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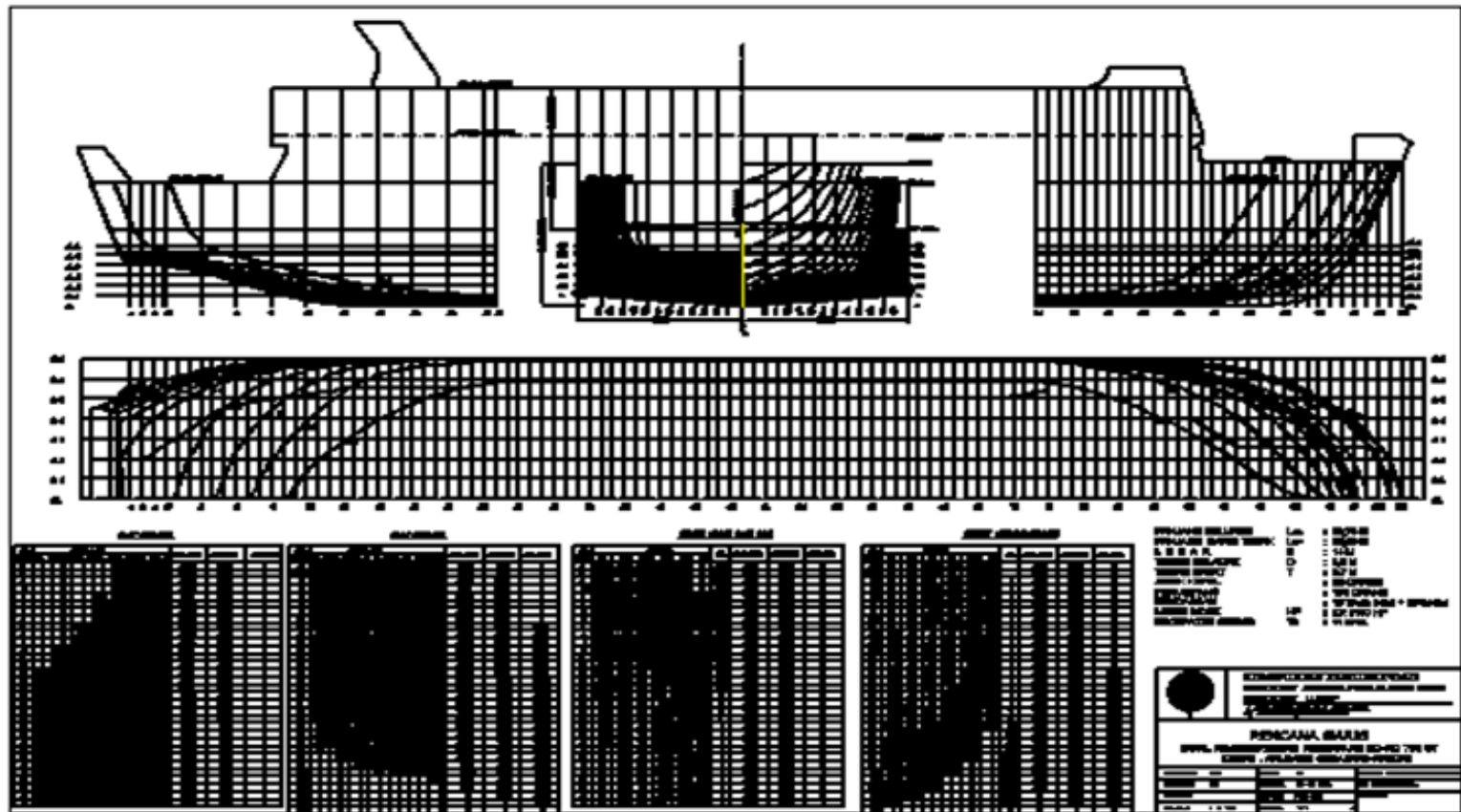
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