mm)	Thickness (mm)						
Portside Side Shell											
1/Ps/Ss	Bulb Plat		B1/SB-F/LF/Ps/Ss/1	85	5	1470	648.28	952971.6	0.0026	2.595	
2/Ps/Ss			B1/SB-F/LF/Ps/Ss/2	85	5	1145	648.28	742280.6	0.0020	2.021	
3/Ps/Ss			B1/SB-F/LF/Ps/Ss/3	85	5	1145	648.28	742280.6	0.0020	2.021	
4/Ps/Ss			B1/SB-F/LF/Ps/Ss/4	85	5	1145	648.28	742280.6	0.0020	2.021	
5		LF5/Ps/Ss		B1/SB-F/LF/Ps/Ss/5	85	5	1145	648.28	742280.6	0.0020	2.021
6		LF6/Ps/Ss		B1/SB-F/LF/Ps/Ss/6	85	5	1145	648.28	742280.6	0.0020	2.021
7		LF7/Ps/Ss		B1/SB-F/LF/Ps/Ss/7	85	5	1145	648.28	742280.6	0.0020	2.021
8		LF8/Ps/Ss		B1/SB-F/LF/Ps/Ss/8	85	5	1145	648.28	742280.6	0.0020	2.021
9		LF9/Ps/Ss		B1/SB-F/LF/Ps/Ss/9	-	8	1490	1143278.1	1143278.1	0.0031	3.113
A.1.2 Long Frame Starboard											
a. Long Frame Starboard Bottom											
1	LF1/Su/B1	T Bar	B1/SB-F/LF/Su/B/1	100x65	6	2057	954	1962378	0.0053	5.344	
2	LF1/Su/B2		B1/SB-F/LF/Su/B/2	100x65	6	2327	954	2219958	0.0060	6.045	
3	LF1/Su/B3		B1/SB-F/LF/Su/B/3	100x65	6	2353	954	2244762	0.0061	6.112	
4	LF1/Su/B4		B1/SB-F/LF/Su/B/4	100x65	6	2353	954	2244762	0.0061	6.112	
5	LF1/Su/B5		B1/SB-F/LF/Su/B/5	100x65	6	2354	954	2245716	0.0061	6.115	
6	LF1/Su/B6		B1/SB-F/LF/Su/B/6	100x65	6	2355	954	2246670	0.0061	6.118	
7	LF1/Su/B7		B1/SB-F/LF/Su/B/7	100x65	6	2355	954	2246670	0.0061	6.118	
8	LF1/Su/B8		B1/SB-F/LF/Su/B/8	-	-	10	1192	151629.78	1516297.8	0.0041	4.129
9	LF1/Su/B9		B1/SB-F/LF/Su/B/9	-	-	10	1194	163412.65	1634126.5	0.0044	4.450
10	LF1/Su/B10		B1/SB-F/LF/Su/B/10	-	-	10	1194	163412.65	1634126.5	0.0044	4.450
b. Girder Rudder Foundation											
Side Web Plate 1	Plate		B1/SB-F/Su/GRF/SWP1	-	6	-	1960425.98	5693363.96	0.0155	15.503	
Side Web Plate 2			B1/SB-F/Su/GRF/SWP2	-	8	-	1338597.7	10708781.6	0.0292	29.160	
Side Face Plate 1			B1/SB-F/Su/GRF/SFP1	100	12	1158	1200	1389600	0.0038	3.784	
Side Face Plate 2			B1/SB-F/Su/GRF/SFP2	100	12	2176	1200	2611200	0.0071	7.110	
Side Face Plate 3			B1/SB-F/Su/GRF/SFP3	-	15	-	473963.928	7109458.92	0.0194	19.359	
Side Face Plate 4			B1/SB-F/Su/GRF/SFP4	-	15	-	197600.691	2964010.365	0.0081	8.071	
Midle Web Plate 1			B1/SB-F/Su/GRF/MWP1	-	6	-	2911025.4	8494765.35	0.0231	23.131	
Midle Web Plate 2			B1/SB-F/Su/GRF/MWP2	-	8	-	412111.325	3296890.6	0.0090	8.977	
Midle Web Plate 3			B1/SB-F/Su/GRF/MWP3	-	8	-	1372010.079	10976080.63	0.0299	29.888	
Midle Face Plate 1			B1/SB-F/Su/GRF/MFP1	100	12	-	617819.38	4006889.6	0.0109	10.911	
Midle Face Plate 2			B1/SB-F/Su/GRF/MFP2	100	12	702	1200	842400	0.0023	2.294	
Midle Face Plate 3			B1/SB-F/Su/GRF/MFP3	100	12	1150	1200	1380000	0.0038	3.758	
Rudder Foundation											
Web Plate 1			B1/SB-F/Su/RF/WP1	-	6	-	573521.81	3441130.86	0.0094	9.370	
Web Plate 2			B1/SB-F/Su/RF/WP2	-	6	-	219787.08	1318722.48	0.0036	3.591	
Web Plate 3			B1/SB-F/Su/RF/WP3	-	10	-	133631.747	1336317.47	0.0036	3.639	
Face Plate			B1/SB-F/Su/RF/FP	100	12	772	1028	793616	0.0022	2.161	
Braket midle			B1/SB-F/Su/RF-BM	-	8	-	-	-	-	17.95	
c. Rudder Foundation Top Plate			B1/SB-F/Su/RF/TP	-	10	-	676953.76	6769537.6	0.0184	18.433	



Nama	Material	Sub Code	Long Frame		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)	
			Kode	Penampang Profil (mm)						
				Breath (mm)						Thickness (mm)
undation										
b Plate 1	Plate		B1/SB-F/LF/St/BF/WB1	-	15	1848	540073.608	8101104.12	0.0221	22.059
b Plate 2			B1/SB-F/LF/St/BF/WB2	-	15	1848	540073.608	8101104.12	0.0221	22.059
b Plate 3			B1/SB-F/LF/St/BF/WB3	150	15	-	162900	1080000	0.0029	2.941
Atkop Braket Foundation 1			B1/SB-F/LF/St/BF/TBF1	-	10	-	241610.327	1071773.79	0.0029	2.918
Atkop Braket Foundation 2			B1/SB-F/LF/St/BF/TBF2	-	15	-	380180.796	2646962.39	0.0072	7.208
Tanktop Braket Foundation 3			B1/SB-F/LF/St/BF/TBF3	-	15	-	328585.106	2027749.4	0.0055	5.522
f. Long Frame Portside Side Shell						B1/SB-F/LF/St/Ss				
1 LF/St/Ss1	Bulb Plat		B1/SB-F/LF/St/Ss/1	85	5	1470	648.28	952971.6	0.0026	2.595
2 LF/St/Ss2			B1/SB-F/LF/St/Ss/2	85	5	1145	648.28	742280.6	0.0020	2.021
3 LF/St/Ss3			B1/SB-F/LF/St/Ss/3	85	5	1145	648.28	742280.6	0.0020	2.021
4 LF/St/Ss4			B1/SB-F/LF/St/Ss/4	85	5	1145	648.28	742280.6	0.0020	2.021
5 LF/St/Ss5			B1/SB-F/LF/St/Ss/5	85	5	1145	648.28	742280.6	0.0020	2.021
6 LF/St/Ss6			B1/SB-F/LF/St/Ss/6	85	5	1145	648.28	742280.6	0.0020	2.021
7 LF/St/Ss7			B1/SB-F/LF/St/Ss/7	85	5	1145	648.28	742280.6	0.0020	2.021
8 LF/St/Ss8			B1/SB-F/LF/St/Ss/8	85	5	1145	648.28	742280.6	0.0020	2.021
9 LF/St/Ss10			B1/SB-F/LF/St/Ss/10	-	8	1490	1143278.1	1143278.1	0.0031	3.113
A.2 Transverse Frame										
A.2.1 Transverse Frame 0 Portside						B1/SB-F/TF/Fr0/Ps				
a. Transverse Frame 0						B1/SB-F/TF/Fr0/CI				
Bracket Frame Bottom						B1/SB-F/TF/Fr0/BF/B				
Bracket 1	Flat Bar		B1/SB-F/TF/Fr0/PS/BF1/B	-	8	-	37644.276	301154.208	0.0008	0.820
Bracket 2			B1/SB-F/TF/Fr0/PS/BF2/B	-	8	-	37644.276	301154.208	0.0008	0.820
Bracket 3			B1/SB-F/TF/Fr0/PS/BF3/B	-	6	-	29856.569	78376.3798	0.0002	0.213
Bracket 4			B1/SB-F/TF/Fr0/PS/BF4/B	-	6	-	29856.569	78376.3798	0.0002	0.213
Bracket 5			B1/SB-F/TF/Fr0/PS/BF5/B	-	6	-	29856.569	78376.3798	0.0002	0.213
Bracket 6			B1/SB-F/TF/Fr0/PS/BF6/B	-	6	-	29856.569	78376.3798	0.0002	0.213
Bracket 7			B1/SB-F/TF/Fr0/PS/BF7/B	-	6	-	29856.569	78376.3798	0.0002	0.213
Bracket 8			B1/SB-F/TF/Fr0/PS/BF8/B	-	6	-	29856.569	78376.3798	0.0002	0.213
b. Transverse Frame 0						B1/SB-F/TF/Fr0/Ps				
1 Section A	Web Plate 1	Plate	B1/SB-F/TF/Fr0/SA	-	10	-	5534957.26	55349572.6	0.1507	150.717
2 Section B	Web Plate 2		B1/SB-F/TF/Fr0/SB	-	10	-	11277749.700	112777497	0.3071	307.093
3 Section C	Web Plate 3		B1/SB-F/TF/Fr0/SC	-	10	-	586069.403	5860694.03	0.0160	15.959
4 Section D	Web Plate 4		B1/SB-F/TF/Fr0/SD	-	10	-	1186700.54	11867005.4	0.0323	32.314
6 Section E	Web Plate 5		B1/SB-F/TF/Fr0/SE/Ps	-	10	-	2431396.9	24313969	0.0662	66.207
7 Section E	Web Plate 6		B1/SB-F/TF/Fr0/SE/Ps	-	11	-	2431396.9	24313969	0.0662	66.207
9 Flanged on Hull 1			B1/SB-F/TF/Fr0/FH1/Ps	-	8	-	484206.3513	3873650.81	0.0105	10.548
10 Flanged on Hull 2			B1/SB-F/TF/Fr0/FH2/Ps	-	8	-	446706.3513	3573650.81	0.0097	9.731
c. Transverse Frame 0 Integral Braket						B1/SB-F/TF/Fr0/Ps/IB				
1 Integral Braket	Flat Bar 1	FB	B1/SB-F/TF/Fr0/Ps/IB/FB1	80	8	-	162020.4313	1296163.45	0.0035	3.529
2 Integral Braket	Flat Bar 2		B1/SB-F/TF/Fr0/Ps/IB/FB2	80	8	-	161596.7538	1292774.03	0.0035	3.520
3 Integral Braket	Flat Bar 3		B1/SB-F/TF/Fr0/Ps/IB/FB3	80	8	-	160245.0825	1281960.66	0.0035	3.491
4 Integral Braket	Flat Bar 4		B1/SB-F/TF/Fr0/Ps/IB/FB4	80	8	-	160245.0825	1281960.66	0.0035	3.491
5 Integral Braket	Flat Bar 5		B1/SB-F/TF/Fr0/Ps/IB/FB5	80	8	-	160245.0825	1281960.66	0.0035	3.491
6 Integral Braket	Flat Bar 6		B1/SB-F/TF/Fr0/Ps/IB/FB6	80	8	-	146078.1325	1168625.06	0.0032	3.182
d. Transverse Frame 0						B1/SB-F/TF/Fr0/Ps				
1	Span Breaker	Web Plate 1	B1/SB-F/TF/Fr0/Ps/SB/WP1	250	5	-	1601855.2	8009276	0.0218	21.809
		Face Plate 1	B1/SB-F/TF/Fr0/Ps/SB/FP1	80	8	-	466418.125	3751345	0.0102	10.160
		Web Plate 2	B1/SB-F/TF/Fr0/Ps/SB/FP2	250	5	-	627067.09	3135335.45	0.0085	8.538
		Face Plate 2	B1/SB-F/TF/Fr0/Ps/SB/WP3	80	8	-	212536.5	1700292	0.0046	4.630
		Flat Bar	Web Plate	B1/SB-F/TF/Fr0/Ps/SB/WP4	100	8	6294	629333.43	5034661.44	0.0137



Nama	Material	Sub Code	Long Frame		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)		
			Kode	Penampang Profil (mm)							
				Breath (mm)						Thickness (mm)	
Stifner	Flat Bar 1		B1/SB-F/TF/Fr0/Ps/S/FB1	85	5	2320	648.28	1504009.6	0.0041	4.095	
	Flat Bar 2		B1/SB-F/TF/Fr0/Ps/S/FB2	85	5	2342	648.28	1518271.76	0.0041	4.134	
	Flat Bar 3		B1/SB-F/TF/Fr0/Ps/S/FB3	85	5	2025	648.28	1312767	0.0036	3.575	
	Flat Bar 4		B1/SB-F/TF/Fr0/Ps/S/FB4	85	5	2031	648.28	1316656.08	0.0036	3.585	
	Flat Bar 5		B1/SB-F/TF/Fr0/Ps/S/FB5	85	5	2428	648.28	1574023.84	0.0043	4.286	
	Flat Bar 6		B1/SB-F/TF/Fr0/Ps/S/FB6	85	5	2450	648.28	1582586	0.0043	4.325	
	Flat Bar 7		B1/SB-F/TF/Fr0/Ps/S/FB7	85	5	2472	648.28	1602548.16	0.0044	4.364	
	Flat Bar 8		B1/SB-F/TF/Fr0/Ps/S/FB8	85	5	1249	648.28	809701.72	0.0023	2.205	
	Flat Bar 9		B1/SB-F/TF/Fr0/Ps/S/FB9	85	5	2510	648.28	1627182.8	0.0044	4.431	
	Flat Bar 10		B1/SB-F/TF/Fr0/Ps/S/FB10	80	5	330	640	211200	0.0006	0.575	
	Flat Bar 11		B1/SB-F/TF/Fr0/Ps/S/FB11	80	5	351	640	224640	0.0006	0.612	
4	Braket		Plate 1	-	5(6)	-	13062.73	391681.8994	0.0011	1.067	
			Plate 2	-	8(3)	-	13062.73	313505.52	0.0009	0.854	
			Plate 3	-	5	-	17969.5989	89847.9946	0.0002	0.245	
5	Bollard Foundation		Web Plate 1	250	6	-	241866.762	1451200.572	0.0040	3.952	
			Face Plate 1	80	8	1429	92225.26625	737802.13	0.0020	1.009	
			Web Plate 2	250	8	-	670576.0938	5364608.75	0.0146	14.608	
			Face Plate 2	80	8	2145	146632.4875	1173059.9	0.0032	3.194	
			Braket 1	-	6	300	34640.01883	207840.113	0.0006	0.566	
			Braket 2	-	6	306	34640.01883	207840.113	0.0006	0.566	
			Bollard 1	152.4	12.7	930	827465.275	6183614.6	0.0168	16.838	
			Bollard 2	152.4	12.7	930	827465.275	6183614.6	0.0168	16.838	
			Web Plate 1	250	8	-	1387811.838	11102494.7	0.0302	30.464	
			Face Plate 1	120	15	2939	353573.9267	4303608.9	0.0144	28.883	
6	Stifner Girder		Middle Web Plate 2	250	8	-	1400748.225	11205985.8	0.0403	30.514	
			Middle Face Plate 1	120	15	2365	283851.2133	4257760.2	0.0116	11.594	
			Middle Face Plate 2	-	10	766	193134.5	1991345	0.0053	5.259	
			Middle Face Plate 3	60	6	636	360	228960	0.0006	0.623	
A.2.2	Transverse Frame 0 Starboard										
a.	Transverse Frame 0				B1/SB-F/TF/Fr0/St						
	Braket Frame Bottom				B1/SB-F/TF/Fr0/BF/B						
		Braket 1		B1/SB-F/TF/Fr0/Su/BF1/B	-	8	-	37644.276	301154.208	0.0008	0.820
		Braket 2		B1/SB-F/TF/Fr0/Su/BF2/B	-	8	-	37644.276	301154.208	0.0008	0.820
		Braket 3		B1/SB-F/TF/Fr0/Su/BF3/B	-	6	-	29856.569	78376.3798	0.0002	0.213
		Braket 4		B1/SB-F/TF/Fr0/Su/BF4/B	-	6	-	29856.569	78376.3798	0.0002	0.213
		Braket 5		B1/SB-F/TF/Fr0/Su/BF5/B	-	6	-	29856.569	78376.3798	0.0002	0.213
		Braket 6		B1/SB-F/TF/Fr0/Su/BF6/B	-	6	-	29856.569	78376.3798	0.0002	0.213
		Braket 7		B1/SB-F/TF/Fr0/Su/BF7/B	-	6	-	29856.569	78376.3798	0.0002	0.213
		Braket 8		B1/SB-F/TF/Fr0/Su/BF8/B	-	6	-	29856.569	78376.3798	0.0002	0.213
b.	Transverse Frame 0				B1/SB-F/TF/Fr0/Ps						
	1	Flanged on Hull 1	Plate	B1/SB-F/TF/Fr0/Su/FH1	-	8	-	484206.3513	3873650.81	0.0105	10.548
	2	Flanged on Hull 2		B1/SB-F/TF/Fr0/Su/FH2	-	8	-	446706.3513	3573650.81	0.0097	9.751
c.	Transverse Frame 0 Integral Braket				B1/SB-F/TF/Fr0/Ps/IB						
	1	Integral Braket	Flat Bar 1	B1/SB-F/TF/Fr0/Su/IB/FB1	80	8	-	162020.4313	1296163.45	0.0035	3.529
	2	Integral Braket	Flat Bar 2	B1/SB-F/TF/Fr0/Su/IB/FB2	80	8	-	161596.7538	1292774.03	0.0035	3.520
	3	Integral Braket	Flat Bar 3	B1/SB-F/TF/Fr0/Su/IB/FB3	80	8	-	160245.0825	1281960.66	0.0035	3.491
	4	Integral Braket	Flat Bar 4	B1/SB-F/TF/Fr0/Su/IB/FB4	80	8	-	160245.0825	1281960.66	0.0035	3.491
	5	Integral Braket	Flat Bar 5	B1/SB-F/TF/Fr0/Su/IB/FB5	80	8	-	160245.0825	1281960.66	0.0035	3.491
	6	Integral Braket	Flat Bar 6	B1/SB-F/TF/Fr0/Su/IB/FB6	80	8	-	146078.1325	1188625.06	0.0032	3.182



Nama	Material	Sub Code	Long Frame		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)		
			Kode	Penampang Profil (mm)							
				Breath (mm)						Thickness (mm)	
e	Frame 0		B1/SB-F/TF/Fr0/Ps								
1	Stifner	Flat Bar 1	B1/SB-F/TF/Fr0/Su/S/FB1	85	5	2320	648.28	1504009.6	0.0041	4.095	
		Flat Bar 2	B1/SB-F/TF/Fr0/Su/S/FB2	85	5	2342	648.28	1518271.76	0.0041	4.134	
		Flat Bar 3	B1/SB-F/TF/Fr0/Su/S/FB3	85	5	2025	648.28	1312767	0.0036	3.579	
		Flat Bar 4	B1/SB-F/TF/Fr0/Su/S/FB4	85	5	2031	648.28	1316656.68	0.0036	3.585	
		Flat Bar 5	B1/SB-F/TF/Fr0/Su/S/FB5	85	5	2428	648.28	1574023.84	0.0043	4.286	
		Flat Bar 6	B1/SB-F/TF/Fr0/Su/S/FB6	85	5	2450	648.28	1588286	0.0043	4.325	
		Flat Bar 7	B1/SB-F/TF/Fr0/Su/S/FB7	85	5	2472	648.28	1602548.16	0.0044	4.364	
		Flat Bar 8	B1/SB-F/TF/Fr0/Su/S/FB8	85	5	1249	648.28	809701.72	0.0022	2.205	
		Flat Bar 9	B1/SB-F/TF/Fr0/Su/S/FB9	85	5	2510	648.28	1627182.8	0.0044	4.431	
		Flat Bar 10	B1/SB-F/TF/Fr0/Su/S/FB10	80	5	330	640	211200	0.0006	0.575	
		Flat Bar 11	B1/SB-F/TF/Fr0/Su/S/FB11	80	5	351	640	224640	0.0006	0.612	
2	Braket	Plate 1	B1/SB-F/TF/Fr0/Su/FB/BKT1	-	5(9)	-	13062.73	58782.8491	0.0016	1.601	
		Plate 3	B1/SB-F/TF/Fr0/Su/FB/BKT3	-	5	-	17969.5989	89847.9946	0.0002	0.245	
3	Bollard Foundation	Web Plate 1	B1/SB-F/TF/Fr0/Su/BF/WB1	250	6	-	241866.762	1451200.572	0.0040	3.952	
		Face Plate 1	B1/SB-F/TF/Fr0/Su/BF/FP1	80	8	1215	92225.26625	737802.13	0.0020	1.009	
		Web Plate 2	B1/SB-F/TF/Fr0/Su/BF/WB2	250	8	-	670576.0938	5364608.75	0.0146	14.608	
		Face Plate 2	B1/SB-F/TF/Fr0/Su/BF/FP2	80	8	2145	146632.4875	1173059.9	0.0032	3.194	
		Braket 1	B1/SB-F/TF/Fr0/Su/BF/BRK1	-	6	300	34640.01883	207840.113	0.0006	0.566	
		Braket 2	B1/SB-F/TF/Fr0/Su/BF/BRK2	-	6	306	34640.01883	207840.113	0.0006	0.566	
		Bollard 1	B1/SB-F/TF/Fr0/Su/BF/BL1	152.4	12.7	930	827465.275	6183614.6	0.0168	16.838	
		Bollard 2	B1/SB-F/TF/Fr0/Su/BF/BL2	152.4	12.7	930	827465.275	6183614.6	0.0168	16.838	
	Braket Mid Frames		B1/SB-F/TF/Fr0/BMF							25.6	
A.3	Transverse Frame		B1/SB-F/TF/Fr1/Ps								
A.3.1	Transverse Frame 1 Portside		B1/SB-F/TF/Fr1/BRK								
	Transverse Frame 1 Braket		B1/SB-F/TF/Fr1/BF/B								
a.	Braket Frame Bottom	Flat Bar	B1/SB-F/TF/Fr01/Ps/BFB/BRK1	-	8	-	37644.276	301154.208	0.0008	0.820	
			B1/SB-F/TF/Fr01/Ps/BFB/BRK2	-	8	-	37644.276	301154.208	0.0008	0.820	
			B1/SB-F/TF/Fr01/Ps/BFB/BRK3	-	6	-	29856.569	78376.3798	0.0002	0.213	
			B1/SB-F/TF/Fr01/Ps/BFB/BRK4	-	6	-	29856.569	78376.3798	0.0002	0.213	
			B1/SB-F/TF/Fr01/Ps/BFB/BRK5	-	6	-	29856.569	78376.3798	0.0002	0.213	
			B1/SB-F/TF/Fr01/Ps/BFB/BRK6	-	6	-	29856.569	78376.3798	0.0002	0.213	
			B1/SB-F/TF/Fr01/Ps/BFB/BRK7	-	6	-	29856.569	78376.3798	0.0002	0.213	
			B1/SB-F/TF/Fr01/Ps/BFB/BRK8	-	6	-	29856.569	78376.3798	0.0002	0.213	
				Transverse Frame 1		B1/SB-F/TF/Fr1/Ps					
b.	Section A	Web Plate 1	B1/SB-F/TF/Fr1/Ps/SA/WP1	-	6	-	606185.676	3637114.06	0.0099	9.904	
		Face Plate 1-1	B1/SB-F/TF/Fr1/Ps/SA/FP1-1	100	10	1094	10940	1094000	0.0030	2.979	
	Section B	Web Plate 1-2	B1/SB-F/TF/Fr1/Ps/SB/WP1	-	6	-	1051777.720	8310666.32	0.0172	17.184	
		Face Plate 2-1	B1/SB-F/TF/Fr1/Ps/SB/FP2-1	100	10	960	9600.000	960000	0.0025	2.614	
	Section C	Face Plate 2-2	B1/SB-F/TF/Fr1/Ps/SB/FP2-2	60	6	554	3324.000	199443	0.0005	0.543	
		Web Plate 3	B1/SB-F/TF/Fr1/Ps/SC/WP5	-	6	-	698447.655	4190685.93	0.0114	11.411	
		Face Plate 3-1	B1/SB-F/TF/Fr1/Ps/SC/FP3-1	80	8	3882	31056	2484480	0.0068	6.765	
		Face Plate 3-2	B1/SB-F/TF/Fr1/Ps/SC/FP3-2	60	6	452	2712	162720	0.0004	0.443	
	Section D	Web Plate 4	B1/SB-F/TF/Fr1/Ps/SD/WP4	-	5	-	228064.616	1140323.08	0.0031	3.105	
	Section E	Web Plate 5	B1/SB-F/TF/Fr1/Ps/SF/WP5	-	6	-	1619711.36	4734772.42	0.0129	12.893	
	Section F	Web Plate 6	B1/SB-F/TF/Fr1/Ps/SE/WP6	-	8	-	1329877.75	10639012	0.0290	28.970	
		Face Plate 6	B1/SB-F/TF/Fr1/Ps/SA/FP6	150	12	1678	20136	6040800	0.0164	16.449	
		Braket		B1/SB-F/TF/Fr1/Ps/BRK	-	5(9)	-	197122.7232	985613.616	0.0027	2.684



Nama	Material	Sub Code	Long Frame		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)	
			Kode	Penampang Profil (mm)						
				Breath (mm)						Thickness (mm)
Deck Plate	Plate									
Deck Plate 1		B1/MD/Ps/DP1	1125	8	2570	2575933.82	20607470.56	0.0561	56.114	
Deck Plate 2		B1/MD/Ps/DP2		5		9462808.63	47314043.2	0.1288	228.836	
Deck Plate 3		B1/MD/Ps/DP3		5		3591070.12	17955350.6	0.0489	97.785	
Deck Plate 4		B1/MD/Ps/DP4		5		11600475	58002374.9	0.1579	176.049	
Deck Plate 5		B1/MD/Ps/DP5		5		2973431.39	14867156.9	0.0405	180.967	
Deck Plate 6		B1/MD/Ps/DP6		5		532155.752	2660778.76	0.0072	7.245	
Deck Plate 7		B1/MD/Ps/DP7		5		10838796.2	54193981.1	0.1476	147.570	
Deck Plate 8	B1/MD/Ps/DP8		5		1200398.77	9603190.17	0.0261	26.149		
Stifner Deck 0-2 Portside			B1/SD/F0-2/St/S							
Stifner Deck 1	Flat Bar	S22P	B1/SD/F0-2/Ps/S22P	85	5	1907	648.28	1236269.96	0.0034	3.366
Stifner Deck 2		S32P	B1/SD/F0-2/Ps/S32P	85	5	2345	648.28	1520216.6	0.0041	8.279
Stifner Deck 3		S35P	B1/SD/F0-2/Ps/S35P-2	85	5	2345	648.28	1520216.6	0.0041	4.140
Stifner Deck 4		S03P	B1/SD/F0-2/Ps/S03P	85	5	2345	648.28	1520216.6	0.0041	12.419
Stifner Deck 5		S13P	B1/SD/F0-2/Ps/S13P	85	5	2345	648.28	1520216.6	0.0041	4.140
Stifner Deck 6		S07P	B1/SD/F0-2/Ps/S07P	85	5	1936	648.28	1255070.08	0.0034	3.418
Stifner Deck 7	Plate	P01P	B1/SD/F0-2/Ps/P01P	-	10	2345	800	1876000	0.0051	5.108
Stifner Deck 8		P12P	B1/SD/F0-2/Ps/P12P	-	10	2345	800	1876000	0.0051	5.108
Stifner Deck 9		P15P	B1/SD/F0-2/Ps/P15P	-	10	2345	800	1876000	0.0051	5.108
Stifner Deck 2-5 Portside			B1/SD/F2-5/St/S							
Stifner Deck 1	Flat Bar	S01P	B1/SD/F2-5/Ps/S01P-6	85	5	3545	648.28	2298152.6	0.0063	37.547
Stifner Deck 2		S02P	B1/SD/F2-5/Ps/S02P	85	5	3545	648.28	2298152.6	0.0063	6.258
Stifner Deck 3		S33P	B1/SD/F2-5/Ps/S33P	85	5	2345	648.28	1520216.6	0.0041	4.140
Stifner Deck 4		S37P	B1/SD/F2-5/Ps/S37P	85	5	2345	648.28	1520216.6	0.0041	20.698
Stifner Deck 5		S38P	B1/SD/F2-5/Ps/S38P	85	5	2345	648.28	1520216.6	0.0041	4.140
Stifner Deck 6		S04P	B1/SD/F2-5/Ps/S04P	85	5	3545	648.28	2298152.6	0.0063	6.258
Stifner Deck 7		S31P	B1/SD/F2-5/Ps/S31P	85	5	3131	648.28	2029764.68	0.0055	5.527
Stifner Deck 8		P13P	B1/SD/F2-5/Ps/SP13P		10	1200	1224	1468800	0.0040	4.000
Stifner Deck 9		P14P	B1/SD/F2-5/Ps/P14P		10	1200	1224	1468800	0.0040	4.000
Stifner Deck 10		P11P	B1/SD/F2-5/Ps/P11P		10	1200	1224	1468800	0.0040	4.000
Stifner Deck 11		P05P	B1/SD/F2-5/Ps/P05P		8		37644.276	301154.208	0.0008	0.820
A.5.2 Main Deck Plate Starboard			B1/MD							
Stifner Deck 0-2 Starboard			B1/SD/F0-2/St/S							
Stifner Deck 1	Flat Bar	S33S	B1/SD/F0-2/St/S33S	85	5	706	648.28	457685.68	0.0012	1.246
Stifner Deck 2		S35S	B1/SD/F0-2/St/S35S-2	85	5	2345	648.28	1520216.6	0.0041	8.279
Stifner Deck 3		S01S	B1/SD/F0-2/St/S01S	85	5	2345	648.28	1520216.6	0.0041	4.140
Stifner Deck 4		S21S	B1/SD/F0-2/St/S21S-3	85	5	2345	648.28	1520216.6	0.0041	12.419
Stifner Deck 5		S04S	B1/SD/F0-2/St/S04S	85	5	2345	648.28	1520216.6	0.0041	4.140
Stifner Deck 6		S37S	B1/SD/F0-2/St/S37S	85	5	1936	648.28	1255070.08	0.0034	3.418
Stifner Deck 2-5 Starboard			B1/SD/F2-5/St/S							
Stifner Deck 1	Flat Bar	S07S	B1/SD/F0-2/St/S07S	85	5	3545	648.28	2298152.6	0.0063	6.258
Stifner Deck 2		S12S	B1/SD/F0-2/St/S12S	85	5	3545	648.28	2298152.6	0.0063	6.258
Stifner Deck 3		S19S	B1/SD/F0-2/St/S19S	85	5	3545	648.28	2298152.6	0.0063	6.258
Stifner Deck 4		S31S	B1/SD/F0-2/St/S31S	85	5	3545	648.28	2298152.6	0.0063	31.289
Stifner Deck 5		S18S	B1/SD/F0-2/St/S18S-5	85	5	3545	648.28	2298152.6	0.0063	6.258
Stifner Deck 6		S02S	B1/SD/F0-2/St/S02S	85	5	3545	648.28	2298152.6	0.0063	6.258
Stifner Deck 7		S03S	B1/SD/F0-2/St/S03S	85	5	3545	648.28	2298152.6	0.0063	6.258
Stifner Deck 8		S38S	B1/SD/F0-2/St/S38S	85	5	3131	648.28	2029764.68	0.0055	5.527
Stifner Deck 9		S01C	B1/SD/F0-2/St/S01	85	5	3045	648.28	1974012.6	0.0054	5.375
Braket 1		P05S	B1/SD/F0-2/St/P05S		8		37644.276	301154.208	0.0008	0.820
Braket 2		B5180	B1/SD/F0-2/St/B5180-2		5		15675.27596	78376.3798	0.0002	0.213



Structure Frame 3-5			Massa jenis Aluminium	2.723	Kg/m ³	0.000000001	mm ³ to m ³				
Nama	Material	Sub Code	Kode	Long Frame		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Ton)	
				Penampang Profil (mm)							
				Breath (mm)	Thickness (mm)						
		SB-F/	B1/SB-F/								
		LF/Ps/	B1/SB-F/LF/Ps/								
		B/	B1/SB-F/LF/Ps/B/								
				100x65	6	3549	954	3385746	0.0092	9.219	
				100x65	6	3550	954	3386700	0.0092	9.222	
				100x65	6	3550	954	3386700	0.0092	9.222	
				100x65	6	3550	954	3386700	0.0092	9.222	
				100x65	6	3552	954	3388608	0.0092	9.227	
				100x65	6	3553	954	3389562	0.0092	9.230	
				100x65	6	3554	954	3390516	0.0092	9.232	
				100x65	6	3555	954	3391470	0.0092	9.235	
				100x65	6	3555	954	3391470	0.0092	9.235	
				100x65	6	2686	954	2562444	0.0070	6.978	
				Total						0.0900	90.0222
				B1/SB-F/LF/Ps/Ss							
				85	5	3545	648.28	2298152.6	0.0063	6.258	
				85	5	3545	648.28	2298152.6	0.0063	6.258	
				85	5	3545	648.28	2298152.6	0.0063	6.258	
				85	5	3545	648.28	2298152.6	0.0063	6.258	
				85	5	3545	648.28	2298152.6	0.0063	6.258	
				85	5	3545	648.28	2298152.6	0.0063	6.258	
				85	5	3545	648.28	2298152.6	0.0063	6.258	
				85	5	3545	648.28	2298152.6	0.0063	6.258	
				85	5	3545	648.28	2298152.6	0.0063	6.258	
				Total						0.0563	62.5787
				B1/SB-F/LF/Ps							
				B1/SB-F/LF/Sv/B							
				100x65	6	3549	965	3424785	0.0093	9.326	
				100x65	6	3550	965	3425750	0.0093	9.328	
				100x65	6	3550	965	3425750	0.0093	9.328	
				100x65	6	3550	965	3425750	0.0093	9.328	
				100x65	6	3552	965	3427680	0.0093	9.334	
				100x65	6	3553	965	3428645	0.0093	9.336	
				100x65	6	3554	965	3429610	0.0093	9.339	
				100x65	6	3555	965	3430575	0.0093	9.341	
				100x65	6	3555	965	3430575	0.0093	9.341	
				100x65	6	2686	965	2591990	0.0071	7.058	
				Total						0.0911	91.0601



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Ton)	
				Breath (mm)	Thickness (mm)						
B1/SB-F/LF/Ps/Ss											
Starboard Side Shell											
1/Ss1			B1/SB-F/LF/Su/Ss/1	85	5	3549	648.28	2300745.72	0.0063	6.265	
1/Ss2			B1/SB-F/LF/Su/Ss/2	85	5	3550	648.28	2301394	0.0063	6.267	
1/Ss3			B1/SB-F/LF/Su/Ss/3	85	5	3550	648.28	2301394	0.0063	6.267	
1/Ss4			B1/SB-F/LF/Su/Ss/4	85	5	3550	648.28	2301394	0.0063	6.267	
1/Ss5			B1/SB-F/LF/Su/Ss/5	85	5	3552	648.28	2302690.56	0.0063	6.270	
6	LF/st/Ss6		B1/SB-F/LF/Su/Ss/6	85	5	3553	648.28	2303338.84	0.0063	6.272	
7	LF/st/Ss7		B1/SB-F/LF/Su/Ss/7	85	5	3554	648.28	2303987.12	0.0063	6.274	
8	LF/st/Ss8		B1/SB-F/LF/Su/Ss/8	85	5	3555	648.28	2304635.4	0.0063	6.276	
9	LF/st/Ss9		B1/SB-F/LF/Su/Ss/9	85	5	3555	648.28	2304635.4	0.0063	6.276	
10	LF/st/Ss10		B1/SB-F/LF/Su/Ss/10	85	5	2686	648.28	1741280.08	0.0047	4.742	
Total										0.0612	61.1735
A.2 Transverse Frame											
A.2.1 Transverse Frame 3											
B1/SB-F/TF/Fr3											
a. Transverse Frame 3 Center Portside											
B1/SB-F/TF/Fr3											
Center Frame Bottom											
B1/SB-F/TF/Fr3											
1	Section A	Web Plate	B1/SB-F/TF/Fr3/Ps/SA/WP	-	6	-	521347.099	3128082.59	0.0085	8.51776889	
		Face Plate	B1/SB-F/TF/Fr3/Ps/SA/FP	100	12	908	208874.019	1106110.24	0.0030	3.01193818	
		Stifner	B1/SB-F/TF/Fr3/Ps/SA/BRK	60	6	664	3984	239040	0.0007	0.65090592	
2	Section B	Web Plate	B1/SB-F/TF/Fr3/CF/SA/WP	-	6	-	564842.36	3389054.16	0.0092	9.22839448	
		Face Plate	B1/SB-F/TF/Fr3/CF/SB/FP	100	12	1234	1480635.44	1480635.44	0.0040	4.0317703	
		Stifner 1	B1/SB-F/TF/Fr3/CF/SB/S-1	60	6	440	360	158400	0.0004	0.4313232	
		Stifner 2	B1/SB-F/TF/Fr3/CF/SB/S-2	60	6	419	360	150840	0.0004	0.41073732	
3	Section Up	Web Plate	B1/SB-F/TF/Fr4/Ps/Su/WP	-	8	-	1330250.31	10642002.48	0.0290	28.9781728	
		Face Plate	B1/SB-F/TF/Fr4/Ps/SU/FP	150	12	3190	38284.8727	5742730.905	0.0156	19.6374563	
		Braket	B1/SB-F/TF/Fr4/Ps/SU/BRK	50	5	178	890	44500	0.0001	0.242347	
b. Transverse Frame 3 Portside											
B1/SB-F/TF/Fr3/Ps											
Side Frame											
B1/SB-F/TF/Fr3/Ps/SF/											
1	Section A	Web Plate 1	B1/SB-F/TF/Fr3/Ps/SF/WP1	-	5	-	705729.494	3528647.47	0.0096	9.60850706	
		Web Plate 2	B1/SB-F/TF/Fr3/Ps/SF/WP2	-	5	-	830885.154	4154425.77	0.0113	11.3125014	
		Web Plate 3	B1/SB-F/TF/Fr3/Ps/SF/WP3	-	6	-	904517.532	5427105.192	0.0148	14.7780074	
		Face Plate 1	B1/SB-F/TF/Fr3/Ps/SF/FP1	80	8	3631	29048	2323840	0.0063	6.32781632	
		Face Plate 2	B1/SB-F/TF/Fr3/Ps/SF/FP2	80	8	3117	24936	1994880	0.0054	5.43205824	
		Braket 1	B1/SB-F/TF/Fr3/Ps/SF/BRK1-3	50	5	165	825	41250	0.0001	0.33697125	
		Braket 2	B1/SB-F/TF/Fr3/Ps/SF/BRK2	50	6	231	1386	69300	0.0002	0.1887039	
		Braket 3	B1/SB-F/TF/Fr3/Ps/SF/BRK3	50	5	188	940	47000	0.0001	0.127981	
		Braket 4	B1/SB-F/TF/Fr3/Ps/SF/BRK4	50	5	165	825	41250	0.0001	0.11232375	
		Braket 5	B1/SB-F/TF/Fr3/Ps/SF/BRK5	50	5	165	825	41250	0.0001	0.11232375	
		Braket 6	B1/SB-F/TF/Fr3/Ps/SF/BRK6	50	5	165	825	41250	0.0001	0.11232375	
		Braket 7	B1/SB-F/TF/Fr3/Ps/SF/BRK7	50	5	185	925	46250	0.0001	0.12593875	
		Braket 8	B1/SB-F/TF/Fr3/Ps/SF/BRK8	50	5	295	1475	73750	0.0002	0.20082125	
		Braket 9	B1/SB-F/TF/Fr3/Ps/SF/BRK9	50	5	178	890	44500	0.0001	0.1211735	
		Braket 10	B1/SB-F/TF/Fr3/Ps/SF/BRK10	50	5	178	890	44500	0.0001	0.1211735	
c. Transverse Frame 3 Starboard											
B1/SB-F/TF/Fr3/Su/											
Side Frame											
B1/SB-F/TF/Fr3/Su/SF/											
1	Section A	Web Plate 1	B1/SB-F/TF/Fr3/Su/SF/WP1	-	5	-	705729.494	3528647.47	0.0096	9.60850706	
		Web Plate 2	B1/SB-F/TF/Fr3/Su/SF/WP2	-	5	-	830885.154	4154425.77	0.0113	16.3125014	
		Web Plate 3	B1/SB-F/TF/Fr3/Su/SF/WP3	-	6	-	904517.532	5427105.192	0.0148	14.7780074	
		Face Plate 1	B1/SB-F/TF/Fr3/Su/SF/FP1	80	8	3631	29048	2323840	0.0063	11.3278163	
		Face Plate 2	B1/SB-F/TF/Fr3/Su/SF/FP2	80	8	3117	24936	1994880	0.0054	10.4320582	