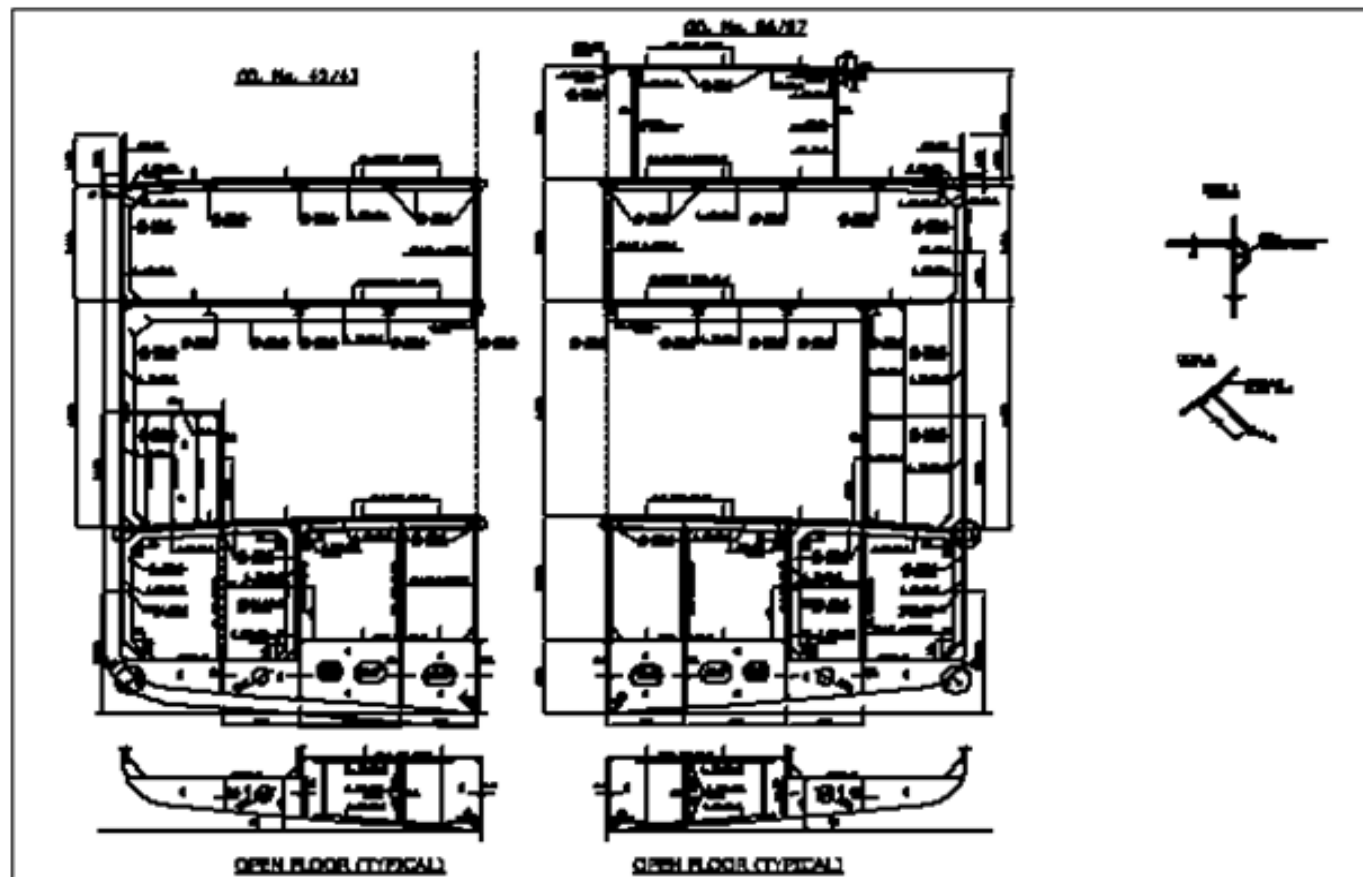
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LAMPIRAN