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Ton)	
				Breath (mm)	Thickness (mm)						
		Braket 1	B1/SB-F/TF/Fr3/Su/SF/BRK1-3	50	5	165	825	41250	0.0001	0.33697125	
		Braket 2	B1/SB-F/TF/Fr3/Su/SF/BRK2	50	6	231	1386	69300	0.0002	0.6087039	
		Braket 3	B1/SB-F/TF/Fr3/Su/SF/BRK3	50	5	188	940	47000	0.0001	0.127981	
		Braket 4	B1/SB-F/TF/Fr3/Su/SF/BRK4	50	5	165	825	41250	0.0001	0.11232375	
		Braket 5	B1/SB-F/TF/Fr3/Su/SF/BRK5	50	5	165	825	41250	0.0001	0.11232375	
		Braket 6	B1/SB-F/TF/Fr3/Su/SF/BRK6	50	5	165	825	41250	0.0001	0.11232375	
		Braket 7	B1/SB-F/TF/Fr3/Su/SF/BRK7	50	5	185	925	46250	0.0001	0.12593875	
		Braket 8	B1/SB-F/TF/Fr3/Su/SF/BRK8	50	5	295	1475	73750	0.0002	0.20082125	
		Braket 9	B1/SB-F/TF/Fr3/Su/SF/BRK9	50	5	178	890	44500	0.0001	0.1211735	
		Braket 10	B1/SB-F/TF/Fr3/Su/SF/BRK10	50	5	178	890	44500	0.0001	0.1211735	
		Braket Mid Frames	B1/SB-F/TF/Fr3/BMF							12.1	
A.3		Tranverse Frame									
A.2.1		Tranverse Frame 4					B1/SB-F/TF/Fr4				
a.		Tranverse Frame 3 Center Portside					B1/SB-F/TF/Fr4				
		Center Frame Bottom					B1/SB-F/TF/Fr4				
	1	Section A	Web Plate	B1/SB-F/TF/Fr4/Ps/SA/WP	-	6	-	521347.099	3128082.59	0.0085	8.51776889
			Face Plate	B1/SB-F/TF/Fr4/Ps/SA/FP	100	12	908	208874.019	1106110.24	0.0030	3.01193818
			Stifner	B1/SB-F/TF/Fr4/Ps/SA/BRK	60	6	664	3984	239040	0.0007	0.65090592
	2	Section B	Web Plate	B1/SB-F/TF/Fr4/CF/SA/WP	-	6	-	564842.36	3389054.16	0.0092	9.22839448
			Face Plate	B1/SB-F/TF/Fr4/CF/SB/FP	100	12	1234	1200	1480635.44	0.0040	7.9317703
			Stifner 1	B1/SB-F/TF/Fr4/CF/SB/S-1	60	6	440	360	158400	0.0004	0.4313232
			Stifner 2	B1/SB-F/TF/Fr4/CF/SB/S-2	60	6	419	360	150840	0.0004	0.41073732
	3	Section Up	Web Plate	B1/SB-F/TF/Fr4/Ps/Su/WP	-	8	-	1330250.31	10642002.48	0.0290	28.9781728
			Face Plate	B1/SB-F/TF/Fr4/Ps/Su/FP	150	12	3190	38284.8727	5742730.905	0.0156	19.6374563
			Braket	B1/SB-F/TF/Fr4/Ps/Su/BRK	50	5	178	890	44500	0.0001	0.242347
b.		Tranverse Frame 4 Portside					B1/SB-F/TF/Fr3/Ps				
		Side Frame					B1/SB-F/TF/Fr3/Ps/SF/				
	1	Section A	Web Plate 1	B1/SB-F/TF/Fr4/Ps/SF/WP1	-	5	-	705729.494	3528647.47	0.0096	9.60850706
			Web Plate 2	B1/SB-F/TF/Fr4/Ps/SF/WP2	-	5	-	830885.154	4154425.77	0.0113	11.3125014
			Web Plate 3	B1/SB-F/TF/Fr4/Ps/SF/WP3	-	6	-	904517.532	5427105.192	0.0148	14.7780074
			Face Plate 1	B1/SB-F/TF/Fr4/Ps/SF/FP1	80	8	3631	29048	2323840	0.0063	9.32781632
			Face Plate 2	B1/SB-F/TF/Fr4/Ps/SF/FP2	80	8	3117	24936	1994880	0.0054	11.4320582
		Braket 1		B1/SB-F/TF/Fr4/Ps/SF/BRK1-3	50	5	165	825	41250	0.0001	0.33697125
		Braket 2		B1/SB-F/TF/Fr4/Ps/SF/BRK2	50	6	231	1386	69300	0.0002	0.1887039
		Braket 3		B1/SB-F/TF/Fr4/Ps/SF/BRK3	50	5	188	940	47000	0.0001	0.127981
		Braket 4		B1/SB-F/TF/Fr4/Ps/SF/BRK4	50	5	165	825	41250	0.0001	0.11232375
		Braket 5		B1/SB-F/TF/Fr4/Ps/SF/BRK5	50	5	165	825	41250	0.0001	0.11232375
		Braket 6		B1/SB-F/TF/Fr4/Ps/SF/BRK6	50	5	165	825	41250	0.0001	0.11232375
		Braket 7		B1/SB-F/TF/Fr4/Ps/SF/BRK7	50	5	185	925	46250	0.0001	0.12593875
		Braket 8		B1/SB-F/TF/Fr4/Ps/SF/BRK8	50	5	295	1475	73750	0.0002	0.20082125
		Braket 9		B1/SB-F/TF/Fr4/Ps/SF/BRK9	50	5	178	890	44500	0.0001	0.1211735
		Braket 10		B1/SB-F/TF/Fr4/Ps/SF/BRK10	50	5	178	890	44500	0.0001	0.1211735
c.		Tranverse Frame 4 Starboard					B1/SB-F/TF/Fr3/Su				
		Side Frame					B1/SB-F/TF/Fr3/Su/SF/				
	1	Section A	Web Plate 1	B1/SB-F/TF/Fr4/Su/SF/WP1	-	5	-	705729.494	3528647.47	0.0096	9.60850706
			Web Plate 2	B1/SB-F/TF/Fr4/Su/SF/WP2	-	5	-	830885.154	4154425.77	0.0113	11.3125014
			Web Plate 3	B1/SB-F/TF/Fr4/Su/SF/WP3	-	6	-	904517.532	5427105.192	0.0148	14.7780074
			Face Plate 1	B1/SB-F/TF/Fr4/Su/SF/FP1	80	8	3631	29048	2323840	0.0063	11.3278163
			Face Plate 2	B1/SB-F/TF/Fr4/Su/SF/FP2	80	8	3117	24936	1994880	0.0054	10.4320582



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Ton)	
				Breath (mm)	Thickness (mm)						
			Braket 13	B1/SB-F/TF/Fr4/Ps/SBF/BRK13	-	6	472	30057.0851	180342.5106	0.0005	0.49107266
			Braket 14	B1/SB-F/TF/Fr4/Ps/SBF/BRK14	-	6	500	30157.0851	180942.5106	0.0005	0.49270646
			Braket 15	B1/SB-F/TF/Fr4/Ps/SBF/BRK15	-	6	552	30357.0851	182142.5106	0.0005	0.49597406
			Braket 16	B1/SB-F/TF/Fr4/Ps/SBF/BRK16	-	6	579	30457.0851	182742.5106	0.0005	0.49760786
			Braket 17	B1/SB-F/TF/Fr4/Ps/SBF/BRK17	-	6	607	30557.0851	183342.5106	0.0005	0.49924166
			Braket 18	B1/SB-F/TF/Fr4/Ps/SBF/BRK18	-	6	634	30657.0851	183942.5106	0.0005	0.50087546
			Braket 19	B1/SB-F/TF/Fr4/Ps/SBF/B/BRK19-59	-	5	-	10235.4725	51177.3625	0.0001	8.22200153
			Braket 20	B1/SB-F/TF/Fr4/Ps/SBF/B/BRK19-2	-	6	-	10236.4725	61418.835	0.0002	0.33448698
											73.122
			c. Stifner Bulkhead Frame 5 Starboard		B1/SB-F/TF/Fr5/Su/STF						
			S1	B1/SB-F/TF/Fr5/Su/STF1	85	5	2250	648.28	1458630	0.0040	3.972
			S2	B1/SB-F/TF/Fr5/Su/STF2	85	5	2264	648.28	1467705.92	0.0040	3.997
			S3	B1/SB-F/TF/Fr5/Su/STF3	85	5	2269	648.28	1470947.32	0.0040	4.005
			S4	B1/SB-F/TF/Fr5/Su/STF4	85	5	2275	648.28	1474837	0.0040	4.016
			S5	B1/SB-F/TF/Fr5/Su/STF5	85	5	2281	648.28	1478726.68	0.0040	4.027
			S6	B1/SB-F/TF/Fr5/Su/STF6	85	5	2292	648.28	1485857.76	0.0040	4.046
			S7	B1/SB-F/TF/Fr5/Su/STF7	85	5	2297	648.28	1489099.16	0.0041	4.055
			S8	B1/SB-F/TF/Fr5/Su/STF8	85	5	2303	648.28	1492988.84	0.0041	4.065
			S9	B1/SB-F/TF/Fr5/Su/STF9	85	5	2309	648.28	1496878.52	0.0041	4.076
			S10	B1/SB-F/TF/Fr5/Su/STF10	100x65	6	2319	954	2212326	0.0060	6.024
			Rider	B1/SB-F/TF/Fr5/Ps/RD	110	10	2406	1100	2646600	0.0072	7.207
			Braket 1	B1/SB-F/TF/Fr4/Ps/SBF/BRK1	-	5	315	10207.1785	51035.8925	0.0001	0.41691221
			Braket 2	B1/SB-F/TF/Fr4/Ps/SBF/BRK2	-	5	312	11181.8747	55909.3735	0.0002	0.15224122
			Braket 3	B1/SB-F/TF/Fr4/Ps/SBF/BRK3	-	5	297	10360.8747	51804.3735	0.0001	0.14106331
			Braket 4	B1/SB-F/TF/Fr4/Ps/SBF/BRK4	-	5	270	28924.3747	144621.8735	0.0004	0.39380536
			Braket 5	B1/SB-F/TF/Fr4/Ps/SBF/BRK5	-	5	240	27242.3747	136211.8735	0.0004	0.37090493
			Braket 6	B1/SB-F/TF/Fr4/Ps/SBF/BRK6	-	5	210	15709.3747	78546.8735	0.0002	0.21388314
			Braket 7	B1/SB-F/TF/Fr4/Ps/SBF/BRK7	-	5	233	29164.3747	145821.8735	0.0004	0.39707296
			Braket 8	B1/SB-F/TF/Fr4/Ps/SBF/BRK8	-	5	232	28378.4174	141892.087	0.0004	0.38637215
			Braket 9	B1/SB-F/TF/Fr4/Ps/SBF/BRK9	-	6	461	28956.0851	173736.5106	0.0005	0.47308452
			Braket 10	B1/SB-F/TF/Fr4/Ps/SBF/BRK10	-	6	381	23092.5851	138555.5106	0.0004	0.37728666
			Braket 11	B1/SB-F/TF/Fr4/Ps/SBF/BRK11	-	6	398	27357.0851	164142.5106	0.0004	0.44696006
			Braket 12	B1/SB-F/TF/Fr4/Ps/SBF/BRK12	-	6	426	28757.0851	172542.5106	0.0005	0.46983326
			Braket 13	B1/SB-F/TF/Fr4/Ps/SBF/BRK13	-	6	472	30057.0851	180342.5106	0.0005	0.49107266
			Braket 14	B1/SB-F/TF/Fr4/Ps/SBF/BRK14	-	6	500	30157.0851	180942.5106	0.0005	0.49270646
			Braket 15	B1/SB-F/TF/Fr4/Ps/SBF/BRK15	-	6	552	30357.0851	182142.5106	0.0005	0.49597406
			Braket 16	B1/SB-F/TF/Fr4/Ps/SBF/BRK16	-	6	579	30457.0851	182742.5106	0.0005	0.49760786
			Braket 17	B1/SB-F/TF/Fr4/Ps/SBF/BRK17	-	6	607	30557.0851	183342.5106	0.0005	0.49924166
			Braket 18	B1/SB-F/TF/Fr4/Ps/SBF/BRK18	-	6	634	30657.0851	183942.5106	0.0005	0.50087546
			Braket 19	B1/SB-F/TF/Fr4/Ps/SBF/B/BRK19-59	-	5	-	10235.4725	51177.3625	0.0001	8.22200153
			Braket 20	B1/SB-F/TF/Fr4/Ps/SBF/B/BRK19-2	-	6	-	10236.4725	61418.835	0.0002	0.33448698
											65.263
			A.5 Tank Bulkhead								
			A.5.1 Bulkhead Portside		B1/SB-F/TBH/Ps						
			Bulkhead 1	B1/SB-F/TBH/Ps/BH1	-	5	-	3666546.41	18332732.05	0.0499	50.9200294
			Bulkhead 2	B1/SB-F/TBH/Ps/BH2	-	5	-	8160725	40803625	0.1111	111.108271
			Stifner Tank Bulkhead 1	B1/SB-F/TBH/Ps/STBH1	85	5	3545	648.28	2298152.6	0.0063	6.25786953
			Stifner Tank Bulkhead 2	B1/SB-F/TBH/Ps/STBH2	-	10	-	329843	3298430	0.0090	8.98162489
			Stifner Tank Bulkhead 3	B1/SB-F/TBH/Ps/STBH3	85	5	3545	648.28	2298152.6	0.0063	6.25786953
			Stifner Tank Bulkhead 4	B1/SB-F/TBH/Ps/STBH4-2	85	5	1425	648.28	923799	0.0025	5.03100935



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Ton)
				Breath (mm)	Thickness (mm)					
er Tank Bulkhead 5			B1/SB-F/TBH/Ps/STBH5-2	85	5	1420	648.28	920557.6	0.0025	5.01335669
er Tank Bulkhead 6			B1/SB-F/TBH/Ps/STBH6	85	5	803	648.28	520568.84	0.0014	2.8350179
er Tank Bulkhead 7			B1/SB-F/TBH/Ps/STBH7	85	5	3545	648.28	2298152.6	0.0063	6.25786953
er Tank Bulkhead 8			B1/SB-F/TBH/Ps/STBH8	85	5	3545	648.28	2298152.6	0.0063	6.25786953
er Tank Bulkhead 9			B1/SB-F/TBH/Ps/STBH9	85	5	3545	648.28	2298152.6	0.0063	6.25786953
er Tank Bulkhead 10			B1/SB-F/TBH/Ps/STBH10	85	5	3432	648.28	2224896.96	0.0061	6.05839442
Stifiner Tank Bulkhead 11			B1/SB-F/TBH/Ps/STBH11	85	5	3545	648.28	2298152.6	0.0063	6.25786953
Stifiner Tank Bulkhead 12			B1/SB-F/TBH/Ps/STBH12	85	5	3545	648.28	2298152.6	0.0063	6.25786953
Stifiner Tank Bulkhead 13			B1/SB-F/TBH/Ps/STBH13	85	5	3544	648.28	2297504.32	0.0063	6.25610426
Braket 1			15B1/SB-F/TBH/Ps/STBRK1-7	-	5	-	19675.0468	98375.234	0.0003	4.01813643
Braket 2			B1/SB-F/TBH/Ps/STBRK2	-	5	-	11346.6443	56733.2215	0.0002	0.15448456
Braket 3			B1/SB-F/TBH/Ps/STBRK3-4	-	5	-	15659.2098	78296.049	0.0002	0.85280057
										245.034316
A.5.2	Bulkhead Starboard			B1/SB-F/TBH/St						
	Bulkhead 1		B1/SB-F/TBH/St/BH1	-	5	-	3666546.41	18332732.05	0.0499	50.9200294
	Bulkhead 2		B1/SB-F/TBH/St/BH2	-	5	-	8160725	40803625	0.1111	111.108271
	Stifiner Tank Bulkhead 1		B1/SB-F/TBH/St/STBH1	85	5	3545	648.28	2298152.6	0.0063	6.25786953
	Stifiner Tank Bulkhead 2		B1/SB-F/TBH/St/STBH2	-	10	-	329843	3298430	0.0090	8.98162489
	Stifiner Tank Bulkhead 3		B1/SB-F/TBH/St/STBH3	85	5	3545	648.28	2298152.6	0.0063	6.25786953
	Stifiner Tank Bulkhead 4		B1/SB-F/TBH/St/STBH4-2	85	5	1425	648.28	923799	0.0025	5.53100935
	Stifiner Tank Bulkhead 5		B1/SB-F/TBH/St/STBH5-2	85	5	1420	648.28	920557.6	0.0025	5.01335669
	Stifiner Tank Bulkhead 6		B1/SB-F/TBH/St/STBH6	85	5	803	648.28	520568.84	0.0014	2.8350179
	Stifiner Tank Bulkhead 7		B1/SB-F/TBH/St/STBH7	85	5	3545	648.28	2298152.6	0.0063	6.25786953
	Stifiner Tank Bulkhead 8		B1/SB-F/TBH/St/STBH8	85	5	3545	648.28	2298152.6	0.0063	6.25786953
	Stifiner Tank Bulkhead 9		B1/SB-F/TBH/St/STBH9	85	5	3545	648.28	2298152.6	0.0063	6.25786953
	Stifiner Tank Bulkhead 10		B1/SB-F/TBH/St/STBH10	85	5	3432	648.28	2224896.96	0.0061	6.05839442
	Stifiner Tank Bulkhead 11		B1/SB-F/TBH/St/STBH11	85	5	3545	648.28	2298152.6	0.0063	6.25786953
	Stifiner Tank Bulkhead 12		B1/SB-F/TBH/St/STBH12	85	5	3545	648.28	2298152.6	0.0063	6.25786953
	Stifiner Tank Bulkhead 13		B1/SB-F/TBH/St/STBH13	85	5	3544	648.28	2297504.32	0.0063	6.25610426
	Braket 1		15B1/SB-F/TBH/St/STBRK1-7	-	5	-	19675.0468	98375.234	0.0003	4.01813643
	Braket 2		B1/SB-F/TBH/St/STBRK2	-	5	-	11346.6443	56733.2215	0.0002	0.15448456
	Braket 3		B1/SB-F/TBH/St/STBRK3-4	-	5	-	15659.2098	78296.049	0.0002	0.85280057
	Tank Hatch		B1/SB-F/TBH/St/STTH	4200	5	2952	2094271.134	10471355.67	0.0285	28.5135015
										245.534316
A.6	Half Pipe Fender									
	Half Pipe Fender Portside		B1/SB-F/Ps/HPF	168	7.11	7786	1712	13329632	0.0363	36.2965879
	Half Pipe Fender After		B1/SB-F/Ps/AF/HPF	168	7.11	3338	1712	5714656	0.0156	15.5610083
	Half Pipe Fender Side		B1/SB-F/Ps/SD/HPF	168	7.11	1079	1712	1847248	0.0050	5.0300563
	Flat Bar		B1/SB-F/Ps/FB	40	8	11812	320	3779840	0.0103	10.2925043
	Half Pipe Fender Starboard		B1/SB-F/St/HPF	168	7.11	7786	1712	13329632	0.0363	36.2965879
	Half Pipe Fender After		B1/SB-F/St/AF/HPF	168	7.11	3338	1712	5714656	0.0156	15.5610083
	Half Pipe Fender Side		B1/SB-F/St/SD/HPF	168	7.11	1079	1712	1847248	0.0050	5.0300563
	Flat Bar		B1/SB-F/St/FB	40	8	11812	320	3779840	0.0103	10.2925043



Structure Frame 5-13			Massa jenis Aluminium	2.723	Kg/m ³	0.00000001	mm ³ to m ³			
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
		SB-F/	B1/SB-F/							
Portside		LF/Ps/	B1/SB-F/LF/Ps/							
Portside Bottom		B/	B1/SB-F/LF/Ps/B/							
		1	B1/SB-F/LF/Ps/B/1	100x65	6	5971	954	5796334	0.0158	15.783
		2	B1/SB-F/LF/Ps/B/2	100x65	6	5971	954	5796334	0.0158	15.783
		3	B1/SB-F/LF/Ps/B/3	100x65	6	5970	954	5795380	0.0158	15.781
		4	B1/SB-F/LF/Ps/B/4	100x65	6	5970	954	5795380	0.0158	15.781
		5	B1/SB-F/LF/Ps/B/5	100x65	6	5070	954	4936780	0.0134	13.443
		6	B1/SB-F/LF/Ps/B/6	100x65	6	5070	954	4936780	0.0134	13.443
		7	B1/SB-F/LF/Ps/B/7	100x65	6	9544	954	9104976	0.0248	24.793
		8	B1/SB-F/LF/Ps/B/8	100x65	6	9544	954	9104976	0.0248	24.793
		9	B1/SB-F/LF/Ps/B/9	100x65	6	9568	954	9127872	0.0249	24.855
		10	B1/SB-F/LF/Ps/B/10	100x65	6	9568	954	9127872	0.0249	24.855
		11	B1/SB-F/LF/Ps/B/11	100x65	6	9568	954	9127872	0.0249	24.855
		12	B1/SB-F/LF/Ps/B/12	85	5	9544	648.28	6187184.32	0.0168	16.848
		13	B1/SB-F/LF/Ps/B/13	85	5	9567	648.28	6202094.76	0.0169	16.888
		14	B1/SB-F/LF/Ps/B/14	85	5	9544	648.28	6187184.32	0.0168	16.848
			Total						0.2142	264.749
		b. Long Frame Portside Side Shell								
		1 LF/Ps/Ss1	B1/SB-F/LF/Ps/Ss/1	85	5	4060	648.28	2632016.8	0.0072	7.167
		2 LF/Ps/Ss2	B1/SB-F/LF/Ps/Ss/2	85	5	4795	648.28	3108502.6	0.0085	8.464
		3 LF/Ps/Ss3	B1/SB-F/LF/Ps/Ss/3	85	5	9570	648.28	6204039.6	0.0169	16.894
		4 LF/Ps/Ss4	B1/SB-F/LF/Ps/Ss/4	85	5	9570	648.28	6204039.6	0.0169	16.894
		5 LF/Ps/Ss5	B1/SB-F/LF/Ps/Ss/5	85	5	3569	648.28	2313711.32	0.0063	6.300
		6 LF/Ps/Ss6	B1/SB-F/LF/Ps/Ss/6	85	5	8345	648.28	5409896.6	0.0147	14.731
		7 LF/Ps/Ss7	B1/SB-F/LF/Ps/Ss/7	85	5	9570	648.28	6204039.6	0.0169	16.894
		8 LF/Ps/Ss8	B1/SB-F/LF/Ps/Ss/8	85	5	4745	648.28	3076088.6	0.0084	8.376
		9 LF/Ps/Ss9	B1/SB-F/LF/Ps/Ss/9	85	5	9570	648.28	6204039.6	0.0169	16.894
		10 LF/Ps/Ss10	B1/SB-F/LF/Ps/Ss/10	85	5	9570	648.28	6204039.6	0.0169	16.894
			Total						0.1126	129.507
		A.1.2 Long Frame Starboard								
		a. Long Frame Starboard Bottom								
		1 LF/St/B1	B1/SB-F/LF/St/B/1	100x65	6	9568	954	9127872	0.0249	24.855
		2 LF/St/B2	B1/SB-F/LF/St/B/2	100x65	6	9568	954	9127872	0.0249	24.855
		3 LF/St/B3	B1/SB-F/LF/St/B/3	100x65	6	9568	954	9127872	0.0249	24.855
		4 LF/St/B4	B1/SB-F/LF/St/B/4	100x65	6	7181	954	6850674	0.0187	18.654
		5 LF/St/B5	B1/SB-F/LF/St/B/5	100x65	6	5957	954	5782978	0.0157	15.747
		6 LF/St/B6	B1/SB-F/LF/St/B/6	100x65	6	8353	954	7968762	0.0217	21.699
		7 LF/St/B7	B1/SB-F/LF/St/B/7	100x65	6	8353	954	7968762	0.0217	21.699
		8 LF/St/B8	B1/SB-F/LF/St/B/8	100x65	6	8351	954	7966854	0.0217	21.694
		9 LF/St/B9	B1/SB-F/LF/St/B/9	100x65	6	8351	954	7966854	0.0217	21.694
		10 LF/St/B10	B1/SB-F/LF/St/B/10	100x65	6	8349	954	7964946	0.0217	21.689
		11 LF/St/B11	B1/SB-F/LF/St/B/11	100x65	6	8349	954	7964946	0.0217	21.689
		12 LF/St/B12	B1/SB-F/LF/St/B/12	100x66	7	1144	954	1091376	0.0030	2.972
		13 LF/St/B13	B1/SB-F/LF/St/B/13	100x67	8	1144	954	1091376	0.0030	2.972
		14 LF/St/B14	B1/SB-F/LF/St/B/14	85	5	9544	648.28	6187184.32	0.0168	16.848
		15 LF/St/B15	B1/SB-F/LF/St/B/15	85	5	9567	648.28	6202094.76	0.0169	16.888
		16 LF/St/B16	B1/SB-F/LF/St/B/16	85	5	9544	648.28	6187184.32	0.0168	16.848



Structure Frame 5-13			Massa jenis Aluminium		2.723	Kg/m ³	0.00000001	mm ³ to m ³			
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)	
				Breath (mm)	Thickness (mm)						
Long Frame											
Total											
urboard Side Shell									0.2391	295.657	
				B1/SB-F/LF/Ps/Ss							
			B1/SB-F/LF/Ss/1	85	5	4060	648.28	2632016.8	0.0072	7.167	
			B1/SB-F/LF/Ss/2	85	5	4795	648.28	3108502.6	0.0085	8.464	
			B1/SB-F/LF/Ss/3	85	5	9570	648.28	6204039.6	0.0169	16.894	
		4	LF/Ss/4	85	5	9570	648.28	6204039.6	0.0169	16.894	
		5	LF/Ss/5	85	5	9570	648.28	6204039.6	0.0169	16.894	
		6	LF/Ss/6	85	5	9545	648.28	6187832.6	0.0168	16.849	
		7	LF/Ss/7	85	5	3967	648.28	2571726.76	0.0070	7.003	
		8	LF/Ss/8	85	5	3569	648.28	2313711.32	0.0063	6.300	
		9	LF/Ss/9	85	5	9570	648.28	6204039.6	0.0169	16.894	
		10	LF/Ss/10	85	5	9570	648.28	6204039.6	0.0169	16.894	
		11	Quarter Frame	B1/SB-F/LF/Ss/QRFR-3	85	8	595	649.28	386321.6	0.0021	2.104
		12	Bottom Braket Ps	B1/SB-F/LF/Ss/B-BRK/Ps-13	-	8	493	1046	515678	0.0183	18.254
		13	Bottom Braket Ps	B1/SB-F/LF/Ss/B-BRK/Ps-14	-	8	493	1046	515678	0.0183	18.254
Total									0.1134	132.356	
A.1.3	Bottom Plates Ps	PLT1	B1/SB-F/Ps/B-PLT1	974	12	5752	14987858.5	179854302	0.4897	489.743	
		PLT2	B1/SB-F/Ps/B-PLT2	1803	12	5702	24598537.67	295182452	0.8038	803.782	
		PLT3	B1/SB-F/Ps/B-PLT3	1039	12	5753	14173303.67	170079644	0.4631	463.127	
		PLT4	B1/SB-F/Ps/B-PLT4	974	12	5051	3262149.517	39145794.2	0.1066	106.594	
	Bottom Plates St	PLT1	B1/SB-F/St/B-PLT1	974	12	5752	14987858.5	179854302	0.4897	489.743	
		PLT2	B1/SB-F/St/B-PLT2	1803	12	5702	24598537.67	295182452	0.8038	803.782	
		PLT3	B1/SB-F/St/B-PLT3	1039	12	5753	14173303.67	170079644	0.4631	463.127	
		PLT4	B1/SB-F/St/B-PLT4	974	12	5051	3262149.517	39145794.2	0.1066	106.594	
A.2	Engine Bed		B3/SB-F/TF/Fr6								
A.2.1	Engine Bed CL Frame		B3/SB-F/ENB/CL/Fr								
1	Engine Keel	Web Plate 1	B1/SB-F/ENK/WP1	-	15	-	297810.8265	4467162.398	0.0122	12.164	
		Web Plate 2	B1/SB-F/ENK/WP2	-	15	-	813624.9092	12204373.64	0.0332	33.233	
		Web Plate 1	B1/SB-F/Ps/ENG/WP1	-	10	-	7911747.82	79117478.2	0.2154	215.437	
		Web Plate 2	B1/SB-F/Ps/ENG/WP2	-	10	-	857966.27	8579662.7	0.0234	23.362	
		Face Plate 1	B1/SB-F/Ps/ENG/FP1	-	20	-	374669.911	7493398.22	0.0204	20.405	
		Face Plate 2	B1/SB-F/Ps/ENG/FP2	-	20	-	340000	6800000	0.0185	18.516	
		Face Plate 3	B1/SB-F/Ps/ENG/FP3	-	20	-	357097.82	7141956.4	0.0194	19.448	
		Face Plate 5	B1/SB-F/Ps/ENG/FP4	-	20	-	301097.82	6021956.4	0.0164	16.398	
		Face Plate 6	B1/SB-F/Ps/ENG/FP5	-	20	-	439792.371	8795847.42	0.0240	23.951	
		Face Plate 7	B1/SB-F/Ps/ENG/FP6	-	20	-	99932.282	1998645.64	0.0054	5.442	
	2	Engine Girder Portside	Face Plate 8	B1/SB-F/Ps/ENG/FP7	-	20	-	265899.159	5317983.18	0.0145	14.481
			Face Plate 9	B1/SB-F/Ps/ENG/FP8	-	20	-	153645.079	3072901.58	0.0084	8.368
			Stifner 1	B1/SB-F/Ps/ENG/STF1-2	60	8	1120	480	537600	0.0029	2.928
			Stifner 2	B1/SB-F/Ps/ENG/STF2	60	8	2850	480	1368000	0.0037	3.725
			Stifner 3	B1/SB-F/Ps/ENG/STF3	60	8	1197	480	574560	0.0016	1.565
			Stifner 4	B1/SB-F/Ps/ENG/STF4	60	8	1115	480	535200	0.0015	1.457
			Stifner 5	B1/SB-F/Ps/ENG/STF5	60	8	1195	480	573600	0.0016	1.562
			Stifner 6	B1/SB-F/Ps/ENG/STF6	60	8	2850	480	1368000	0.0037	3.725
			Stifner 7	B1/SB-F/Ps/ENG/STF7	60	8	2850	480	1368000	0.0037	3.725
			FB	B1/SB-F/ENG/FB	110	10	1349	1100	1483900	0.0340	34.041



Structure Frame 5-13			Massa jenis Aluminium	2.723	Kg/m ³	0.00000001	mm ³ to m ³			
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
Frame 8	Web Plate		B3/SB-F/ENB/SFPs/Fr8/WP	-	8	-	547110.33	4376882.64	0.0119	11.918
	Face Plate 1		B3/SB-F/ENB/SFPs/Fr8/FP	100	10	742	1000	742000	0.0020	2.020
	Stifner 1		B3/SB-F/ENB/SFPs/Fr8/STF1	80	8	1020	640	652800	0.0018	1.778
	Stifner 2		B3/SB-F/ENB/SFPs/Fr8/STF2	80	8	985	640	630400	0.0017	1.717
	Frame 8A		B3/SB-F/ENB/SFPs/Fr8A	-	8	-	891554	7132432	0.0194	19.422
Frame 9	Web Plate		B3/SB-F/ENB/SFPs/Fr9/WP	-	8	-	738360.33	5906882.64	0.0161	16.084
	Face Plate 1		B3/SB-F/ENB/SFPs/Fr9/FP	-	10	-	75513.2597	755132.597	0.0021	2.056
	Stifner 1		B3/SB-F/ENB/SFPs/Fr9/STF1	80	8	522	640	334080	0.0009	0.910
	Stifner 2		B3/SB-F/ENB/SFPs/Fr9/STF2	80	8	681	640	435840	0.0024	2.374
	Stifner 3		B3/SB-F/ENB/SFPs/Fr9/STF3	80	8	589	640	376960	0.0010	1.026
	Stifner 4		B3/SB-F/ENB/SFPs/Fr9/STF4	80	8	799	640	511360	0.0028	2.785
Frame 9A		B3/SB-F/ENB/SFPs/Fr9A	-	8	-	879054	7032432	0.0191	19.149	
Side Frame Starboard										
Frame 6	Web Plate	Plate	B3/SB-F/ENB/SFSU/Fr6/WP	-	8	-	644400.0475	5155200.38	0.0140	14.038
	Face Plate		B3/SB-F/ENB/SFSU/Fr6/FP	100	10	945	911	860895	0.0023	2.344
	Stifner1		B3/SB-F/ENB/SFSU/Fr6/STF1	80	8	1129	640	722560	0.0020	1.968
	Stifner2		B3/SB-F/ENB/SFSU/Fr6/STF2	80	8	1121	640	717440	0.0020	1.954
Frame 7	Web Plate		B3/SB-F/ENB/SFSU/Fr7/WP	-	8	-	677110.33	5416882.64	0.0148	14.750
	Face Plate 1		B3/SB-F/ENB/SFSU/Fr7/FP1	-	10	-	92478.152	924781.52	0.0025	2.518
	Stifner 1		B3/SB-F/ENB/SFSU/Fr7/STF1	80	8	691	640	442240	0.0024	2.408
	Stifner 2		B3/SB-F/ENB/SFSU/Fr7/STF2	80	8	598	640	382720	0.0010	1.042
	Stifner 3		B3/SB-F/ENB/SFSU/Fr7/STF3	80	8	601	640	384640	0.0010	1.047
Frame 8	Stifner 4		B3/SB-F/ENB/SFSU/Fr7/STF4	80	8	800	640	512000	0.0028	2.788
	Web Plate		B3/SB-F/ENB/SFSU/Fr8/WP	-	8	-	547110.33	4376882.64	0.0119	11.918
	Face Plate 1		B3/SB-F/ENB/SFSU/Fr8/FP	100	10	742	1000	742000	0.0020	2.020
	Stifner 1		B3/SB-F/ENB/SFSU/Fr8/STF1	80	8	1020	640	652800	0.0018	1.778
	Stifner 2		B3/SB-F/ENB/SFSU/Fr8/STF2	80	8	985	640	630400	0.0017	1.717
Frame 9	Frame 8A		B3/SB-F/ENB/SFSU/Fr8A	-	8	-	891554	7132432	0.0194	19.422
	Web Plate		B3/SB-F/ENB/SFSU/Fr9/WP	-	8	-	738360.33	5906882.64	0.0161	16.084
	Face Plate 1		B3/SB-F/ENB/SFSU/Fr9/FP	-	10	-	75513.2597	755132.597	0.0021	2.056
	Stifner 1		B3/SB-F/ENB/SFSU/Fr9/STF1	80	8	522	640	334080	0.0009	0.910
	Stifner 2		B3/SB-F/ENB/SFSU/Fr9/STF2	80	8	681	640	435840	0.0024	2.374
	Stifner 3		B3/SB-F/ENB/SFSU/Fr9/STF3	80	8	589	640	376960	0.0010	1.026
Frame 9	Stifner 4		B3/SB-F/ENB/SFSU/Fr9/STF4	80	8	799	640	511360	0.0028	2.785
	Frame 9A		B3/SB-F/ENB/SFSU/Fr9A	-	8	-	879054	7032432	0.0191	19.149
6	Engine Bed Girder Portside									
a.	Portside	Web Plate 1	B3/SB-F/ENBGPs/Ps/WP1	-	10	-	1632826.99	16328269.9	0.0445	44.462
		Web Plate 2	B3/SB-F/ENBGPs/Ps/WP2	-	10	-	3813252.65	38132526.5	0.1038	103.835
		Web Plate 3	B3/SB-F/ENBGPs/Ps/WP3	-	10	-	2092645.61	20926456.1	0.0570	56.983
		Face Plate 1	B3/SB-F/ENBGPs/Ps/FP1	-	20	-	366868.037	7337360.74	0.0200	19.980
		Face Plate 2	B3/SB-F/ENBGPs/Ps/FP2	-	20	-	353604.517	7072090.34	0.0193	19.257
		Face Plate 3	B3/SB-F/ENBGPs/Ps/FP3	-	20	-	310823.633	6216472.66	0.0169	16.927
		Face Plate 4	B3/SB-F/ENBGPs/Ps/FP4	-	20	-	679450.56	13589011.2	0.0370	37.003
		Face Plate 5	B3/SB-F/ENBGPs/Ps/FP5	-	20	-	132180.54	2643610.8	0.0072	7.199
		Stifner 1	B3/SB-F/ENBGPs/Ps/STF1	60	8	1195	480	573600	0.0031	3.124
		Stifner 2	B3/SB-F/ENBGPs/Ps/STF2	60	8	412	480	197760	0.0011	1.077
		Stifner 3	B3/SB-F/ENBGPs/Ps/STF3	60	8	1833	480	879840	0.0048	4.792
		Stifner 4	B3/SB-F/ENBGPs/Ps/STF4	60	8	421	480	202080	0.0011	1.101
		Stifner 5	B3/SB-F/ENBGPs/Ps/STF5	60	8	795	480	381600	0.0010	1.039
		Stifner 6	B3/SB-F/ENBGPs/Ps/STF6	60	8	615	480	295200	0.0016	1.608



Structure Frame 5-13			Massa jenis Aluminium	2.723	Kg/m ³	0.00000001	mm ³ to m ³				
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)	
				Breath (mm)	Thickness (mm)						
b.	Starboard										
			Web Plate	B3/SB-F/ENBGP/Su/WP1	-	10	-	4789252.65	47892526.5	0.1304	130.411
			Web Plate	B3/SB-F/ENBGP/Su/WP2	-	10	-	987645.61	9876456.1	0.0269	26.894
			Face Plate 1	B3/SB-F/ENBGP/Su/FP1	-	20	-	339868.037	6797360.74	0.0185	18.509
			Face Plate 2	B3/SB-F/ENBGP/Su/FP2	-	20	-	357604.517	7152090.34	0.0195	19.475
			Face Plate 3	B3/SB-F/ENBGP/Su/FP3	-	20	-	310823.633	6216472.66	0.0169	16.927
			Face Plate 4	B3/SB-F/ENBGP/Su/FP4	-	20	-	709450.56	14189011.2	0.0386	38.637
			Face Plate 5	B3/SB-F/ENBGP/Su/FP5	-	20	-	132180.54	2643610.8	0.0072	7.199
			Stifner 1	B3/SB-F/ENBGP/Su/STF1	60	8	1100	480	528000	0.0029	2.875
			Stifner 2	B3/SB-F/ENBGP/Su/STF2	60	8	201	480	96480	0.0005	0.525
			Stifner 3	B3/SB-F/ENBGP/Su/STF3	60	8	945	480	453600	0.0012	1.235
			Stifner 4	B3/SB-F/ENBGP/Su/STF4	60	8	2739	480	1314720	0.0036	3.580
			Stifner 5	B3/SB-F/ENBGP/Su/STF5	60	8	561	480	269280	0.0007	0.733
			Stifner 6	B3/SB-F/ENBGP/Su/STF6	60	8	1245	480	597600	0.0016	1.627
	Face Plate 6	B3/SB-F/ENBGP/Su/FP6	-	20	-	336868.037	6737360.74	0.0183	18.346		
7	Portside Engine Bed										
	Frame 5A	Web Plate	B3/SB-F/PsENB/Fr5A/WP	-	6	-	807533.3967	4845200.38	0.0132	13.193	
		Face Plate	B3/SB-F/PsENB/Fr5A/WP	80	8	3958	640	2533120	0.0069	6.898	
	Frame 6	Web Plate	B3/SB-F/PsENB/Fr6/WP	-	8	-	600768.8025	4806150.42	0.0131	13.087	
		Face Plate	B3/SB-F/PsENB/Fr6/FP	100	10	704	1000	704000	0.0019	1.917	
		Stifner1	B3/SB-F/PsENB/Fr6/STF1	80	8	867	572	495924	0.0014	1.350	
		Stifner2	B3/SB-F/PsENB/Fr6/STF2	80	8	907	653	592271	0.0016	1.613	
	frame 6A	Web Plate	B3/SB-F/PsENB/Fr6A/WP	-	6	-	827533.3967	4965200.38	0.0135	13.520	
		Face Plate	B3/SB-F/PsENB/Fr6A/FP	80	8	4201	640	2688640	0.0073	7.321	
	Frame 7	Web Plate	B3/SB-F/ENB/PsENB/Fr7/WP	-	8	-	702052.815	5616422.52	0.0153	15.294	
		Face Plate 1	B3/SB-F/ENB/PsENB/Fr7/FP1	100	10	837	1000	837000	0.0023	2.279	
		Stifner	B3/SB-F/ENB/PsENB/Fr7/STF	80	8	980	640	627200	0.0017	1.708	
	Frame 7A	Web Plate	B3/SB-F/ENB/PsENB/Fr7A/WP	-	6	-	894200.0633	5365200.38	0.0146	14.609	
		Face Plate	B3/SB-F/ENB/PsENB/Fr7A/FP	80	8	4127	640	2641280	0.0072	7.192	
	Frame 8	Web Plate	B3/SB-F/ENB/PsENB/Fr8/WP	-	10	-	327885.801	3278858.01	0.0089	8.928	
		Face Plate 1	B3/SB-F/ENB/PsENB/Fr8/FP	100	10	1200	1000	1200000	0.0033	3.268	
		Braket	B3/SB-F/ENB/PsENB/Fr8/Braket	-	6	-	65207.16667	391243	0.0011	1.065	
	Frame 9	Web Plate	B3/SB-F/ENB/PsENB/Fr9/WP	-	10	-	220185.801	2201858.01	0.0060	5.996	
		Face Plate 1	B3/SB-F/ENB/PsENB/Fr9/FP	100	10	1141	1000	1141000	0.0031	3.107	
		Collar	B3/SB-F/ENB/PsENB/Fr9/COL	-	10	-	6433.69286	64336.9286	0.0005	0.526	
8	Engine Bed Girder Starboard										
	a.	Portside									
			Web Plate 1	B3/SB-F/ENBGS/Ps/WP1	-	10	-	1632826.99	16328269.9	0.0445	44.462
			Web Plate 2	B3/SB-F/ENBGS/Ps/WP2	-	10	-	3813252.65	38132526.5	0.1038	103.835
			Web Plate 3	B3/SB-F/ENBGS/Ps/WP3	-	10	-	2092645.61	20926456.1	0.0570	56.983
			Face Plate 1	B3/SB-F/ENBGS/Ps/FP1	-	20	-	366868.037	7337360.74	0.0200	19.980
			Face Plate 2	B3/SB-F/ENBGS/Ps/FP2	-	20	-	353604.517	7072090.34	0.0193	19.257
			Face Plate 3	B3/SB-F/ENBGS/Ps/FP3	-	20	-	310823.633	6216472.66	0.0169	16.927
			Face Plate 4	B3/SB-F/ENBGS/Ps/FP4	-	20	-	679450.56	13589011.2	0.0370	37.003
			Face Plate 5	B3/SB-F/ENBGS/Ps/FP5	-	20	-	132180.54	2643610.8	0.0072	7.199
			Stifner 1	B3/SB-F/ENBGS/Ps/STF1	60	8	1195	480	573600	0.0031	3.124
			Stifner 2	B3/SB-F/ENBGS/Ps/STF2	60	8	412	480	197760	0.0011	1.077
			Stifner 3	B3/SB-F/ENBGS/Ps/STF3	60	8	1833	480	879840	0.0048	4.792
			Stifner 4	B3/SB-F/ENBGS/Ps/STF4	60	8	421	480	202080	0.0011	1.101
			Stifner 5	B3/SB-F/ENBGS/Ps/STF5	60	8	795	480	381600	0.0010	1.039
	Stifner 6	B3/SB-F/ENBGS/Ps/STF6	60	8	615	480	295200	0.0016	1.608		