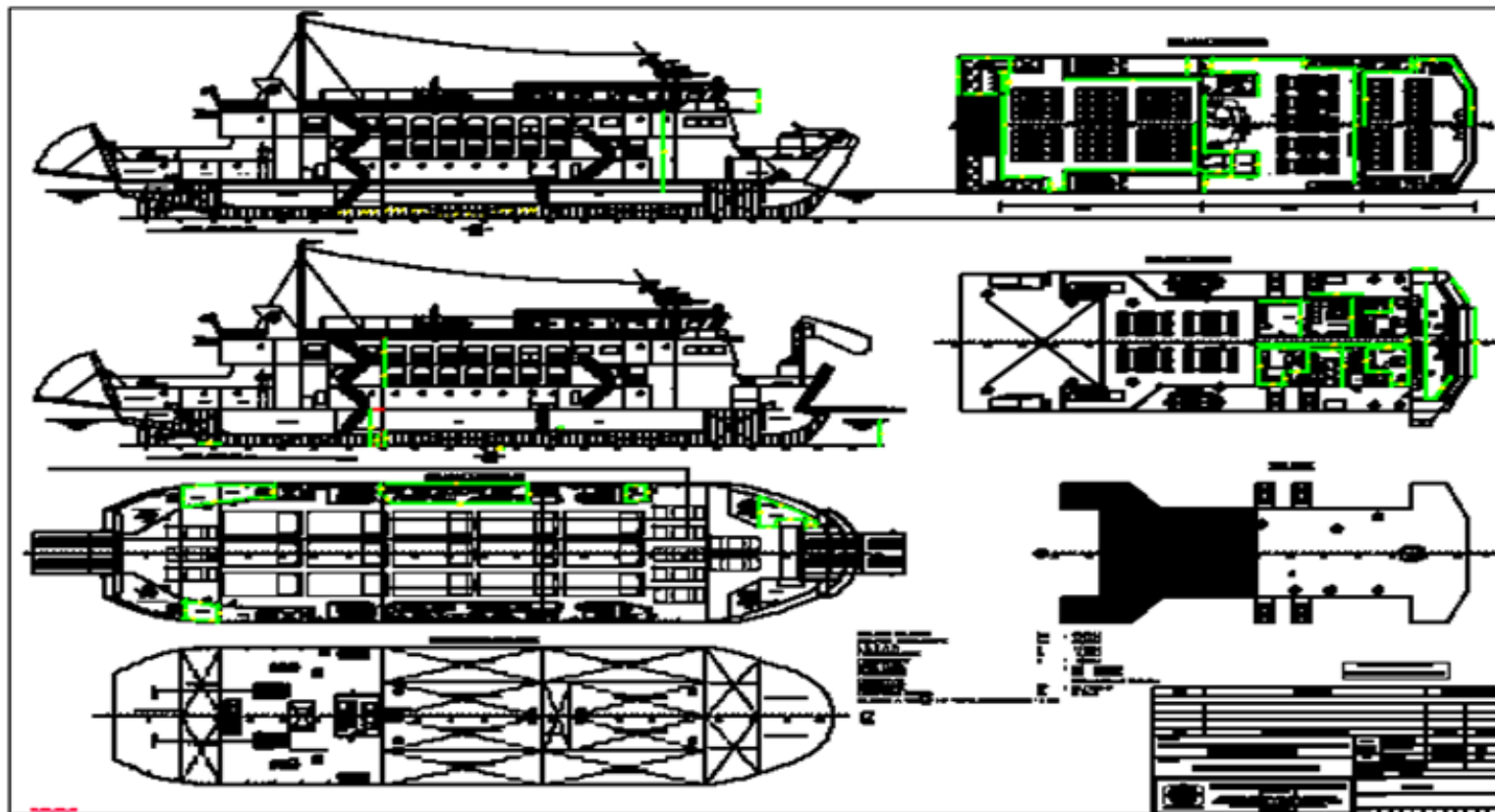
Lampiran 1 : Gambar Lines Plan Kapal Ferry Ro-Ro 750 GT



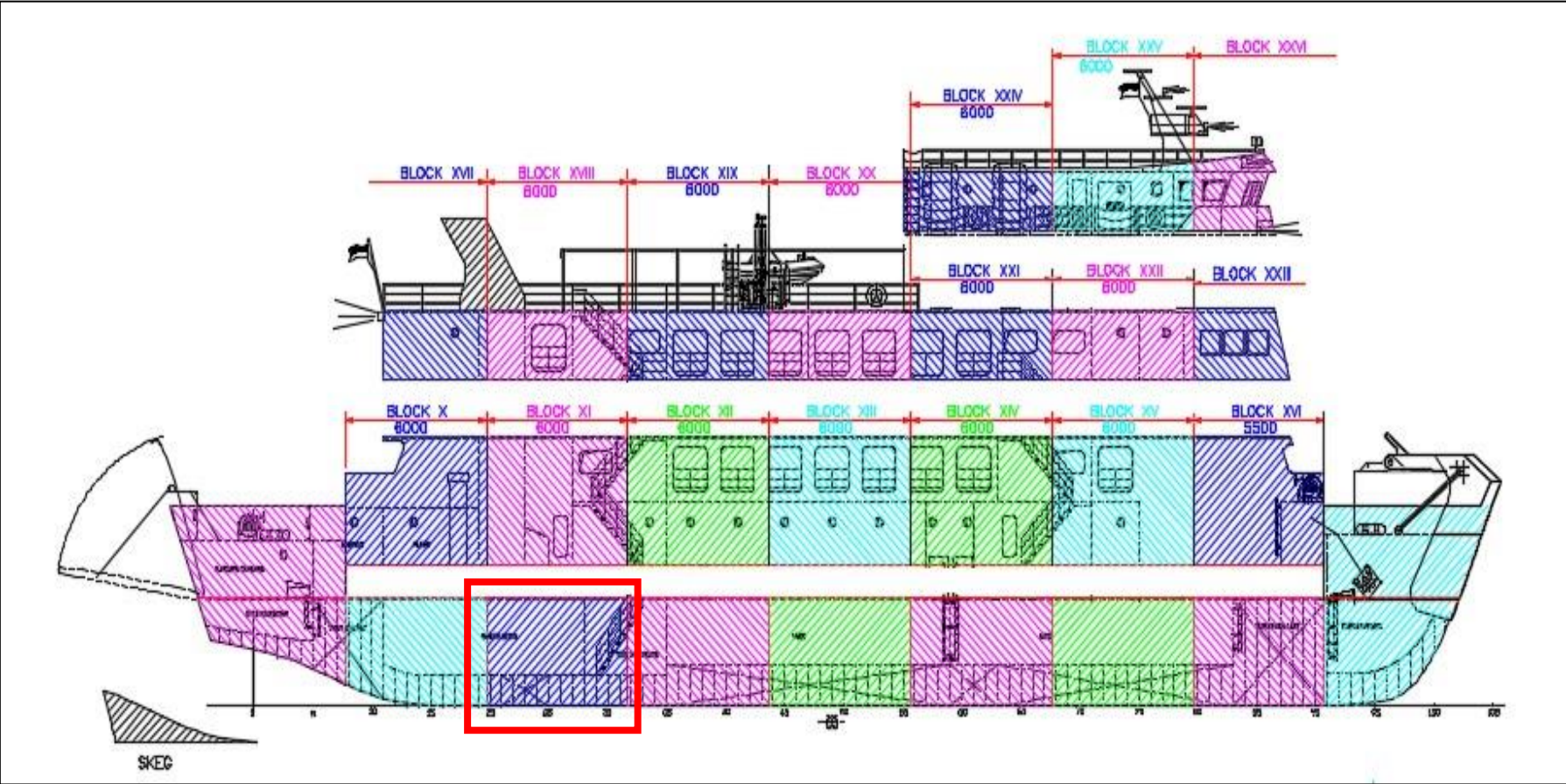
Lampiran 3 : Gambar Miship Section Kapal Ferry Ro-Ro 750 GT