Structure Frame 5-13			Massa jenis Aluminium	2.723	Kg/m ³	0.00000001	mm ³ to m ³				
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)	
				Breath (mm)	Thickness (mm)						
b.	Starboard		Web Plate 1	B3/SB-F/ENBGS/St/WP1	-	10	-	4789252.65	47892526.5	0.1304	130.411
		Web Plate 2	B3/SB-F/ENBGS/St/WP2	-	10	-	987645.61	9876456.1	0.0269	26.894	
		Face Plate 1	B3/SB-F/ENBGS/St/FP1	-	20	-	339868.037	6797360.74	0.0185	18.509	
		Face Plate 2	B3/SB-F/ENBGS/St/FP2	-	20	-	357604.517	7152090.34	0.0195	19.475	
		Face Plate 3	B3/SB-F/ENBGS/St/FP3	-	20	-	310823.633	6216472.66	0.0169	16.927	
		Face Plate 4	B3/SB-F/ENBGS/St/FP4	-	20	-	709450.56	14189011.2	0.0386	38.637	
		Face Plate 5	B3/SB-F/ENBGS/St/FP5	-	20	-	132180.54	2643610.8	0.0072	7.199	
		Stifner 1	B3/SB-F/ENBGS/St/STF1	60	8	1100	480	528000	0.0029	2.875	
		Stifner 2	B3/SB-F/ENBGS/St/STF2	60	8	201	480	96480	0.0005	0.525	
		Stifner 3	B3/SB-F/ENBGS/St/STF3	60	8	945	480	453600	0.0012	1.235	
		Stifner 4	B3/SB-F/ENBGS/St/STF4	60	8	2739	480	1314720	0.0036	3.580	
		Stifner 5	B3/SB-F/ENBGS/St/STF5	60	8	561	480	269280	0.0007	0.733	
		Stifner 6	B3/SB-F/ENBGS/St/STF6	60	8	1245	480	597600	0.0016	1.627	
		Face Plate 6	B3/SB-F/ENBGS/St/FP6	-	20	-	336868.037	6737360.74	0.0183	18.346	
Face Plate 7	B3/SB-F/ENBGS/St/FP7	-	20	-	609699.976	12193999.52	0.0332	33.204			
Face Plate 8	B3/SB-F/ENBGS/St/FP8	-	20	-	609699.976	12193999.52	0.0332	33.204			
a.	Portside Engine Bed										
	Frame 5A	Web Plate	B3/SB-F/PsENB/Fr5A/WP	-	6	-	807533.3967	4845200.38	0.0132	13.193	
		Face Plate	B3/SB-F/PsENB/Fr5A/WP	80	8	3958	640	2533120	0.0069	6.898	
	Frame 6	Web Plate	B3/SB-F/PsENB/Fr6/WP	-	8	-	600768.8025	4806150.42	0.0131	13.087	
		Face Plate	B3/SB-F/PsENB/Fr6/FP	100	10	704	1000	704000	0.0019	1.917	
		Stifner1	B3/SB-F/PsENB/Fr6/STF1	80	8	867	572	495924	0.0014	1.350	
		Stifner2	B3/SB-F/PsENB/Fr6/STF2	80	8	907	653	592271	0.0016	1.613	
	frame 6A	Web Plate	B3/SB-F/PsENB/Fr6A/WP	-	6	-	827533.3967	4965200.38	0.0135	13.520	
		Face Plat	B3/SB-F/PsENB/Fr6A/FP	80	8	4201	640	2688640	0.0073	7.321	
	Frame 7	Web Plate	B3/SB-F/ENB/PsENB/Fr7/WP	-	8	-	702052.815	5616422.52	0.0153	15.294	
		Face Plate 1	B3/SB-F/ENB/PsENB/Fr7/FP1	100	10	837	1000	837000	0.0023	2.279	
		Stifner	B3/SB-F/ENB/PsENB/Fr7/STF	80	8	980	640	627200	0.0017	1.708	
	Frame 7A	Web Plate	B3/SB-F/ENB/PsENB/Fr7A/WP	-	6	-	894200.0633	5365200.38	0.0146	14.609	
		Face Plate	B3/SB-F/ENB/PsENB/Fr7A/FP	80	8	4127	640	2641280	0.0072	7.192	
	Frame 8	Web Plate	B3/SB-F/ENB/PsENB/Fr8/WP	-	10	-	327885.801	3278858.01	0.0089	8.928	
		Face Plate 1	B3/SB-F/ENB/PsENB/Fr8/FP	100	10	1200	1000	1200000	0.0033	3.268	
		Braket	B3/SB-F/ENB/PsENB/Fr8/Braket	-	6	-	65207.16667	391243	0.0011	1.065	
	Frame 9	Web Plate	B3/SB-F/ENB/PsENB/Fr9/WP	-	10	-	220185.801	2201858.01	0.0060	5.996	
		Face Plate 1	B3/SB-F/ENB/PsENB/Fr9/FP	100	10	1141	1000	1141000	0.0031	3.107	
		Collar	B3/SB-F/ENB/PsENB/Fr9/COL	-	10	-	6433.69286	64336.9286	0.0005	0.526	
9	a. OBD Portside										
	Frame 6	Web Plate	B3/SB-F/ENB/OBD/Ps/Fr6/WP	-	8	-	752744.4475	6021955.58	0.0164	16.398	
		Face Plate	B3/SB-F/ENB/OBD/Ps/Fr6/FP	100	10	1116	997	1112652	0.0030	3.030	
		Stifner1	B3/SB-F/ENB/OBD/Ps/Fr6/STF1	80	8	438	640	280320	0.0008	0.763	
		Stifner2	B3/SB-F/ENB/OBD/Ps/Fr6/STF2	80	8	720	640	460800	0.0013	1.255	
		Stifner3	B3/SB-F/ENB/OBD/Ps/Fr6/STF3	50	5	190	250	47500	0.0001	0.129	
	Frame 7	Web Plate	B3/SB-F/ENB/OBD/Ps/Fr7/WP	-	8	-	779016.105	6232128.84	0.0170	16.970	
		Face Plate 1	B3/SB-F/ENB/OBD/Ps/Fr7/FP	100	10	1143	1000	1143000	0.0031	3.112	
		Stifner 1	B3/SB-F/ENB/OBD/Ps/Fr7/STF1	80	8	722	640	462080	0.0013	1.258	
		Stifner 2	B3/SB-F/ENB/OBD/Ps/Fr7/STF2	80	8	445	640	284800	0.0008	0.776	
		Stifner 3	B3/SB-F/ENB/OBD/Ps/Fr7/STF3	50	5	180	250	45000	0.0001	0.123	
	Frame 8	Web Plate	B3/SB-F/ENB/OBD/Ps/Fr8/WP	-	8	-	643463.9638	5147711.71	0.0140	14.017	
		Face Plate 1	B3/SB-F/ENB/OBD/Ps/Fr8/FP	100	10	1265	986	1247290	0.0034	3.396	
		Stifner 1	B3/SB-F/ENB/OBD/Ps/Fr8/STF1	80	8	302	576	173952	0.0005	0.474	
		Stifner 2	B3/SB-F/ENB/OBD/Ps/Fr8/STF2	80	8	699	640	447360	0.0012	1.218	



Structure Frame 5-13			Massa jenis Aluminium	2.723	Kg/m ³	0.00000001	mm ³ to m ³			
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
3	Stifner 3		B3/SB-F/ENB/OBD/Ps/Fr8/STF3	50	5	165	250	41250	0.0001	0.112
	Web Plate		B3/SB-F/ENB/OBD/Ps/Fr8B/WP	-	8	-	316793.125	2534345	0.0069	6.901
	Face Plate		B3/SB-F/ENB/OBD/Ps/Fr8B/FP	80	8	861	640	551040	0.0015	1.500
	Web Plate		B3/SB-F/ENB/OBD/Ps/Fr9/WP	-	8	-	698729.0888	5589832.71	0.0152	15.221
	Face Plate 1		B3/SB-F/ENB/OBD/Ps/Fr9/FP	100	10	1220	1000	1220000	0.0033	3.322
	Stifner 1		B3/SB-F/ENB/OBD/Ps/Fr9/STF1	80	8	361	649	234289	0.0006	0.638
	Stifner 2		B3/SB-F/ENB/OBD/Ps/Fr9/STF2	80	8	706	653	461018	0.0013	1.255
	Stifner 3		B3/SB-F/ENB/OBD/Ps/Fr9/STF3	50	5	165	342	56430	0.0002	0.154
	Frame 9B		Web Plate	-	8	-	295543.125	2364345	0.0064	6.438
	Face Plate		B3/SB-F/ENB/OBD/Ps/Fr9B/FP	80	8	862	640	551680	0.0015	1.502
	b. OBD Starboard									
	Frame 6		Web Plate	-	8	-	765244.4475	6121955.58	0.0167	16.670
	Face Plate		B3/SB-F/ENB/OBD/St/Fr6/FP	100	10	1116	997	1112652	0.0030	3.030
	Stifner1		B3/SB-F/ENB/OBD/St/Fr6/STF1	80	8	438	640	280320	0.0008	0.763
	Stifner2		B3/SB-F/ENB/OBD/St/Fr6/STF2	80	8	720	640	460800	0.0013	1.255
	Stifner3		B3/SB-F/ENB/OBD/St/Fr6/STF3	50	5	190	250	47500	0.0001	0.129
	Frame 7		Web Plate	-	8	-	779016.105	6232128.84	0.0170	16.970
	Face Plate 1		B3/SB-F/ENB/OBD/St/Fr7/FP	100	10	1143	1000	1143000	0.0031	3.112
	Stifner 1		B3/SB-F/ENB/OBD/St/Fr7/STF1	80	8	722	640	462080	0.0013	1.258
	Stifner 2		B3/SB-F/ENB/OBD/St/Fr7/STF2	80	8	445	640	284800	0.0008	0.776
	Stifner 3		B3/SB-F/ENB/OBD/St/Fr7/STF3	50	5	180	250	45000	0.0001	0.123
	Frame 8		Web Plate	-	8	-	643463.9638	5147711.71	0.0140	14.017
	Face Plate 1		B3/SB-F/ENB/OBD/St/Fr8/FP	100	10	1265	986	1247290	0.0034	3.396
	Stifner 1		B3/SB-F/ENB/OBD/St/Fr8/STF1	80	8	302	576	173952	0.0005	0.474
	Stifner 2		B3/SB-F/ENB/OBD/St/Fr8/STF2	80	8	699	640	447360	0.0012	1.218
	Stifner 3		B3/SB-F/ENB/OBD/St/Fr8/STF3	50	5	165	250	41250	0.0001	0.112
	Frame 8B		Web Plate	-	8	-	316793.125	2534345	0.0069	6.901
	Face Plate		B3/SB-F/ENB/OBD/St/Fr8B/FP	80	8	861	640	551040	0.0015	1.500
	Frame 9		Web Plate	-	8	-	698729.0888	5589832.71	0.0152	15.221
	Face Plate 1		B3/SB-F/ENB/OBD/St/Fr9/FP	100	10	1220	1000	1220000	0.0033	3.322
	Stifner 1		B3/SB-F/ENB/OBD/St/Fr9/STF1	80	8	361	649	234289	0.0006	0.638
	Stifner 2		B3/SB-F/ENB/OBD/St/Fr9/STF2	80	8	706	653	461018	0.0013	1.255
	Stifner 3		B3/SB-F/ENB/OBD/St/Fr9/STF3	50	5	165	342	56430	0.0002	0.154
	Frame 9B		Web Plate	-	8	-	293043.125	2344345	0.0064	6.384
	Face Plate		B3/SB-F/ENB/OBD/St/Fr9B/FP	80	8	862	640	551680	0.0015	1.502
	10 Main Deck Plates									
	a. Main Deck Plates Portside									
	Plate 1		B3/SB-F/MDP/Ps/PL1	1876	8	1546	2500005.6	20000044.8	0.0545	54.460
	Plate 2		B3/SB-F/MDP/Ps/PL2	1826	8	5768	7950347.51	63602780.08	0.1732	173.190
	Plate 3		B3/SB-F/MDP/Ps/PL3	2502	8	1999	3417439.9	27339519.2	0.0744	74.446
	Plate 4		B3/SB-F/MDP/Ps/PL4	190	8	3272	622251.212	4978009.696	0.0136	13.555
	Plate 5		B3/SB-F/MDP/Ps/PL5	1948	8	1080	2148940.22	17191521.76	0.0468	46.813
	Plate 6		B3/SB-F/MDP/Ps/PL6	402	8	1080	433754.812	3470038.496	0.0094	9.449
	Plate 7 Midle		B3/SB-F/MDP/Ps/PL7	402	8	1068	427325.104	3418600.832	0.0093	9.309
	Plate 8 Midle		B3/SB-F/MDP/Ps/PL8	2264	8	100	226421.42	1811371.36	0.0049	4.932
	b. Main Deck Plates Starboard									
	Plate 1		B3/SB-F/MDP/St/PL1	1876	8	1546	2500005.6	20000044.8	0.0545	54.460
	Plate 2		B3/SB-F/MDP/St/PL2	1826	8	5768	10210347.51	81682780.08	0.2224	195.883
	Plate 3		B3/SB-F/MDP/St/PL3	2502	8	1999	3417439.9	27339519.2	0.0744	74.446
	Plate 4		B3/SB-F/MDP/St/PL4	190	8	3272	622251.212	4978009.696	0.0136	13.555
	Plate 5		B3/SB-F/MDP/St/PL5	1948	8	1080	2148940.22	17191521.76	0.0468	46.813
	Plate 6		B3/SB-F/MDP/St/PL6	402	8	1080	433754.812	3470038.496	0.0094	9.449
	Plate 7 Midle		B3/SB-F/MDP/St/PL7	402	8	1068	427325.104	3418600.832	0.0093	9.309



Structure Frame 5-13		Massa jenis Aluminium		2.723	Kg/m ³	0.00000001	mm ³ to m ³			
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
	Plate 8 Midle		B3/SB-F/MDP/Su/PL8	2264	8	100	226421.42	1811371.36	0.0049	4.932
	acking Plates									
	Palka 1	HB1	B3/SB-F/MDP/HBP/PK1/HB1	100	8	-	548164.241	4385313.928	0.0119	11.941
		HB2	B3/SB-F/MDP/HBP/PK1/HB2	100	8	-	548133.725	4385069.8	0.0119	11.941
	Palka 2	HB1	B3/SB-F/MDP/HBP/PK2/HB1	100	8	-	548133.959	4385071.672	0.0119	11.941
		HB2	B3/SB-F/MDP/HBP/PK2/HB2	100	8	-	548103.964	4384831.712	0.0119	11.940
	Palka 3	HB1	B3/SB-F/MDP/HBP/PK3/HB1	100	8	-	548164.244	4385313.952	0.0119	11.941
		HB2	B3/SB-F/MDP/HBP/PK3/HB2	100	8	-	548133.725	4385069.8	0.0119	11.941
	Palka 4	HB1	B3/SB-F/MDP/HBP/PK4/HB1	100	8	-	370765.416	2966123.328	0.0081	8.077
		HB2	B3/SB-F/MDP/HBP/PK4/HB2	100	8	-	370765.416	2966123.328	0.0081	8.077
d.	Main Deck Stifners Portside									
		STF1	B3/SB-F/MDSTF/Ps/STF1	85	8	3964	648.28	2569781.92	0.0070	6.998
		STF2	B3/SB-F/MDSTF/Ps/STF2	85	8	5214	648.28	3380131.92	0.0092	9.204
		STF3	B3/SB-F/MDSTF/Ps/STF3	85	8	8220	648.28	5328861.6	0.0145	14.510
		STF4	B3/SB-F/MDSTF/Ps/STF4-5	85	8	3570	648.28	2314359.6	0.0315	31.510
		STF5	B3/SB-F/MDSTF/Ps/STF5	85	8	2395	648.28	1552630.6	0.0042	4.228
		STF6	B3/SB-F/MDSTF/Ps/STF6-3	85	8	1170	648.28	758487.6	0.0062	6.196
		STF7	B3/SB-F/MDSTF/Ps/STF7-3	85	8	1144	648.28	741632.32	0.0061	6.058
		STF8	B3/SB-F/MDSTF/Ps/STF8-3	85	8	1017	648.28	659300.76	0.0144	14.362
		STF9	B3/SB-F/MDSTF/Ps/STF9-2	85	8	1019	648.28	660597.32	0.0036	3.598
		STF10	B3/SB-F/MDSTF/Ps/STF10	85	8	1030	648.28	667728.4	0.0018	1.818
		STF11	B3/SB-F/MDSTF/Ps/STF11-9	85	8	1325	648.28	858971	0.0211	21.051
		STF12	B3/SB-F/MDSTF/Ps/STF12-2	85	8	1328	648.28	860915.84	0.0047	4.689
		STF13	B3/SB-F/MDSTF/Ps/STF13	85	8	455	648.28	294967.4	0.0008	0.803
		STF14	B3/SB-F/MDSTF/Ps/STF14	85	8	1488	648.28	964640.64	0.0053	5.253
	Bollard Foundation Braket	FB 1	B3/SB-F/MDSTF/Ps/STF15/FB-2	60	6	254	360	91440	0.0005	0.498
		FB 2	B3/SB-F/MDSTF/Ps/FB2	90	6	741	540	400140	0.0022	2.179
		FB 3	B3/SB-F/MDSTF/Ps/FB3	60	6	836	360	300960	0.0008	0.820
e.	Main Deck Stifners Starboard									
		STF1	B3/SB-F/MDSTF/Su/STF1	85	8	1142	648.28	740335.76	0.0020	2.016
		STF2	B3/SB-F/MDSTF/Su/STF2	85	8	1620	649.28	1051833.6	0.0029	2.864
		STF3	B3/SB-F/MDSTF/Su/STF3	85	8	4012	649.28	2604911.36	0.0071	7.093
		STF4	B3/SB-F/MDSTF/Su/STF4-2	85	8	3265	648.28	2116634.2	0.0115	11.527
		STF5	B3/SB-F/MDSTF/Su/STF5	85	8	2345	648.28	1520216.6	0.0041	4.140
		STF6	B3/SB-F/MDSTF/Su/STF6	85	8	3555	648.28	2304635.4	0.0063	6.276
		STF7	B3/SB-F/MDSTF/Su/STF7	85	8	2395	648.28	1552630.6	0.0042	4.228
		STF8	B3/SB-F/MDSTF/Su/STF8-2	85	8	3570	648.28	2314359.6	0.0126	12.604
		STF9	B3/SB-F/MDSTF/Su/STF9-4	85	8	1170	648.28	758487.6	0.0083	8.261
		STF10	B3/SB-F/MDSTF/Su/STF9-3	85	8	1144	648.28	741632.32	0.0061	6.058
		STF11	B3/SB-F/MDSTF/Su/STF10-7	85	8	1017	648.28	659300.76	0.0126	12.567
		STF12	B3/SB-F/MDSTF/Su/STF11-2	85	8	1019	648.28	660597.32	0.0036	3.598
		STF13	B3/SB-F/MDSTF/Su/STF12	85	8	1030	648.28	667728.4	0.0018	1.818
		STF14	B3/SB-F/MDSTF/Su/STF13-8	85	8	1325	648.28	858971	0.0187	18.712
		STF15	B3/SB-F/MDSTF/Su/STF14-2	85	8	1328	648.28	860915.84	0.0047	4.689
		STF16	B3/SB-F/MDSTF/Su/STF15	85	8	455	648.28	294967.4	0.0008	0.803
		STF17	B3/SB-F/MDSTF/Su/STF16	85	8	1488	648.28	964640.64	0.0053	5.253
	Bollard Foundation Braket	FB 1	B3/SB-F/MDSTF/Su/FB1	60	6	254	360	91440	0.0002	0.249
		FB 2	B3/SB-F/MDSTF/Su/FB2	90	6	741	540	400140	0.0011	1.090
		FB 3	B3/SB-F/MDSTF/Su/FB3	60	6	836	360	300960	0.0008	0.820



Structure Frame 5-13		Massa jenis Aluminium			2.723	Kg/m ³	0.00000001	mm ³ to m ³		
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
Long Frame										
NBD Girder Fr 7-10										
Plates 1										
	Web Plate		B3/SB-F/MDPs/INBDG/GP1	395	8	3592	3160	11350720	0.0309	30.908
	Web Plate		B3/SB-F/MDPs/INBDG/GP2	390	8	3592	3051	10959192	0.0298	29.842
	Rider1		B3/SB-F/MDPs/INBDG/RD1	-	15	3720	1124543	16868145	0.0459	45.932
	Rider2		B3/SB-F/MDPs/INBDG/RD2	314	8	-	106565.809	852526.472	0.0046	4.643
	Ring Frame		B3/SB-F/MDPs/INBDG/RF	45	8	1721	360	619560	0.0034	3.374
	Braket		B3/SB-F/MDPs/INBDG/BRK-11	40	8	147	331	48657	0.0015	1.457
b. Girder Plates 2										
	Web Plate		B3/SB-F/MDPs/INBDG/GP1	395	8	3592	3160	11350720	0.0309	30.908
	Web Plate		B3/SB-F/MDPs/INBDG/GP2	390	8	3592	3051	10959192	0.0298	29.842
	Rider1		B3/SB-F/MDPs/INBDG/RD1	-	15	3720	1124543	16868145	0.0459	45.932
	Rider2		B3/SB-F/MDPs/INBDG/RD2	314	8	-	106565.809	852526.472	0.0046	4.643
	Ring Frame		B3/SB-F/MDPs/INBDG/RF	45	8	1721	360	619560	0.0034	3.374
	Braket		B3/SB-F/MDPs/INBDG/BRK-11	40	8	147	331	48657	0.0015	1.457
g. MD Ps OBD Girder FR7-10										
	web Plate		B3/SB-F/MDPs/OBD/WP	385	8	3592	28546	10990210	0.0299	29.926
	Face Plate		B3/SB-F/MDPs/OBD/Fp	120	15	3480	417600	6264000	0.0171	17.057
	Ring Frame		B3/SB-F/MDPs/OBD/RF	45	8	1721	360	619560	0.0034	3.374
	Braket		B3/SB-F/MDPs/OBD/BRK	40	8	147	331	48657	0.0015	1.457
h. MD St OBD Girder FR7-10										
	web Plate		B3/SB-F/MDSu/OBD/WP	385	8	3592	28546	10990210	0.0299	29.926
	Face Plate		B3/SB-F/MDSu/OBD/Fp	120	15	3480	417600	6264000	0.0171	17.057
	Ring Frame		B3/SB-F/MDSu/OBD/RF	45	8	1721	360	619560	0.0034	3.374
	Braket		B3/SB-F/MDSu/OBD/BRK	40	8	147	331	48657	0.0015	1.457
i. MD Fr7 Plates										
	Web Plate 1		B3/SB-F/MDPLT/Fr7/WP1	250	5	-	288078.93	1440394.65	0.0039	3.922
	Web Plate 2		B3/SB-F/MDPLT/Fr7/WP2	400	8	-	3305063.175	26440505.4	0.0720	71.997
	Web Plate 3		B3/SB-F/MDPLT/Fr7/WP3	250	5	-	288078.93	1440394.65	0.0039	3.922
	Face Plate 1		B3/SB-F/MDPLT/Fr7/FP1	100	10	1311	1000	1311000	0.0071	7.140
	Face Plate 2		B3/SB-F/MDPLT/Fr7/FP2	120	15	1400	1800	2520000	0.0069	6.862
	Face Plate 3		B3/SB-F/MDPLT/Fr7/FP3	120	15	2539	1800	4570200	0.0249	24.889
	Braket Fwd		Ring Frame1	45	8	1726	360	621360	0.0017	1.692
			Braket1	40	8	162	320	51840	0.0007	0.706
			Ring Frame2	45	8	1726	360	621360	0.0017	1.692
			Braket2	40	8	162	320	51840	0.0007	0.706
			Ring Frame3	45	8	1726	360	621360	0.0017	1.692
			Braket3	40	8	162	320	51840	0.0007	0.706
			Braket4	50	5	165	250	41250	0.0002	0.225
			Braket5	50	5	166	250	41500	0.0003	0.339
			Braket6	-	5	353	19543.8831	97719.4155	0.0011	1.064
			Braket7	-	5	164	11703.1149	58515.5745	0.0010	0.956
	Braket Aft		Braket 8	-	5	308	37425.5898	187127.949	0.0107	10.701
j MD Ps Girder Fr5-7										
	Web Plate		B3/SB-F/MDPsG/Ps/Fr5-7/WP	400	8	2390	21031	8412400	0.0229	22.907
	Face Plate1		B3/SB-F/MDPsG/Ps/Fr5-7/FP1	120	15	1959	242380	3635700	0.0099	9.900
	Face Plate2		B3/SB-F/MDPsG/Ps/Fr5-7/FP2	-	15	219	40489	607335	0.0017	1.654
	Braket		B3/SB-F/MDPsG/Ps/Fr5-7/BRK-2	-	5	400	988.92531	395570.124	0.0011	1.077
MD Ps Girder Fr5-7										
	Web Plate		B3/SB-F/MDPsG/Su/Fr5-7/WP	400	8	2390	21031	8412400	0.0229	22.907
	Face Plate1		B3/SB-F/MDPsG/Su/Fr5-7/FP1	120	15	1959	242380	3635700	0.0099	9.900
	Face Plate2		B3/SB-F/MDPsG/Su/Fr5-7/FP2	-	15	219	40489	607335	0.0017	1.654
	Braket		B3/SB-F/MDPsG/Su/Fr5-7/BRK-2	-	5	400	988.92531	395570.124	0.0011	1.077



Structure Frame 5-13		Massa jenis Aluminium		2.723	Kg/m ³	0.00000001	mm ³ to m ³			
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
6 CL	Web Plate		B3/SB-F/MD/CL/Fr6/WP	380	8	2981	1101937.664	8815501.31	0.0240	24.005
	Face Plate1		B3/SB-F/MD/CL/Fr6/FP	150	12	2922	431341.65	5176099.8	0.0141	14.095
	Braket		B3/SB-F/MD/CL/Fr6/BRK-2	-	5	294	27294.96	136474.8	0.0007	0.743
6 Ps	Web Plate		B3/SB-F/MD/Ps/Fr6/WP	300	6	2503	874265.7733	5245594.64	0.0143	14.284
	Web Plate		B3/SB-F/MD/Ps/Fr6/WP	250	5	2503	288078.422	1440392.11	0.0039	3.922
	Face Plate1		B3/SB-F/MD/Ps/Fr6/FP	100	10	3859	1000	3859000	0.0105	10.508
	Braket		B3/SB-F/MD/Ps/Fr6/BRK	-	5	294	27294.96	136474.8	0.0004	0.372
	Braket		B3/SB-F/MD/Ps/Fr6/BRK	-	5	302	26512	132560	0.0004	0.361
	Stifner		B3/SB-F/MD/Ps/Fr6/STF-2	50	5	165	250	41250	0.0002	0.225
MD Frame 6 St	Web Plate		B3/SB-F/MD/St/Fr6/WP	300	6	2503	874265.7733	5245594.64	0.0143	14.284
	Web Plate		B3/SB-F/MD/St/Fr6/WP	250	5	2503	288078.422	1440392.11	0.0039	3.922
	Face Plate1		B3/SB-F/MD/St/Fr6/FP	100	10	3859	1000	3859000	0.0105	10.508
	Braket		B3/SB-F/MD/St/Fr6/BRK	-	5	294	27294.96	136474.8	0.0004	0.372
	Braket		B3/SB-F/MD/St/Fr6/BRK	-	5	302	26512	132560	0.0004	0.361
	Stifner		B3/SB-F/MD/St/Fr6/STF-2	50	5	165	250	41250	0.0002	0.225
MD Frame 8 Ps	Web Plate		B3/SB-F/MD/Ps/Fr8/WP	300	6	1052	454311.7267	2725870.36	0.0074	7.423
	Web Plate		B3/SB-F/MD/Ps/Fr8/WP	250	5	1224	288083.73	1440418.65	0.0039	3.922
	Face Plate1		B3/SB-F/MD/Ps/Fr8/FP	100	10	2381	1000	2381000	0.0065	6.483
	Braket		B3/SB-F/MD/Ps/Fr8/BRK	-	5	294	27294.96	136474.8	0.0004	0.372
	Braket		B3/SB-F/MD/Ps/Fr8/BRK	-	5	302	26512	132560	0.0007	0.722
	Stifner		B3/SB-F/MD/Ps/Fr8/STF-2	50	5	165	250	41250	0.0002	0.225
MD Frame 8 St	Web Plate		B3/SB-F/MD/St/Fr8/WP	300	6	1052	454311.7267	2725870.36	0.0074	7.423
	Web Plate		B3/SB-F/MD/St/Fr8/WP	250	5	1224	288083.73	1440418.65	0.0039	3.922
	Face Plate1		B3/SB-F/MD/St/Fr8/FP	100	10	2381	1000	2381000	0.0065	6.483
	Braket		B3/SB-F/MD/St/Fr8/BRK	-	5	294	27294.96	136474.8	0.0004	0.372
	Braket		B3/SB-F/MD/St/Fr8/BRK	-	5	302	26512	132560	0.0007	0.722
	Stifner		B3/SB-F/MD/St/Fr8/STF-2	50	5	165	250	41250	0.0002	0.225
MD Frame 9 Ps	Web Plate		B3/SB-F/MD/Ps/Fr9/WP	300	6	1052	454311.7267	2725870.36	0.0074	7.423
	Web Plate		B3/SB-F/MD/Ps/Fr9/WP	250	5	1224	288083.73	1440418.65	0.0039	3.922
	Face Plate1		B3/SB-F/MD/Ps/Fr9/FP	100	10	2381	1000	2381000	0.0065	6.483
	Braket		B3/SB-F/MD/Ps/Fr9/BRK	-	5	294	27294.96	136474.8	0.0004	0.372
	Braket		B3/SB-F/MD/Ps/Fr9/BRK	-	5	284	21543	107715	0.0003	0.293
	Braket		B3/SB-F/MD/Ps/Fr9/BRK	-	5	302	26512	132560	0.0007	0.722
MD Frame 9 St	Web Plate		B3/SB-F/MD/St/Fr9/WP	300	6	1052	454311.7267	2725870.36	0.0074	7.423
	Web Plate		B3/SB-F/MD/St/Fr9/WP	250	5	1224	288083.73	1440418.65	0.0039	3.922
	Face Plate1		B3/SB-F/MD/St/Fr9/FP	100	10	2381	1000	2381000	0.0065	6.483
	Braket		B3/SB-F/MD/St/Fr9/BRK	-	5	294	27294.96	136474.8	0.0004	0.372
	Braket		B3/SB-F/MD/st/Fr9/BRK	-	5	284	21543	107715	0.0003	0.293
	Braket		B3/SB-F/MD/St/Fr9/BRK	-	5	302	26512	132560	0.0007	0.722
1 Ps Bollard Foundation	Web plate 1		B3/SB-F/Ps/BLFND/WP1	-	8	1194	292660.289	2341282.312	0.0064	6.375
	Braket		B3/SB-F/Ps/BLFND/BRK-2	174	6	245	61343	368058	0.0020	2.004
	Face Plate 1		B3/SB-F/Ps/BLFND/FP1	80	8	298	720	214560	0.0006	0.584
	Face Plate 2		B3/SB-F/Ps/BLFND/FP2	80	8	247	720	177840	0.0005	0.484
	Face Plate 3		B3/SB-F/Ps/BLFND/FP3	80	8	233	720	167760	0.0005	0.457
	Bollard		B3/SB-F/Ps/BLFND/BLD	152.4	12.7	919	5573.783	5122306.577	0.0279	27.896
	OD BAR		B3/SB-F/Ps/BLFND/ODBAR	38.1	-	830	1274.783	1058069.89	0.0029	2.881
	UP		B3/SB-F/Ps/BLFND/UP	-	5	-	943	4715	0.0000	0.013



Structure Frame 5-13			Massa jenis Aluminium	2.723	Kg/m ³	0.00000001	mm ³ to m ³			
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
	Stiffner2		B3/SB-F/ENGH/Su/STF2	180	8	3516	346668.4938	2773347.95	0.015103653	15.104
	Hatch Fr8		Plate	200	8	1664	348190.7775	2785526.22	0.007584988	7.585
			Stiffner1	100	10	1500	1000	1500000	0.0040845	4.085
			Stiffner2	50	5	126	250	31500	0.000171549	0.172
	Hatch Fr9		Plate	200	8	1664	348190.7775	2785526.22	0.007584988	7.585
			Stiffner1	100	10	1500	1000	1500000	0.0040845	4.085
			Stiffner2	50	5	126	250	31500	0.000171549	0.172
			Side Frame 1	200	8	-	372872.1313	2982977.05	0.008122647	8.123
			Side Frame 2	200	8	-	758997.6513	6071981.21	0.016534005	16.534
			Side Frame 1	200	8	-	372872.1313	2982977.05	0.008122647	8.123
			Side Frame 2	200	8	-	691497.6513	5531981.21	0.015063585	15.064
			Face Plate 1	100	10	-	504298.64	5042986.4	0.013732052	13.732
			Face Plate 2	100	10	-	504298.64	5042986.4	0.013732052	13.732
	p FWD Hatch									
			Plates	2504	6	1317	3240133.817	19440802.9	0.052937306	52.937
			Stifner	90	8	1115	132742.2225	1061937.78	0.020241596	20.242
			side Frame1	200	8	-	1432117.925	11456943.4	0.031197257	31.197
				100	10	-	634565.809	6345658.09	0.017279227	17.279



Structure Frame 10-13			Massa jenis Aluminium	2.723	Kg/m ³	0.00000001	mm ³ to m ³			
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
	Web Plate		B3/SB-F/ENB/SFSu/Fr12/WP	-	8	-	663170.6413	5305365.13	0.0144	14.447
	Face Plate 1		B3/SB-F/ENB/SFSu/Fr12/FP	100	10	983	975	958425	0.0026	2.610
	Stifner 1		B3/SB-F/ENB/SFSu/Fr12/STF1	80	8	1161	640	743040	0.0020	2.023
	Stifner 2		B3/SB-F/ENB/SFSu/Fr12/STF2	80	8	1216	640	778240	0.0021	2.119
Frame 10	Web Plate		B3/SB-F/ENB/SFSu/Fr10/WP	-	10	-	345287.201	3452872.01	0.0094	9.402
	Face Plate 1		B3/SB-F/ENB/SFSu/Fr10/FP	100	10	1190	974	1159060	0.0032	3.156
	Collar		B3/SB-F/ENB/PsENB/Fr9/COL	-	10	-	6433.69286	64336.9286	0.0005	0.526
Frame 10B	Web Plate		B3/SB-F/ENB/PsENB/Fr10B/WP	-	8	-	544054	4352432	0.0119	11.852
	Face Plate		B3/SB-F/ENB/PsENB/Fr10B/FP	80	8	3320	640	2124800	0.0058	5.786
Frame 11	Web Plate		B3/SB-F/ENB/PsENB/Fr11/WP	-	8	-	538404.395	4307235.16	0.0117	11.729
	Face Plate 1		B3/SB-F/ENB/PsENB/Fr11/FP	100	10	900	967	870300	0.0024	2.370
	Stifner 1		B3/SB-F/ENB/PsENB/Fr11/STF1	80	8	1060	640	678400	0.0018	1.847
	Stifner 2		B3/SB-F/ENB/PsENB/Fr11/STF2	80	8	1081	640	691840	0.0019	1.884
Frame 12	Web Plate		B3/SB-F/ENB/SFSu/Fr12/WP	-	8	-	663170.6413	5305365.13	0.0144	14.447
	Face Plate 1		B3/SB-F/ENB/SFSu/Fr12/FP	100	10	983	975	958425	0.0026	2.610
	Stifner 1		B3/SB-F/ENB/SFSu/Fr12/STF1	80	8	1161	640	743040	0.0020	2.023
	Stifner 2		B3/SB-F/ENB/SFSu/Fr12/STF2	80	8	1216	640	778240	0.0021	2.119
Frame 10	Web Plate		B3/SB-F/ENB/OBD/Ps/Fr10/WP	-	8	-	597641.105	4781128.84	0.0130	13.019
	Face Plate		B3/SB-F/ENB/OBD/Ps/Fr10/FP	100	10	1315	1000	1315000	0.0036	3.581
	Stifner 1		B3/SB-F/ENB/OBD/Ps/Fr10/STF1	80	8	268	640	171520	0.0005	0.467
	Stifner 2		B3/SB-F/ENB/OBD/Ps/Fr10/STF2	80	8	711	640	455040	0.0012	1.239
	Stifner 3		B3/SB-F/ENB/OBD/Ps/Fr10/STF3	50	5	165	250	41250	0.0001	0.112
Frame 10B	Web Plate		B3/SB-F/ENB/OBD/Ps/Fr10B/WP	-	8	-	314293.125	2514345	0.0068	6.847
	Face Plate		B3/SB-F/ENB/OBD/Ps/Fr10B/FP	80	8	909	640	581760	0.0016	1.584
Frame 11	Web Plate		B3/SB-F/ENB/OBD/Ps/Fr11/WP	-	8	-	722081.2213	5776649.77	0.0157	15.730
	Face Plate 1		B3/SB-F/ENB/OBD/Ps/Fr11/FP	100	10	1208	929	1122232	0.0031	3.056
	Stifner 1		B3/SB-F/ENB/OBD/Ps/Fr11/STF1	80	8	686	640	439040	0.0012	1.196
	Stifner 2		B3/SB-F/ENB/OBD/Ps/Fr11/STF2	80	8	374	640	239360	0.0007	0.652
	Stifner 3		B3/SB-F/ENB/OBD/Ps/Fr11/STF3	50	5	165	250	41250	0.0001	0.112
Frame 12	Web Plate		B3/SB-F/ENB/OBD/Ps/Fr12/WP	-	8	-	742081.2213	5936649.77	0.0162	16.165
	Face Plate 1		B3/SB-F/ENB/OBD/Ps/Fr12/FP	100	10	1158	1000	1158000	0.0032	3.153
	Stifner 1		B3/SB-F/ENB/OBD/Ps/Fr12/STF1	80	8	714	640	456960	0.0012	1.244
	Stifner 2		B3/SB-F/ENB/OBD/Ps/Fr12/STF2	80	8	472	640	302080	0.0008	0.823
	Stifner 3		B3/SB-F/ENB/OBD/Ps/Fr12/STF3	50	5	183	250	45750	0.0001	0.125
Frame 10	Web Plate		B3/SB-F/ENB/OBD/St/Fr10/WP	-	8	-	597641.105	4781128.84	0.0130	13.019
	Face Plate		B3/SB-F/ENB/OBD/St/Fr10/FP	100	10	1315	1000	1315000	0.0036	3.581
	Stifner 1		B3/SB-F/ENB/OBD/St/Fr10/STF1	80	8	268	640	171520	0.0005	0.467
	Stifner 2		B3/SB-F/ENB/OBD/St/Fr10/STF2	80	8	711	640	455040	0.0012	1.239
	Stifner 3		B3/SB-F/ENB/OBD/St/Fr10/STF3	50	5	165	250	41250	0.0001	0.112
Frame 10B	Web Plate		B3/SB-F/ENB/OBD/St/Fr10B/WP	-	8	-	314293.125	2514345	0.0068	6.847
	Face Plate		B3/SB-F/ENB/OBD/St/Fr10B/FP	80	8	909	640	581760	0.0016	1.584
Frame 11	Web Plate		B3/SB-F/ENB/OBD/St/Fr11/WP	-	8	-	722081.2213	5776649.77	0.0157	15.730
	Face Plate 1		B3/SB-F/ENB/OBD/St/Fr11/FP	100	10	1208	929	1122232	0.0031	3.056
	Stifner 1		B3/SB-F/ENB/OBD/St/Fr11/STF1	80	8	686	640	439040	0.0012	1.196
	Stifner 2		B3/SB-F/ENB/OBD/St/Fr11/STF2	80	8	374	640	239360	0.0007	0.652
	Stifner 3		B3/SB-F/ENB/OBD/St/Fr11/STF3	50	5	165	250	41250	0.0001	0.112
Frame 12	Web Plate		B3/SB-F/ENB/OBD/St/Fr12/WP	-	8	-	742081.2213	5936649.77	0.0162	16.165
	Face Plate 1		B3/SB-F/ENB/OBD/St/Fr12/FP	100	10	1158	1000	1158000	0.0032	3.153
	Stifner 1		B3/SB-F/ENB/OBD/st/Fr12/STF1	80	8	714	640	456960	0.0012	1.244
	Stifner 2		B3/SB-F/ENB/OBD/st/Fr12/STF2	80	8	472	640	302080	0.0008	0.823
	Stifner 3		B3/SB-F/ENB/OBD/st/Fr12/STF3	50	5	183	250	45750	0.0001	0.125