Lampiran 4 : Gambar General Arrangement Kapal Ferry Ro-Ro 750 GT



Lampiran 5 : Gambar Pembagian Block Kapal Ferry Ro-RO 750 GT



Lampiran 6 : Tabel Sistem Kode untuk Digit 1 ST sampai 1d ST

Kode								
1st		1a st		1b st		1c st		1d st
Workgroup		Block		Sub Block		Panel		Posisi Frame
1	Hull Construction	HS01	Hull Structure 01	SB01	Bottom	P01	Bottom	
2	Outfitting	HS02	Hull Structure 02	SB02	Portside	P02	Inner Bottom	
3	Painting	HS03	Hull Structure 03	SB03	Starboard	P03	Sheel	
4	Pipe Piece Family	HS04	Hull Structure 04	SB04	Deck	P04	Side	
		HS05	Hull Structure 05	SB05	Bulkhead	P05	Deck	
		HS06	Hull Structure 06					
		HS07	Hull Structure 07					
		HS08	Hull Structure 08					
		HS09	Hull Structure 09					

Lampiran 7 : Tabel Sistem Kode Digit 1e ST

Kode 1e ST Komponen			
BS (PS)	Bilge Strake (Portside)	SG4(PS)	Side Girder 4 (Portside)
BS (SB)	Bilge Strake (Starboard)	SG4(SB)	Side Girder 4 (Starboard)
BP1 (PS)	Bottom Plate 1 (Portside)	SG5(PS)	Side Girder 5 (Portside)
BP1 (SB)	Bottom Plate 1 (Starboard)	SG5(SB)	Side Girder 5 (Starboard)
BP2 (PS)	Bottom Plate 2 (Portside)	SF1(PS)	Solid Floor 1 (Portside)
BP2 (SB)	Bottom Plate 2 (Starboard)	SF1(SB)	Solid Floor 1 (Starboard)
BP3 (PS)	Bottom Plate 3 (Portside)	SF2(PS)	Solid Floor 2 (Portside)
BP3 (SB)	Bottom Plate 3 (Starboard)	SF2(SB)	Solid Floor 2 (Starboard)
BP4 (PS)	Bottom Plate 4 (Portside)	SF3(PS)	Solid Floor 3 (Portside)
BP4 (SB)	Bottom Plate 4 (Starboard)	SF3(SB)	Solid Floor 3 (Starboard)
BDD	Bracket of Deck Beam	SF4(PS)	Solid Floor 4 (Portside)
BMF1(PS)	Bracket of Main Frame (Atas)	SF4(SB)	Solid Floor 4 (Starboard)
BMF2(PS)	Bracket of Main Frame (Bawah)	SF5(PS)	Solid Floor 5 (Portside)
BOPL	Bracket of Pillar	SF5(SB)	Solid Floor 5 (Starboard)
CA	Cantilever	SF6(PS)	Solid Floor 6 (Portside)
CG	Center Girder	SF6(SB)	Solid Floor 6 (Starboard)
GDB1	Girder & Transverse Deck Beam 1	TDB1	Transverse Deck Beam 1
GDB2	Girder & Transverse Deck Beam 2	TDB2	Transverse Deck Beam 2
GDB3	Girder & Transverse Deck Beam 3	TDB3	Transverse Deck Beam 3
GDB4	Girder & Transverse Deck Beam 4	WFR(PS)	Web Frame (Portside)
IB1	Inner Bottom 1	WFR(SB)	Web Frame (Starboard)
IB2 (PS)	Inner Bottom 2 (Portside)	SP(PS)	Side Plate (Portside)
IB2 (SB)	Inner Bottom 2 (Starboard)	SP(SB)	Side Plate (Starboard)
IB3 (PS)	Inner Bottom 3 (Portside)	LDB1	Longitudinal Deck Beam 1
IB3 (SB)	Inner Bottom 3 (Starboard)	LDB2	Longitudinal Deck Beam 2
IB4 (PS)	Inner Bottom 4 (Portside)	LDB3	Longitudinal Deck Beam 3
IB4 (SB)	Inner Bottom 4 (Starboard)	LDB4	Longitudinal Deck Beam 4
IB5 (PS)	Inner Bottom 5 (Portside)	MFR(PS)	Main Frame (Portside)
IB5 (SB)	Inner Bottom 5 (Starboard)	MFR(SB)	Main Frame (Starboard)
KP	Keel Plate	PL	Pillar
SS(SB)	Sheer Strake	SG3(PS)	Side Girder 3 (Portside)
SS (PS)	Sheer Strake	SG3(SB)	Side Girder 3 (Starboard)
DP1	Deck Plate 1	EF(PS)	Engine Foundation (Portside)
DP2(PS)	Deck Plate 2 (Portside)	EF(SB)	Engine Foundation (Starboard)
DP2(SB)	Deck Plate 2 (Starboard)	FCE(PS)	Face Plate of Engine Foundation (Portside)
DP3(PS)	Deck Plate 3 (Portside)	FCE(SB)	Face Plate of Engine Foundation (Starboard)
DP3(SB)	Deck Plate 3 (Starboard)	SG1(PS)	Side Girder 1 (Portside)
DP4(PS)	Deck Plate 4 (Portside)	SG1(SB)	Side Girder 1 (Starboard)
DP4(SB)	Deck Plate 4 (Starboard)	SG2(PS)	Side Girder 2 (Portside)
DP5(PS)	Deck Plate 5 (Portside)	SG2(SB)	Side Girder 2 (Starboard)
DP5(SB)	Deck Plate 5 (Starboard)		




















Lampiran 8 : Tabel Sistem Kode untuk Digit 2nd

	2 ND
	Level Product
1	Plate
2	Profil
3	Sub-Panel
4	Panel
5	Sub-Block
6	Block

Lampiran 9 : Gambar Sistem Kode 2nd untuk Plate digit 3rd sampai 17th

1 ST - 1 - HULL STRUCTURE






2 ND - 1 - PLATE

	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	11TH	12TH	13TH	14TH	15TH	16TH	17TH
	TYPE	MATERIAL	LENGTH (Meter)	WIDTH (Meter)	THICKNESS (Meter)	SHAPE	HOLE & SLOTS	EDGE PRE-PARATION	PRE-PROCESSING TREATMENT	CUTTING	FORMING	CONNECTION TYPE	WORK POSITION	WORK STATION	EQUIPMENT USED
0		Class 1-Secondary STEEL "A/AH"	$0 \leq 0.2$	$0 \leq 0.1$	$0 \leq 1 \leq 5$		NONE		NONE	NONE	NONE	NONE	DOWN HAND	CLOSED PLATE WORKSHOP	MANUAL CUTTING
1	STANDART	Class 1-Secondary STEEL "B/AH"	$0.2 \leq 0.4$	$0.1 \leq 0.2$	$5 \leq 1 \leq 10$				BLAST	SHEAR	FLANGE	FILLED WELD NON-CONT	VERTICAL	OPEN PLATE WORKSHOP	MANUAL CUTTING
2	GALVANIZED	Class 1-Secondary STEEL "D/DH"	$0.4 \leq 0.8$	$0.2 \leq 0.4$	$10 \leq 1 \leq 15$				MARKING	SAW	PRESS	FILLED WELD CONT	OVERHEAD	PIPE WORKSHOP	OTOMATIS CUTTING
3	EXPANDED	Class II-Primary STEEL "B/AH"	$0.8 \leq 1.2$	$0.4 \leq 0.6$	$15 \leq 1 \leq 20$				1 + 2	MANUAL BURN	ROLL	BUTT WELDING	ROTATE	OPEN WORKSHOP ASSEMBLING	MANUAL BENDING
4	PERFORATED	Class II-Primary STEEL "D/DH"	$1.2 \leq 2$	$0.6 \leq 0.9$	$20 \leq 1 \leq 25$			0 + 1		FITTING CUTTING	RING PRESS	ONE SIDE BUTT WELD	TURN	MACHINERY WORKSHOP	HYDROULIK PRESS
5	2 + 4	Class II-Primary STEEL "E/EH"	$2 \leq 3$	$0.9 \leq 1.1$	$25 \leq 1 \leq 30$			0 + 2		N/C BURN	LINE HEAT	PLUG WELD	0 + 3	ELECTRICAL WORKSHOP	CNC OPTIC CUTTING
6		Class III-Spesial STEEL "D/DH"	$3 \leq 4$	$1.1 \leq 1.5$	$30 \leq 1 \leq 35$		1 + 2	1 + 2		DRILL	3 + 4	FAIR/FILL WELD	0 + 4	WOODEN WORKSHOP	0 + 3 + LIFT
7		Class III-Spesial STEEL "E/EH"	$4 \leq 5$	$1.5 \leq 1.7$	$35 \leq 1 \leq 45$		1 + 2 + 3	3 + 0		ROUTER	3 + 5	BOLT	1 + 3	BULDING BERTH	0 + 4 + LIFT
8		Class III-Spesial STEEL "FH"	$5 \leq 6$	$1.7 \leq 2.2$	$45 \leq 1 \leq 50$		2 + 3	3 + 1			4 + 5	RIVET	1 + 4	GRAVING DOCK	2 + 3 + LIFT
9		ALUMINIUM	≥ 6	≥ 2.2	≥ 50		4 + 5	3 + 2				OTHER	2 + 3	OTHER	2 + 4 + LIFT