Structure Frame 10-13		Massa jenis Aluminium		2.723	Kg/m ³	0.00000001	mm ³ to m ³			
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
Clacking Plates										
Palka 4	HB1		B3/SB-F/MDP/HBP/PK4/HB1	100	8	-	370765.416	2966123.328	0.0081	8.077
	HB2		B3/SB-F/MDP/HBP/PK4/HB2	100	8	-	370765.416	2966123.328	0.0081	8.077
Plates	Web Plate 1		B3/SB-F/MDPLT/Fr10/WP1	250	5	-	288078.93	1440394.65	0.0039	3.922
	Web Plate 2		B3/SB-F/MDPLT/Fr10/WP2	400	8	-	3318813.175	26550505.4	0.0723	72.297
	Web Plate 3		B3/SB-F/MDPLT/Fr10/WP3	250	5	-	288078.93	1440394.65	0.0039	3.922
	Face Plate 1		B3/SB-F/MDPLT/Fr10/FP1	100	10	1311	1000	1311000	0.0071	7.140
	Face Plate 2		B3/SB-F/MDPLT/Fr7/FP2	120	15	2582	1800	4647600	0.0253	25.311
	Face Plate 3		B3/SB-F/MDPLT/Fr7/FP3	120	15	1400	1800	2520000	0.0069	6.862
Braket Fwd	Ring Frame1		B3/SB-F/MDPLT/Fr7/RF1	45	8	1726	360	621360	0.0017	1.692
	Braket1		B3/SB-F/MDPLT/Fr7/BRK1	40	8	162	320	51840	0.0007	0.706
	Ring Frame2		B3/SB-F/MDPLT/Fr7/RF2	45	8	1726	360	621360	0.0017	1.692
	Braket2		B3/SB-F/MDPLT/Fr7/BRK2	40	8	162	320	51840	0.0007	0.706
	Ring Frame3		B3/SB-F/MDPLT/Fr7/RF3	45	8	1726	360	621360	0.0017	1.692
	Braket3		B3/SB-F/MDPLT/Fr7/BRK3	40	8	162	320	51840	0.0007	0.706
	Braket4		B3/SB-F/MDPLT/Fr7/BRK4	50	5	165	250	41250	0.0002	0.225
	Braket5		B3/SB-F/MDPLT/Fr7/BRK5	50	5	166	250	41500	0.0003	0.339
Braket6	Braket6		B3/SB-F/MDPLT/Fr7/BRK6	-	5	353	21543.8831	107719.4155	0.0012	1.173
	Braket7		B3/SB-F/MDPLT/Fr7/BRK7	-	5	164	12003.1149	60015.5745	0.0010	0.981
	Braket8		B3/SB-F/MDPLT/Fr7/BRK8	-	5	308	39425.5898	197127.949	0.0086	8.588
Braket Aft	Braket 8		B3/SB-F/MDPLT/Fr7/BRK8	-	5	308	39425.5898	197127.949	0.0086	8.588
	MD Ps Girder fr10-13 Plates		B3/SB-F/MDPsG/Fr10-13/WP1	400	8	1292	10336	4134400	0.0113	11.258
	Web Plate2		B3/SB-F/MDPsG/Fr10-13/WP2	400	8	2153	15821	6328400	0.0172	17.232
	Face Plate 1		B3/SB-F/MDPsG/Fr10-13/FP1	120	15	898	107802	1617030	0.0044	4.403
	Face Plate 2		B3/SB-F/MDPsG/Fr10-13/FP2	150	12	2275	340780	4089360	0.0111	11.135
	Face Plate 3		B3/SB-F/MDPsG/Fr10-13/FP3	241	15	241	43232.02	648480.3	0.0018	1.766
Braket	Ring Frame		B3/SB-F/MDPsG/Fr10-13/RF	45	8	954	7632	343440	0.0009	0.935
	Braket		B3/SB-F/MDPsG/Fr10-13/BRK	40	8	160	1277.69	51107.6	0.0004	0.417
MD St Girder fr10-13 Plates	Web Plate1		B3/SB-F/MDSiG/Fr10-13/WP1	400	8	1292	10336	4134400	0.0113	11.258
	Web Plate2		B3/SB-F/MDSiG/Fr10-13/WP2	400	8	2153	15821	6328400	0.0172	17.232
	Face Plate 1		B3/SB-F/MDSiG/Fr10-13/FP1	120	15	898	107802	1617030	0.0044	4.403
	Face Plate 2		B3/SB-F/MDSiG/Fr10-13/FP2	150	12	2275	340780	4089360	0.0111	11.135
	Face Plate 3		B3/SB-F/MDSiG/Fr10-13/FP3	241	15	241	43232.02	648480.3	0.0018	1.766
	Ring Frame		B3/SB-F/MDSiG/Fr10-13/RF	45	8	954	7632	343440	0.0009	0.935
	Braket		B3/SB-F/MDSiG/Fr10-13/BRK	40	8	160	1277.69	51107.6	0.0004	0.417
	Braket		B3/SB-F/MDSiG/Fr10-13/BRK	40	8	160	1277.69	51107.6	0.0004	0.417

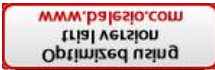


Structure Frame 10-13			Massa jenis Aluminium	2.723	Kg/m ³	0.00000001	mm ³ to m ³			
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
Plates Fr11	Web Plates		B3/SB-F/MDPLTS/CL/Fr11/WP	300	6	2384	14704	4411200	0.0120	12.012
	Face Plate		B3/SB-F/MDPLTS/CL/Fr11/FP	100	10	2197	1000	2197000	0.0060	5.982
	Ring Frame		B3/SB-F/MDPLTS/CL/Fr11/RF	45	8	2370	360	853200	0.0023	2.323
	Braket		B3/SB-F/MDPLTS/CL/Fr11/BRK-7	40	8	62	320	19840	0.0004	0.378
	Braket		B3/SB-F/MDPLTS/CL/Fr11/BRK-6	-	5	212	23931.0884	119655.442	0.0020	1.955
MD CL Plates Fr12	Web Plates		B3/SB-F/MDPLTS/CL/Fr12/WP	300	6	2384	14704	4411200	0.0120	12.012
	Face Plate		B3/SB-F/MDPLTS/CL/Fr12/FP	100	10	2197	1000	2197000	0.0060	5.982
	Ring Frame		B3/SB-F/MDPLTS/CL/Fr12/RF	45	8	2370	360	853200	0.0023	2.323
	Braket		B3/SB-F/MDPLTS/CL/Fr12/BRK-7	40	8	62	320	19840	0.0004	0.378
	Braket		B3/SB-F/MDPLTS/CL/Fr12/BRK-7	-	5	212	23631.0884	118155.442	0.0023	2.252
MD Frame 11 Ps	Web Plate		B3/SB-F/MD/Ps/Fr11/WP	300	6	2794	967307.52	5803845.12	0.0158	15.804
	Web Plate		B3/SB-F/MD/Ps/Fr11/WP	250	5	1224	288072.358	1440361.79	0.0039	3.922
	Face Plate1		B3/SB-F/MD/Ps/Fr11/FP	100	10	1311	1000	1311000	0.0036	3.570
	Face Plate2		B3/SB-F/MD/Ps/Fr11/FP	100	10	2786	1001	2788786	0.0076	7.594
	Braket		B3/SB-F/MD/Ps/Fr11/BRK	-	5	294	27294.96	136474.8	0.0007	0.743
MD Frame 11 Ps	Stifner		B3/SB-F/MD/Ps/Fr11/STF-2	50	5	165	250	41250	0.0002	0.225
	Web Plate		B3/SB-F/MD/Su/Fr11/WP	300	6	2794	967307.52	5803845.12	0.0158	15.804
	Web Plate		B3/SB-F/MD/Su/Fr11/WP	250	5	1224	288072.358	1440361.79	0.0039	3.922
	Face Plate1		B3/SB-F/MD/Su/Fr11/FP	100	10	1311	1000	1311000	0.0036	3.570
	Face Plate2		B3/SB-F/MD/Su/Fr11/FP	100	10	2786	1001	2788786	0.0076	7.594
MD Frame 11 Ps	Braket		B3/SB-F/MD/Su/Fr11/BRK	-	5	294	27294.96	136474.8	0.0007	0.743
	Braket		B3/SB-F/MD/Su/Fr11/BRK	-	5	154	17321	86605	0.0002	0.236
	Stifner		B3/SB-F/MD/Su/Fr11/STF-2	50	5	165	250	41250	0.0002	0.225
	Stifner		B3/SB-F/MD/Su/Fr11/STF	50	5	212	250	53000	0.0001	0.144
	Web Plate		B3/SB-F/MD/Ps/Fr12/WP	300	6	2794	967307.52	5803845.12	0.0158	15.804
MD Frame 12 Ps	Web Plate		B3/SB-F/MD/Ps/Fr12/WP	250	5	1224	288072.358	1440361.79	0.0039	3.922
	Face Plate1		B3/SB-F/MD/Ps/Fr12/FP	100	10	1311	1000	1311000	0.0036	3.570
	Face Plate2		B3/SB-F/MD/Ps/Fr12/FP	100	10	2807	1000	2807000	0.0076	7.643
	Braket		B3/SB-F/MD/Ps/Fr12/BRK	-	5	294	20871	104355	0.0003	0.284
	Stifner		B3/SB-F/MD/ps/Fr12/STF-2	50	5	165	250	41250	0.0001	0.112
MD Frame 12 Ps	Stifner		B3/SB-F/MD/ps/Fr12/STF-2	50	5	212	250	53000	0.0003	0.289
	Web Plate		B3/SB-F/MD/Su/Fr12/WP	300	6	2794	967307.52	5803845.12	0.0158	15.804
	Web Plate		B3/SB-F/MD/Su/Fr12/WP	250	5	1224	288072.358	1440361.79	0.0039	3.922
	Face Plate1		B3/SB-F/MD/Su/Fr12/FP	100	10	1311	1000	1311000	0.0036	3.570
	Face Plate2		B3/SB-F/MD/Su/Fr12/FP	100	10	2807	1000	2807000	0.0076	7.643
MD Frame 12 St	Stifner		B3/SB-F/MD/Su/Fr12/STF-2	50	5	165	250	41250	0.0001	0.112
	Stifner		B3/SB-F/MD/Su/Fr12/STF-2	50	5	212	250	53000	0.0003	0.289

Long Frame



Kategori	Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar
					Breath (mm)	Thickness (mm)					
A.1	a.	T Bar	1	B2/SB-F/LF/B/Ps/1	100x65	6	4800	954	4579200	0.0125	
			2	B2/SB-F/LF/B/Ps/2	100x65	6	4800	954	4579200	0.0125	
			3	B2/SB-F/LF/B/Ps/3	100x65	6	4800	954	4579200	0.0125	
			4	B2/SB-F/LF/B/Ps/4	100x65	6	4800	954	4579200	0.0125	
			5	B2/SB-F/LF/B/Ps/5	100x65	6	4800	954	4579200	0.0125	
			6	B2/SB-F/LF/B/Ps/6	100x65	6	4800	954	4579200	0.0125	
			7	B2/SB-F/LF/B/Ps/7	100x65	6	4800	954	4579200	0.0125	
			8	B2/SB-F/LF/B/Ps/8	100x65	6	4800	954	4579200	0.0125	
			9	B2/SB-F/LF/B/Ps/9	100x65	6	4800	954	4579200	0.0125	
			10	B2/SB-F/LF/B/Ps/10	100x65	6	4800	954	4579200	0.0125	
			11	B2/SB-F/LF/B/Ps/11	100x65	6	4800	954	4579200	0.0125	
b.	Long Frame Side Shell Portside		LF/Ss1/Ps/		B2/SB-F/LF/Ss1/Ps/						
	1	LF/Ps/Ss1	1	B2/SB-F/LF/Ss1/Ps/1	85	5	4800	648.28	3111744	0.0085	
	2	LF/Ps/Ss2	2	B2/SB-F/LF/Ss1/Ps/2	85	5	4800	648.28	3111744	0.0085	
	3	LF/Ps/Ss3	3	B2/SB-F/LF/Ss1/Ps/3	85	5	4800	648.28	3111744	0.0085	
	4	LF/Ps/Ss4	4	B2/SB-F/LF/Ss1/Ps/4	85	5	4800	648.28	3111744	0.0085	
	5	LF/Ps/Ss5	5	B2/SB-F/LF/Ss1/Ps/5	85	5	4800	648.28	3111744	0.0085	
	6	LF/Ps/Ss6	6	B2/SB-F/LF/Ss1/Ps/6	85	5	4800	648.28	3111744	0.0085	
	7	LF/Ps/Ss7	7	B2/SB-F/LF/Ss1/Ps/7	85	5	4800	648.28	3111744	0.0085	
	8	LF/Ps/Ss8	8	B2/SB-F/LF/Ss1/Ps/8	85	5	4800	648.28	3111744	0.0085	
9	LF/Ps/Ss9	9	B2/SB-F/LF/Ss1/Ps/9	85	5	4800	648.28	3111744	0.0085		
A.1.2	Long Frame Starboard		LF/B/		B2/SB-F/LF/B/						
a.	Long Frame Bottom Starboard		Sb/		B2/SB-F/LF/B/Sb/						
	1	LF/Ps/B1	1	B2/SB-F/LF/B/Sb/1	100x65	6	4800	954	4579200	0.0125	
	2	LF/Ps/B2	2	B2/SB-F/LF/B/Sb/2	100x65	6	4800	954	4579200	0.0125	
	3	LF/Ps/B3	3	B2/SB-F/LF/B/Sb/3	100x65	6	4800	954	4579200	0.0125	
	4	LF/Ps/B4	4	B2/SB-F/LF/B/Sb/4	100x65	6	4800	954	4579200	0.0125	
	5	LF/Ps/B5	5	B2/SB-F/LF/B/Sb/5	100x65	6	4800	954	4579200	0.0125	
	6	LF/Ps/B6	6	B2/SB-F/LF/B/Sb/6	100x65	6	4800	954	4579200	0.0125	
	7	LF/Ps/B7	7	B2/SB-F/LF/B/Sb/7	100x65	6	4800	954	4579200	0.0125	
	8	LF/Ps/B8	8	B2/SB-F/LF/B/Sb/8	100x65	6	4800	954	4579200	0.0125	
	9	LF/Ps/B9	9	B2/SB-F/LF/B/Sb/9	100x65	6	4800	954	4579200	0.0125	
	10	LF/Ps/B10	10	B2/SB-F/LF/B/Sb/10	100x65	6	4800	954	4579200	0.0125	
11	LF/Ps/B11	11	B2/SB-F/LF/B/Sb/11	100x65	6	4800	954	4579200	0.0125		
b.	Long Frame Side Shell Starboard		LF/Ss1/Sb/		B2/SB-F/LF/Ss1/Sb/						
	1	LF/Ps/Ss1	1	B2/SB-F/LF/Ss1/Sb/1	85	5	4800	648.28	3111744	0.0085	
	2	LF/Ps/Ss2	2	B2/SB-F/LF/Ss1/Sb/2	85	5	4800	648.28	3111744	0.0085	
	3	LF/Ps/Ss3	3	B2/SB-F/LF/Ss1/Sb/3	85	5	4800	648.28	3111744	0.0085	
	4	LF/Ps/Ss4	4	B2/SB-F/LF/Ss1/Sb/4	85	5	4800	648.28	3111744	0.0085	
	5	LF/Ps/Ss5	5	B2/SB-F/LF/Ss1/Sb/5	85	5	4800	648.28	3111744	0.0085	
	6	LF/Ps/Ss6	6	B2/SB-F/LF/Ss1/Sb/6	85	5	4800	648.28	3111744	0.0085	
	7	LF/Ps/Ss7	7	B2/SB-F/LF/Ss1/Sb/7	85	5	4800	648.28	3111744	0.0085	
8	LF/Ps/Ss8	8	B2/SB-F/LF/Ss1/Sb/8	85	5	4800	648.28	6223488	0.0169		



13 sd 17

Massa jenis Aluminium
Long Frame

2.723

Ton/m³

0.00000001

mm³ to m³

No	Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar
					Breath (mm)	Thickness (mm)					
A.2	14	TF/Fr14/		B2/SB-F/TF/Fr14/							
		CL/		B2/SB-F/TF/Fr14/CL/							
a.	14 Centerline	B/		B2/SB-F/TF/Fr14/CL/B/							
		Plate	WP	B2/SB-F/TF/Fr14/CL/B/WP	-	5	-	434884.93	2174424.65	0.0059	
2	CL TankTop		FP	B2/SB-F/TF/Fr14/CL/B/FP	80	8	1407.17	640	900588.8	0.002452	
		Plate	TT/	B2/SB-F/TF/Fr14/CL/TT/							
WP	B2/SB-F/TF/Fr14/CL/TT/WP		-	8	-	134694.16	1077553.28	0.0029			
	FP	B2/SB-F/TF/Fr14/CL/TT/FP	60	8	1310.3201	480	628953.648	0.001713			
b.		1	Transverse Frame 14 Portside		Ps/		B2/SB-F/TF/Fr14/Ps/				
	Plate		SA/	B2/SB-F/TF/Fr14/Ps/SA/							
WP1		B2/SB-F/TF/Fr14/Ps/SA/WP1	-	8	-	168409.343	1347274.745	0.0037			
	WP2	B2/SB-F/TF/Fr14/Ps/SA/WP2	-	5	-	293578.951	1467894.755	0.0040			
FP		B2/SB-F/TF/Fr14/Ps/SA/FP	60	8	1299.2877	480	623658.096	0.0017			
	2	Section B	SB/		B2/SB-F/TF/Fr14/Ps/SB/						
Plate			WP1	B2/SB-F/TF/Fr14/Ps/SB/WP1	-	8	-	168409.3431	1347274.745	0.0037	
	WP2	B2/SB-F/TF/Fr14/Ps/SB/WP2	-	5	-	818800.5392	4094002.696	0.0111			
FP		B2/SB-F/TF/Fr14/Ps/SB/FP	60	8	1299.2877	480	623658.096	0.0017			
	3	Side Shell 1	SS1/		B2/SB-F/TF/Fr14/Ps/SS1/						
Plate			WP	B2/SB-F/TF/Fr14/Ps/SS1/WP	-	5	-	1092041.757	5460208.783	0.0149	
	FP	B2/SB-F/TF/Fr14/Ps/SS1/FP	80	8	3192.6945	640	2043324.48	0.0056			
4		Side Shell 2	SS2/		B2/SB-F/TF/Fr14/Ps/SS2/						
	Plate		WP	B2/SB-F/TF/Fr14/Ps/SS2/WP	-	5	-	844179.6262	4220898.131	0.0115	
FP		B2/SB-F/TF/Fr14/Ps/SS2/FP	80	8	2796.98	640	1790067.2	0.0049			
	c.	1	Transverse Frame 14 Starboard		St/		B2/SB-F/TF/Fr14/St/				
Plate			SA/	B2/SB-F/TF/Fr14/St/SA/							
	P1	B2/SB-F/TF/Fr14/St/SA/P1	-	8	-	699063.357	5592506.854	0.0152			
2		Section B	SB/		B2/SB-F/TF/Fr14/St/SB/						
	Plate		WP1	B2/SB-F/TF/Fr14/St/SB/WP1	-	8	-	168409.3431	1347274.745	0.0037	
WP2		B2/SB-F/TF/Fr14/St/SA/WP2	-	5	-	818800.5392	4094002.696	0.0111			
	FP	B2/SB-F/TF/Fr14/St/SA/FP	60	8	1299.2877	480	623658.096	0.0017			
3		Side Shell 1	SS1/		B2/SB-F/TF/Fr14/St/SS1/						
	Plate		WP	B2/SB-F/TF/Fr14/St/SS1/WP	-	5	-	1092041.757	5460208.783	0.0149	
FP		B2/SB-F/TF/Fr14/St/SS1/FP	80	8	3192.6945	640	2043324.48	0.0056			
	4	Side Shell 2	SS2/		B2/SB-F/TF/Fr14/St/SS2/						
Plate			WP	B2/SB-F/TF/Fr14/St/SS2/WP	-	5	-	844179.6262	4220898.131	0.0115	
	FP	B2/SB-F/TF/Fr14/St/SS2/FP	80	8	2796.98	640	1790067.2	0.0049			
A.2.2		14.6	Transverse Frame 14.6		TF/Fr14.6/		B2/SB-F/TF/Fr14.6/				
	Transverse Frame 14.6 Centerline		CL/		B2/SB-F/TF/Fr14.6/CL/						
a.	1	B/		B2/SB-F/TF/Fr14.6/CL/B/							
		Plate	WP1	B2/SB-F/TF/Fr14.6/WP1	-	15	-	761776.749	11426651.24	0.0311	
WP2	B2/SB-F/TF/Fr14.6/WP2		-	30	-	782594.85	23477845.5	0.063930			



Kategori	Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar		
					Breath (mm)	Thickness (mm)							
b.	14.6 Portside	Ps/	SA/	B2/SB-F/TF/Fr14.6/Ps/									
				B2/SB-F/TF/Fr14.6/Ps/SA/									
				Plate	WP1	B2/SB-F/TF/Fr14.6/Ps/SA/ WP1	-	15	-	308459.827	4626897.405	0.0126	
	WP2	B2/SB-F/TF/Fr14.6/Ps/SA/ WP2	-		30	-	165542.467	4966274.01	0.0135				
	WP3	B2/SB-F/TF/Fr14.6/Ps/SA/ WP3	-		50	-	200058.6						
	2	Section B	SB/	SA/	B2/SB-F/TF/Fr14.6/Ps/SB/								
					B2/SB-F/TF/Fr14.6/Ps/SB/SA/								
					Plate	WP1	B2/SB-F/TF/Fr14.6/Ps/SB/ WP1	-	15	-	565173.734	8477606.01	0.0231
	WP2	B2/SB-F/TF/Fr14.6/Ps/SB/ WP2	-	30		-	617465.374	18523961.22	0.0504				
	WP3	B2/SB-F/TF/Fr14.6/Ps/SB/ WP3	-	50		-	116486.858	5824342.9	0.0159				
	3	Side Shell 1	SS1/	SA/	B2/SB-F/TF/Fr14.6/Ps/SS1/								
					Plate	WP	B2/SB-F/TF/Fr14.6/Ps/SS1/ WP	-	15	-	535441.322	8031619.83	0.0219
	A.2.3	Transverse Frame 14.6 Starboard		Sb/	B2/SB-F/TF/Fr14.6/Ps/Sb/								
		1	Section A	SA/	B2/SB-F/TF/Fr14.6/Ps/Sb/SA/								
					Plate	WP1	B2/SB-F/TF/Fr14.6/Ps/Sb/SA/ WP1	-	15	-	308459.827	4626897.405	0.0126
						WP2	B2/SB-F/TF/Fr14.6/Ps/Sb/SA/ WP2	-	30	-	165542.467	4966274.01	0.0135
		WP3	B2/SB-F/TF/Fr14.6/Ps/Sb/SA/ WP3	-		50	-	200058.6					
		2	Section B	SB/	SA/	B2/SB-F/TF/Fr14.6/Ps/Sb/SB/							
B2/SB-F/TF/Fr14.6/Ps/Sb/SB/SA/													
Plate						WP1	B2/SB-F/TF/Fr14.6/Ps/Sb/SB/ WP1	-	15	-	565173.734	8477606.01	0.0231
		WP2	B2/SB-F/TF/Fr14.6/Ps/Sb/SB/ WP2	-	30	-	617465.374	18523961.22	0.0504				
		WP3	B2/SB-F/TF/Fr14.6/Ps/Sb/SB/ WP3	-	50	-	116486.858	5824342.9	0.0159				
3		Side Shell 1	SS1/	SA/	B2/SB-F/TF/Fr14.6/Ps/Sb/SS1/								
					Plate	WP	B2/SB-F/TF/Fr14.6/Ps/Sb/SS1/ WP	-	15	-	535441.322	8031619.83	0.0219
a.	Transverse Frame 15		TF/Fr15/	B2/SB-F/TF/Fr15/									
	Transverse Frame 15 Centerline		Cl/	B2/SB-F/TF/Fr15/Cl/									
	1	CL Bottom	B/	SA/	B2/SB-F/TF/Fr15/Cl/B/								
					Plate	WP	B2/SB-F/TF/Fr15/Cl/B/ WP	-	5	-	463847.954	2319239.77	0.0063
	FP	B2/SB-F/TF/Fr15/Cl/B/ FP	80	8		1407.1745	640	900591.68	0.002452				
	2	CL TankTop	TT/	SA/	B2/SB-F/TF/Fr15/Cl/B/TT/								
					Plate	WP	B2/SB-F/TF/Fr15/Cl/B/ WP	-	8	-	134816.4001	1078531.201	0.0029
	FP	B2/SB-F/TF/Fr15/Cl/B/ FP	80	8		1279.025	640	818576	0.002229				
	b.	Transverse Frame 15 Portside		Ps/	B2/SB-F/TF/Fr15/Ps/								
		1	Section A	SA/	B2/SB-F/TF/Fr15/Ps/SA/								
					Plate	WP1	B2/SB-F/TF/Fr15/Ps/SA/ WP1	-	8	-	169109.343	1352874.745	0.0037
						WP2	B2/SB-F/TF/Fr15/Ps/SA/ WP2	-	5	-	298133.6977	1490668.489	0.0041
FP		B2/SB-F/TF/Fr15/Ps/SA/ FP	80	8		1290.8176	640	826123.264	0.0022				
2		Section B	SB/	SA/	B2/SB-F/TF/Fr15/Ps/SB/								
					B2/SB-F/TF/Fr15/Ps/SB/SA/								
					Plate	WP1	B2/SB-F/TF/Fr15/Ps/SB/ WP1	-	8	-	137301.5431	1098412.345	0.0030
WP2		B2/SB-F/TF/Fr15/Ps/SB/ WP2	-	5		-	814454.6212	4072273.106	0.0111				
FP		B2/SB-F/TF/Fr15/Ps/SB/ FP	80	8		2210.26	640	1414566.4	0.0039				
3		Side Shell 1	SS1/	SA/	B2/SB-F/TF/Fr15/Ps/SS1/								
					Plate	WP	B2/SB-F/TF/Fr15/Ps/SS1/ WP	-	5	-	1070072.441	5350362.207	0.0146
FP	B2/SB-F/TF/Fr15/Ps/SS1/ FP	80	8	3088.4376		640	1976600.064	0.0054					
4	Side Shell 2	SS2/	SA/	B2/SB-F/TF/Fr15/Ps/SS2/									
				Plate	WP	B2/SB-F/TF/Fr15/Ps/SS2/ WP	-	5	-	851390.8999	4256954.5	0.0116	
FP	B2/SB-F/TF/Fr15/Ps/SS2/ FP	80	8		2795.7297	640	1789267.008	0.0049					



13 sd 17

Massa jenis Aluminium
Long Frame

2.723

Ton/m³

0.00000001

mm³ to m³

Kategori	Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
					Breath (mm)	Thickness (mm)						
c.	15 Starboard	Sb/		B2/SB-F/TF/Fr15/Sb/								
		SA/		B2/SB-F/TF/Fr15/Sb/SA/								
		Plate	WP1	B2/SB-F/TF/Fr15/Sb/SA/WP1	-	8	-	169109.343	1352874.745	0.0037		
	WP2		B2/SB-F/TF/Fr15/Sb/SA/WP2	-	5	-	298133.6977	1490668.489	0.0041			
	FP		B2/SB-F/TF/Fr15/Sb/SA/FP	80	8	1290.8176	640	826123.264	0.0022			
	2	Section B	SB/		B2/SB-F/TF/Fr15/Sb/SB/							
			Plate	WP1	B2/SB-F/TF/Fr15/Sb/SB/WP1	-	8	-	137301.5431	1098412.345	0.0030	
				WP2	B2/SB-F/TF/Fr15/Sb/SB/WP2	-	5	-	814454.6212	4072273.106	0.0111	
	FP	B2/SB-F/TF/Fr15/Sb/SB/FP		80	8	2210.26	640	1414566.4	0.0039			
	3	Side Shell 1	SS1/		B2/SB-F/TF/Fr15/Sb/SS1/							
			Plate	WP	B2/SB-F/TF/Fr15/Sb/SS1/WP	-	5	-	1070072.441	5350362.207	0.0146	
				FP	B2/SB-F/TF/Fr15/Sb/SS1/FP	80	8	3088.4376	640	1976600.064	0.0054	
4	Side Shell 2	SS2/		B2/SB-F/TF/Fr15/Sb/SS2/								
		Plate	WP	B2/SB-F/TF/Fr15/Sb/SS2/WP	-	5	-	851390.8999	4256954.5	0.0116		
			FP	B2/SB-F/TF/Fr15/Sb/SS2/FP	80	8	2795.7297	640	1789267.008	0.0049		
A.2.4	Transverse Frame 16		TF/Fr16/		B2/SB-F/TF/Fr16/							
	Transverse Frame 16 Centerline		Cl/		B2/SB-F/TF/Fr16/Cl/							
a.	1	CL Bottom	B/		B2/SB-F/TF/Fr16/Cl/B/							
			Plate	WP1	B2/SB-F/TF/Fr16/Cl/WP1	-	15	-	848549.6382	12728244.57	0.0347	
				WP2	B2/SB-F/TF/Fr16/Cl/WP2	-	30	-	786472.8408	23594185.22	0.064247	
b.	Transverse Frame 16 Portside		Ps/		B2/SB-F/TF/Fr16/Ps/							
	1	Section A	SA/		B2/SB-F/TF/Fr16/Ps/SA/							
			Plate	WP1	B2/SB-F/TF/Fr16/Ps/SA/WP1	-	15	-	313471.381	4702070.711	0.0128	
				WP2	B2/SB-F/TF/Fr16/Ps/SA/WP2	-	30	-	165542.4668	4966274.004	0.0135	
					WP3	B2/SB-F/TF/Fr16/Ps/SA/WP3	-	50	-	203936.9192		
	2	Section B	SB/		B2/SB-F/TF/Fr16/Ps/SB/							
			Plate	WP1	B2/SB-F/TF/Fr16/Ps/SB/WP1	-	15	-	577906.2462	8668593.693	0.0236	
				WP2	B2/SB-F/TF/Fr16/Ps/SB/WP2	-	30	-	622274.8842	18668246.53	0.0508	
					WP3	B2/SB-F/TF/Fr16/Ps/SB/WP3	-	50	-	120329.164	6016458.2	0.0164
	3	Side Shell 1	SS1/		B2/SB-F/TF/Fr16/Ps/SS1/							
			Plate	WP	B2/SB-F/TF/Fr16/Ps/SS1/WP	-	15	-	497829.4143	7467441.215	0.0203	
	4	Side Shell 2	SS2/		B2/SB-F/TF/Fr16/Ps/SS2/							
			Plate	WP	B2/SB-F/TF/Fr16/Ps/SS2/WP	-	5	-	1231843.353	6159216.767	0.0168	
	5	Side Shell 3	SS3/		B2/SB-F/TF/Fr16/Ps/SS3/							
			Plate	WP	B2/SB-F/TF/Fr16/Ps/SS3/WP	-	6	-	1715048.76	10290292.56	0.0280	
	Transverse Frame 16 Starboard		Sb/		B2/SB-F/TF/Fr16/Sb/							
	1	Section A	SA/		B2/SB-F/TF/Fr16/Sb/SA/							
			Plate	WP1	B2/SB-F/TF/Fr16/Sb/SA/WP1	-	15	-	313471.381	4702070.711	0.0128	
WP2				B2/SB-F/TF/Fr16/Sb/SA/WP2	-	30	-	165542.4668	4966274.004	0.0135		
				WP3	B2/SB-F/TF/Fr16/Sb/SA/WP3	-	50	-	203936.9192			
2	Section B	SB/		B2/SB-F/TF/Fr16/Sb/SB/								
		Plate	WP1	B2/SB-F/TF/Fr16/Sb/SB/WP1	-	15	-	577906.2462	8668593.693	0.0236		
			WP2	B2/SB-F/TF/Fr16/Sb/SB/WP2	-	30	-	622274.8842	18668246.53	0.0508		
				WP3	B2/SB-F/TF/Fr16/Sb/SB/WP3	-	50	-	120329.164	6016458.2	0.0164	
3	Side Shell 1	SS1/		B2/SB-F/TF/Fr16/Sb/SS1/								
		Plate	WP	B2/SB-F/TF/Fr16/Sb/SS1/WP	-	15	-	497829.4143	7467441.215	0.0203		

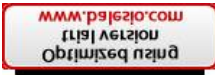


Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar		
				Breath (mm)	Thickness (mm)							
Side Shell 2	SS2/		B2/SB-F/TF/Fr16/Sb/SS2/									
	Plate	WP	B2/SB-F/TF/Fr16/Sb/SS2/WP	-	5	-	1231843.353	6159216.767	0.0168			
Side Shell 3	SS3/		B2/SB-F/TF/Fr16/Sb/SS3/									
	Plate	WP	B2/SB-F/TF/Fr16/Sb/SS3/WP	-	6	-	1715048.76	10290292.56	0.0280			
Transverse Frame 18		TF/Fr18/		B5/SB-F/TF/Fr18/								
1	Centerline	CI/		B5/SB-F/TF/Fr18/CI/								
	Face Plate	Plate Bar	FP	B5/SB-F/TF/Fr18/CI/FP	80	5	2512	400	1004800	0.0027		
	Stiffener	Palte Bar	S1	B5/SB-F/TF/Fr18/CI/S1	90	8	2390	720	1720800	0.0047		
			S2	B5/SB-F/TF/Fr18/CI/S2	90	8	2390	720	1720800	0.0047		
			S3	B5/SB-F/TF/Fr18/CI/S3	90	8	2390	720	1720800	0.0047		
			S4	B5/SB-F/TF/Fr18/CI/S4	90	8	2390	720	1720800	0.0047		
2	Portside	Ps/		B5/SB-F/TF/Fr18/Ps/								
a.	Bottom	B/		B5/SB-F/TF/Fr18/Ps/B/								
	Plate	Plate Bar	P	B5/SB-F/TF/Fr18/Ps/B/P	-	5	-	2562588.32	12812941.6	0.0349		
	Stiffener	Plate Bar	S1	B5/SB-F/TF/Fr18/Ps/B/S1	80	8	1349.86	640	863910.4	0.0024		
			S2	B5/SB-F/TF/Fr18/Ps/B/S2	80	8	550.67	640	352428.8	0.0010		
			S3	B5/SB-F/TF/Fr18/Ps/B/S3	80	8	289.59	640	185337.6	0.0005		
			S4	B5/SB-F/TF/Fr18/Ps/B/S4	80	8	1508.84	640	965657.6	0.0026		
			S5	B5/SB-F/TF/Fr18/Ps/B/S5	80	8	404.07	640	258604.8	0.0007		
b.	Side Shell	SS/		B5/SB-F/TF/Fr18/Ps/SS/								
	Frame Side Shell	Plate Bar	WP	B5/SB-F/TF/Fr18/Ps/SS/WP	-	5	-	908838.53	4544192.65	0.0124		
3	Starboard	Sb/		B5/SB-F/TF/Fr18/Sb/								
a.	Bottom	B/		B5/SB-F/TF/Fr18/Sb/B/								
	Plate	Plate Bar	P	B5/SB-F/TF/Fr18/Sb/B/P	-	5	-	2562588.32	12812941.6	0.0349		
	Stiffener	Plate Bar	S1	B5/SB-F/TF/Fr18/Sb/B/S1	80	8	1349.86	640	863910.4	0.0024		
			S2	B5/SB-F/TF/Fr18/Sb/B/S2	80	8	550.67	640	352428.8	0.0010		
			S3	B5/SB-F/TF/Fr18/Sb/B/S3	80	8	289.59	640	185337.6	0.0005		
			S4	B5/SB-F/TF/Fr18/Sb/B/S4	80	8	1508.84	640	965657.6	0.0026		
			S5	B5/SB-F/TF/Fr18/Sb/B/S5	80	8	404.07	640	258604.8	0.0007		
b.	Side Shell	SS/		B5/SB-F/TF/Fr18/Sb/SS/								
	Frame Side Shell	Plate Bar	WP	B5/SB-F/TF/Fr18/Sb/B/WP	-	5	-	908838.53	4544192.65	0.0124		
		Plate Bar	FP	B5/SB-F/TF/Fr18/Sb/B/FP	80	8	4581.83	640	2932371.2	0.0080		
Transverse Frame 19		TF/Fr19/		B5/SB-F/TF/Fr19/								
1	Portside	Ps/		B5/SB-F/TF/Fr19/Ps/								
a.	Bottom	B/		B5/SB-F/TF/Fr19/Ps/B/								
	Section A	Plate Bar	P	B5/SB-F/TF/Fr19/Ps/B/P	-	5	-	811057.482	4055287.41	0.0110		
			S1	B5/SB-F/TF/Fr19/Ps/B/S1	80	8	1278.909	640	818501.76	0.0022		
			S2	B5/SB-F/TF/Fr19/Ps/B/S2	80	8	997.68	640	638515.2	0.0017		
			S3	B5/SB-F/TF/Fr19/Ps/B/S3	80	8	1102.177	640	705393.28	0.0019		
b.	Section B	Plate Bar	WP	B5/SB-F/TF/Fr19/Ps/B/WP	-	5	-	1043236.546	5216182.73	0.0142		
			FP	B5/SB-F/TF/Fr19/Ps/B/FP	80	8	1265.93	640	810195.2	0.0022		
			Stiffener	S1	B5/SB-F/TF/Fr19/Ps/B/S1	80	8	1347.174	640	862191.36	0.0023	
					S2	B5/SB-F/TF/Fr19/Ps/B/S2	80	8	751.458	640	480933.12	0.0013
					S3	B5/SB-F/TF/Fr19/Ps/B/S3	80	8	246.086	640	157495.04	0.0004
			S4	B5/SB-F/TF/Fr19/Ps/B/S4	80	8	1341.921	640	858829.44	0.0023		
			S5	B5/SB-F/TF/Fr19/Ps/B/S5	80	8	350.541	640	224346.24	0.0006		

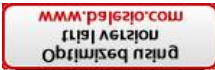


Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
Side Shell	SS/		B5/SB-F/TF/Fr19/Ps/SS/								
Frame Side Shell	Plate Bar	WP	B5/SB-F/TF/Fr19/Ps/SS/WP	-	5	-	734283.366	3671416.83	0.0100		
	Plate Bar	FP	B5/SB-F/TF/Fr19/Ps/SS/FP	80	8	2785.253	640	1782561.92	0.0049		
Starboard	Sb/		B5/SB-F/TF/Fr19/Sb/								
a.	Bottom	B/	B5/SB-F/TF/Fr19/Sb/B/								
	Section A	P	B5/SB-F/TF/Fr19/Sb/B/P	-	5	-	811057.482	4055287.41	0.0110		
	Stiffener	S1	B5/SB-F/TF/Fr19/Sb/B/S1	80	8	1278.909	640	818501.76	0.0022		
		S2	B5/SB-F/TF/Fr19/Sb/B/S2	80	8	997.68	640	638515.2	0.0017		
		S3	B5/SB-F/TF/Fr19/Sb/B/S3	80	8	1102.177	640	705393.28	0.0019		
b.	Section B	WP	B5/SB-F/TF/Fr19/Sb/B/WP	-	5	-	1043236.546	5216182.73	0.0142		
		FP	B5/SB-F/TF/Fr19/Sb/B/FP	80	8	1265.93	640	810195.2	0.0022		
	Stiffener	S1	B5/SB-F/TF/Fr19/Sb/B/S1	80	8	1347.174	640	862191.36	0.0023		
		S2	B5/SB-F/TF/Fr19/Sb/B/S2	80	8	751.458	640	480933.12	0.0013		
		S3	B5/SB-F/TF/Fr19/Sb/B/S3	80	8	246.086	640	157495.04	0.0004		
		S4	B5/SB-F/TF/Fr19/Sb/B/S4	80	8	1341.921	640	858829.44	0.0023		
		S5	B5/SB-F/TF/Fr19/Sb/B/S5	80	8	350.541	640	224346.24	0.0006		
b.	Side Shell	SS/	B5/SB-F/TF/Fr19/Sb/SS/								
	Frame Side Shell	Plate Bar	B5/SB-F/TF/Fr19/Sb/SS/WP	-	5	-	734283.366	3671416.83	0.0100		
		Plate Bar	B5/SB-F/TF/Fr19/Sb/SS/FP	80	8	2785.253	640	1782561.92	0.0049		
Sub Block Transversal Bulkhead		S-TB/		B2/S-TB/							
e Bulkhead Fr 13		Fr13/		B2/S-TB/Fr13/							
B.1.1	Bulkhead Plate	P/	B2/S-TB/Fr13/P/	B2/S-TB/Fr13/B2/S-TB/Fr13/P/							
		Plate	1	B2/S-TB/Fr13/P/1	-	8	-	6340079.58	50720636.64	0.1381	
			2	B2/S-TB/Fr13/P/2	-	8	-	1486687.34	11893498.72	0.0324	
			3	B2/S-TB/Fr13/P/3	-	5	-	4762782.55	23813912.75	0.0648	
			4	B2/S-TB/Fr13/P/4	-	5	-	8946574.56	44732872.8	0.1218	
			5	B2/S-TB/Fr13/P/5	-	5	-	423543.27	2117716.35	0.0058	
er Bulkhead		Sf/		B2/S-TB/Fr13/Sf/							
1	Plat Bar	Plate Bar	FB1	B2/S-TB/Fr13/Sf/FB1	90	8	3412.342	720	2456886.24	0.0067	
			FB2	B2/S-TB/Fr13/Sf/FB2	110	8	1172.979	880	1032221.52	0.0028	
			FB3	B2/S-TB/Fr13/Sf/FB3	90	8	3412.342	720	2456886.24	0.0067	
			FB4	B2/S-TB/Fr13/Sf/FB4	80	8	1189	640	760960	0.0021	
			FB5	B2/S-TB/Fr13/Sf/FB5	80	8	1189	640	760960	0.0021	
			FB6	B2/S-TB/Fr13/Sf/FB6	80	5	300	400	120000	0.0003	
			FB7	B2/S-TB/Fr13/Sf/FB7	80	5	300	400	120000	0.0003	
			FB8	B2/S-TB/Fr13/Sf/FB8	80	5	300	400	120000	0.0003	
			FB9	B2/S-TB/Fr13/Sf/FB9	80	5	300	400	120000	0.0003	
			FB10	B2/S-TB/Fr13/Sf/FB10	80	5	600	400	240000	0.0007	
			FB11	B2/S-TB/Fr13/Sf/FB11	80	5	900	400	360000	0.0010	
	Bp1	B2/S-TB/Fr13/Sf/Bp1	85	5	1221.423	648.28	791824.1024	0.0022			
	Bp2	B2/S-TB/Fr13/Sf/Bp2	85	5	1304.039	648.28	845382.4029	0.0023			
	Bp3	B2/S-TB/Fr13/Sf/Bp3	85	5	378.753	648.28	245537.9948	0.0007			
	Bp4	B2/S-TB/Fr13/Sf/Bp4	85	5	459.861	648.28	298118.6891	0.0008			
	Bp5	B2/S-TB/Fr13/Sf/Bp5	85	5	535.055	648.28	346865.4554	0.0009			
	Bp6	B2/S-TB/Fr13/Sf/Bp6	85	5	632	648.28	409712.96	0.0011			
	Bp7	B2/S-TB/Fr13/Sf/Bp7	85	5	717	648.28	464816.76	0.0013			
	Bp8	B2/S-TB/Fr13/Sf/Bp8	85	5	717	648.28	464816.76	0.0013			

Kategori	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar				
				Breath (mm)	Thickness (mm)									
B.1.2 2	Stiffener Bulb Plat	Bulb Plat	Bp9	B2/S-TB/Fr13/Sf/Bp9	85	5	717	648.28	464816.76	0.0013				
			Bp10	B2/S-TB/Fr13/Sf/Bp10	85	5	717	648.28	464816.76	0.0013				
			Bp11	B2/S-TB/Fr13/Sf/Bp11	85	5	632	648.28	409712.96	0.0011				
			Bp12	B2/S-TB/Fr13/Sf/Bp12	85	5	601.408	648.28	389880.7782	0.0011				
			Bp13	B2/S-TB/Fr13/Sf/Bp13	85	5	535.055	648.28	346865.4554	0.0009				
			Bp14	B2/S-TB/Fr13/Sf/Bp14	85	5	459.861	648.28	298118.6891	0.0008				
			Bp15	B2/S-TB/Fr13/Sf/Bp15	85	5	1304.039	648.28	845382.4029	0.0023				
			Bp16	B2/S-TB/Fr13/Sf/Bp16	85	5	1221.423	648.28	791824.1024	0.0022				
			Bp17	B2/S-TB/Fr13/Sf/Bp17	85	5	1189.063	648.28	770845.7616	0.0021				
			Bp18	B2/S-TB/Fr13/Sf/Bp18	85	5	1193.01	648.28	773404.5228	0.0021				
			Bp19	B2/S-TB/Fr13/Sf/Bp19	85	5	1198.525	648.28	776979.787	0.0021				
			Bp20	B2/S-TB/Fr13/Sf/Bp20	85	5	1204.04	648.28	780555.0512	0.0021				
			Bp21	B2/S-TB/Fr13/Sf/Bp21	85	5	2292	648.28	1485857.76	0.0040				
			Bp22	B2/S-TB/Fr13/Sf/Bp22	85	5	2292	648.28	1485857.76	0.0040				
			Bp23	B2/S-TB/Fr13/Sf/Bp23	85	5	2298	648.28	1489747.44	0.0041				
			Bp24	B2/S-TB/Fr13/Sf/Bp24	85	5	2303.613	648.28	1493386.236	0.0041				
			Bp25	B2/S-TB/Fr13/Sf/Bp25	85	5	1992.5	648.28	1291697.9	0.0035				
			Bp26	B2/S-TB/Fr13/Sf/Bp26	85	5	2317.749	648.28	1502550.322	0.0041				
			Bp27	B2/S-TB/Fr13/Sf/Bp27	85	5	2211	648.28	1433347.08	0.0039				
			Bp28	B2/S-TB/Fr13/Sf/Bp28	85	5	1787	648.28	1158476.36	0.0032				
			Bp29	B2/S-TB/Fr13/Sf/Bp29	85	5	2334.94	648.28	1513694.903	0.0041				
			Bp30	B2/S-TB/Fr13/Sf/Bp30	85	5	1992.5	648.28	1291697.9	0.0035				
			Bp31	B2/S-TB/Fr13/Sf/Bp31	85	5	2303.613	648.28	1493386.236	0.0041				
			Bp32	B2/S-TB/Fr13/Sf/Bp32	85	5	2298	648.28	1489747.44	0.0041				
			Bp33	B2/S-TB/Fr13/Sf/Bp33	85	5	2287	648.28	1482616.36	0.0040				
			Bp34	B2/S-TB/Fr13/Sf/Bp34	85	5	2292	648.28	1485857.76	0.0040				
			Bp35	B2/S-TB/Fr13/Sf/Bp35	85	5	1204.04	648.28	780555.0512	0.0021				
			Bp36	B2/S-TB/Fr13/Sf/Bp36	85	5	1198.525	648.28	776979.787	0.0021				
			Bp37	B2/S-TB/Fr13/Sf/Bp37	85	5	1193.01	648.28	773404.5228	0.0021				
			Bp38	B2/S-TB/Fr13/Sf/Bp38	85	5	1189.063	648.28	770845.7616	0.0021				
			B.2.1	Bulkhead Fr 17	Fr17/				B2/S-TB/Fr17/					
					P/				B2/S-TB/Fr17/P/					
			B.1.1	Bulkhead Plate	Plate	1	B2/S-TB/Fr17/P/1	-	5	-	1047416.47	5237082.35	0.0143	
						2	B2/S-TB/Fr17/P/2	-	5	-	8402017.52	42010087.6	0.1144	
						3	B2/S-TB/Fr17/P/3	-	5	-	2257012.39	11285061.95	0.0307	
						4	B2/S-TB/Fr17/P/4	-	5	-	8854903.92	44274519.6	0.1206	
						5	B2/S-TB/Fr17/P/5	-	5	-	3492728.12	17463640.6	0.0476	
			B.1.2	Stiffener Bulkhead	Sf/				B2/S-TB/Fr17/Sf/					
1	Plat Bar	Plate Bar	FB1	B2/S-TB/Fr17/Sf/FB1	110	8	11766.093	880	10354161.84	0.0282				
			FB2	B2/S-TB/Fr17/Sf/FB2	94	5	300	470						
			FB3	B2/S-TB/Fr17/Sf/FB3	94	5	300	470						
			FB4	B2/S-TB/Fr17/Sf/FB4	95	8	1200	760						



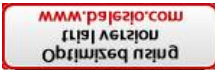
No	Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
					Breath (mm)	Thickness (mm)						
2	Stiffener T	T Bar	Tb1	B2/S-TB/Fr17/Sf/Tb1	100 x 65	6	2367.626	954	2258715.204	0.0062		
			Tb2	B2/S-TB/Fr17/Sf/Tb2	100 x 65	6	2480.601	954	2366493.354	0.0064		
			Tb3	B2/S-TB/Fr17/Sf/Tb3	100 x 65	6	2589.042	954	2469946.068	0.0067		
			Tb4	B2/S-TB/Fr17/Sf/Tb4	100 x 65	6	2700.533	954	2576308.482	0.0070		
			Tb5	B2/S-TB/Fr17/Sf/Tb5	100 x 65	6	2809.879	954	2680624.566	0.0073		
			Tb6	B2/S-TB/Fr17/Sf/Tb6	100 x 65	6	2939.066	954	2803868.964	0.0076		
			Tb7	B2/S-TB/Fr17/Sf/Tb7	100 x 65	6	3048.667	954	2908428.318	0.0079		
			Tb8	B2/S-TB/Fr17/Sf/Tb8	101 x 65	6	3089.724	954	2947596.696	0.0080		
			Tb9	B2/S-TB/Fr17/Sf/Tb9	102 x 65	6	2254.202	954	2150508.708	0.0059		
			Tb10	B2/S-TB/Fr17/Sf/Tb10	101 x 65	6	3089.724	954	2947596.696	0.0080		
			Tb11	B2/S-TB/Fr17/Sf/Tb11	102 x 65	6	2254.202	954	2150508.708	0.0059		
			Tb12	B2/S-TB/Fr17/Sf/Tb12	100 x 65	6	2367.626	954	2258715.204	0.0062		
			Tb13	B2/S-TB/Fr17/Sf/Tb13	100 x 65	6	2480.601	954	2366493.354	0.0064		
			Tb14	B2/S-TB/Fr17/Sf/Tb14	100 x 65	6	2589.042	954	2469946.068	0.0067		
			Tb15	B2/S-TB/Fr17/Sf/Tb15	100 x 65	6	2700.533	954	2576308.482	0.0070		
			Tb16	B2/S-TB/Fr17/Sf/Tb16	100 x 65	6	2809.879	954	2680624.566	0.0073		
			Tb17	B2/S-TB/Fr17/Sf/Tb17	100 x 65	6	2939.066	954	2803868.964	0.0076		
			Tb18	B2/S-TB/Fr17/Sf/Tb18	100 x 65	6	3048.667	954	2908428.318	0.0079		
3	Stiffener Bulb Plat	Bulb Plat	Bp1	B2/S-TB/Fr17/Sf/Bp1	85	5	1189.063	648.28	770845.7616	0.0021		
			Bp2	B2/S-TB/Fr17/Sf/Bp2	85	5	716.255	648.28	464333.7914	0.0013		
			Bp3	B2/S-TB/Fr17/Sf/Bp3	85	5	716.255	648.28	464333.7914	0.0013		
			Bp4	B2/S-TB/Fr17/Sf/Bp4	85	5	716.255	648.28	464333.7914	0.0013		
			Bp5	B2/S-TB/Fr17/Sf/Bp5	85	5	1189.063	648.28	770845.7616	0.0021		
Sub Block Deck		SB-D/			B2/SB-D/							
Deck Girder		LDG/			B2/SB-D/LDG/							
	Girder Centerline	CI/			B2/SB-D/LDG/CI/							
C.1.1	1	LDG/	Bulb Plat	1	B2/SB-D/LDG/CI/1	85	5	1200	648.28	777936	0.0021	
	2	LDG/		2	B2/SB-D/LDG/CI/2	85	5	1200	648.28	777936	0.0021	
	3	LDG/		3	B2/SB-D/LDG/CI/3	85	5	1200	648.28	777936	0.0021	
	4	LDG/		4	B2/SB-D/LDG/CI/4	85	5	1200	648.28	777936	0.0021	
	5	LDG/		5	B2/SB-D/LDG/CI/5	85	5	1200	648.28	777936	0.0021	
	6	LDG/		6	B2/SB-D/LDG/CI/6	85	5	1200	648.28	777936	0.0021	
	7	LDG/		7	B2/SB-D/LDG/CI/7	85	5	1200	648.28	777936	0.0021	
	8	LDG/		8	B2/SB-D/LDG/CI/8	85	5	1200	648.28	777936	0.0021	
	9	LDG/		9	B2/SB-D/LDG/CI/9	85	5	1200	648.28	777936	0.0021	
	10	LDG/		10	B2/SB-D/LDG/CI/10	85	5	1200	648.28	777936	0.0021	
	11	LDG/		11	B2/SB-D/LDG/CI/11	85	5	1200	648.28	777936	0.0021	
	12	LDG/		12	B2/SB-D/LDG/CI/12	85	5	1200	648.28	777936	0.0021	
	13	LDG/		13	B2/SB-D/LDG/CI/13	85	5	1200	648.28	777936	0.0021	
	14	LDG/		14	B2/SB-D/LDG/CI/14	85	5	1200	648.28	777936	0.0021	



Kategori	Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar		
					Breath (mm)	Thickness (mm)							
C.1.2	Bulb Plat	LDG/	Ps/				B2/SB-D/LDG/Ps/						
			1	B2/SB-D/LDG/Ps/1	85	5	4800	648.28	3111744	0.0085			
			2	B2/SB-D/LDG/Ps/2	85	5	4800	648.28	3111744	0.0085			
			3	B2/SB-D/LDG/Ps/3	85	5	4800	648.28	3111744	0.0085			
			4	B2/SB-D/LDG/Ps/4	85	5	4800	648.28	3111744	0.0085			
			5	B2/SB-D/LDG/Ps/5	85	5	4800	648.28	3111744	0.0085			
			6	B2/SB-D/LDG/Ps/6	85	5	4800	648.28	3111744	0.0085			
			7	B2/SB-D/LDG/Ps/7	85	5	4800	648.28	3111744	0.0085			
C.1.3	Bulb Plat	LDG/	Sb/				B2/SB-D/LDG/Sb/						
			1	B2/SB-D/LDG/Sb/1	85	5	4800	648.28	3111744	0.0085			
			2	B2/SB-D/LDG/Sb/2	85	5	4800	648.28	3111744	0.0085			
			3	B2/SB-D/LDG/Sb/3	85	5	4800	648.28	3111744	0.0085			
			4	B2/SB-D/LDG/Sb/4	85	5	4800	648.28	3111744	0.0085			
			5	B2/SB-D/LDG/Sb/5	85	5	4800	648.28	3111744	0.0085			
			6	B2/SB-D/LDG/Sb/6	85	5	4800	648.28	3111744	0.0085			
			7	B2/SB-D/LDG/Sb/7	85	5	4800	648.28	3111744	0.0085			
C.2	Transverse Deck Beam	LDG/	TDB/				B2/SB-D/TDB/						
			Fr14/				B2/SB-D/TDB/Fr14/						
			a.	Centerline	Plate	Cl/				B2/SB-D/TDB/Fr14/Cl/			
						WP	B2/SB-D/TDB/Fr14/Cl/WP	300	6	-	719436.809	4316620.854	0.0118
			FP	B2/SB-D/TDB/Fr14/Cl/FP	100	10	2271.449	1000	2271449	0.0062			
			b.	Portside	Plate	Ps/				B2/SB-D/TDB/Fr14/Ps/			
						WP	B2/SB-D/TDB/Fr14/Ps/WP	300	6	-	476458.757	2858752.542	0.0078
			FP	B2/SB-D/TDB/Fr14/Ps/FP	100	10	1375.887	1000	1375887	0.0037			
c.	Starboard	Plate	Sb/				B2/SB-D/TDB/Fr14/Sb/						
			WP	B2/SB-D/TDB/Fr14/Sb/WP	300	6	-	719436.809	4316620.854	0.0118			
FP	B2/SB-D/TDB/Fr14/Sb/FP	100	10	2271.449	1000	2271449	0.0062						
C.2.2	Transverse Deck Beam Frame 15	LDG/	Fr15/				B2/SB-D/TDB/Fr15/						
			a.	Portside	Plate	Ps/				B2/SB-D/TDB/Fr15/Ps/			
						WP	B2/SB-D/TDB/Fr15/Ps/WP	300	6	-	469976.533	2819859.198	0.0077
			FP	B2/SB-D/TDB/Fr15/Ps/FP	100	10	1478.028	1000	1478028	0.0040			
			c.	Starboard	Plate	Sb/				B2/SB-D/TDB/Fr14/Sb/			
						WP	B2/SB-D/TDB/Fr15/Ps/WP	300	6	-	469976.533	2819859.198	0.0077
FP	B2/SB-D/TDB/Fr15/Ps/FP	100	10	1478.028	1000	1478028	0.0040						
C.2.3	Transverse Deck Beam Frame 16	LDG/	Fr16/				B2/SB-D/TDB/Fr16/						
			a.	Centerline	Plate	Cl/				B2/SB-D/TDB/Fr16/Cl/			
						WP	B2/SB-D/TDB/Fr16/Cl/WP	300	6	-	719436.809	4316620.854	0.0118
			FP	B2/SB-D/TDB/Fr16/Cl/FP	100	10	2281.921	1000	2281921	0.0062			
			b.	Portside	Plate	Ps/				B2/SB-D/TDB/Fr16/Ps/			
						WP	B2/SB-D/TDB/Fr16/Ps/WP	300	6	-	468537.77	2811226.62	0.0077
FP	B2/SB-D/TDB/Fr16/Ps/FP	100	10	1312.31	1000	1312310	0.0036						
c.	Starboard	Plate	Sb/				B2/SB-D/TDB/Fr16/Sb/						
			WP	B2/SB-D/TDB/Fr16/Sb/WP	300	6	-	468537.77	2811226.62	0.0077			
FP	B2/SB-D/TDB/Fr16/Sb/FP	100	10	1312.31	1000	1312310	0.0036						



Kategori	Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
					Breath (mm)	Thickness (mm)						
C.2.4	Transverse Deck Beam	TDB/		B5/SB-D/TDB/								
		Deck Beam Frame 18	Fr18/		B5/SB-D/TDB/Fr18/							
	b. Portside	Centerline	Cl/		B5/SB-D/TDB/Fr18/Cl/							
			Plate	WP	B5/SB-D/TDB/Fr18/Cl/WP	187	5	-	456037.512	2280187.56	0.0062	
		Plate	FP	B5/SB-D/TDB/Fr18/Cl/FP	60	6	2191.97		360	789109.2	0.0021	
			Ps/		B5/SB-D/TDB/Fr18/Ps/							
			Plate	WP	B5/SB-D/TDB/Fr18/Ps/WP	187	5	-	379970.146	1899850.73	0.0052	
			FP	B5/SB-D/TDB/Fr18/Ps/FP	60	6	1872.737		360	674185.32	0.0018	
	c. Starboard	Centerline	Sb/		B5/SB-D/TDB/Fr18/Sb/							
			Plate	WP	B5/SB-D/TDB/Fr18/Sb/WP	187	5	-	379970.146	1899850.73	0.0052	
		Plate	FP	B5/SB-D/TDB/Fr18/Sb/FP	60	6	1872.737		360	674185.32	0.0018	
			Fr19/		B5/SB-D/TDB/Fr19/							
Cl/				B5/SB-D/TDB/Fr19/Cl/								
Plate			WP	B5/SB-D/TDB/Fr19/Cl/WP	187	5	-	458301.976	2291509.88	0.0062		
C.2.5	Transverse Deck Beam Frame 19	FP		B5/SB-D/TDB/Fr19/Cl/FP	60	6	2376.395	360	855502.2	0.0023		
		b. Portside	Centerline	Ps/		B5/SB-D/TDB/Fr19/Ps/						
	Plate			WP	B5/SB-D/TDB/Fr19/Ps/WP	187	5	-	367330.436	1836652.18	0.0050	
	Plate		FP1	B5/SB-D/TDB/Fr19/Ps/FP1	60	6	1106.195		360	398230.2	0.0011	
			FP2	B5/SB-D/TDB/Fr19/Ps/FP2	60	6	261.23		360	94042.8	0.0003	
			Sb/		B5/SB-D/TDB/Fr19/Sb/							
			Plate	WP	B5/SB-D/TDB/Fr19/Sb/WP	187	5	-	367330.436	1836652.18	0.0050	
	c. Starboard	Centerline	FP		B5/SB-D/TDB/Fr19/Sb/FP	60	6	1807.94	360	650858.4	0.0018	
			Plate	MP/		B2/SB-D/MP/						
		P/1			B2/SB-D/MP/P/1	-	8	-	3787504.44	30300035.52	0.0825	
		P/2			B2/SB-D/MP/P/2	-	5	-	540705.248	2703526.24	0.0074	
		P/3			B2/SB-D/MP/P/3	-	10	-	958009.918	9580099.18	0.0261	
P/4			B2/SB-D/MP/P/4	-	5	-	5757134.49	28785672.45	0.0784			
P/5		B2/SB-D/MP/P/5	-	5	-	8785241.1	43926205.5	0.1196				
P/6		B2/SB-D/MP/P/6	-	5	-	866647.042	4333235.21	0.0118				
P/7		B2/SB-D/MP/P/7	-	5	-	474538.489	2372692.445	0.0065				
P/8		B2/SB-D/MP/P/8	-	5	-	8785242.16	43926210.8	0.1196				
P/9		B2/SB-D/MP/P/9	-	5	-	6972181.5	34860907.5	0.0949				
P/10		B2/SB-D/MP/P/10	-	8	-	4071193.62	32569548.96	0.0887				



13 sd 17

Massa jenis Aluminium
Long Frame

2.723

Ton/m³

0.00000001

mm³ to m³



Kategori	Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
					Breath (mm)	Thickness (mm)						
D.1.1	Keel Plate	Plate Bar	K1	B2/SB-LC/B/CI/K1	150	5	-	52345.5459	261727.7295	0.0007		
				B2/SB-LC/B/CI/K2	150	5	-	717766.585	3588832.925	0.0098		
	Stiffener	Plate Bar	S1	B2/SB-LC/B/CI/S1	-	8	-	72485.2897	579882.3176	0.0016		
				B2/SB-LC/B/CI/S2	-	8	-	113713.504	909708.032	0.0025		
				B2/SB-LC/B/CI/S3	-	8	-	115811.382	926491.056	0.0025		
	D.1.2	Long Bottom Section A1	Plate	SA1/	B2/SB-LC/B/Ps/SA1/FB1	-	8	-	1165377.99	9323023.92	0.0254	
					B2/SB-LC/B/Ps/SA1/FB2	-	15	-	4793496.4	71902446	0.1958	
		Stiffener	Plate	S1	B2/SB-LC/B/Ps/SA1/S1	80	8	1059.787	640	678263.68	0.0018	
					B2/SB-LC/B/Ps/SA1/S2	80	8	4472.451	640	2862368.64	0.0078	
					B2/SB-LC/B/Ps/SA1/S3	80	8	3591.217	640	2298378.88	0.0063	
B2/SB-LC/B/Ps/SA1/S4					80	8	4469.414	640	2860424.96	0.0078		
B2/SB-LC/B/Ps/SA2/FB1					-	8	-	207639.05	1661112.4	0.0045		
Stiffener		Plate Bar	S1	B2/SB-LC/B/Ps/SA2/S1	80	8	3570	640	2284800	0.0062		
				B2/SB-LC/B/Ps/SA2/S2	80	8	3570	640	2284800	0.0062		
				B2/SB-LC/B/Ps/SA2/S3	80	8	3570	640	2284800	0.0062		
	B2/SB-LC/B/Ps/SA2/S4			80	8	1170	640	748800	0.0020			
	B2/SB-LC/B/Ps/SA2/S5			80	8	1170	640	748800	0.0020			
	B2/SB-LC/B/Ps/SA2/S6			80	8	1170	640	748800	0.0020			
D.1	Long Bottom Section B2	Plate Bar	SB2/	B2/SB-LC/B/Ps/SB2/FB1	-	8	-	2375605.81	19004846.48	0.0518		
				B2/SB-LC/B/Ps/SB2/FB2	-	5	-	353652.257	1768261.285	0.0048		
	Stiffener	Plate Bar	S1	B2/SB-LC/B/Ps/SB2/S1	90	10	3545.962	900	3191365.8	0.0087		
				B2/SB-LC/B/Ps/SB2/S2	90	10	631.79	900	568611	0.0015		
				B2/SB-LC/B/Ps/SB2/S3	80	10	451.77	800	361416	0.0010		
				B2/SB-LC/B/Ps/SB2/S4	80	10	451.77	800	361416	0.0010		
				B2/SB-LC/B/Ps/SB2/S5	80	8	1086.599	640	695423.36	0.0019		
	D.1	Long Bottom Section A1	Plate	SA1/	B2/SB-LC/B/Sb/SA1/FB1	-	8	-	1165377.99	9323023.92	0.0254	
					B2/SB-LC/B/Sb/SA1/FB2	-	15	-	4793496.4	71902446	0.1958	
		Stiffener	Plate	S1	B2/SB-LC/B/Sb/SA1/S1	80	8	1195.011	640	764807.04	0.0021	
B2/SB-LC/B/Sb/SA1/S2					80	8	1195.011	640	764807.04	0.0021		
B2/SB-LC/B/Sb/SA1/S3					80	8	1195.011	640	764807.04	0.0021		
B2/SB-LC/B/Sb/SA1/S4					80	8	3570.237	640	2284951.68	0.0062		
B2/SB-LC/B/Sb/SA1/S5					80	8	3545	640	2268800	0.0062		
B2/SB-LC/B/Sb/SA1/S6					80	8	3545	640	2268800	0.0062		
Long Bottom Section A2		Plate Bar	SA2/	B2/SB-LC/B/Sb/SA2/FB1	-	8	-	207639.05	1661112.4	0.0045		
				B2/SB-LC/B/Sb/SA2/FB2	-	15	-	4077983.71	61169755.65	0.1666		



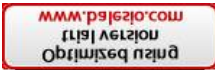
uma	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
Stiffener	Plate Bar	S1	B2/SB-LC/B/Sb/SA2/S1	80	8	3570	640	2284800	0.0062		
		S2	B2/SB-LC/B/Sb/SA2/S2	80	8	3570	640	2284800	0.0062		
		S3	B2/SB-LC/B/Sb/SA2/S3	80	8	3570	640	2284800	0.0062		
		S4	B2/SB-LC/B/Sb/SA2/S4	80	8	1170	640	748800	0.0020		
		S5	B2/SB-LC/B/Sb/SA2/S5	80	8	1170	640	748800	0.0020		
		S6	B2/SB-LC/B/Sb/SA2/S6	80	8	1170	640	748800	0.0020		
3	Long Bottom Section B2	SB2/		B2/SB-LC/B/Sb/SB2/							
a.	Plat Bar	Plate Bar	FB1	B2/SB-LC/B/Sb/SB2/FB1	-	8	-	2375605.81	19004846.48	0.0518	
			FB2	B2/SB-LC/B/Sb/SB2/FB2	-	5	-	353652.257	1768261.285	0.0048	
b.	Stiffener	Plate Bar	S1	B2/SB-LC/B/Sb/SB2/S1	90	10	3545.962	900	3191365.8	0.0087	
			S2	B2/SB-LC/B/Sb/SB2/S2	90	10	631.79	900	568611	0.0015	
			S3	B2/SB-LC/B/Sb/SB2/S3	80	10	451.77	800	361416	0.0010	
			S4	B2/SB-LC/B/Sb/SB2/S4	80	10	451.77	800	361416	0.0010	
			S5	B2/SB-LC/B/Sb/SB2/S5	80	8	1086.599	640	695423.36	0.0019	
Longitudinal Tank Top Construction		TT/		B2/SB-LC/TT/							
Portside		Ps/		B2/SB-LC/TT/Ps/							
D.2.1	1	Section A-1	SA-1/		B2/SB-LC/TT/Ps/SA-1/						
			Plate Bar	WP1	B2/SB-LC/TT/Ps/SA-1/WP1	180	8	-	415757.406	3326059.248	0.0091
				FP1	B2/SB-LC/TT/Ps/SA-1/FP1	100	10	2120.974	1000	2120974	0.0058
			Pillar	P1	B2/SB-LC/TT/Ps/SA-1/P1	127	6.35	2030.5	3064.51	6222487.555	0.0169
D.2.2	2	Section A-2	SA-2/		B2/SB-LC/TT/Ps/SA-2/						
			Plate Bar	WP1	B2/SB-LC/TT/Ps/SA-2/WP1	180	8	-	415757.406	3326059.248	0.0091
				FP1	B2/SB-LC/TT/Ps/SA-2/FP1	100	10	2120.974	1000	2120974	0.0058
			Pillar	P1	B2/SB-LC/TT/Ps/SA-2/P1	127	6.35	2030.5	3064.51	6222487.555	0.0169
Starboard		Sb/		B2/SB-LC/TT/Sb/							
D.2.2	1	Section A-1	SA-1/		B2/SB-LC/TT/Sb/SA-1/						
			Plate Bar	WP1	B2/SB-LC/TT/Sb/SA-1/WP1	180	8	-	415757.406	3326059.248	0.0091
				FP1	B2/SB-LC/TT/Sb/SA-1/FP1	100	10	2120.974	1000	2120974	0.0058
			Pillar	P1	B2/SB-LC/TT/Sb/SA-1/P1	127	6.35	2030.5	3064.51	6222487.555	0.0169
D.2.2	2	Section A-2	SA-2/		B2/SB-LC/TT/Sb/SA-2/						
			Plate Bar	WP1	B2/SB-LC/TT/Sb/SA-2/WP1	180	8	-	415757.406	3326059.248	0.0091
				FP1	B2/SB-LC/TT/Sb/SA-2/FP1	100	10	2120.974	1000	2120974	0.0058
			Pillar	P1	B2/SB-LC/TT/Sb/SA-2/P1	127	6.35	2030.5	3064.51	6222487.555	0.0169
Deck Construction		D/		B2/SB-LC/D/							
D.3	D.3.1	a.	Portside		B2/SB-LC/D/Ps/						
			Deck	Plate Bar	WP	B2/SB-LC/D/Ps/WP	-	8	-	1796050.838	14368406.7
		FP	B2/SB-LC/D/Ps/FP	150	12	4785.206	1800	8613370.8	0.0235		
	D.3.2	b.	Starboard		B2/SB-LC/D/Sb/						
Deck			Plate Bar	WP	B2/SB-LC/D/Sb/WP	-	8	-	1796050.838	14368406.7	0.0391
	FP	B2/SB-LC/D/Sb/FP	150	12	4785.206	1800	8613370.8	0.0235			



Kategori	Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar
					Breath (mm)	Thickness (mm)					
D.4	D.4.1	Wing Tank Blukhead	Bkh/		B2/SB-LC/Bkh/						
			Ps/		B2/SB-LC/Bkh/Ps/						
			Plate Bar	FB1	B2/SB-LC/Bkh/Ps/FB1	-	5	-	4624219.79	23121098.95	0.0630
				FB2	B2/SB-LC/Bkh/Ps/FB2	-	5	-	3464450.13	17322250.65	0.0472
			Stiffener	S1	B2/SB-LC/Bkh/Ps/S1	85	5	648.28	0	0.0000	
				S2	B2/SB-LC/Bkh/Ps/S2	85	5	3594	648.28	2329918.32	0.0063
				S3	B2/SB-LC/Bkh/Ps/S3	85	5	3594	648.28	2329918.32	0.0063
				S4	B2/SB-LC/Bkh/Ps/S4	85	5	3594	648.28	2329918.32	0.0063
				S5	B2/SB-LC/Bkh/Ps/S5	85	5	2548.66	648.28	1652245.305	0.0045
				S6	B2/SB-LC/Bkh/Ps/S6	85	5	539.45	648.28	349714.646	0.0010
S7	B2/SB-LC/Bkh/Ps/S7	85		5	539.45	648.28	349714.646	0.0010			
S8	B2/SB-LC/Bkh/Ps/S8	85		5	3594	648.28	2329918.32	0.0063			
S9	B2/SB-LC/Bkh/Ps/S9	85	5	3594	648.28	2329918.32	0.0063				
D.4.2	D.4.2	Wing Tank Blukhead	Sb/		B2/SB-LC/Bkh/Sb/						
			Ps/		B2/SB-LC/Bkh/Ps/						
			Plate Bar	FB1	B2/SB-LC/Bkh/Sb/FB1	-	5	-	4624219.79	23121098.95	0.0630
				FB2	B2/SB-LC/Bkh/Sb/FB2	-	5	-	3464450.13	17322250.65	0.0472
			Stiffener	S1	B2/SB-LC/Bkh/Sb/S1	85	5	648.28	0	0.0000	
				S2	B2/SB-LC/Bkh/Sb/S2	85	5	3594	648.28	2329918.32	0.0063
				S3	B2/SB-LC/Bkh/Sb/S3	85	5	3594	648.28	2329918.32	0.0063
				S4	B2/SB-LC/Bkh/Sb/S4	85	5	3594	648.28	2329918.32	0.0063
				S5	B2/SB-LC/Bkh/Sb/S5	85	5	2548.66	648.28	1652245.305	0.0045
				S6	B2/SB-LC/Bkh/Sb/S6	85	5	539.45	648.28	349714.646	0.0010
S7	B2/SB-LC/Bkh/Sb/S7	85		5	539.45	648.28	349714.646	0.0010			
S8	B2/SB-LC/Bkh/Sb/S8	85		5	3594	648.28	2329918.32	0.0063			
S9	B2/SB-LC/Bkh/Sb/S9	85	5	3594	648.28	2329918.32	0.0063				
Sub Block Bottom			SB-B/		B2/SB-B/						
E.1	E.1	Inner Bottom (Tank Top Stiffener)	TT/Sf/		B2/SB-B/TT/Sf/						
			Plate Bar	1	B2/SB-B/TT/Sf/1	100	8	3595	800	2876000	0.0078
				2	B2/SB-B/TT/Sf/2	100	8	3595	800	2876000	0.0078
				3	B2/SB-B/TT/Sf/3	100	8	1985	800	1588000	0.0043
				4	B2/SB-B/TT/Sf/4	100	8	3595	800	2876000	0.0078
				5	B2/SB-B/TT/Sf/5	100	8	3595	800	2876000	0.0078
				6	B2/SB-B/TT/Sf/6	100	8	1985	800	1588000	0.0043
				7	B2/SB-B/TT/Sf/7	100	8	3595	800	2876000	0.0078
				8	B2/SB-B/TT/Sf/8	100	8	3595	800	2876000	0.0078



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar			
				Breath (mm)	Thickness (mm)								
Centerline				TT/P/		B2/SB-B/TT/P/							
				Cl/		B2/SB-B/TT/P/Cl/							
E.2	E.2.1	1	Plat Tank Top	Plate Bar	FB1	B2/SB-B/TT/P/Cl/	8	-	2132817.06	17062536.48	0.0465	46	
					FB2	B2/SB-B/TT/P/Cl/	30	-	1253210.2	37596306	0.1024	102	
					FB3	B2/SB-B/TT/P/Cl/	50	-	764234.073	38211703.65	0.1041	104	
					FB4	B2/SB-B/TT/P/Cl/	50	-	972734.07	48636703.5	0.1324	132	
					FB5	B2/SB-B/TT/P/Cl/	120	15	572.5	1800	1030500	0.0028	3
					FB6	B2/SB-B/TT/P/Cl/	120	15	572.5	1800	1030500	0.0028	3
					FB7	B2/SB-B/TT/P/Cl/	50	-	607015.6	30350780	0.0826	83	
					FB8	B2/SB-B/TT/P/Cl/	50	-	815515.6	40775780	0.1110	111	
					FB9	B2/SB-B/TT/P/Cl/	120	30	765	3600	2754000	0.0075	7
					FB10	B2/SB-B/TT/P/Cl/	120	30	765	3600	2754000	0.0075	7
					FB11	B2/SB-B/TT/P/Cl/	30	-	252600	7578000	0.0206	21	
					FB12	B2/SB-B/TT/P/Cl/	120	30	765	3600	2754000	0.0075	7
					FB13	B2/SB-B/TT/P/Cl/	120	30	765	3600	2754000	0.0075	7
					2	Stiffener	Plate Bar	S1	B2/SB-B/TT/P/Cl/	75	8	690.41	600
S2	B2/SB-B/TT/P/Cl/	75	8	690.41				600	414246	0.0011	1.127991858		
S3	B2/SB-B/TT/P/Cl/	80	10	1015				800	812000	0.0022	2.211076		
S4	B2/SB-B/TT/P/Cl/	80	10	1015				800	812000	0.0022	2.211076		
Portside				Ps/		B2/SB-B/TT/P/Ps/							
E.2.1 Section A				SA/		B2/SB-B/TT/P/Ps/SA/							
E.2.2	1	Plat Tank Top	Plate Bar	FB1	B2/SB-B/TT/P/Ps/SA/	8	-	2601250	20810000	0.0567	57		
				FB2	B2/SB-B/TT/P/Ps/SA/	30	-	252600	7578000	0.0206	21		
				FB3	B2/SB-B/TT/P/Ps/SA/	15	-	1013145.01	15197175.15	0.0414	41		
				FB4	B2/SB-B/TT/P/Ps/SA/	30	-	471688.05	14150641.5	0.0385	39		
				FB5	B2/SB-B/TT/P/Ps/SA/	30	-	252586.38	7577591.4	0.0206	21		
				FB6	B2/SB-B/TT/P/Ps/SA/	75	8	690.41	600	414246	0.0011	1.127991858	
2	Stiffener	Plate Bar	S1	B2/SB-B/TT/P/Ps/SA/	75	8	690.41	600	414246	0.0011	1.127991858		
			S2	B2/SB-B/TT/P/Ps/SA/	75	8	690.41	600	414246	0.0011	1.127991858		
E.2.2 Section B				SB/		B2/SB-B/TT/P/Ps/SB/							
E.2.2		Section B	Plate Bar	FB1	B2/SB-B/TT/P/Ps/SB/	12	-	215035	2580420	0.0070	7.02648366		
				FB2	B2/SB-B/TT/P/Ps/SB/	15	-	397814.51	5967217.65	0.0162	16.24873366		
				FB3	B2/SB-B/TT/P/Ps/SB/	15	-	355463.46	5331951.9	0.0145	14.51890502		
				FB4	B2/SB-B/TT/P/Ps/SB/	80	8	72900.28	583202.24	0.0016	1.5880597		
Starboard				Sb/		B2/SB-B/TT/P/Sb/							
E.3.1 Section A				SA/		B2/SB-B/TT/P/Sb/SA/							
E.2.3	1	Plat Tank Top	Plate Bar	FB1	B2/SB-B/TT/P/Ps/SA/	8	-	2219650	17757200	0.0484	48		
				FB2	B2/SB-B/TT/P/Ps/SA/	30	-	252600	7578000	0.0206	21		
				FB3	B2/SB-B/TT/P/Ps/SA/	15	-	1013145.01	15197175.15	0.0414	41		
				FB4	B2/SB-B/TT/P/Ps/SA/	30	-	471688.05	14150641.5	0.0385	39		
				S1	B2/SB-B/TT/P/Ps/SA/	75	8	690.41	600	414246	0.0011	1.127991858	
				S2	B2/SB-B/TT/P/Ps/SA/	75	8	690.41	600	414246	0.0011	1.127991858	
E.3.2	Section B	Plate Bar	FB1	B2/SB-B/TT/P/Ps/SB/	12	-	215035	2580420	0.0070	7.02648366			
			FB2	B2/SB-B/TT/P/Ps/SB/	15	-	397814.51	5967217.65	0.0162	16.24873366			
			FB3	B2/SB-B/TT/P/Ps/SB/	15	-	355463.46	5331951.9	0.0145	14.51890502			
			FB4	B2/SB-B/TT/P/Ps/SB/	80	8	72900.28	583202.24	0.0016	1.5880597			