Lampiran 10 : Gambar Sistem Kode 2nd untuk Profile digit 3rd sampai 17th

1 ST - 1 - STRUCTURE









2 ND - 1 - PROFILE

	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	11TH	12TH	13TH	14TH	15TH	16TH	17TH
	TYPE	MATERIAL	LENGTH (Meter)	WEB DEPTH (Milimeter)	FLANGE WIDTH (Milimeter)	WEB THICKNESS (Milimeter)	FLANGE THICKNESS (Milimeter)	END CUT	PRE-PROCESSING TREATMENT	CUTTING	FORMING	CONNECTION TYPE	WORK POSITION	WORK STATION	EQUIPMENT USED
0		Class 1- Secondary STEEL "A/AH"	0 ≤ 0.2	50 ≤ 100	30 ≤ 40	0 ≤ t ≤ 5	0 ≤ t ≤ 5		NONE	NONE	NONE	NONE	DOWN HAND	CLOSED PLATE WORKSHOP	MANUAL CUTTING
1	PLAT BAR	Class 1- Secondary STEEL "B/AH"	0.2 ≤ 0.4	100 ≤ 150	40 ≤ 50	5 ≤ t ≤ 10	5 ≤ t ≤ 10		BLAST	SHEAR	PRESS	FILLED WELD NON-CONT	VERTICAL	OPEN PLATE WORKSHOP	MANUAL BENDING
2	WEB FRAME	Class 1- Secondary STEEL "D/DH"	0.4 ≤ 0.8	150 ≤ 200	50 ≤ 60	10 ≤ t ≤ 15	10 ≤ t ≤ 15		MARKING	SAW	ROLL BEND	FILLED WELD CONT	OVERHEAD	PIPE WORKSHOP	HYDROLIK BENDING
3	INVERT EED TEE BAR FRAME	Class II- Primary STEEL "B/AH"	0.8 ≤ 1.2	200 ≤ 250	60 ≤ 70	15 ≤ t ≤ 20	15 ≤ t ≤ 20		1 + 2	MANUAL BURN	LINE HEAT BENDING	BUTT WELDING	ROTATE	OPEN WORKSHOP ASSEMBLING	PROFILE BENDING
4	INVERTED ANGLE FRAME	Class II- Primary STEEL "D/DH"	1.2 ≤ 2	250 ≤ 300	70 ≤ 80	20 ≤ t ≤ 25	20 ≤ t ≤ 25			FITTING CUTTING	MANUAL TWIST	ONE SIDE BUTT WELD	TURN	MACHINERY WORKSHOP	PIPE BENDING
5	PLAIN ANGLE FRAME	Class II- Primary STEEL "E/EH"	2 ≤ 3	300 ≤ 350	80 ≤ 90	25 ≤ t ≤ 30	25 ≤ t ≤ 30	1 + 3		N/C BURN		PLUG WELD	0 + 3	ELECTRICAL WORKSHOP	LIFT
6	BULB ANGLE FRAME	Class III- Spesial STEEL "D/DH"	3 ≤ 4	350 ≤ 400	90 ≤ 100	30 ≤ t ≤ 35	30 ≤ t ≤ 35			DRILL		FAIR/FILL WELD	0 + 4	WOODEN WORKSHOP	0 + 1 + 5
7	CHANEL FRAME	Class III- Spesial STEEL "E/EH"	4 ≤ 5	400 ≤ 450	100 ≤ 110	35 ≤ t ≤ 45	35 ≤ t ≤ 45			ROUTER		BOLT	1 + 3	BULDING BERTH	0 + 2 + 5
8	ZEE BAR FRAME	Class III- Spesial STEEL "FH"	5 ≤ 6	450 ≤ 500	110 ≤ 120	45 ≤ t ≤ 50	45 ≤ t ≤ 50					RIVET	1 + 4	GRAVING DOCK	0 + 3 + 5
9	PIPE	ALUMINIUM	≥ 6	≥ 500	≥ 120	≥ 50	≥ 50					OTHER	2 + 3	OTHER	0 + 4 + 5