18 sd 22

Massa jenis Aluminium

2.723

Ton/m³

0.00000001

mm³ to m³

0.000001

66 Long Frame



	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
		SB-F/				B5/SB-F/					
		SB-F/				B5/SB-F/					
		LF/B/				B5/SB-F/LF/B/					
	Portside	Ps/				B5/SB-F/LF/B/Ps/					
a.	1	LFP 1	T Bar	B5/SB-F/LF/B/Ps/1	100x65	6	6000	954	5724000	0.0156	
	2	LFP 2		B5/SB-F/LF/B/Ps/2	100x65	6	6000	954	5724000	0.0156	
	3	LFP 3		B5/SB-F/LF/B/Ps/3	100x65	6	6000	954	5724000	0.0156	
	4	LFP 4		B5/SB-F/LF/B/Ps/4	100x65	6	6000	954	5724000	0.0156	
	5	LFP 5		B5/SB-F/LF/B/Ps/5	100x65	6	6000	954	5724000	0.0156	
	6	LFP 6		B5/SB-F/LF/B/Ps/6	100x65	6	6000	954	5724000	0.0156	
	7	LFP 7		B5/SB-F/LF/B/Ps/7	100x65	6	6000	954	5724000	0.0156	
	8	LFP 8		B5/SB-F/LF/B/Ps/8	100x65	6	6000	954	5724000	0.0156	
	9	LFP 9		B5/SB-F/LF/B/Ps/9	100x65	6	6000	954	5724000	0.0156	
	10	LFP 10		B5/SB-F/LF/B/Ps/10	100x65	6	6000	954	5724000	0.0156	
	11	LFP 11		B5/SB-F/LF/B/Ps/11	100x65	6	6000	954	5724000	0.0156	
	12	LFP 12		B5/SB-F/LF/B/Ps/12	100x65	6	6000	954	5724000	0.0156	
	13	LFP 13		B5/SB-F/LF/B/Ps/13	100x65	6	4800	954	4579200	0.0125	
Long Frame Side Shell Portside		LF/Ss1/Ps/				B5/SB-F/LF/Ss1/Ps/					
b.	1	LF/Ps/Ss1	Bulb Plat	B5/SB-F/LF/Ss1/Ps/1	85	5	3600	648.28	2333808	0.0064	
	2	LF/Ps/Ss2		B5/SB-F/LF/Ss1/Ps/2	85	5	6000	648.28	3889680	0.0106	
	3	LF/Ps/Ss3		B5/SB-F/LF/Ss1/Ps/3	85	5	6000	648.28	3889680	0.0106	
	4	LF/Ps/Ss4		B5/SB-F/LF/Ss1/Ps/4	85	5	6000	648.28	3889680	0.0106	
	5	LF/Ps/Ss5		B5/SB-F/LF/Ss1/Ps/5	85	5	6000	648.28	3889680	0.0106	
	6	LF/Ps/Ss6		B5/SB-F/LF/Ss1/Ps/6	85	5	6000	648.28	3889680	0.0106	
	7	LF/Ps/Ss7		B5/SB-F/LF/Ss1/Ps/7	85	5	6000	648.28	3889680	0.0106	
	8	LF/Ps/Ss8		B5/SB-F/LF/Ss1/Ps/8	85	5	6000	648.28	3889680	0.0106	
	9	LF/Ps/Ss9		B5/SB-F/LF/Ss1/Ps/9	85	5	6000	648.28	3889680	0.0106	
	10	LF/Ps/Ss10		B5/SB-F/LF/Ss1/Ps/10	85	5	6000	648.28	3889680	0.0106	
Tranverse Frame		TF/Fr20/				B5/SB-F/TF/Fr20/					
A.2.1	Transverse Frame 20		TF/Fr20/			B5/SB-F/TF/Fr20/					
	1	Portside	Ps/			B5/SB-F/TF/Fr20/Ps/					
		Bottom	B/			B5/SB-F/TF/Fr20/Ps/B/					
	a.	Section A	Plate Bar	P	B5/SB-F/TF/Fr20/Ps/B/P	-	5	-	1431440.42	7157202.1	0.0195
				S1	B5/SB-F/TF/Fr20/Ps/B/S1	80	8	1282.119	640	820556.16	0.0022
			Stiffener	S2	B5/SB-F/TF/Fr20/Ps/B/S2	80	8	991.964	640	634856.96	0.0017
				S3	B5/SB-F/TF/Fr20/Ps/B/S3	80	8	660.694	640	422844.16	0.0012
				S4	B5/SB-F/TF/Fr20/Ps/B/S4	80	8	1100.277	640	704177.28	0.0019
	b.	Section B	Plate Bar	WP	B5/SB-F/TF/Fr20/Ps/B/WP	-	5	-	944192.262	4720961.31	0.0129
				S1	B5/SB-F/TF/Fr20/Ps/B/S1	80	8	1062.291	640	679866.24	0.0019
Stiffener			S2	B5/SB-F/TF/Fr20/Ps/B/S2	80	8	485.481	640	310707.84	0.0008	
			S3	B5/SB-F/TF/Fr20/Ps/B/S3	80	8	292.321	640	187085.44	0.0005	
			S4	B5/SB-F/TF/Fr20/Ps/B/S4	80	8	1214.849	640	777503.36	0.0021	
S5	B5/SB-F/TF/Fr20/Ps/B/S5	80	8	393.387	640	251767.68	0.0007				

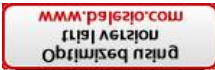
66

Long Frame



Starboard

	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar		
				Breath (mm)	Thickness (mm)							
Side Shell	SS/			B5/SB-F/TF/Fr20/Ps/SS/								
	Plate Bar	WP	B5/SB-F/TF/Fr20/Ps/SS/WP	-	5	-	758063.366	3790316.83	0.0103			
	Plate Bar	FP	B5/SB-F/TF/Fr20/Ps/SS/FP	80	8	4429.924	640	2835151.36	0.0077			
Bottom	Sb/			B5/SB-F/TF/Fr20/Sb/								
	B/			B5/SB-F/TF/Fr20/Sb/B/								
a.	Section A	Plate Bar	P	B5/SB-F/TF/Fr20/Sb/B/P	-	5	-	1431440.42	7157202.1	0.0195		
		Stiffener	S1	B5/SB-F/TF/Fr20/Sb/B/S1	80	8	1282.119	640	820556.16	0.0022		
			S2	B5/SB-F/TF/Fr20/Sb/B/S2	80	8	991.964	640	634856.96	0.0017		
			S3	B5/SB-F/TF/Fr20/Sb/B/S3	80	8	660.694	640	422844.16	0.0012		
			S4	B5/SB-F/TF/Fr20/Sb/B/S4	80	8	1100.277	640	704177.28	0.0019		
b.	Section B	Plate Bar	WP	B5/SB-F/TF/Fr20/Sb/B/WP	-	5	-	944192.262	4720961.31	0.0129		
		Stiffener	S1	B5/SB-F/TF/Fr20/Sb/B/S1	80	8	1062.291	640	679866.24	0.0019		
			S2	B5/SB-F/TF/Fr20/Sb/B/S2	80	8	485.481	640	310707.84	0.0008		
			S3	B5/SB-F/TF/Fr20/Sb/B/S3	80	8	292.321	640	187085.44	0.0005		
			S4	B5/SB-F/TF/Fr20/Sb/B/S4	80	8	1214.849	640	777503.36	0.0021		
	S5	B5/SB-F/TF/Fr20/Sb/B/S5	80	8	393.387	640	251767.68	0.0007				
b.	Side Shell			SS/								
	Frame Side Shell			B5/SB-F/TF/Fr20/Sb/SS/								
	Plate Bar	WP	B5/SB-F/TF/Fr20/Sb/SS/WP	-	5	-	758063.366	3790316.83	0.0103			
	Plate Bar	FP	B5/SB-F/TF/Fr20/Sb/SS/FP	80	8	4429.924	640	2835151.36	0.0077			
A.2.2	Transverse Frame 21			TF/Fr22/								
	1 Portside			Ps/								
	Bottom			B/								
	a.	Section A	Plate Bar	P	B5/SB-F/TF/Fr22/Ps/B/P	-	5	-	898106.926	4490534.63	0.0122	
			Stiffener	S1	B5/SB-F/TF/Fr22/Ps/B/S1	80	8	1310.044	640	838428.16	0.0023	
				S2	B5/SB-F/TF/Fr22/Ps/B/S2	80	8	986.472	640	631342.08	0.0017	
				S3	B5/SB-F/TF/Fr22/Ps/B/S3	80	8	631.777	640	404337.28	0.0011	
				S4	B5/SB-F/TF/Fr22/Ps/B/S4	80	8	1102.177	640	705393.28	0.0019	
	b.	Section B	Plate Bar	WP	B5/SB-F/TF/Fr22/Ps/B/WP	-	5	-	865711.714	4328558.57	0.0118	
			Stiffener	S1	B5/SB-F/TF/Fr22/Ps/B/S1	80	8	1047.8	640	670592	0.0018	
				S2	B5/SB-F/TF/Fr22/Ps/B/S2	80	8	953.149	640	610015.36	0.0017	
		S3	B5/SB-F/TF/Fr22/Ps/B/S3	80	8	434.92	640	278348.8	0.0008			
	c.	Side Shell			SS/							
		Frame Side Shell			B5/SB-F/TF/Fr22/Ps/SS/							
		Plate Bar	WP	B5/SB-F/TF/Fr22/Ps/SS/WP	-	5	-	765868.166	3829340.83	0.0104		
	Plate Bar	FP	B5/SB-F/TF/Fr22/Ps/SS/FP	80	8	4229.95	640	2707168	0.0074			
2	Starboard			Sb/								
	Bottom			B/								
	a.	Section A	Plate Bar	P	B5/SB-F/TF/Fr22/Sb/B/P	-	5	-	898106.926	4490534.63	0.0122	
			Stiffener	S1	B5/SB-F/TF/Fr22/Sb/B/S1	80	8	1310.044	640	838428.16	0.0023	
				S2	B5/SB-F/TF/Fr22/Sb/B/S2	80	8	986.472	640	631342.08	0.0017	
				S3	B5/SB-F/TF/Fr22/Sb/B/S3	80	8	631.777	640	404337.28	0.0011	
				S4	B5/SB-F/TF/Fr22/Sb/B/S4	80	8	1102.177	640	705393.28	0.0019	
	b.	Section B	Plate Bar	WP	B5/SB-F/TF/Fr22/Sb/B/WP	-	5	-	865711.714	4328558.57	0.0118	
			Stiffener	S1	B5/SB-F/TF/Fr22/Sb/B/S1	80	8	1047.8	640	670592	0.0018	
				S2	B5/SB-F/TF/Fr22/Sb/B/S2	80	8	953.149	640	610015.36	0.0017	
	S3	B5/SB-F/TF/Fr22/Sb/B/S3	80	8	434.92	640	278348.8	0.0008				



18 sd 22

Massa jenis Aluminium

2.723

Ton/m³

0.00000001

mm³ to m³

0.000001

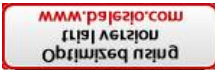
66 Long Frame

	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
		SS/		B5/SB-F/TF/Fr22/Sb/SS/							
Side Shell	Plate Bar	WP	B5/SB-F/TF/Fr22/Sb/SS/WP	-	5	-	765868.166	3829340.83	0.0104		
	Plate Bar	FP	B5/SB-F/TF/Fr22/Sb/SS/FP	80	8		640	0	0.0000		
		S-TB/		B5/S-TB/							
Bulkhead Frame 22		Fr22/		B5/S-TB/Fr22/							
		P/		B5/S-TB/Fr22/P/							
	Plate Bar	1	B5/S-TB/Fr22/P/1	-	5	-	529686.482	2648432.41	0.0072		
		2	B5/S-TB/Fr22/P/2	-	5	-	6665454.96	33327274.8	0.0908		
		3	B5/S-TB/Fr22/P/3	-	5	-	781791.04	3908955.2	0.0106		
		4	B5/S-TB/Fr22/P/4	-	5	-	9810268.92	49051344.6	0.1336		
		5	B5/S-TB/Fr22/P/5	-	5	-	3872580.74	19362903.7	0.0527		
B.1.2	Stiffener Bulkhead	Sf/		B5/S-TB/Fr22/Sf/							
1	Plate Bar	Plate Bar	FB1	B5/S-TB/Fr22/Sf/FB1	90	8	1799.356	720	1295536.32	0.0035	
			FB2	B5/S-TB/Fr22/Sf/FB2	90	8	2390	720	1720800	0.0047	
			FB3	B5/S-TB/Fr22/Sf/FB3	90	8	2390	720	1720800	0.0047	
			FB4	B5/S-TB/Fr22/Sf/FB4	90	8	2390	720	1720800	0.0047	
			FB5	B5/S-TB/Fr22/Sf/FB5	90	8	6153.66	720	4430635.2	0.0121	
			FB6	B5/S-TB/Fr22/Sf/FB6	90	8	1374	720	989280	0.0027	
			FB7	B5/S-TB/Fr22/Sf/FB7	90	8	460	720	331200	0.0009	
			FB8	B5/S-TB/Fr22/Sf/FB8	90	8	6153.66	720	4430635.2	0.0121	
2	Stiffener T	T Bar	Tb1	B5/S-TB/Fr22/Sf/Tb1	100 x 65	6	1072.069	954	1022753.826	0.0028	
			Tb2	B5/S-TB/Fr22/Sf/Tb2	100 x 65	6	1843.45	954	1758651.3	0.0048	
			Tb3	B5/S-TB/Fr22/Sf/Tb3	100 x 65	6	2028.552	954	1935238.608	0.0053	
			Tb4	B5/S-TB/Fr22/Sf/Tb4	100 x 65	6	2172.41	954	2072479.14	0.0056	
			Tb5	B5/S-TB/Fr22/Sf/Tb5	100 x 65	6	2315.048	954	2208555.792	0.0060	
			Tb6	B5/S-TB/Fr22/Sf/Tb6	100 x 65	6	2460.69	954	2347498.26	0.0064	
			Tb7	B5/S-TB/Fr22/Sf/Tb7	100 x 65	6	2599.14	954	2479579.56	0.0068	
			Tb8	B5/S-TB/Fr22/Sf/Tb8	101 x 65	6	2197	954	2095938	0.0057	
			Tb9	B5/S-TB/Fr22/Sf/Tb9	102 x 65	6	2197	954	2095938	0.0057	
			Tb10	B5/S-TB/Fr22/Sf/Tb10	101 x 65	6	2197	954	2095938	0.0057	
			Tb11	B5/S-TB/Fr22/Sf/Tb11	102 x 65	6	2197	954	2095938	0.0057	
			Tb12	B5/S-TB/Fr22/Sf/Tb12	100 x 65	6	2197	954	2095938	0.0057	
			Tb13	B5/S-TB/Fr22/Sf/Tb13	100 x 65	6	2197	954	2095938	0.0057	
			Tb14	B5/S-TB/Fr22/Sf/Tb14	100 x 65	6	2599.14	954	2479579.56	0.0068	
			Tb15	B5/S-TB/Fr22/Sf/Tb15	100 x 65	6	2460.69	954	2347498.26	0.0064	
			Tb16	B5/S-TB/Fr22/Sf/Tb16	100 x 65	6	2315.048	954	2208555.792	0.0060	
			Tb17	B5/S-TB/Fr22/Sf/Tb17	100 x 65	6	2172.41	954	2072479.14	0.0056	
			Tb18	B5/S-TB/Fr22/Sf/Tb18	100 x 65	6	2028.552	954	1935238.608	0.0053	
			Tb19	B5/S-TB/Fr22/Sf/Tb19	100 x 65	6	1843.45	954	1758651.3	0.0048	
			Tb20	B5/S-TB/Fr22/Sf/Tb20	100 x 65	6	1072.069	954	1022753.826	0.0028	

66 Long Frame



	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
		SB-D/				B5/SB-D/					
		LDG/				B5/SB-D/LDG/					
		CI/				B5/SB-D/LDG/CI/					
1	Centerline	Bulb Plat	1	B5/SB-D/LDG/CI/1	60	5	4495.64	408.28	1835479.899	0.0050	
			2	B5/SB-D/LDG/CI/2	60	5	5760	408.28	2351692.8	0.0064	
			3	B5/SB-D/LDG/CI/3	60	5	5760	408.28	2351692.8	0.0064	
			4	B5/SB-D/LDG/CI/4	60	5	5760	408.28	2351692.8	0.0064	
			5	B5/SB-D/LDG/CI/5	60	5	5760	408.28	2351692.8	0.0064	
			6	B5/SB-D/LDG/CI/6	60	5	5760	408.28	2351692.8	0.0064	
			7	B5/SB-D/LDG/CI/7	60	5	3360	408.28	1371820.8	0.0037	
			8	B5/SB-D/LDG/CI/8	60	5	3360	408.28	1371820.8	0.0037	
			9	B5/SB-D/LDG/CI/9	60	5	2094.55	408.28	855162.874	0.0023	
			Plate Bar	FB1	B5/SB-D/LDG/CI/FB1	60	5	415	300	124500	0.0003
	FB2	B5/SB-D/LDG/CI/FB2		60	5	415	300	124500	0.0003		
2	Portside	Bulb Plat	Ps/				B5/SB-D/LDG/Ps/				
			1	B5/SB-D/LDG/Ps/1	60	5	5760	408.28	2351692.8	0.0064	
			2	B5/SB-D/LDG/Ps/2	60	5	5760	408.28	2351692.8	0.0064	
			3	B5/SB-D/LDG/Ps/3	60	5	5760	408.28	2351692.8	0.0064	
			4	B5/SB-D/LDG/Ps/4	60	5	5760	408.28	2351692.8	0.0064	
			5	B5/SB-D/LDG/Ps/5	60	5	5760	408.28	2351692.8	0.0064	
			6	B5/SB-D/LDG/Ps/6	60	5	5760	408.28	2351692.8	0.0064	
			7	B5/SB-D/LDG/Ps/7	60	5	3360	408.28	1371820.8	0.0037	
		8	B5/SB-D/LDG/Ps/8	60	5	3360	408.28	1371820.8	0.0037		
	Bulb Plat	Sb/				B5/SB-D/LDG/Sb/					
1		B5/SB-D/LDG/Sb/1	60	5	5760	408.28	2351692.8	0.0064			
2		B5/SB-D/LDG/Sb/2	60	5	5760	408.28	2351692.8	0.0064			
3		B5/SB-D/LDG/Sb/3	60	5	5760	408.28	2351692.8	0.0064			
4		B5/SB-D/LDG/Sb/4	60	5	5760	408.28	2351692.8	0.0064			
5		B5/SB-D/LDG/Sb/5	60	5	5760	408.28	2351692.8	0.0064			
6		B5/SB-D/LDG/Sb/6	60	5	5760	408.28	2351692.8	0.0064			
7		B5/SB-D/LDG/Sb/7	60	5	3360	408.28	1371820.8	0.0037			
8	B5/SB-D/LDG/Sb/8	60	5	3360	408.28	1371820.8	0.0037				
Transverse Deck Beam		TDB/				B5/SB-D/TDB/					
C.2.1	a.	Centerline	Fr20/				B5/SB-D/TDB/Fr20/				
			CI/				B5/SB-D/TDB/Fr20/CI/				
			Plate	WP1	B5/SB-D/TDB/Fr20/CI/WP1	187	5	-	322946.248	1614731.24	0.0044
	FP1			B5/SB-D/TDB/Fr20/CI/FP1	60	6	1475	360	531000	0.0014	
	Plate		WP2	B5/SB-D/TDB/Fr20/CI/WP2	187	5	-	165467.716	827338.58	0.0023	
			FP2	B5/SB-D/TDB/Fr20/CI/FP2	60	6	753	360	271080	0.0007	
	b.	Portside	Ps/				B5/SB-D/TDB/Fr20/Ps/				
			Plate	WP	B5/SB-D/TDB/Fr20/Ps/WP	187	5	-	367330.436	1836652.18	0.0050
	FP	B5/SB-D/TDB/Fr20/Ps/FP		60	6	1807.94	360	650858.4	0.0018		
	c.	Starboard	Sb/				B5/SB-D/TDB/Fr20/Sb/				
Plate			WP	B5/SB-D/TDB/Fr20/Sb/WP	187	5	-	367330.436	1836652.18	0.0050	
	FP	B5/SB-D/TDB/Fr20/Sb/FP	60	6	1807.94	360	650858.4	0.0018			



18 sd 22

Massa jenis Aluminium

2.723

Ton/m³

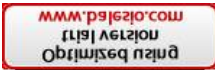
0.00000001

mm³ to m³

0.000001

66 Long Frame

C.2.2	b.	Portside	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
						Breath (mm)	Thickness (mm)						
				Fr21		B5/SB-D/TDB/Fr21							
				CI/		B5/SB-D/TDB/Fr21CI/							
			Plate	WP	B5/SB-D/TDB/Fr21CI/WP	187	5	-	322942.874	1614714.37	0.0044		
				FP	B5/SB-D/TDB/Fr21CI/FP	60	6	1475	360	531000	0.0014		
				Ps/		B5/SB-D/TDB/Fr21Ps/							
			Plate	WP	B5/SB-D/TDB/Fr21Ps/WP	187	5	-	367330.436	1836652.18	0.0050		
				FP	B5/SB-D/TDB/Fr21Ps/FP	60	6	1807.94	360	650858.4	0.0018		
				Sb/		B5/SB-D/TDB/Fr21Sb/							
			Plate	WP	B5/SB-D/TDB/Fr21Sb/WP	187	5	-	367330.436	1836652.18	0.0050		
				FP	B5/SB-D/TDB/Fr21Sb/FP	60	6	1807.94	360	650858.4	0.0018		
				SB-LC/		B5/SB-LC/							
				B/		B5/SB-LC/B/							
				CI/		B5/SB-LC/B/CI/							
			a.	Keel Plate	Plate Bar	K3	B5/SB-LC/B/CI/K3	150	5	-	2585727.14	12928635.7	0.0352
						Tc/	B5/SB-LC/B/CI/Tc/						
			b.	Tank Coonstruction	Web Plate	WP1	B5/SB-LC/B/CI/Tc/WP1	-	5	-	1448486.82	7242434.1	0.0197
			WP2			B5/SB-LC/B/CI/Tc/WP2	-	5	-	3118288.66	15591443.3	0.0425	
			Stiffener		FP1	B5/SB-LC/B/CI/Tc/FP1	80	8	3168.903	640	2028097.92	0.0055	
					FP2	B5/SB-LC/B/CI/Tc/FP2	80	8	3409.694	640	2182204.16	0.0059	
					FP3	B5/SB-LC/B/CI/Tc/FP3	80	8	3631.966	640	2324458.24	0.0063	
					FP4	B5/SB-LC/B/CI/Tc/FP4	80	8	3649.85	640	2335904	0.0064	
					FP5	B5/SB-LC/B/CI/Tc/FP5	80	8	3452.319	640	2209484.16	0.0060	
				Ps/		B5/SB-LC/B/Ps/							
				Bkh/		B5/SB-LC/B/Ps/Bkh/							
			b.	Longitudinal Bulkhead	Web Plate	WP1	B5/SB-LC/B/Ps/Bkh/WP1	-	5	-	785032.036	3925160.18	0.0107
			WP2			B5/SB-LC/B/Ps/Bkh/WP2	-	5	-	4997843.82	24989219.1	0.0680	
			Stiffener		FP1	B5/SB-LC/B/Ps/Bkh/FP1	90	8	2607.427	720	1877347.44	0.0051	
					FP2	B5/SB-LC/B/Ps/Bkh/FP2	90	8	4558.097	720	3281829.84	0.0089	
					FP3	B5/SB-LC/B/Ps/Bkh/FP3	90	8	4558.097	720	3281829.84	0.0089	
					FP4	B5/SB-LC/B/Ps/Bkh/FP4	90	8	4558.097	720	3281829.84	0.0089	
					FP5	B5/SB-LC/B/Ps/Bkh/FP5	90	8	4558.097	720	3281829.84	0.0089	
					Sb/		B5/SB-LC/B/Sb/						
					Bkh/		B5/SB-LC/B/Sb/Bkh/						
			b.	Longitudinal Bulkhead	Web Plate	WP1	B5/SB-LC/B/Sb/Bkh/WP1	-	5	-	785032.036	3925160.18	0.0107
			WP2			B5/SB-LC/B/Sb/Bkh/WP2	-	5	-	4997843.82	24989219.1	0.0680	
			Stiffener		FP1	B5/SB-LC/B/Sb/Bkh/FP1	90	8	2607.427	720	1877347.44	0.0051	
					FP2	B5/SB-LC/B/Sb/Bkh/FP2	90	8	4558.097	720	3281829.84	0.0089	
					FP3	B5/SB-LC/B/Sb/Bkh/FP3	90	8	4558.097	720	3281829.84	0.0089	
					FP4	B5/SB-LC/B/Sb/Bkh/FP4	90	8	4558.097	720	3281829.84	0.0089	
					FP5	B5/SB-LC/B/Sb/Bkh/FP5	90	8	4558.097	720	3281829.84	0.0089	



18 sd 22

Massa jenis Aluminium

2.723

Ton/m³

0.00000001

mm³ to m³

0.000001

66 Long Frame

	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
		D/		B5/SB-LC/D/							
		CI/		B5/SB-LC/D/CI/							
	Deck	Plate Bar	WP	B5/SB-LC/D/CI/FP	-	8	-	427200	3417600	0.0093	
			FP	B5/SB-LC/D/CI/FP	120	15	2400	1800	4320000	0.0118	
		Ps/		B5/SB-LC/D/Ps/							
D.2.2	a.	Deck	Plate Bar	WP1	B5/SB-LC/D/Ps/FP1	-	8	-	484536.4863	3876291.89	0.0106
				WP2	B5/SB-LC/D/Ps/FP2	-	8	-	657714.7138	5261717.71	0.0143
	b.	Deck	Plate Bar	FP1	B5/SB-LC/D/Ps/FP1	120	15	211	1800	379800	0.0010
				FP2	B5/SB-LC/D/Ps/FP2	120	15	893.848	1800	1608926.4	0.0044
				FP3	B5/SB-LC/D/Ps/FP3	120	15	1205	1800	2169000	0.0059
				FP4	B5/SB-LC/D/Ps/FP4	120	15	3695.183	1800	6651329.4	0.0181
D.2.3	Starboard	Deck	Plate Bar	WP1	B5/SB-LC/D/Sb/FP1	-	8	-	484536.4863	3876291.89	0.0106
				WP2	B5/SB-LC/D/Sb/FP2	-	8	-	657714.7138	5261717.71	0.0143
	b.	Deck	Plate Bar	FP1	B5/SB-LC/D/Sb/FP1	120	15	211	1800	379800	0.0010
				FP2	B5/SB-LC/D/Sb/FP2	120	15	893.848	1800	1608926.4	0.0044
				FP3	B5/SB-LC/D/Sb/FP3	120	15	1205	1800	2169000	0.0059
				FP4	B5/SB-LC/D/Sb/FP4	120	15	3695.183	1800	6651329.4	0.0181
D.2.4	Section A3	SA-3/		B5/SB-LC/D/SA-3/							
	Portside	Ps/		B5/SB-LC/D/SA-3/Ps/							
	a.	Deck	Plate Bar	WP	B5/SB-LC/D/SA-3/Ps/FP	-	8	-	417906.8625	3343254.9	0.0091
				FP	B5/SB-LC/D/SA-3/Ps/FP	100	10	2223.38	1000	2223380	0.0061
	b.	Deck	Plate Bar	WP	B5/SB-LC/D/SA-3/Sb/FP	-	8	-	417906.8625	3343254.9	0.0091
				FP	B5/SB-LC/D/SA-3/Sb/FP	100	10	2223.38	1000	2223380	0.0061
Tank Top Stiffener		SB-B/		B5/SB-B/							
		TT/Bp/		B5/SB-B/TT/Bp/							
		Bulb Plat	1	B5/SB-B/TT/Bp/1	85	5	4794.75	648.28	3108340.53	0.0085	
			2	B5/SB-B/TT/Bp/2	85	5	4794.75	648.28	3108340.53	0.0085	
			3	B5/SB-B/TT/Bp/3	85	5	3595	648.28	2330566.6	0.0063	
			4	B5/SB-B/TT/Bp/4	85	5	4794.75	648.28	3108340.53	0.0085	
			5	B5/SB-B/TT/Bp/5	85	5	4794.75	648.28	3108340.53	0.0085	
	6		B5/SB-B/TT/Bp/6	85	5	4794.75	648.28	3108340.53	0.0085		



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar
				Breath (mm)	Thickness (mm)					
	SB-F/					B6/SB-F/				
	SB-F/					B6/SB-F/				
A.1.1 Long Frame	LF/B/					B6/SB-F/LF/B/				
A.1.1 Long Frame Portside	Ps/					B6/SB-F/LF/B/Ps/				
1 LFP 1	T Bar	1	B6/SB-F/LF/B/Ps/1	125x6	75x8	2389	1302	3110478	0.0085	8.4698316
2 LFP 2		2	B6/SB-F/LF/B/Ps/2	125x6	75x8	6014	1302	7830228	0.0213	21.321711
3 LFP 3		3	B6/SB-F/LF/B/Ps/3	125x6	75x8	6617	1302	8615334	0.0235	23.459554
4 LFP 4		4	B6/SB-F/LF/B/Ps/4	125x6	75x8	6637	1302	8641374	0.0235	23.530461
5 LFP 5		5	B6/SB-F/LF/B/Ps/5	125x6	75x8	6633	1302	8636166	0.0235	23.51628
6 LFP 6		6	B6/SB-F/LF/B/Ps/6	125x6	75x8	6627	1302	8628354	0.0235	23.495008
7 LFP 7		7	B6/SB-F/LF/B/Ps/7	125x6	75x8	6622	1302	8621844	0.0235	23.477281
8 LFP 8		8	B6/SB-F/LF/B/Ps/8	125x6	75x8	2400	1302	3124800	0.0085	8.5088304
9 LFP 9		9	B6/SB-F/LF/B/Ps/9	125x6	75x8	2398	1302	3122196	0.0085	8.5017397
10 LFP 10		10	B6/SB-F/LF/B/Ps/10	125x6	75x8	2397	1302	3120894	0.0085	8.4981944
11 LFP 11		11	B6/SB-F/LF/B/Ps/11	125x6	75x8	2371	1302	3087042	0.0084	8.4060154
12 LFP 12		12	B6/SB-F/LF/B/Ps/12	125x6	75x8	4175	1302	5435850	0.0148	14.80182
13 LFP 13		13	B6/SB-F/LF/B/Ps/13	125x6	75x8	4177	1302	5438454	0.0148	14.80891
14 LFP 14		14	B6/SB-F/LF/B/Ps/14	125x6	75x8	4181	1302	5443662	0.0148	14.823092
15 LFP 15		15	B6/SB-F/LF/B/Ps/15	125x6	75x8	4160	1302	5416320	0.0147	14.748639
16 LFP 16		16	B6/SB-F/LF/B/Ps/16	125x6	75x8	4166	1302	5424132	0.0148	14.769911
Long Frame Side Shell Portside	LF/Ss1/Ps/					B6/SB-F/LF/Ss1/Ps/				
1 LF/Ps/Ss1	Bulb Plat	1	B6/SB-F/LF/Ss1/Ps/1	85	5	3021	648.28	1958453.88	0.0053	5.3328699
2 LF/Ps/Ss2		2	B6/SB-F/LF/Ss1/Ps/2	85	5	9694	648.28	6284426.32	0.0171	17.112493
3 LF/Ps/Ss3		3	B6/SB-F/LF/Ss1/Ps/3	85	5	9676	648.28	6272757.28	0.0171	17.080718
4 LF/Ps/Ss4		4	B6/SB-F/LF/Ss1/Ps/4	85	5	9660	648.28	6262384.8	0.0171	17.052474
5 LF/Ps/Ss5		5	B6/SB-F/LF/Ss1/Ps/5	85	5	9646	648.28	6253308.88	0.0170	17.02776
6 LF/Ps/Ss6		6	B6/SB-F/LF/Ss1/Ps/6	85	5	9344	648.28	6057528.32	0.0165	16.49465
7 LF/Ps/Ss7		7	B6/SB-F/LF/Ss1/Ps/7	85	5	3570	648.28	2314359.6	0.0063	6.3020012
8 LF/Ps/Ss8		8	B6/SB-F/LF/Ss1/Ps/8	85	5	8387	648.28	5437124.36	0.0148	14.80529
9 LF/Ps/Ss9		9	B6/SB-F/LF/Ss1/Ps/9	85	5	9640	648.28	6249419.2	0.0170	17.017168
10 LF/Ps/Ss10		10	B6/SB-F/LF/Ss1/Ps/10	85	5	9609	648.28	6229322.52	0.0170	16.962445



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar
				Breath (mm)	Thickness (mm)					
Starboard	LF/B/			B6/SB-F/LF/B/						
Long frame Bottom Starboard	St/			B6/SB-F/LF/B/St/						
a.	T Bar									
1	LFP 1	1	B6/SB-F/LF/B/St/1	125x6	75x8	2389	1302	3110478	0.0085	8.4698316
2	LFP 2	2	B6/SB-F/LF/B/St/2	125x6	75x8	6014	1302	7830228	0.0213	21.321711
3	LFP 3	3	B6/SB-F/LF/B/St/3	125x6	75x8	6617	1302	8615334	0.0235	23.459554
4	LFP 4	4	B6/SB-F/LF/B/St/4	125x6	75x8	6637	1302	8641374	0.0235	23.530461
5	LFP 5	5	B6/SB-F/LF/B/St/5	125x6	75x8	6633	1302	8636166	0.0235	23.51628
6	LFP 6	6	B6/SB-F/LF/B/St/6	125x6	75x8	6627	1302	8628354	0.0235	23.495008
7	LFP 7	7	B6/SB-F/LF/B/St/7	125x6	75x8	6622	1302	8621844	0.0235	23.477281
8	LFP 8	8	B6/SB-F/LF/B/St/8	125x6	75x8	2400	1302	3124800	0.0085	8.5088304
9	LFP 9	9	B6/SB-F/LF/B/St/9	125x6	75x8	2398	1302	3122196	0.0085	8.5017397
10	LFP 10	10	B6/SB-F/LF/B/St/10	125x6	75x8	2397	1302	3120894	0.0085	8.4981944
11	LFP 11	11	B6/SB-F/LF/B/St/11	125x6	75x8	2371	1302	3087042	0.0084	8.4060154
12	LFP 12	12	B6/SB-F/LF/B/St/12	125x6	75x8	4175	1302	5435850	0.0148	14.80182
13	LFP 13	13	B6/SB-F/LF/B/St/13	125x6	75x8	4177	1302	5438454	0.0148	14.80891
14	LFP 14	14	B6/SB-F/LF/B/St/14	125x6	75x8	4181	1302	5443662	0.0148	14.823092
15	LFP 15	15	B6/SB-F/LF/B/St/15	125x6	75x8	4160	1302	5416320	0.0147	14.748639
16	LFP 16	16	B6/SB-F/LF/B/St/16	125x6	75x8	4166	1302	5424132	0.0148	14.769911
b.	Long Frame Side Shell Starboard	LF/Ss1/St/		B6/SB-F/LF/B/LF/Ss1/St/						
1	LF/St/Ss1	1	B6/SB-F/LF/B/LF/Ss1/St/1	85	5	3021	648.28	1958453.88	0.0053	5.3328699
2	LF/St/Ss2	2	B6/SB-F/LF/B/LF/Ss1/St/2	85	5	9694	648.28	6284426.32	0.0171	17.112493
3	LF/St/Ss3	3	B6/SB-F/LF/B/LF/Ss1/St/3	85	5	9676	648.28	6272757.28	0.0171	17.080718
4	LF/St/Ss4	4	B6/SB-F/LF/B/LF/Ss1/St/4	85	5	9660	648.28	6262384.8	0.0171	17.052474
5	LF/St/Ss5	5	B6/SB-F/LF/B/LF/Ss1/St/5	85	5	9646	648.28	6253308.88	0.0170	17.02776
6	LF/St/Ss6	6	B6/SB-F/LF/B/LF/Ss1/St/6	85	5	9344	648.28	6057528.32	0.0165	16.49465
7	LF/St/Ss7	7	B6/SB-F/LF/B/LF/Ss1/St/7	85	5	3570	648.28	2314359.6	0.0063	6.3020012
8	LF/St/Ss8	8	B6/SB-F/LF/B/LF/Ss1/St/8	85	5	8387	648.28	5437124.36	0.0148	14.80529
9	LF/St/Ss9	9	B6/SB-F/LF/B/LF/Ss1/St/9	85	5	9640	648.28	6249419.2	0.0170	17.017168
10	LF/St/Ss10	10	B6/SB-F/LF/B/LF/Ss1/St/10	85	5	9609	648.28	6229322.52	0.0170	16.962445
A.1.3	Shell and Bottom Plates	SHL/PLT/		B6/SB-F/SHL/PLT/						
a.	Shell Plates Portside	Ps/		B6/SB-F/SHL/PLT/Ps/						
1	SHL 1	1	B6/SB-F/SHL/PLT/Ps/1	-	6	-	3652377.07	21914262.42	0.0597	59.672537
2	SHL 2	2	B6/SB-F/SHL/PLT/Ps/2	-	6	-	1562278.76	9373672.56	0.0255	25.52451
3	SHL 3	3	B6/SB-F/SHL/PLT/Ps/3	-	6	-	7352022.72	44112136.32	0.1201	120.11735
4	SHL 4	4	B6/SB-F/SHL/PLT/Ps/4	-	6	-	8306397.82	49838386.92	0.1357	135.70993
5	SHL 5	5	B6/SB-F/SHL/PLT/Ps/5	-	8	-	2438075.16	19504601.28	0.0531	53.111029



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar		
				Breath (mm)	Thickness (mm)							
es	B/PLT/Ps/		B6/SB-F/B/PLT/Ps/									
b.	1	B/PLT1	1	B6/SB-F/B/PLT/Ps/1	-	8	-	9379909.63	75039277.04	0.2043	204.33195	
	2	B/PLT2	2	B6/SB-F/B/PLT/Ps/2	-	8	-	2909231.1	23273848.8	0.0634	63.37469	
	3	B/PLT3	3	B6/SB-F/B/PLT/Ps/3	-	8	-	10979162.81	87833302.48	0.2392	239.17008	
	4	B/PLT4	4	B6/SB-F/B/PLT/Ps/4	-	8	-	4501612.05	36012896.4	0.0981	98.063117	
a.	Shell Plates Starboard		SHL/PLT/St/		B6/SB-F/SHL/PLT/St/							
	1	SHL 1	1	B6/SB-F/SHL/PLT/St/1	-	6	-	3652377.07	21914262.42	0.0597	59.672537	
	2	SHL 2	2	B6/SB-F/SHL/PLT/St/2	-	6	-	1562278.76	9373672.56	0.0255	25.52451	
	3	SHL 3	3	B6/SB-F/SHL/PLT/St/3	-	6	-	7352022.72	44112136.32	0.1201	120.11735	
	4	SHL 4	4	B6/SB-F/SHL/PLT/St/4	-	6	-	8306397.82	49838386.92	0.1357	135.70993	
b.	Bottom Plates		B/PLT/St/		B6/SB-F/B/PLT/St/							
	1	B/PLT1	1	B6/SB-F/B/PLT/St/1	-	8	-	9379909.63	75039277.04	0.2043	204.33195	
	2	B/PLT2	2	B6/SB-F/B/PLT/St/2	-	8	-	2909231.1	23273848.8	0.0634	63.37469	
	3	B/PLT3	3	B6/SB-F/B/PLT/St/3	-	8	-	10979162.81	87833302.48	0.2392	239.17008	
A.2.1	Transverse Frame 23		TF/Fr23/		B6/SB-F/TF/Fr23/							
	1	Centerline	Cl/		B6/SB-F/TF/Fr23/Cl/							
	Web Plate Beam		Plate Bar	WP	B6/SB-F/TF/Fr23/Cl/WP	150	5	2512	750	1884000	0.0051	5.130132
	Face Plate		FB	FB1	B6/SB-F/TF/Fr23/Cl/FB1	60	8	2405	480	1154400	0.0031	3.1434312
Stiffener		Plate Bar	S1	B6/SB-F/TF/Fr23/Cl/S1	50	5	150	250	37500	0.0001	0.1021125	
a.	Portside Frame		Ps/Fr/		B6/SB-F/TF/Fr23/Ps/Fr/							
	Plate 1		Plate Bar	P1	B6/SB-F/TF/Fr23/Ps/Fr/P1	280	5	-	887773.812	4438869.06	0.0121	12.08704
	Plate 2			P2	B6/SB-F/TF/Fr23/Ps/Fr/P2	280	5	-	748094.62	3740473.1	0.0102	10.185308
	Plate 3			P3	B6/SB-F/TF/Fr23/Ps/Fr/P3	150	5	-	760492.444	3802462.22	0.0104	10.354105
	Plate 4			P4	B6/SB-F/TF/Fr23/Ps/Fr/P4	150	5	-	311829.142	1559145.71	0.0042	4.2455538
	Plate 5		Face Plate	FP1	B6/SB-F/TF/Fr23/Ps/Fr/FP1	80	8	4149	640	2654124	0.0072	7.2271797
	Plate 6			FP2	B6/SB-F/TF/Fr23/Ps/Fr/FP2	60	6	1842	360	662951.352	0.0018	1.8052165
	Plate 7			FP3	B6/SB-F/TF/Fr23/Ps/Fr/FP3	60	6	2167	360	1038987.92	0.0028	2.8291641
				S1	B6/SB-F/TF/Fr23/Ps/Fr/S1	80	8	530	640	339200	0.0009	0.9236416
				S2	B6/SB-F/TF/Fr23/Ps/Fr/S2	80	8	1102	640	705280	0.0019	1.9204774
			S3	B6/SB-F/TF/Fr23/Ps/Fr/S3	80	8	959	640	613760	0.0017	1.6712685	
			S4	B6/SB-F/TF/Fr23/Ps/Fr/S4	80	8	1355	640	867200	0.0024	2.3613856	
			S5	B6/SB-F/TF/Fr23/Ps/Fr/S5	80	8	713	640	456320	0.0012	1.2425594	
			S6	B6/SB-F/TF/Fr23/Ps/Fr/S6	80	8	430	640	275200	0.0007	0.7493696	
			S7	B6/SB-F/TF/Fr23/Ps/Fr/S7	80	8	634	640	405760	0.0011	1.1048845	