Lampiran 11 : Gambar Sistem kode 2nd untuk Sub-Panel digit 3rd sampai 17th

1 ST - 1 - STRUCTURE

2 ND - 2 - SUB PANEL

	3RD	4TH	5TH	6TH	7TH	8TH	9TH	10TH	11TH	12TH	13TH	14TH	15TH	16TH	17TH
	TYPE	MATERIAL	LENGTH (Meter)	WIDTH (Meter)	DEPTH (Meter)	SHAPE	WEIGHT (Kg)	NUMBER OF PART PER SUB-ASSEMBLY	PRE-PROCESSING TREATMENT	CUTTING	FORMING	CONNECTION TYPE	WORK POSITION	WORK STATION	EQUIPMENT USED
0			0 ≤ 0.2	≤ 0.25	≤ 0.05		≤ 20	2	NONE	NONE		NONE	DOWN HAND	CLOSED PLATE WORKSHOP	MANUAL CUTTING
1	WEB FRAME		0.2 ≤ 0.4	0.25 ≤ 0.5	0.5 ≤ 0.1		20 ≤ 40	3	BLAST	SHEAR		FILLED WELD NON-CONT	VERTICAL	OPEN PLATE WORKSHOP	MANUAL CUTTING
2	BULKHEAD WEB		0.4 ≤ 0.8	0.5 ≤ 1	0.1 ≤ 0.15		40 ≤ 60	5	MARKING	SAW		FILLED WELD CONT	OVERHEAD	PIPE WORKSHOP	WELDING
3	SIDE STRINGER		0.8 ≤ 1.2	1 ≤ 1.5	0.15 ≤ 0.2		60 ≤ 80	7	1 + 2	MANUAL BURN		BUTT WELDING	ROTATE	OPEN WORKSHOP ASSEMBLING	BLOCK AND TACKLE
4	BULKHEAD STRINGER		1.2 ≤ 2	1.5 ≤ 2	0.2 ≤ 0.25		80 ≤ 100	7 ≤ 10		FITTING CUTTING		ONE SIDE BUTT WELD	TURN	MACHINERY WORKSHOP	JACK
5	BOTTOM GIRDER		2 ≤ 3	2 ≤ 2.5	0.25 ≤ 0.5		100 ≤ 125	10 ≤ 13		N/C BURN		PLUG WELD	0 + 3	ELECTRICAL WORKSHOP	LIFT
6	DECK GIRDER		3 ≤ 4	2.5 ≤ 3	0.5 ≤ 1		125 ≤ 150	13 ≤ 15		DRILL		FAIR/FILL WELD	0 + 4	WOODEN WORKSHOP	1 + 2 + 3
7	DECK TRANSVERSE		4 ≤ 5	3 ≤ 4	1 ≤ 1.25		150 ≤ 175	15 ≤ 20		ROUTER		BOLT	1 + 3	BUILDING BERTH	2 + 5
8	BULKWARK		5 ≤ 6	4 ≤ 5	1.25 ≤ 1.5	OTHER	175 ≤ 200	20 ≤ 30				RIVET	1 + 4	GRAVING DOCK	2 + 3
9	OTHER		≥ 6	≥ 5	≥ 1.5		≥ 200	≥ 30				OTHER	2 + 3	OTHER	ALL

Lampiran 12 : Pembagian Konstruksi (*Breakdown*) pada *Block* Kapal