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				Breath (mm)	Thickness (mm)						
Stiffener	Flat Bar	S8	B6/SB-F/TF/Fr23/Ps/Fr/S8	50.8	4.5	308	720	221760	0.0006	0.6038525	
		S9	B6/SB-F/TF/Fr23/Ps/Fr/S9	50	5	150	250	37500	0.0001	0.1021125	
		S10	B6/SB-F/TF/Fr23/Ps/Fr/S10	50	5	153	251	38403	0.0001	0.1045714	
		S11	B6/SB-F/TF/Fr23/Ps/Fr/S11	50	5	194	252	48888	0.0001	0.133122	
		S12	B6/SB-F/TF/Fr23/Ps/Fr/S12	50	5	195	253	49335	0.0001	0.1343392	
		S13	B6/SB-F/TF/Fr23/Ps/Fr/S13	50	5	202	254	51308	0.0001	0.1397117	
		S14	B6/SB-F/TF/Fr23/Ps/Fr/S14	50	5	134	255	34170	0.0001	0.0930449	
S15	B6/SB-F/TF/Fr23/Ps/Fr/S15	50	5	150	256	38400	0.0001	0.1045632			
3	Starboard Frame	St/Fr/	B6/SB-F/TF/Fr23/St/Fr/								
a.	Plate Bar	Plate 1	P1	B6/SB-F/TF/Fr23/St/Fr/P1	280	5	-	887773.812	4438869.06	0.0121	12.08704
		Plate 2	P2	B6/SB-F/TF/Fr23/St/Fr/P2	280	5	-	748094.62	3740473.1	0.0102	10.185308
		Plate 3	P3	B6/SB-F/TF/Fr23/St/Fr/P3	150	5	-	760492.444	3802462.22	0.0104	10.354105
		Plate 4	P4	B6/SB-F/TF/Fr23/St/Fr/P4	150	5	-	311829.142	1559145.71	0.0042	4.2455538
	Face Plate	Plate 5	FP1	B6/SB-F/TF/Fr23/St/Fr/FP1	80	8	4149	640	2654124	0.0072	7.2271797
		Plate 6	FP2	B6/SB-F/TF/Fr23/St/Fr/FP2	60	6	1842	360	662951.352	0.0018	1.8052165
		Plate 7	FP3	B6/SB-F/TF/Fr23/St/Fr/FP3	60	6	2167	360	1038987.92	0.0028	2.8291641
	Stiffener	Flat Bar	S1	B6/SB-F/TF/Fr23/St/Fr/S1	80	8	530	640	339200	0.0009	0.9236416
			S2	B6/SB-F/TF/Fr23/St/Fr/S2	80	8	1102	640	705280	0.0019	1.9204774
			S3	B6/SB-F/TF/Fr23/St/Fr/S3	80	8	959	640	613760	0.0017	1.6712685
			S4	B6/SB-F/TF/Fr23/St/Fr/S4	80	8	1355	640	867200	0.0024	2.3613856
			S5	B6/SB-F/TF/Fr23/St/Fr/S5	80	8	713	640	456320	0.0012	1.2425594
			S6	B6/SB-F/TF/Fr23/St/Fr/S6	80	8	430	640	275200	0.0007	0.7493696
			S7	B6/SB-F/TF/Fr23/St/Fr/S7	80	8	634	640	405760	0.0011	1.1048845
			S8	B6/SB-F/TF/Fr23/St/Fr/S8	50.8	4.5	308	720	221760	0.0006	0.6038525
			S9	B6/SB-F/TF/Fr23/St/Fr/S9	50	5	150	250	37500	0.0001	0.1021125
S10			B6/SB-F/TF/Fr23/St/Fr/S10	50	5	153	251	38403	0.0001	0.1045714	
S11			B6/SB-F/TF/Fr23/St/Fr/S11	50	5	194	252	48888	0.0001	0.133122	
S12			B6/SB-F/TF/Fr23/St/Fr/S12	50	5	195	253	49335	0.0001	0.1343392	
S13	B6/SB-F/TF/Fr23/St/Fr/S13	50	5	202	254	51308	0.0001	0.1397117			
S14	B6/SB-F/TF/Fr23/St/Fr/S14	50	5	134	255	34170	0.0001	0.0930449			
S15	B6/SB-F/TF/Fr23/St/Fr/S15	50	5	150	256	38400	0.0001	0.1045632			
S16	B6/SB-F/TF/Fr23/St/Fr/S16	50	5	150	3543	531450	0.0014	1.4471384			
	Midframe	B6/SB-F/TF/Fr23/St/Fr/Midframe	-	8	-	-	-	-	0.0066	6.6	



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				Breath (mm)	Thickness (mm)						
Frame 24	TF/Fr24/			B6/SB-F/TF/Fr24/							
		B/		B6/SB-F/TF/Fr24/B/							
	Plate1	Plate Bar	P1	B6/SB-F/TF/Fr24/B/P1	-	5	-	4219966.04	21099830.2	0.0575	57.454838
a.	Face Plate	FB	FB1	B6/SB-F/TF/Fr24/B/FB1	80	8	4026	640	2576640	0.0070	7.0161907
			FB2	B6/SB-F/TF/Fr24/B/FB2	80	8	4026	640	2576640	0.0070	7.0161907
b.	Stiffener	FB	S1	B6/SB-F/TF/Fr24/B/S1	90	8	2160	720	1555200	0.0042	4.2348096
			S2	B6/SB-F/TF/Fr24/B/S2	90	8	2160	720	1555200	0.0042	4.2348096
			S3	B6/SB-F/TF/Fr24/B/S3	90	8	2160	720	1555200	0.0042	4.2348096
			S4	B6/SB-F/TF/Fr24/B/S4	50.8	4.5	346	720	249120	0.0007	0.6783538
			S5	B6/SB-F/TF/Fr24/B/S5	50.8	4.5	346	720	249120	0.0007	0.6783538
			S6	B6/SB-F/TF/Fr24/B/S6	50.8	4.5	346	720	249120	0.0007	0.6783538
			S7	B6/SB-F/TF/Fr24/B/S7	50.8	4.5	346	720	249120	0.0007	0.6783538
			S8	B6/SB-F/TF/Fr24/B/S8	80	8	492	720	354240	0.0010	0.9645955
			S9	B6/SB-F/TF/Fr24/B/S9	80	8	492	720	354240	0.0010	0.9645955
			S10	B6/SB-F/TF/Fr24/B/S10	50	5	220	250	55000	0.0001	0.149765
			S11	B6/SB-F/TF/Fr24/B/S11	50	5	220	250	55000	0.0001	0.149765
	S12	B6/SB-F/TF/Fr24/B/S12	50	5	154	250	38500	0.0001	0.1048355		
	S13	B6/SB-F/TF/Fr24/B/S13	50	5	154	250	38500	0.0001	0.1048355		



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				Breath (mm)	Thickness (mm)						
c	Braket	Plate	B511-6	B6/SB-F/TF/Fr24/B/B511-6	-	5	-	9988.43364	49942.1682	0.0008	0.8159551
			BRK1	B6/SB-F/TF/Fr24/B/BRK1	-	5	-	39392.9564	196964.782	0.0011	1.0726702
			BRK2	B6/SB-F/TF/Fr24/B/BRK2	-	5	-	30899.462	154497.31	0.0008	0.8413924
			BRK3	B6/SB-F/TF/Fr24/B/BRK3	-	5	-	40998.9546	204994.773	0.0011	1.1164015
			BRK4	B6/SB-F/TF/Fr24/B/BRK4	-	5	-	49677.1624	248385.812	0.0014	1.3527091
			BRK5	B6/SB-F/TF/Fr24/B/BRK5	-	5	-	229677.3624	1148386.812	0.0063	6.2541146
A.2.2		MDFR	B6/SB-F/TF/Fr24/B/MDFR	-	8	-			0.0154	15.4	
2	Portside	Ps/	B6/SB-F/TF/Fr24/B/Ps/								0
a.	Frame Portside	Plate Bar	WP1	B6/SB-F/TF/Fr24/B/Ps/WP1	280	5	-	741929.48	3709647.4	0.0101	10.10137
			WP2	B6/SB-F/TF/Fr24/B/Ps/WP2	150	5	-	321707.246	1608536.23	0.0044	4.3800442
			WP3	B6/SB-F/TF/Fr24/B/Ps/WP3	150	5	-	347415.31	1737076.55	0.0047	4.7300594
	Face Plate		FP1	B6/SB-F/TF/Fr24/B/Ps/FP1	60	6	1907	360	686520	0.0019	1.869394
			FP2	B6/SB-F/TF/Fr24/B/Ps/FP2	60	8	2252	480	1080134.14	0.0029	2.9412053
			FP3	B6/SB-F/TF/Fr24/B/Ps/FP3	60	6	1992	360	717049.169	0.0020	1.9525249
			FP4	B6/SB-F/TF/Fr24/B/Ps/FP4	60	8	2233	480	1069838.17	0.0029	2.9131693
			b.	Stiffener	FB	S1	B6/SB-F/TF/Fr24/B/Ps/S1	50	5	194	250
S2	B6/SB-F/TF/Fr24/B/Ps/S2	50				5	195	250	48750	0.0001	0.1327463
S3	B6/SB-F/TF/Fr24/B/Ps/S3	50				5	207	250	51750	0.0001	0.1409153
S4	B6/SB-F/TF/Fr24/B/Ps/S4	50				5	138	250	34500	0.0001	0.0939435
S5	B6/SB-F/TF/Fr24/B/Ps/S5	50				5	150	250	37500	0.0001	0.1021125
3	Starboard	St/	B6/SB-F/TF/Fr24/St/								
a.	Frame Portside	Plate Bar	WP1	B6/SB-F/TF/Fr24/St/WP1	280	5	-	741929.48	3709647.4	0.0101	10.10137
			WP2	B6/SB-F/TF/Fr24/B/Ps/WP2	150	5	-	321707.246	1608536.23	0.0044	4.3800442
	Face Plate		FP1	B6/SB-F/TF/Fr24/B/Ps/FP1	60	6	1907	360	686520	0.0019	1.869394
			FP2	B6/SB-F/TF/Fr24/B/Ps/FP2	60	8	2252	480	1080134.14	0.0029	2.9412053
b.	Stiffener	FB	S1	B6/SB-F/TF/Fr24/B/Ps/S1	50	5	194	250	48500	0.0001	0.1320655
			S2	B6/SB-F/TF/Fr24/B/Ps/S2	50	5	195	250	48750	0.0001	0.1327463
			S3	B6/SB-F/TF/Fr24/B/Ps/S3	50	5	207	250	51750	0.0001	0.1409153
			S4	B6/SB-F/TF/Fr24/B/Ps/S4	50	5	138	250	34500	0.0001	0.0939435
			S5	B6/SB-F/TF/Fr24/B/Ps/S5	50	5	150	250	37500	0.0001	0.1021125



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar		
				Breath (mm)	Thickness (mm)							
Frame 25	TF/Fr25/			B6/SB-F/TF/Fr25/								
1	Portside	Ps/		B6/SB-F/TF/Fr25/Ps/								
	Center	CL/		B6/SB-F/TF/Fr25/Ps/CL/								
a.	Section A	Plate Bar	P	B6/SB-F/TF/Fr25/Ps/CL/P	-	5	-	1104749.462	5523747.31	0.0150	15.041164	
		Face Plate	FB1	B6/SB-F/TF/Fr25/Ps/CL/FB1	80	8	2647	640	1694080	0.0046	4.6129798	
			FB2	B6/SB-F/TF/Fr25/Ps/CL/FB2	80	8	1377	118260.4	946083.2	0.0026	2.5761846	
		Stiffener	S1	B6/SB-F/TF/Fr25/Ps/CL/S1	60	6	709	360	255240	0.0007	0.6950185	
			S2	B6/SB-F/TF/Fr25/Ps/CL/S2	50	5	417	250	104250	0.0003	0.2838728	
			S3	B6/SB-F/TF/Fr25/Ps/CL/S3	50	5	417	250	104250	0.0003	0.2838728	
			S4	B6/SB-F/TF/Fr25/Ps/CL/S4	50	5	200	250	50000	0.0001	0.13615	
			S5	B6/SB-F/TF/Fr25/Ps/CL/S5	60	6	316	360	113760	0.0003	0.3097685	
		b.	Pillar	PL	B6/SB-F/TF/Fr25/Ps/CL/PL	100.6	6	2197	2294.4	5040796.8	0.0137	13.72609
		c.	Section B	Flat Bar	FB	B6/SB-F/TF/Fr25/Ps/CL/FB	150	5	2184	322682.388	1613411.94	0.0044
Face Plate	FP1			B6/SB-F/TF/Fr25/Ps/CL/FP1	60	6	1850	360	666000	0.0018	1.813518	
	FP2			B6/SB-F/TF/Fr25/Ps/CL/FP2	80	8	1850	640	888000	0.0024	2.418024	
	Stiffener	S1	B6/SB-F/TF/Fr25/Ps/CL/S1	50	5	150	250	37500	0.0001	0.1021125		
	Side Shell	SS/		B6/SB-F/TF/Fr25/Ps/SS/							0	
d.	Frame Side Shell	Plate Bar	WP1	B6/SB-F/TF/Fr25/Ps/SS/WP1	300	6	-	961457.09	5768742.54	0.0157	15.708286	
			WP2	B6/SB-F/TF/Fr25/Ps/SS/WP2	148	5	2138		1571725.94	0.0043	4.2798097	
			FP1	B6/SB-F/TF/Fr25/Ps/SS/FP1	120	12	3578	1440	5121685	0.0139	13.946348	
			FP2	B6/SB-F/TF/Fr25/Ps/SS/FP2	60	8	1897	480	910452.637	0.0025	2.4791625	
			FP3	B6/SB-F/TF/Fr25/Ps/SS/FP3	60	8	2218	480	1064640	0.0029	2.8990147	
		Stiffener	S1	B6/SB-F/TF/Fr25/Ps/SS/S1	50	5	179	250	44750	0.0001	0.1218543	
			S2	B6/SB-F/TF/Fr25/Ps/SS/S2	50	5	174	250	43500	0.0001	0.1184505	
			S3	B6/SB-F/TF/Fr25/Ps/SS/S3	50	5	214	250	53500	0.0001	0.1456805	
			S4	B6/SB-F/TF/Fr25/Ps/SS/S4	50	5	215	250	53750	0.0001	0.1463613	
			S5	B6/SB-F/TF/Fr25/Ps/SS/S5	50	5	168	250	42000	0.0001	0.114366	
S6	B6/SB-F/TF/Fr25/Ps/SS/S6	50	5	148	250	37000	0.0001	0.100751				
2	Starboard	St/		B6/SB-F/TF/Fr25/St/							0	
	Center	CL/		B6/SB-F/TF/Fr25/St/CL/								
a.	Section A	Plate Bar	P	B6/SB-F/TF/Fr25/St/CL/P	-	5	-	1104749.462	5523747.31	0.0150	15.041164	
		Face Plate	FB1	B6/SB-F/TF/Fr25/St/CL/FB1	80	8	2647	640	1694080	0.0046	4.6129798	
			FB2	B6/SB-F/TF/Fr25/St/CL/FB2	80	8	1377	118260.4	946083.2	0.0026	2.5761846	
		Stiffener	S1	B6/SB-F/TF/Fr25/St/CL/S1	60	6	709	360	255240	0.0007	0.6950185	
			S2	B6/SB-F/TF/Fr25/St/CL/S2	50	5	417	250	104250	0.0003	0.2838728	
			S3	B6/SB-F/TF/Fr25/St/CL/S3	50	5	417	250	104250	0.0003	0.2838728	
			S4	B6/SB-F/TF/Fr25/St/CL/S4	50	5	200	250	50000	0.0001	0.13615	
S5	B6/SB-F/TF/Fr25/St/CL/S5		60	6	316	360	113760	0.0003	0.3097685			



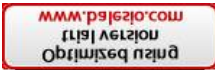
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil (mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
Pillar	Pillar	PL	B6/SB-F/TF/Fr25/St/CL/PL	100.6	6	2197	2294.4	5040796.8	0.0137	13.72609	
Section B	Flat Bar	FB	B6/SB-F/TF/Fr25/St/CL/FB	150	5	2184	322682.388	1613411.94	0.0044	4.3933207	
	Face Plate	FP1	B6/SB-F/TF/Fr25/St/CL/FP1	60	6	1850	360	666000	0.0018	1.813518	
		FP2	B6/SB-F/TF/Fr25/St/CL/FP2	80	8	1850	640	888000	0.0024	2.418024	
	Stiffener	S1	B6/SB-F/TF/Fr25/St/CL/S1	50	5	150	250	37500	0.0001	0.1021125	
Side Shell	SS/		B6/SB-F/TF/Fr25/St/SS/							0	
d.	Plate Bar	WP1	B6/SB-F/TF/Fr25/St/SS/WP1	300	6	-	961457.09	5768742.54	0.0157	15.708286	
		WP2	B6/SB-F/TF/Fr25/St/SS/WP2	148	5	2138		1571725.94	0.0043	4.2798097	
		FP1	B6/SB-F/TF/Fr25/St/SS/FP1	120	12	3578	1440	5121685	0.0139	13.946348	
		FP2	B6/SB-F/TF/Fr25/St/SS/FP2	60	8	1897	480	910452.637	0.0025	2.4791625	
		FP3	B6/SB-F/TF/Fr25/St/SS/FP3	60	8	2218	480	1064640	0.0029	2.8990147	
		S1	B6/SB-F/TF/Fr25/St/SS/S1	50	5	179	250	44750	0.0001	0.1218543	
	Stiffener	S2	B6/SB-F/TF/Fr25/St/SS/S2	50	5	174	250	43500	0.0001	0.1184505	
		S3	B6/SB-F/TF/Fr25/St/SS/S3	50	5	214	250	53500	0.0001	0.1456805	
		S4	B6/SB-F/TF/Fr25/St/SS/S4	50	5	215	250	53750	0.0001	0.1463613	
		S5	B6/SB-F/TF/Fr25/St/SS/S5	50	5	168	250	42000	0.0001	0.114366	
	Braket	BRK	B6/SB-F/TF/Fr25/St/SS/BRK	-	5	-				0.0013	1.296
		MDFR	B6/SB-F/TF/Fr25/St/SS/MDFR	-	8	-				0.0177	17.7
	A.2.4	Transverse Frame 26	TF/Fr26/		B6/SB-F/TF/Fr26/						
l	Portside	Ps/		B6/SB-F/TF/Fr26/Ps/							
	Center	CL/		B6/SB-F/TF/Fr26/Ps/CL/							
a.	Section A	Plate Bar	P	B6/SB-F/TF/Fr26/Ps/CL/P	-	5	-	970875.51	4854377.55	0.0132	13.21847
		Stiffener	S1	B6/SB-F/TF/Fr26/Ps/CL/S1	80	8	2811	640	1799040	0.0049	4.8987859
			S2	B6/SB-F/TF/Fr26/Ps/CL/S2	80	8	1317	640	842880	0.0023	2.2951622
			S3	B6/SB-F/TF/Fr26/Ps/CL/S3	50	5	336	250	84000	0.0002	0.228732
			S4	B6/SB-F/TF/Fr26/Ps/CL/S4	50	5	125	250	31250	0.0001	0.0850938
			S5	B6/SB-F/TF/Fr26/Ps/CL/S5	50	5	139	250	34750	0.0001	0.0946243
			S6	B6/SB-F/TF/Fr26/Ps/CL/S6	50	5	236	250	59000	0.0002	0.160657
			S7	B6/SB-F/TF/Fr26/Ps/CL/S7	50	5	200	250	50000	0.0001	0.13615
b.	Section B	Plate Bar	WP	B6/SB-F/TF/Fr26/Ps/CL/WP	150	5	2184	323987.874	1619939.37	0.0044	4.4110949
		Stiffener	S1	B6/SB-F/TF/Fr26/Ps/CL/S1	60	6	1850	360	666000	0.0018	1.813518
			S2	B6/SB-F/TF/Fr26/Ps/CL/S2	60	8	2072	480	994560	0.0027	2.7081869
			S3	B6/SB-F/TF/Fr26/Ps/CL/S3	50	5	150	250	37500	0.0001	0.1021125
Side Shell	SS/		B6/SB-F/TF/Fr26/Ps/SS/							0	
Plate Bar	WP1	B6/SB-F/TF/Fr26/Ps/SS/WP1	300	6	-	1136013.98	6816083.88	0.0186	18.560196		
	FP1	B6/SB-F/TF/Fr26/Ps/SS/FP1	120	12	3470	1440	4996800	0.0136	13.606286		
	WP2	B6/SB-F/TF/Fr26/Ps/SS/WP2	148	5	-	299003.152	1495015.76	0.0041	4.0709279		



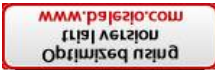
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar		
				Breath (mm)	Thickness (mm)							
c.	Frame Side Shell	FP2	B6/SB-F/TF/Fr26/Ps/SS/FP2	60	8	1789	480	858720	0.0023	2.3382946		
		FP3	B6/SB-F/TF/Fr26/Ps/SS/FP3	60	8	2329	480	1117920	0.0030	3.0440962		
		Stiffener	S1	B6/SB-F/TF/Fr26/Ps/SS/S1	50	5	174	250	43500	0.0001	0.1184505	
			S2	B6/SB-F/TF/Fr26/Ps/SS/S2	50	5	173	250	43250	0.0001	0.1177698	
			S3	B6/SB-F/TF/Fr26/Ps/SS/S3	50	5	213	250	53250	0.0001	0.1449998	
			S4	B6/SB-F/TF/Fr26/Ps/SS/S4	50	5	214	250	53500	0.0001	0.1456805	
			S5	B6/SB-F/TF/Fr26/Ps/SS/S5	50	5	333	250	83250	0.0002	0.2266898	
			S6	B6/SB-F/TF/Fr26/Ps/SS/S6	50	5	223	250	55750	0.0002	0.1518073	
S7	B6/SB-F/TF/Fr26/Ps/SS/S7	50	5	148	250	37000	0.0001	0.100751				
2	Starboard	St/	B6/SB-F/TF/Fr26/Su/						0			
a.	Section A	Center	CL/	B6/SB-F/TF/Fr26/Su/CL/						0		
		Stiffener	Plate Bar	P	B6/SB-F/TF/Fr26/St/CL/P	-	5	-	970875.51	4854377.55	0.0132	13.21847
			S1	B6/SB-F/TF/Fr26/St/CL/S1	80	8	2811	640	1799040	0.0049	4.8987859	
			S2	B6/SB-F/TF/Fr26/St/CL/S2	80	8	1317	640	842880	0.0023	2.2951622	
			S3	B6/SB-F/TF/Fr26/St/CL/S3	50	5	336	250	84000	0.0002	0.228732	
			S4	B6/SB-F/TF/Fr26/St/CL/S4	50	5	125	250	31250	0.0001	0.0850938	
			S5	B6/SB-F/TF/Fr26/St/CL/S5	50	5	139	250	34750	0.0001	0.0946243	
			S6	B6/SB-F/TF/Fr26/St/CL/S6	50	5	236	250	59000	0.0002	0.160657	
		S7	B6/SB-F/TF/Fr26/St/CL/S7	50	5	200	250	50000	0.0001	0.13615		
		b.	Section B	Plate Bar	WP	B6/SB-F/TF/Fr26/St/CL/WP	150	5	2184	323987.874	1619939.37	0.0044
Stiffener	S1			B6/SB-F/TF/Fr26/St/CL/S1	60	6	1850	360	666000	0.0018	1.813518	
	S2			B6/SB-F/TF/Fr26/St/CL/S2	60	8	2072	480	994560	0.0027	2.7081869	
	S3			B6/SB-F/TF/Fr26/St/CL/S3	50	5	150	250	37500	0.0001	0.1021125	
c.	Frame Side Shell	Side Shell	SS/	B6/SB-F/TF/Fr26/St/SS/						0		
		Plate Bar	WP1	B6/SB-F/TF/Fr26/St/SS/WP1	300	6	-	1136013.98	6816083.88	0.0186	18.560196	
			FP1	B6/SB-F/TF/Fr26/St/SS/FP1	120	12	3470	1440	4996800	0.0136	13.606286	
			WP2	B6/SB-F/TF/Fr26/St/SS/WP2	148	5	-	299003.152	1495015.76	0.0041	4.0709279	
			FP2	B6/SB-F/TF/Fr26/St/SS/FP2	60	8	1789	480	858720	0.0023	2.3382946	
		Stiffener	FP3	B6/SB-F/TF/Fr26/St/SS/FP3	60	8	2329	480	1117920	0.0030	3.0440962	
			S1	B6/SB-F/TF/Fr26/St/SS/S1	50	5	174	250	43500	0.0001	0.1184505	
			S2	B6/SB-F/TF/Fr26/St/SS/S2	50	5	173	250	43250	0.0001	0.1177698	
			S3	B6/SB-F/TF/Fr26/St/SS/S3	50	5	213	250	53250	0.0001	0.1449998	
			S4	B6/SB-F/TF/Fr26/St/SS/S4	50	5	214	250	53500	0.0001	0.1456805	
			S5	B6/SB-F/TF/Fr26/St/SS/S5	50	5	333	250	83250	0.0002	0.2266898	
			S6	B6/SB-F/TF/Fr26/St/SS/S6	50	5	223	250	55750	0.0002	0.1518073	
		S7	B6/SB-F/TF/Fr26/St/SS/S7	50	5	148	250	37000	0.0001	0.100751		
MidFr	MDFR	B6/SB-F/TF/Fr26/St/SS/MDFR	-	8	-	-	-	-	0.0162	16.2		



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
Frame 27	TF/Fr27/			B6/SB-F/TF/Fr27/							
1	Portside	Ps/		B6/SB-F/TF/Fr27/Ps/							
	Center	CL/		B6/SB-F/TF/Fr27/Ps/CL/							
a.	Section A	Plate Bar	P	B6/SB-F/TF/Fr27/Ps/CL/P	-	5	-	846476.508	4232382.54	0.0115	11.524778
		Stiffener	S1	B6/SB-F/TF/Fr27/Ps/CL/S1	80	8	2412	640	1543680	0.0042	4.2034406
			S2	B6/SB-F/TF/Fr27/Ps/CL/S2	80	8	1016	640	650240	0.0018	1.7706035
			S3	B6/SB-F/TF/Fr27/Ps/CL/S3	50	5	419	250	104750	0.0003	0.2852343
b.	Section B	Plate Bar	WP	B6/SB-F/TF/Fr27/Ps/CL/WP	150	5	2184	323987.874	1619939.37	0.0044	4.4110949
		Stiffener	S1	B6/SB-F/TF/Fr27/Ps/CL/S1	60	6	1850	360	666000	0.0018	1.813518
			S2	B6/SB-F/TF/Fr27/Ps/CL/S2	60	8	2072	480	994560	0.0027	2.7081869
			S3	B6/SB-F/TF/Fr27/Ps/CL/S3	50	5	150	250	37500	0.0001	0.1021125
	Side Shell	SS/		B6/SB-F/TF/Fr27/Ps/SS/							0
c.	Frame Side Shell	Plate Bar	WP1	B6/SB-F/TF/Fr27/Ps/SS/WP1	300	6	-	1136013.98	6816083.88	0.0186	18.560196
			FP1	B6/SB-F/TF/Fr27/Ps/SS/FP1	120	12	3577	1440	5150880	0.0140	14.025846
			WP2	B6/SB-F/TF/Fr27/Ps/SS/WP2	148	5	-	299003.152	1495015.76	0.0041	4.0709279
			FP2	B6/SB-F/TF/Fr27/Ps/SS/FP2	60	8	1636	480	785280	0.0021	2.1383174
		Stiffener	FP3	B6/SB-F/TF/Fr27/Ps/SS/FP3	60	8	2329	480	1117920	0.0030	3.0440962
			S1	B6/SB-F/TF/Fr27/Ps/SS/S1	50	5	173	250	43250	0.0001	0.1177698
			S2	B6/SB-F/TF/Fr27/Ps/SS/S2	50	5	213	250	53250	0.0001	0.1449998
			S3	B6/SB-F/TF/Fr27/Ps/SS/S3	50	5	214	250	53500	0.0001	0.1456805
			S4	B6/SB-F/TF/Fr27/Ps/SS/S4	50	5	438	250	109500	0.0003	0.2981685
			S5	B6/SB-F/TF/Fr27/Ps/SS/S5	50	5	340	250	85000	0.0002	0.231455
S6	B6/SB-F/TF/Fr27/Ps/SS/S6	50	5	148	250	37000	0.0001	0.100751			
1	Starboard	St/		B6/SB-F/TF/Fr27/St/							
	Center	CL/		B6/SB-F/TF/Fr27/St/CL/							
a.	Section A	Plate Bar	P	B6/SB-F/TF/Fr27/St/CL/P	-	5	-	846476.508	4232382.54	0.0115	11.524778
		Stiffener	S1	B6/SB-F/TF/Fr27/St/CL/S1	80	8	2412	640	1543680	0.0042	4.2034406
			S2	B6/SB-F/TF/Fr27/St/CL/S2	80	8	1016	640	650240	0.0018	1.7706035
			S3	B6/SB-F/TF/Fr27/St/CL/S3	50	5	419	250	104750	0.0003	0.2852343
b.	Section B	Plate Bar	WP	B6/SB-F/TF/Fr27/St/CL/WP	150	5	2184	323987.874	1619939.37	0.0044	4.4110949
		Stiffener	S1	B6/SB-F/TF/Fr27/St/CL/S1	60	6	1850	360	666000	0.0018	1.813518
			S2	B6/SB-F/TF/Fr27/St/CL/S2	60	8	2072	480	994560	0.0027	2.7081869
			S3	B6/SB-F/TF/Fr27/St/CL/S3	50	5	150	250	37500	0.0001	0.1021125
	Side Shell	SS/		B6/SB-F/TF/Fr27/St/SS/							0
			WP1	B6/SB-F/TF/Fr27/Ps/SS/WP1	300	6	-	1136013.98	6816083.88	0.0186	18.560196
			FP1	B6/SB-F/TF/Fr27/St/SS/FP1	120	12	3577	1440	5150880	0.0140	14.025846



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar
				Breath (mm)	Thickness (mm)					
c.	Plate Bar	WP2	B6/SB-F/TF/Fr27/St/SS/WP2	148	5	-	299003.152	1495015.76	0.0041	4.0709279
		FP2	B6/SB-F/TF/Fr27/St/SS/FP2	60	8	1636	480	785280	0.0021	2.1383174
		FP3	B6/SB-F/TF/Fr27/St/SS/FP3	60	8	2329	480	1117920	0.0030	3.0440962
	Stiffener	S1	B6/SB-F/TF/Fr27/St/SS/S1	50	5	173	250	43250	0.0001	0.1177698
		S2	B6/SB-F/TF/Fr27/St/SS/S2	50	5	213	250	53250	0.0001	0.1449998
		S3	B6/SB-F/TF/Fr27/St/SS/S3	50	5	214	250	53500	0.0001	0.1456805
		S4	B6/SB-F/TF/Fr27/St/SS/S4	50	5	438	250	109500	0.0003	0.2981685
		S5	B6/SB-F/TF/Fr27/St/SS/S5	50	5	340	250	85000	0.0002	0.231455
S6	B6/SB-F/TF/Fr27/St/SS/S6	50	5	148	250	37000	0.0001	0.100751		
A.2.6	Transverse Frame 28	TF/Fr28/	B6/SB-F/TF/Fr28/							
l	Portside	Ps/	B6/SB-F/TF/Fr28/Ps/							
	Center	CL/	B6/SB-F/TF/Fr28/Ps/CL/							
a.	Plate Bar	P1	B6/SB-F/TF/Fr27/Ps/CL/P1	-	8	-	51868.80675	414950.454	0.0011	1.1299101
		P2	B6/SB-F/TF/Fr27/Ps/CL/P2	-	6	-	494207.1383	2965242.83	0.0081	8.0743562
		S1	B6/SB-F/TF/Fr27/Ps/CL/S1	80	8	1858	640	1189120	0.0032	3.2379738
	Stiffener	S2	B6/SB-F/TF/Fr27/Ps/CL/S2	80	8	1631	640	1043840	0.0028	2.8423763
		S3-3	B6/SB-F/TF/Fr27/Ps/CL/S3-3	50	5	136	250	34000	0.0003	0.277746
b.	Plate Bar	WP	B6/SB-F/TF/Fr27/Ps/CL/WP	150	5	2184	323987.874	1619939.37	0.0044	4.4110949
		S1	B6/SB-F/TF/Fr27/Ps/CL/S1	60	6	1850	360	666000	0.0018	1.813518
	Stiffener	S2	B6/SB-F/TF/Fr27/Ps/CL/S2	60	8	2072	480	994560	0.0027	2.7081869
		S3	B6/SB-F/TF/Fr27/Ps/CL/S3	50	5	150	250	37500	0.0001	0.1021125
	Side Shell	SS/	B6/SB-F/TF/Fr28/Ps/SS/							
c.	Plate Bar	WP1	B6/SB-F/TF/Fr27/Ps/SS/WP1	300	6	-	1319055.903	7914335.42	0.0216	21.550735
		FP1	B6/SB-F/TF/Fr27/Ps/SS/FP1	120	12	3723	1440	5361120	0.0146	14.59833
		WP2	B6/SB-F/TF/Fr27/Ps/SS/WP2	148	5	-	245890.074	1229450.37	0.0033	3.3477934
		FP2	B6/SB-F/TF/Fr27/Ps/SS/FP2	60	8	1430	480	686400	0.0019	1.8690672
		FP3	B6/SB-F/TF/Fr27/Ps/SS/FP3	60	8	2329	480	1117920	0.0030	3.0440962
		S1	B6/SB-F/TF/Fr27/Ps/SS/S1	50	5	175	250	43750	0.0001	0.1191313
		S2	B6/SB-F/TF/Fr27/Ps/SS/S2	50	5	173	250	43250	0.0001	0.1177698
		S3	B6/SB-F/TF/Fr27/Ps/SS/S3	50	5	213	250	53250	0.0001	0.1449998
		S4	B6/SB-F/TF/Fr27/Ps/SS/S4	50	5	213	250	53250	0.0001	0.1449998
	Stiffener	S5	B6/SB-F/TF/Fr27/Ps/SS/S5	50	5	558	250	139500	0.0004	0.3798585
		S6	B6/SB-F/TF/Fr27/Ps/SS/S6	50	5	287	250	71750	0.0002	0.1953753
		S7	B6/SB-F/TF/Fr27/Ps/SS/S7	50	5	148	250	37000	0.0001	0.100751
		S8	B6/SB-F/TF/Fr27/Ps/SS/S8	50	5	4866	250	1216500	0.0033	3.3125295
Midframe	B6/SB-F/TF/Fr27/Ps/SS/Midframe	-	8	-	-	-	-	0.0453	45.3	



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar		
				Breath (mm)	Thickness (mm)							
Board	St/			B6/SB-F/TF/Fr28/St/								
Side Shell	SS/			B6/SB-F/TF/Fr28/St/SS/								
										0		
a.	Frame Side Shell	Plate Bar	WP1	B6/SB-F/TF/Fr27/Ps/SS/ WP1	300	6	-	1319055.903	7914335.42	0.0216	21.550735	
			FP1	B6/SB-F/TF/Fr27/St/SS/ FP1	120	12	3723	1440	5361120	0.0146	14.59833	
			WP2	B6/SB-F/TF/Fr27/St/SS/ WP2	148	5	-	245890.074	1229450.37	0.0033	3.3477934	
			FP2	B6/SB-F/TF/Fr27/St/SS/ FP2	60	8	1430	480	686400	0.0019	1.8690672	
			FP3	B6/SB-F/TF/Fr27/St/SS/ FP3	60	8	2329	480	1117920	0.0030	3.0440962	
		Stiffener	S1	B6/SB-F/TF/Fr27/St/SS/ S1	50	5	175	250	43750	0.0001	0.1191313	
			S2	B6/SB-F/TF/Fr27/St/SS/ S2	50	5	173	250	43250	0.0001	0.1177698	
			S3	B6/SB-F/TF/Fr27/St/SS/ S3	50	5	213	250	53250	0.0001	0.1449998	
			S4	B6/SB-F/TF/Fr27/St/SS/ S4	50	5	213	250	53250	0.0001	0.1449998	
			S5	B6/SB-F/TF/Fr27/St/SS/ S5	50	5	558	250	139500	0.0004	0.3798585	
			S6	B6/SB-F/TF/Fr27/St/SS/ S6	50	5	287	250	71750	0.0002	0.1953753	
			S7	B6/SB-F/TF/Fr27/St/SS/ S7	50	5	148	250	37000	0.0001	0.100751	
		Transverse Frame 29		TF/Fr29/		B6/SB-F/TF/Fr29/						
		l	Portside	Ps/		B6/SB-F/TF/Fr29/Ps/						
Center	CL/			B6/SB-F/TF/Fr29/Ps/CL/								
a.	Section A	Plate Bar	P	B6/SB-F/TF/Fr27/Ps/CL/P	-	6	-	1041545.482	6249272.89	0.0170	17.01677	
			Stiffener	S1	B6/SB-F/TF/Fr27/Ps/CL/S1	100	12	1328	1200	1593600	0.0043	4.3393728
		S2		B6/SB-F/TF/Fr27/Ps/CL/S2	100	12	2259	1200	2710800	0.0074	7.3815084	
		S3		B6/SB-F/TF/Fr27/Ps/CL/S3	50	5	75	250	18750	0.0001	0.0510563	
		S4		B6/SB-F/TF/Fr27/Ps/CL/S4	50	5	75	250	18750	0.0001	0.0510563	
		S5		B6/SB-F/TF/Fr27/Ps/CL/S5	50	5	14	250	3500	0.0000	0.0095305	
		S6		B6/SB-F/TF/Fr27/Ps/CL/S6	50	5	124	250	31000	0.0001	0.084413	
		b.	Section B	Plate Bar	WP	B6/SB-F/TF/Fr27/Ps/CL/ WP	150	5	2184	361530.476	1807652.38	0.0049
Stiffener	S1			B6/SB-F/TF/Fr27/Ps/CL/S1	60	8	550	480	264000	0.0007	0.718872	
	S2	B6/SB-F/TF/Fr27/Ps/CL/S2	60	8	550	480	264000	0.0007	0.718872			
	S3	B6/SB-F/TF/Fr27/Ps/CL/S3	60	6	1850	360	666000	0.0018	1.813518			
A.2.7	c.	Frame Side Shell	Side Shell	SS/		B6/SB-F/TF/Fr29/Ps/SS/						
			Plate Bar	WP1	B6/SB-F/TF/Fr27/Ps/SS/ WP1	300	6	-	1331501.953	7989011.72	0.0218	21.754079
				FP1	B6/SB-F/TF/Fr27/Ps/SS/ FP1	120	12	3583	1440	5159520	0.0140	14.049373
				WP2	B6/SB-F/TF/Fr27/Ps/SS/ WP2	148	5	-	195731.4094	978657.047	0.0027	2.6648831
				FP2	B6/SB-F/TF/Fr27/Ps/SS/ FP2	60	8	2197	480	1054560	0.0029	2.8715669
				FP3	B6/SB-F/TF/Fr27/Ps/SS/ FP3	60	8	1166	480	559680	0.0015	1.5240086
			Stiffener	S1	B6/SB-F/TF/Fr27/Ps/SS/ S1	50	5	173	250	43250	0.0001	0.1177698
				S2	B6/SB-F/TF/Fr27/Ps/SS/ S2	50	5	172	250	43000	0.0001	0.117089
				S3	B6/SB-F/TF/Fr27/Ps/SS/ S3	50	5	212	250	53000	0.0001	0.144319



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil (mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
		S4	B6/SB-F/TF/Fr27/Ps/SS/S4	50	5	213	250	53250	0.0001	0.1449998	
		Midframe	B6/SB-F/TF/Fr27/Ps/SS/Midframe	-	8	-	-	-	0.0080	8	
1	Starboard	St/	B6/SB-F/TF/Fr29/St/								
	Side Shell	SS/	B6/SB-F/TF/Fr29/St/SS/								
c.	Frame Side Shell	Plate Bar	WP1	B6/SB-F/TF/Fr27/Ps/SS/WP1	300	6	-	1331501.953	7989011.72	0.0218	21.754079
			FP1	B6/SB-F/TF/Fr27/St/SS/FP1	120	12	3583	1440	5159520	0.0140	14.049373
			WP2	B6/SB-F/TF/Fr27/St/SS/WP2	148	5	-	195731.4094	978657.047	0.0027	2.6648831
			FP2	B6/SB-F/TF/Fr27/St/SS/FP2	60	8	2197	480	1054560	0.0029	2.8715669
		Stiffener	FP3	B6/SB-F/TF/Fr27/St/SS/FP3	60	8	1166	480	559680	0.0015	1.5240086
			S1	B6/SB-F/TF/Fr27/St/SS/S1	50	5	173	250	43250	0.0001	0.1177698
			S2	B6/SB-F/TF/Fr27/St/SS/S2	50	5	172	250	43000	0.0001	0.117089
			S3	B6/SB-F/TF/Fr27/St/SS/S3	50	5	212	250	53000	0.0001	0.144319
			S4	B6/SB-F/TF/Fr27/St/SS/S4	50	5	213	250	53250	0.0001	0.1449998
Sub Block Transversal Bulkhead		S-TB/	B6/S-TB/								
Bulkhead Frame 27,5		B-Fr27,5/	B6/S-TB/B-Fr27,5/								
1	Plate Frame	Plate Bar	P/								
			1	B6/S-TB/B-Fr27,5/P/1	-	5	-	2067632.16	10338160.8	0.0282	28.150812
			2	B6/S-TB/B-Fr27,5/P/2	-	6	-	1470468.94	8822813.64	0.0240	24.024522
			3	B6/S-TB/B-Fr27,5/P/3	-	4	-	3115899.25	12463597	0.0339	33.938375
			4	B6/S-TB/B-Fr27,5/P/4	148	5	-	261661.38	1308306.9	0.0036	3.5625197
			5	B6/S-TB/B-Fr27,5/P/5	148	5	-	387215.282	1936076.41	0.0053	5.2719361
			6	B6/S-TB/B-Fr27,5/P/6	-	4	-	4224255.25	16897021	0.0460	46.010588
			7	B6/S-TB/B-Fr27,5/P/7	-	6	-	1470468.94	8822813.64	0.0240	24.024522
			8	B6/S-TB/B-Fr27,5/P/8	-	4	-	3115899.25	12463597	0.0339	33.938375
			9	B6/S-TB/B-Fr27,5/P/9	148	5	-	261661.38	1308306.9	0.0036	3.5625197
B.1.2	Stiffener Bulkhead	Sf/	B6/S-TB/B-Fr27,5/Sf/								
1	Plate Bar	Plate Bar	FB1	B6/S-TB/B-Fr27,5/Sf/1	60	8	1850	480	888000	0.0024	2.418024
			FB2	B6/S-TB/B-Fr27,5/Sf/2	120	12	3388	1440	4878720	0.0133	13.284755
			FB3	B6/S-TB/B-Fr27,5/Sf/3	60	8	1541	480	739680	0.0020	2.0141486
			FB4	B6/S-TB/B-Fr27,5/Sf/4	120	12	3388	1440	4878720	0.0133	13.284755
			FB5	B6/S-TB/B-Fr27,5/Sf/5	150	12	270	1800	486000	0.0013	1.323378
			FB6	B6/S-TB/B-Fr27,5/Sf/6	60	8	2218	480	1064640	0.0029	2.8990147
			FB7	B6/S-TB/B-Fr27,5/Sf/7	60	8	2218	480	1064640	0.0029	2.8990147
			FB8	B6/S-TB/B-Fr27,5/Sf/8	60	8	1541	480	739680	0.0020	2.0141486



B.1

2

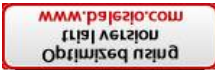
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil (mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar
				Breath (mm)	Thickness (mm)					
Stiffener T	T Bar	FB9	B6/S-TB/B-Fr27,5/Sf/FB9	60	8	1950	480	936000	0.0025	2.548728
		FB10	B6/S-TB/B-Fr27,5/Sf/FB10	60	8	1850	480	888000	0.0024	2.418024
		FB11	B6/S-TB/B-Fr27,5/Sf/FB11	150	12	270	1800	486000	0.0013	1.323378
		FB12	B6/S-TB/B-Fr27,5/Sf/FB12	60	5	1190	300	357000	0.0010	0.972111
		FB13	B6/S-TB/B-Fr27,5/Sf/FB13	60	5	227	300	68100	0.0002	0.1854363
		FB14	B6/S-TB/B-Fr27,5/Sf/FB14	60	5	227	300	68100	0.0002	0.1854363
		FB15	B6/S-TB/B-Fr27,5/Sf/FB15	60	5	227	300	68100	0.0002	0.1854363
		FB16	B6/S-TB/B-Fr27,5/Sf/FB16	60	5	2197	300	659100	0.0018	1.7947293
		FB17	B6/S-TB/B-Fr27,5/Sf/FB17	60	5	2197	300	659100	0.0018	1.7947293
		FB18	B6/S-TB/B-Fr27,5/Sf/FB18	60	5	2112	300	633600	0.0017	1.7252928
		FB19	B6/S-TB/B-Fr27,5/Sf/FB19	60	5	2112	300	633600	0.0017	1.7252928
		FB20	B6/S-TB/B-Fr27,5/Sf/FB20	60	5	1893	954	1805922	0.0049	4.9175256
		FB21	B6/S-TB/B-Fr27,5/Sf/FB21	60	5	1893	954	1805922	0.0049	4.9175256
		FB22	B6/S-TB/B-Fr27,5/Sf/FB22	60	5	1685	954	1607490	0.0044	4.3771953
		FB23	B6/S-TB/B-Fr27,5/Sf/FB23	60	5	1685	954	1607490	0.0044	4.3771953
		FB24	B6/S-TB/B-Fr27,5/Sf/FB24	60	5	1473	954	1405242	0.0038	3.826474
		FB25	B6/S-TB/B-Fr27,5/Sf/FB25	60	5	1473	954	1405242	0.0038	3.826474
		FB26	B6/S-TB/B-Fr27,5/Sf/FB26	60	5	1123	954	1071342	0.0029	2.9172643
		FB27	B6/S-TB/B-Fr27,5/Sf/FB27	60	5	1123	954	1071342	0.0029	2.9172643
		FB28	B6/S-TB/B-Fr27,5/Sf/FB28	60	5	769	954	733626	0.0020	1.9976636
		FB29	B6/S-TB/B-Fr27,5/Sf/FB29	60	5	769	955	734395	0.0020	1.9997576
		FB30	B6/S-TB/B-Fr27,5/Sf/FB30	50	5	297	956	283932	0.0008	0.7731468
		FB31	B6/S-TB/B-Fr27,5/Sf/FB31	50	5	297	957	284229	0.0008	0.7739556
		FB32	B6/S-TB/B-Fr27,5/Sf/FB32	50	5	509	958	487622	0.0013	1.3277947
		FB33	B6/S-TB/B-Fr27,5/Sf/FB33	50	5	509	959	488131	0.0013	1.3291807
		FB34	B6/S-TB/B-Fr27,5/Sf/FB34	50	5	214	960	205440	0.0006	0.5594131
		FB35	B6/S-TB/B-Fr27,5/Sf/FB35	50	5	214	961	205654	0.0006	0.5599958
		FB36	B6/S-TB/B-Fr27,5/Sf/FB36	50	5	214	962	205868	0.0006	0.5605786
		FB37	B6/S-TB/B-Fr27,5/Sf/FB37	50	5	214	963	206082	0.0006	0.5611613
		FB38	B6/S-TB/B-Fr27,5/Sf/FB38	80	8	1407	964	1356348	0.0037	3.6933356
		FB39	B6/S-TB/B-Fr27,5/Sf/FB39	80	8	1407	965	1357755	0.0037	3.6971669
		FB40	B6/S-TB/B-Fr27,5/Sf/FB40	50.8	4.5	865	720	622800	0.0017	1.6958844
		FB41	B6/S-TB/B-Fr27,5/Sf/FB41	50.8	4.5	865	720	622800	0.0017	1.6958844
		FB42	B6/S-TB/B-Fr27,5/Sf/FB42	50.8	4.5	298	720	214560	0.0006	0.5842469
		FB43	B6/S-TB/B-Fr27,5/Sf/FB43	50.8	4.5	298	720	214560	0.0006	0.5842469
		FB44	B6/S-TB/B-Fr27,5/Sf/FB44	50.8	4.5	571	720	411120	0.0011	1.1194798
		FB45	B6/S-TB/B-Fr27,5/Sf/FB45	50.8	4.5	571	720	411120	0.0011	1.1194798



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
	Pillar	PL1	B6/S-TB/B-Fr27,5/Sf/PL1	101.6	6	2197	2294.4	5040796.8	0.0137	13.72609	
		PL2	B6/S-TB/B-Fr27,5/Sf/PL2	101.6	6	2197	2294.4	5040796.8	0.0137	13.72609	
		Midframe	B6/S-TB/B-Fr27,5/Sf/Midframe	-	8	-			0.0096	9.6	
Sub Blok Deck		SB-D/		B6/SB-D/							
Long Deck Girder		LDG/		B6/SB-D/LDG/							
C.1	1	Centerline	Bulb Plat	CI/		B6/SB-D/LDG/CI/					
				1	B6/SB-D/LDG/CI/1	60	5	4495.64	408.28	1835479.899	0.0050
				2	B6/SB-D/LDG/CI/2	60	5	5760	408.28	2351692.8	0.0064
				3	B6/SB-D/LDG/CI/3	60	5	5760	408.28	2351692.8	0.0064
				4	B6/SB-D/LDG/CI/4	60	5	5760	408.28	2351692.8	0.0064
				5	B6/SB-D/LDG/CI/5	60	5	5760	408.28	2351692.8	0.0064
				6	B6/SB-D/LDG/CI/6	60	5	5760	408.28	2351692.8	0.0064
				7	B6/SB-D/LDG/CI/7	60	5	3360	408.28	1371820.8	0.0037
				8	B6/SB-D/LDG/CI/8	60	5	3360	408.28	1371820.8	0.0037
	Plate Bar	FB1	B6/SB-D/LDG/CI/FB1	60	5	415	300	124500	0.0003		
		FB2	B6/SB-D/LDG/CI/FB2	60	5	415	300	124500	0.0003		
	2	Portside	Bulb Plat	Ps/		B6/SB-D/LDG/Ps/					
				1	B6/SB-D/LDG/Ps/1	60	5	5760	408.28	2351692.8	0.0064
				2	B6/SB-D/LDG/Ps/2	60	5	5760	408.28	2351692.8	0.0064
				3	B6/SB-D/LDG/Ps/3	60	5	5760	408.28	2351692.8	0.0064
				4	B6/SB-D/LDG/Ps/4	60	5	5760	408.28	2351692.8	0.0064
				5	B6/SB-D/LDG/Ps/5	60	5	5760	408.28	2351692.8	0.0064
				6	B6/SB-D/LDG/Ps/6	60	5	5760	408.28	2351692.8	0.0064
				7	B6/SB-D/LDG/Ps/7	60	5	3360	408.28	1371820.8	0.0037
8	B6/SB-D/LDG/Ps/8	60	5	3360	408.28	1371820.8	0.0037				
3	Starboard	Bulb Plat	Sb/		B6/SB-D/LDG/Sb/						
			1	B6/SB-D/LDG/Sb/1	60	5	5760	408.28	2351692.8	0.0064	
			2	B6/SB-D/LDG/Sb/2	60	5	5760	408.28	2351692.8	0.0064	
			3	B6/SB-D/LDG/Sb/3	60	5	5760	408.28	2351692.8	0.0064	
			4	B6/SB-D/LDG/Sb/4	60	5	5760	408.28	2351692.8	0.0064	
			5	B6/SB-D/LDG/Sb/5	60	5	5760	408.28	2351692.8	0.0064	
			6	B6/SB-D/LDG/Sb/6	60	5	5760	408.28	2351692.8	0.0064	
			7	B6/SB-D/LDG/Sb/7	60	5	3360	408.28	1371820.8	0.0037	
8	B6/SB-D/LDG/Sb/8	60	5	3360	408.28	1371820.8	0.0037				



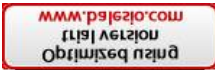
Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar	
				Breath (mm)	Thickness (mm)						
Transverse Deck Beam Frame 18	TDB/			B6/SB-D/TDB/							
C.2.1	Centerline	Plate	Fr18/	B6/SB-D/TDB/Fr18/							
			CI/	B6/SB-D/TDB/Fr18/CI/							
	WP	B6/SB-D/TDB/Fr18/CI/WP	187	5	-	456037.512	2280187.56	0.0062			
		FP	B6/SB-D/TDB/Fr18/CI/FP	60	6	2191.97	360	789109.2	0.0021		
	Portside	Plate	Ps/	B6/SB-D/TDB/Fr18/Ps/							
			WP	B6/SB-D/TDB/Fr18/Ps/WP	187	5	-	379970.146	1899850.73	0.0052	
	FP	B6/SB-D/TDB/Fr18/Ps/FP	60	6	1872.737	360	674185.32	0.0018			
		Starboard	Plate	Sb/	B6/SB-D/TDB/Fr18/Sb/						
WP	B6/SB-D/TDB/Fr18/Sb/WP			187	5	-	379970.146	1899850.73	0.0052		
FP	B6/SB-D/TDB/Fr18/Sb/FP	60	6	1872.737	360	674185.32	0.0018				
Transverse Deck Beam Frame 19	Fr19/			B6/SB-D/TDB/Fr19/							
C.2.2	Centerline	Plate	CI/	B6/SB-D/TDB/Fr19/CI/							
			WP	B6/SB-D/TDB/Fr19/CI/WP	187	5	-	458301.976	2291509.88	0.0062	
	FP	B6/SB-D/TDB/Fr19/CI/FP	60	6	2376.395	360	855502.2	0.0023			
	Portside	Plate	Ps/	B6/SB-D/TDB/Fr19/Ps/							
			WP	B6/SB-D/TDB/Fr19/Ps/WP	187	5	-	367330.436	1836652.18	0.0050	
			FP1	B6/SB-D/TDB/Fr19/Ps/FP1	60	6	1106.195	360	398230.2	0.0011	
	FP2	B6/SB-D/TDB/Fr19/Ps/FP2	60	6	261.23	360	94042.8	0.0003			
	Starboard	Plate	Sb/	B6/SB-D/TDB/Fr19/Sb/							
WP			B6/SB-D/TDB/Fr19/Sb/WP	187	5	-	367330.436	1836652.18	0.0050		
FP	B6/SB-D/TDB/Fr19/Sb/FP	60	6	1807.94	360	650858.4	0.0018				
Transverse Deck Beam Frame 20	Fr20/			B6/SB-D/TDB/Fr20/							
C.2.3	Centerline	Plate	CI/	B6/SB-D/TDB/Fr20/CI/							
			WP1	B6/SB-D/TDB/Fr20/CI/WP1	187	5	-	322946.248	1614731.24	0.0044	
		FP1	B6/SB-D/TDB/Fr20/CI/FP1	60	6	1475	360	531000	0.0014		
		WP2	B6/SB-D/TDB/Fr20/CI/WP2	187	5	-	165467.716	827338.58	0.0023		
	FP2		B6/SB-D/TDB/Fr20/CI/FP2	60	6	753	360	271080	0.0007		
	Portside	Plate	Ps/	B6/SB-D/TDB/Fr20/Ps/							
			WP	B6/SB-D/TDB/Fr20/Ps/WP	187	5	-	367330.436	1836652.18	0.0050	
	FP	B6/SB-D/TDB/Fr20/Ps/FP	60	6	1807.94	360	650858.4	0.0018			
Starboard	Plate	Sb/	B6/SB-D/TDB/Fr20/Sb/								
		WP	B6/SB-D/TDB/Fr20/Sb/WP	187	5	-	367330.436	1836652.18	0.0050		
FP	B6/SB-D/TDB/Fr20/Sb/FP	60	6	1807.94	360	650858.4	0.0018				



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar		
				Breath (mm)	Thickness (mm)							
Deck Beam Frame 21		Fr21	B6/SB-D/TDB/Fr21									
		Cl/	B6/SB-D/TDB/Fr21Cl/									
C.2.4	a.	Centerline	Plate	WP	B6/SB-D/TDB/Fr21Cl/WP	187	5	-	322942.874	1614714.37	0.0044	
				FP	B6/SB-D/TDB/Fr21Cl/FP	60	6	1475	360	531000	0.0014	
	b.	Portside	Plate	Ps/		B6/SB-D/TDB/Fr21Ps/						
				WP	B6/SB-D/TDB/Fr21Ps/WP	187	5	-	367330.436	1836652.18	0.0050	
		FP	B6/SB-D/TDB/Fr21Ps/FP	60	6	1807.94	360	650858.4	0.0018			
	c.	Starboard	Plate	Sb/		B6/SB-D/TDB/Fr21Sb/						
WP				B6/SB-D/TDB/Fr21Sb/WP	187	5	-	367330.436	1836652.18	0.0050		
	FP	B6/SB-D/TDB/Fr21Sb/FP	60	6	1807.94	360	650858.4	0.0018				
Sub Block Longitudinal Construction		SB-LC/	B6/SB-LC/									
Bottom Longitudinal		B/	B6/SB-LC/B/									
		Cl/	B6/SB-LC/B/Cl/									
D.1.1	a.	Keel Plate	Plate Bar	K3	B6/SB-LC/B/Cl/K3	150	15	-	885565.68	13283485.2	0.0362	36.17093
				K3	B6/SB-LC/B/Cl/K3	150	15	-	448488.8973	6727333.46	0.0183	18.318529
	b.	Tank Coonstruction	Web Plate	Tc/		B6/SB-LC/B/Cl/Tc/						
				WP1	B6/SB-LC/B/Cl/Tc/WP1	-	5	-	3041333.86	15206669.3	0.0414	41.407761
			WP2	B6/SB-LC/B/Cl/Tc/WP2	-	5	-	1799368.116	8996840.58	0.0245	24.498397	
			Stiffener	FP1	B6/SB-LC/B/Cl/Tc/FP1	80	8	3319	640	2124160	0.0058	5.7840877
				FP2	B6/SB-LC/B/Cl/Tc/FP2	80	8	3314	640	2120960	0.0058	5.7753741
				FP3	B6/SB-LC/B/Cl/Tc/FP3	80	8	3308	640	2117120	0.0058	5.7649178
				FP4	B6/SB-LC/B/Cl/Tc/FP4	80	8	3520	640	2252800	0.0061	6.1343744
				FP5	B6/SB-LC/B/Cl/Tc/FP5	80	8	1659	640	1061760	0.0029	2.8911725
				FP6	B6/SB-LC/B/Cl/Tc/FP6	80	8	1859	640	1189760	0.0032	3.2397165
				FP7	B6/SB-LC/B/Cl/Tc/FP7	80	8	2328	640	1489920	0.0041	4.0570522
TT1	B6/SB-LC/B/Cl/Tc/TT1	-		8	-	496600.75	3972806	0.01081795	10.817951			
TT2	B6/SB-LC/B/Cl/Tc/TT2	-	5	-	8456445	42282225	0.1151345	115.1				
D.1	Portside	Ps/		B6/SB-LC/B/Ps/								
		Bkh/		B6/SB-LC/B/Ps/Bkh/								
D.1.2	b.	Longitudinal Bulkhead	Web Plate	WP1	B6/SB-LC/B/Ps/Bkh/WP1	134	8	-	803951.3288	6431610.63	0.0175	17.513276
				WP2	B6/SB-LC/B/Ps/Bkh/WP2	134	8	-	436992.5863	3495940.69	0.0095	9.5194465
				WP3	B6/SB-LC/B/Ps/Bkh/WP3	-	15	-	726432.0333	10896480.5	0.0297	29.671116
				WP4	B6/SB-LC/B/Ps/Bkh/WP4	-	15	-	726432.0333	10896480.5	0.0297	29.671116
				WP5	B6/SB-LC/B/Ps/Bkh/WP5	-	15	-	1352527.32	20287909.8	0.1105	110.48796
			Stiffener	FP1	B6/SB-LC/B/Ps/Bkh/FP1	120	15	2668	1800	4802400	0.0131	13.076935
				FP2	B6/SB-LC/B/Ps/Bkh/FP2	120	15	2690	1800	4842000	0.0132	13.184766
				FP3	B6/SB-LC/B/Ps/Bkh/FP3	120	15	3422	1800	6159600	0.0168	16.772591
				FP4	B6/SB-LC/B/Ps/Bkh/FP4	90	8	2345	720	1688400	0.0046	4.5975132



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil (mm ²)	Volume Profil (mm ³)	Berat (Ton)	Gambar			
				Breath (mm)	Thickness (mm)								
		FP5	B6/SB-LC/B/Ps/Bkh/FP5	90	8	867	720	624240	0.0017	1.6998055			
		FP6	B6/SB-LC/B/Ps/Bkh/FP6	90	8	870	720	626400	0.0017	1.7056872			
	Starboard	Sb/		B6/SB-LC/B/Sb/						0			
		Bkh/		B6/SB-LC/B/Sb/Bkh/						0			
D.1.3	b.	Web Plate	WP1	B6/SB-LC/B/Sb/Bkh/WP1	134	8	-	803951.3288	6431610.63	0.0175	17.513276		
			WP2	B6/SB-LC/B/Sb/Bkh/WP2	134	8	-	436992.5863	3495940.69	0.0095	9.5194465		
			WP3	B6/SB-LC/B/Sb/Bkh/WP3	-	15	-	726432.0333	10896480.5	0.0297	29.671116		
			WP4	B6/SB-LC/B/Sb/Bkh/WP4	-	15	-	726432.0333	10896480.5	0.0297	29.671116		
		Stiffener	FP1	B6/SB-LC/B/Sb/Bkh/FP1	120	15	2668	1800	4802400	0.0131	13.076935		
			FP2	B6/SB-LC/B/Sb/Bkh/FP2	120	15	2690	1800	4842000	0.0132	13.184766		
			FP3	B6/SB-LC/B/Sb/Bkh/FP3	120	15	3422	1800	6159600	0.0168	16.772591		
			FP4	B6/SB-LC/B/Sb/Bkh/FP4	90	8	2345	720	1688400	0.0046	4.5975132		
			FP5	B6/SB-LC/B/Sb/Bkh/FP5	90	8	867	720	624240	0.0017	1.6998055		
			FP6	B6/SB-LC/B/Sb/Bkh/FP6	90	8	870	720	626400	0.0017	1.7056872		
			G02	B6/SB-LC/B/Sb/Bkh/G02	-	8	-	765	6120	0.0078	7.8		
			G03	B6/SB-LC/B/Sb/Bkh/G03	-	8	-	676	5408	0.0082	8.2		
		G04	B6/SB-LC/B/Sb/Bkh/G04	-	8	-	66798	534384	0.1093	109.3			
		G06	B6/SB-LC/B/Sb/Bkh/G06	-	8	-	899	7192	0.0116	11.6			
		G07	B6/SB-LC/B/Sb/Bkh/G07	-	8	-	234	1872	0.0137	13.7			
		A01	B6/SB-LC/B/Sb/Bkh/A01	-	8	-	543	4344	0.0119	11.9			
	Longitudinal Planking Construction	PLK/		B6/SB-LC/PLK/									
	Centerline	Cl/		B6/SB-LC/PLK/Cl/									
D.2	D.2.1	a.	Deck	FSW	PLK1	B6/SB-LC/PLK/Cl/PLK1	2160	11000	6572	6701	44038972	0.1199	119.91812
					PLK2	B6/SB-LC/PLK/Cl/PLK2	2160	11000	6572	6701	44038972	0.1199	119.91812
					PLK3	B6/SB-LC/PLK/Cl/PLK3	2160	11000	6572	2543	16712596	0.0303	30.32
					PLK4	B6/SB-LC/PLK/Cl/PLK4	2160	11000	2980	2657	7917860	0.0543	54.321312
					PLK5	B6/SB-LC/PLK/Cl/PLK5	2160	11000	2980	6342	18899160	0.0453	45.321312
					PLK6	B6/SB-LC/PLK/Cl/PLK6	2160	11000	2980	5454	16252920	0.0549	54.8785
					PLK7	B6/SB-LC/PLK/Cl/PLK7	2160	11000	2699	821	2215879	0.0049	4.867
					PLK8	B6/SB-LC/PLK/Cl/PLK8	2160	11000	2699	821	2215879	0.0050	4.986



Massa jenis Aluminium
Long Frame

2.723

Ton/m³

0.000000001

mm³ to m³

0.000001



Nama	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)	
				Breath (mm)	Thickness (mm)						
		SB-F/		B6/SB-F/							
A.1	Long Frame	SB-F/		B6/SB-F/							
A.1.1	Long Frame Portside	LF/B/		B6/SB-F/LF/B/							
a.	Long Frame Bottom Portside	Ps/		B6/SB-F/LF/B/Ps/							
	1 LFP 1	T Bar	1	B6/SB-F/LF/B/Ps/1	125x6	75x8	3031	1302	3946362	0.0107	10.74594
	2 LFP 2		2	B6/SB-F/LF/B/Ps/2	125x6	75x8	3026	1302	3939852	0.0107	10.72822
	3 LFP 3		3	B6/SB-F/LF/B/Ps/3	125x6	75x8	3020	1302	3932040	0.0107	10.70694
	4 LFP 4		4	B6/SB-F/LF/B/Ps/4	125x6	75x8	3013	1302	3922926	0.0107	10.68213
	5 LFP 5		5	B6/SB-F/LF/B/Ps/5	125x6	75x8	1170	1302	1523340	0.0041	4.148055
	6 LFP 6		6	B6/SB-F/LF/B/Ps/6	125x6	75x8	1773	1302	2308446	0.0063	6.285898
	7 LFP 7		7	B6/SB-F/LF/B/Ps/7	125x6	75x8	1767	1302	2300634	0.0063	6.264626
	8 LFP 8		8	B6/SB-F/LF/B/Ps/8	125x6	75x8	1761	1302	2292822	0.0062	6.243354
	9 LFP 9		9	B6/SB-F/LF/B/Ps/9	-	8	0	4312	34496	0.0001	0.093933
	10 LFP 10		10	B6/SB-F/LF/B/Ps/10	-	10	0	211232	2112320	0.0058	5.751847
A.1.2	Long Frame Portside	LF/B/		B6/SB-F/LF/B/							
a.	Long Frame Bottom Portside	St/		B6/SB-F/LF/B/St/							
	1 LFP 1	T Bar	1	B6/SB-F/LF/B/Ps/1	125x6	75x8	3031	1302	3946362	0.0107	10.74594
	2 LFP 2		2	B6/SB-F/LF/B/Ps/2	125x6	75x8	3026	1302	3939852	0.0107	10.72822
	3 LFP 3		3	B6/SB-F/LF/B/Ps/3	125x6	75x8	3020	1302	3932040	0.0107	10.70694
	4 LFP 4		4	B6/SB-F/LF/B/Ps/4	125x6	75x8	3013	1302	3922926	0.0107	10.68213
	5 LFP 5		5	B6/SB-F/LF/B/Ps/5	125x6	75x8	1170	1302	1523340	0.0041	4.148055
	6 LFP 6		6	B6/SB-F/LF/B/Ps/6	125x6	75x8	1773	1302	2308446	0.0063	6.285898
	7 LFP 7		7	B6/SB-F/LF/B/Ps/7	125x6	75x8	1767	1302	2300634	0.0063	6.264626
	8 LFP 8		8	B6/SB-F/LF/B/Ps/8	125x6	75x8	1761	1302	2292822	0.0062	6.243354
	9 LFP 9		9	B6/SB-F/LF/B/Ps/9	-	10	0	211232	2112320	0.0058	5.751847



No	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)		
				Breath (mm)	Thickness (mm)							
	S2		B7/SB-F/TF/Fr31/S2	60	6	704	360	253440	0.0007	0.690		
	S3		B7/SB-F/TF/Fr31/S3	60	6	749	360	269640	0.0007	0.734		
	S4		B7/SB-F/TF/Fr31/S4	60	6	704	360	253440	0.0007	0.690		
	S5		B7/SB-F/TF/Fr31/S5	50	5	250	250	62500	0.0002	0.170		
	S6		B7/SB-F/TF/Fr31/S6	50	5	382	250	95500	0.0003	0.260		
	S7		B7/SB-F/TF/Fr31/S7	50	5	382	250	95500	0.0003	0.260		
	S8		B7/SB-F/TF/Fr31/S8	50	5	315	250	78750	0.0002	0.214		
	S9		B7/SB-F/TF/Fr31/S9	50	5	172	250	43000	0.0001	0.117		
	S10		B7/SB-F/TF/Fr31/S10	50	5	237	250	59250	0.0002	0.161		
	S11		B7/SB-F/TF/Fr31/S11	50	5	237	250	59250	0.0002	0.161		
	S12		B7/SB-F/TF/Fr31/S12	50	5	140	250	35000	0.0001	0.095		
	S13		B7/SB-F/TF/Fr31/S13	50	5	211	250	52750	0.0001	0.144		
	S14		B7/SB-F/TF/Fr31/S14	50	5	211	250	52750	0.0001	0.144		
	S15		B7/SB-F/TF/Fr31/S15	50	5	212	250	53000	0.0001	0.144		
	S16		B7/SB-F/TF/Fr31/S16	50	5	172	250	43000	0.0001	0.117		
	S17		B7/SB-F/TF/Fr31/S17	50	5	140	250	35000	0.0001	0.095		
	S18		B7/SB-F/TF/Fr31/S18	50	5	212	250	53000	0.0001	0.144		
	S19		B7/SB-F/TF/Fr31/S19	50	5	315	250	78750	0.0002	0.214		
	B622		B7/SB-F/TF/Fr31/B622-4	55	6	50	2677.21	16063.26	0.0002	0.175		
	C611		B7/SB-F/TF/Fr31/C611-9	102	6	94	9515.21	57091.26	0.0014	1.399		
	Braket		B7/SB-F/TF/Fr31/BRK-2	121	6	183	21453	128718	0.0031	3.108		
	MidFr		B7/SB-F/TF/Fr31/MidFr	-	8	-	-	-	0.0454	45.400		
A.2.3	Transverse Frame 32											
a.	Transverse Frame 32											
				B7/SB-F/TF/Fr32								
	Frame	P1	B7/SB-F/TF/Fr32/P1	-	6	-	3410.989833	20465.939	0.0001	0.111		
		P2	B7/SB-F/TF/Fr32/P2	-	6	-	360266.86	2161601.16	0.0059	5.886		
		P3	B7/SB-F/TF/Fr32/P3	-	6	-	1634632.66	9807795.96	0.0267	26.707		
		P4	B7/SB-F/TF/Fr32/P4	-	6	-	783837.1667	4703023	0.0128	12.806		
		P5	B7/SB-F/TF/Fr32/P5	-	6	-	1700562.517	10203375.1	0.0278	27.784		
		P6	B7/SB-F/TF/Fr32/P6	-	10	-	847226.871	8472268.71	0.0231	23.070		
		P7	B7/SB-F/TF/Fr32/P7	-	6	-	548410.3	3290461.8	0.0090	8.960		
		FP1	B7/SB-F/TF/Fr32/FP1	100	10	3161	1000	3161000	0.0086	8.607		
		FP2	B7/SB-F/TF/Fr32/FP2	100	10	3186	1000	3186000	0.0087	8.675		
		FP3	B7/SB-F/TF/Fr32/FP3	100	10	4674	1000	4674000	0.0127	12.727		
		FP4	B7/SB-F/TF/Fr32/FP4	100	10	4463	1000	4463000	0.0122	12.153		
	Stiffner	S1	B7/SB-F/TF/Fr32/S1	50	5	250	250	62500	0.00017	0.17019		
		S2	B7/SB-F/TF/Fr32/S2	50	5	140	250	35000	0.00010	0.09531		
		S3	B7/SB-F/TF/Fr32/S3	50	5	170	250	42500	0.00012	0.11573		
		S4	B7/SB-F/TF/Fr32/S4	50	5	421	250	105250	0.00029	0.28660		
		S5	B7/SB-F/TF/Fr32/S5	50	5	404	250	101000	0.00028	0.27502		
		S6	B7/SB-F/TF/Fr32/S6	50	5	210	250	52500	0.00014	0.14296		
		S7	B7/SB-F/TF/Fr32/S7	50	5	245	250	61250	0.00017	0.16678		
		S8	B7/SB-F/TF/Fr32/S8	50	5	245	250	61250	0.00017	0.16678		
		S9	B7/SB-F/TF/Fr32/S9	50	5	309	250	77250	0.00021	0.21035		
		S10	B7/SB-F/TF/Fr32/S10	50	5	214	250	53500	0.00015	0.14568		
		S11	B7/SB-F/TF/Fr32/S11	50	5	288	250	72000	0.00020	0.19606		
		S12	B7/SB-F/TF/Fr32/S12	50	5	140	250	35000	0.00010	0.09531		
		S13	B7/SB-F/TF/Fr32/S13	50	5	210	250	52500	0.00014	0.14296		
		S14	B7/SB-F/TF/Fr32/S14	50	5	210	250	52500	0.00014	0.14296		
		S15	B7/SB-F/TF/Fr32/S15	50	5	170	250	42500	0.00012	0.11573		



a	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
	FP4		B7/SB-F/CL-Fr/B/FP4	-	8	4599	1218462	9747696	0.02654	26.543
	WP1		B7/SB-F/CL-Fr/UP/WP1	250	6	2390	813809.8083	4882858.85	0.01330	13.296
	WP2		B7/SB-F/CL-Fr/UP/WP2	250	6	3590	1159987.773	6959926.64	0.01895	18.952
	FP1		B7/SB-F/CL-Fr/UP/FP1	100	10	2377	1000	2377000	0.00647	6.473
	FP2		B7/SB-F/CL-Fr/UP/FP2	100	10	3522	1000	3522000	0.00959	9.590
	Braket		B7/SB-F/CL-Fr/UP/BRK	168	6	265	687.189	115447.764	0.000	0.314
b.	Windlass Foundation									
	Anchor Long Bulkhead Plate	P1	B7/SB-F/WD-FND/P1	-	10	2397	2064482.730	20644827.300	0.056	56.216
		P2	B7/SB-F/WD-FND/P2	-	10	2397	2525446.910	25254469.100	0.069	68.768
	Stiffner	S1	B7/SB-F/WD-FND/S1-3	80	8	1190	640.000	1077876.890	0.009	8.805
		S2	B7/SB-F/WD-FND/S2	80	8	900	640.000	723726.017	0.002	1.971
		S3	B7/SB-F/WD-FND/S3-5	80	8	1190	640.000	707337.201	0.010	9.630
	Braket		B7/SB-F/WD-FND/BRK-3	60	6	292	360.000	105120.000	0.001	0.859
c.	Bollard Tubes									
	Bollard Tube FWD	FWD1	B7/SB-F/BLD-TB/FWD1	152.4	12.7	701	5573.782	3907221.182	0.011	10.639
		FWD2	B7/SB-F/BLD-TB/FWD2	152.4	12.7	701	5573.782	3907221.182	0.011	10.639
	Braket		B7/SB-F/BLD-TB/BRk	379	15	175	32036.020	480540.300	0.003	2.617
	Braket		B7/SB-F/BLD-TB/BRk	-	15	-	5847.620	87714.300	0.000	0.478
	Tube		B7/SB-F/BLD-TB/TB-2	-	5	-	5573.782	27868.910	0.000	0.152
	Bollard Tube Side	SD1	B7/SB-F/BLD-TB/SD1	152.4	12.7	1031	5573.782	5746569.242	0.016	15.648
		SD2	B7/SB-F/BLD-TB/SD2	152.4	12.7	1031	5573.782	5746569.242	0.016	15.648
		SD3	B7/SB-F/BLD-TB/SD3	38.1	0	780	642.000	500760.000	0.001	1.364
		SD4	B7/SB-F/BLD-TB/SD4	38.1	0	780	642.000	500760.000	0.001	1.364
	Tube		B7/SB-F/BLD-TB/TB-4	-	5	-	873.782	4368.910	0.000	0.048
	G05		B7/SB-F/BLD-TB/G05	-	5	-	-	-	0.01101	11.01
	G06	FP	B7/SB-F/BLD-TB/G06/FP	100	10	2381	1000	2381000	0.006	6.483
		WP	B7/SB-F/BLD-TB/G06/WP	-	8	-	493123	3944984	0.011	10.742
d.	Accommodation									
	Steps to Accommodation	WP1	B7/SB-F/ACC/S-ACC/WP1	-	5	900	424646.42	2123232.1	0.006	5.782
		WP2	B7/SB-F/ACC/S-ACC/WP2	-	5	900	424646.42	2123232.1	0.006	5.782
		WP3	B7/SB-F/ACC/S-ACC/WP3	-	5	900	424646.42	2123232.1	0.006	5.782
	Steps Sides	SS	B7/SB-F/ACC/Ss	-	5	-	505275.342	2526376.71	0.014	13.759
		STF1	B7/SB-F/ACC/STF1	60	6	417	360	150120	0.001	0.818
		STF2	B7/SB-F/ACC/STF2	60	6	624	360	224640	0.001	1.223
e.	Half Tube Fender									
	Half Tube1		B7/SB-F/HTF1	168	7.11	1709	1819.14218	3108913.986	0.017	16.931
	Half Tube2		B7/SB-F/HTF2	168	7.11	4338	1819.14218	7891438.777	0.043	42.977
	Half Tube3		B7/SB-F/HTF3	168	7.11	470	1819.14218	854996.8246	0.005	4.656
	FB		B7/SB-F/HTF/FB	40	8	274	320	87680	0.000	0.478
	FB		B7/SB-F/HTF/FB	40	8	4307	320	1378240	0.008	7.506
	FB		B7/SB-F/HTF/FB	40	8	230	320	73600	0.000	0.401
	FB		B7/SB-F/HTF/FB	40	8	554	320	177280	0.001	0.965
	G09	FP1	B7/SB-F/HTF/G09/FP1	150	12	1100	1800	1980000	0.011	10.783
		FP2	B7/SB-F/HTF/G09/FP2	70	10	1100	700	770000	0.013	12.580
		WP	B7/SB-F/HTF/G09/WP	-	6	-	37570.16667	225421	0.004	3.683
	G10	FP1	B7/SB-F/HTF/G010/FP1	100	10	1100	1000	1100000	0.003	2.995
		FP2	B7/SB-F/HTF/G010/FP2	100	10	1100	1000	1100000	0.003	2.995
		WP	B7/SB-F/HTF/G010/WP	-	8	-	89280.125	714241	0.002	1.945
f.	Main Deck		B7/SB-F/MD							
	Main Deck Plates	P1	B7/SB-F/MD/P1	-	8	-	4392145.22	35137161.76	0.096	95.678



1a	Material	Sub Code	Kode	Penampang Profil (mm)		Panjang (mm)	Luas Penampang Profil(mm ²)	Volume Profil (mm ³)	Berat (Ton)	Berat (Kg)
				Breath (mm)	Thickness (mm)					
		P2	B7/SB-F/MD/P2	-	8	-	1240883.53	9927068.24	0.027	27.031
		P3	B7/SB-F/MD/P3	-	8	-	1240883.53	9927068.24	0.027	27.031
		P4	B7/SB-F/MD/P4	-	5	-	7946500.38	39732501.9	0.108	108.192
		P5	B7/SB-F/MD/P5	-	8	-	530688.684	4245509.472	0.012	11.561
		P6	B7/SB-F/MD/P6	-	8	-	530688.684	4245509.472	0.012	11.561
		P7	B7/SB-F/MD/P7	-	5	-	8753682.34	43768411.7	0.119	119.181
		P8	B7/SB-F/MD/P8	-	8	-	511339.88	4090719.04	0.011	11.139
		P9	B7/SB-F/MD/P9	-	8	-	511339.88	4090719.04	0.011	11.139
		P10	B7/SB-F/MD/P10	-	8	-	605952.81	4847622.48	0.013	13.200
		FP1	B7/SB-F/MD/FP1-2	60	6	2541	360	914760	0.005	4.982
		FP2	B7/SB-F/MD/FP2-2	60	6	843	360	303480	0.002	1.653
	Stiffner Deck	S1	B7/SB-F/MD/S1	60	6	894	360	321840	0.001	0.876
		S2	B7/SB-F/MD/S2	60	6	894	360	321840	0.001	0.876
		S3	B7/SB-F/MD/S3	60	6	3544	360	1275840	0.003	3.474
		S4	B7/SB-F/MD/S4	60	6	2346	360	844560	0.002	2.300
		S5	B7/SB-F/MD/S5	60	6	3544	360	1275840	0.003	3.474
		S6	B7/SB-F/MD/S6	60	6	870	360	313200	0.001	0.853
		S7	B7/SB-F/MD/S7	60	6	3269	360	1176840	0.003	3.205
		S8	B7/SB-F/MD/S8	60	6	253	360	91080	0.000	0.248
		S9	B7/SB-F/MD/S9	60	6	2669	360	960840	0.003	2.616
		S10	B7/SB-F/MD/S10	60	6	2428	360	874080	0.002	2.380
		S11	B7/SB-F/MD/S11	60	6	1349	360	485640	0.001	1.322
		S12	B7/SB-F/MD/S12	60	6	2669	360	960840	0.003	2.616
		S13	B7/SB-F/MD/S13	60	6	1145	360	412200	0.001	1.122
		S14	B7/SB-F/MD/S14	60	6	1349	360	485640	0.001	1.322
		S15	B7/SB-F/MD/S15	60	6	869	360	312840	0.001	0.852
		S16	B7/SB-F/MD/S16	60	6	1145	360	412200	0.001	1.122
		S17	B7/SB-F/MD/S17	60	6	1144	360	411840	0.001	1.121
		S18	B7/SB-F/MD/S18-2	60	6	259	360	93240	0.001	0.508
		S19	B7/SB-F/MD/S18-3	-	6	1196	108763.911	652583.466	0.005	5.331
		S20	B7/SB-F/MD/S18-5	-	6	1194	128146.5053	768879.032	0.010	10.468
		S21	B7/SB-F/MD/S18-3	-	6	430	128146.5053	768879.032	0.006	6.281
		S22	B7/SB-F/MD/S18-2	-	8	1795	306624.6713	2452997.37	0.013	13.359
		S23	B7/SB-F/MD/S18-2	-	8	1795	234429.37	1875434.96	0.010	10.214
		S24	B7/SB-F/MD/S18-2	-	8	2301	319833.77	2558670.16	0.014	13.935
		D02	B7/SB-F/MD/D02	-	6	1194	547069.665	3282417.99	0.009	8.938
		D03	B7/SB-F/MD/D03	65	15	125	420175.218	6302628.27	0.028	27.500
		D04	B7/SB-F/MD/D04	65	15	125	420175.218	6302628.27	0.007	7.4
		D05	B7/SB-F/MD/D05	65	15	125	420175.218	6302628.27	0.003	2.8
		D06	B7/SB-F/MD/D06	65	15	125	420175.218	6302628.27	0.030	29.9
		D07	B7/SB-F/MD/D07	65	15	125	420175.218	6302628.27	0.004	3.5
		D08	B7/SB-F/MD/D08	65	15	125	420175.218	6302628.27	0.005	4.9
		D09	B7/SB-F/MD/D09	65	15	125	420175.218	6302628.27	0.006	5.9
		D10	B7/SB-F/MD/D10	65	15	125	420175.218	6302628.27	0.007	6.7
		D11	B7/SB-F/MD/D11	65	15	125	420175.218	6302628.27	0.008	7.6
		D12	B7/SB-F/MD/D12	65	15	125	420175.218	6302628.27	0.061	60.5
		D13	B7/SB-F/MD/D13	65	15	125	420175.218	6302628.27	0.033	32.7
		D14	B7/SB-F/MD/D14	65	15	125	420175.218	6302628.27	0.030	30.3
		D15	B7/SB-F/MD/D15	65	15	125	420175.218	6302628.27	0.061	60.7