

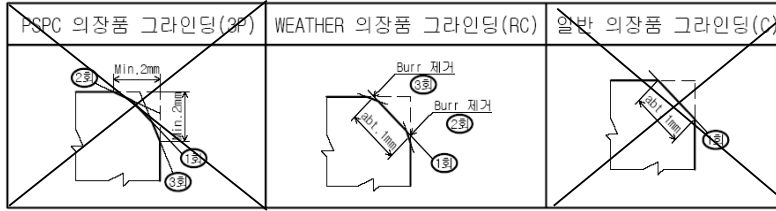
NOTE

PSPC 의장품

WEATHER 의장품

일반 의장품

1. 본도는 VERTICAL LADDER 제작도임.
2. 모서리 부분은 하기와 같이 GRINDING 할 것. (RC)

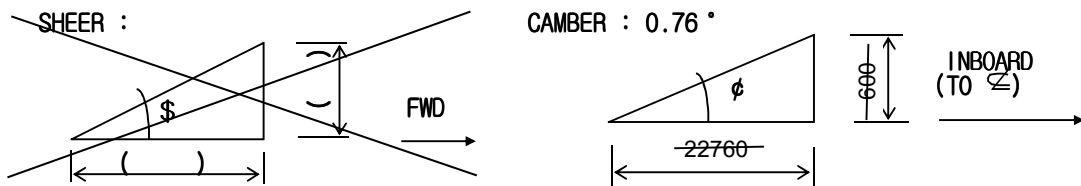


3. 용접은 특기외 하기 표 참조하고 연속 용접할 것.

* 필렛의 용접 각장은 아래를 따를 것.

재료의 두께	4.5	6	7~8	9~10	11~12	13	14~15	16~18	19~20
용접 각장	3	4	4.5	5	5.5	6	7	7.5	9


4. 제작시 DECK 상의 SHEER (\$: /)와 CAMBER (φ : 600/22760)를 필히 적용할 것.



5. 한 도면에서 서로 상이부분이 있거나 제작상 문제점 발생시 필히 당부와 협의/확정 후 제작 완료할 것.
6. 본 도면상에 표기된 자재 중 SS400 , 단조품(SF자재) 및 용접되는 주강품(SC42)은 탄소(C) 함유량이 0.23% 이하가 되어야 함에 유의할 것 (자재 MILL SHEET 제출 요).
- 또한, 주강품은 용접 시 PRE-HEATING(200℃) 한 후 용접하여 용접균열을 방지할 것.
7. 사용 자재의 MILL SHEET를 제출할 것.
8. 제작 시 정도관리를 철저히 하고, 제작 후 당사 자재 검사를 필할 것.
9. BOLT 길이는 NUT 체결후 ABT. 2~3 산이 남도록 할 것.
10. 모든 NAME PLATE는 상면에 GREASE COATING VINYL 3회 이상 감아서 청 TAP 부착하여 SET SCREW를 이용하여 정방향 부착 입고 할 것.
11. 도면 상 언급된 지시 사항 필히 준수하고 제작 TOLERANCE 준수할 것.
12. 소요부서 : 자재구매부, 대조립부, 판넬조립부
13. P.O.R NO. : J62
14. TOTAL WEIGHT : 1002.6 Kg/SHIP

(표지 포함 11매)

DEPT. B011000	SHIP NO. 8070-8073, 8103/8104	SHIP TYPE 14,800 TEU CLASS CONTAINER CARRIER
TEL. 3326	부서명 구 조 설 계 부	도 면 명
승 인 김 성 주	검 도 이 완 순	VERTICAL LADDER 제 작 도
작 성 문 지 혁		
HYUNDAI SAMHO HEAVY INDUSTRIES CO., LTD. SAMHO SHIPYARD, KOREA		도 면 번 호 1511-H12B-0
		날 짜 2021년 08월 17일

	PLAN HISTORY			SHIP NO.	8070-8073, 8103/8104	1
				DWG. NO.	1511-H12B	
DATE	REV. NO.	DESCRIPTION	DRAWN	CHECKED	APPROVED	
2021.08.17	O	8070-8073, 8103/8104호선 VERTICAL LADDER 제작도임.	문지혁	이완순	김성주	

PAINTING SPEC.						PAINT SUPPLIER	JOTUN
PAINT'G SYMBOL	PAINT ITEM OR AREA	MAT'L	SHOP PRIMER	표면 처리	BRAND NAME OF PAINT AND ITS COLOR SHADE	D.F.T (μ)	REMARK
UD	VERTICAL LADDER (VLD-S**)	STEEL	NS	T3			
	ITEM	IN SIDE & OUT SIDE			IN SIDE	OUT SIDE	
	ALL	FINAL	SHOP PRIMER	PRIMER			
		0					



製作仕様書(외주구매용)

SHIP NO.

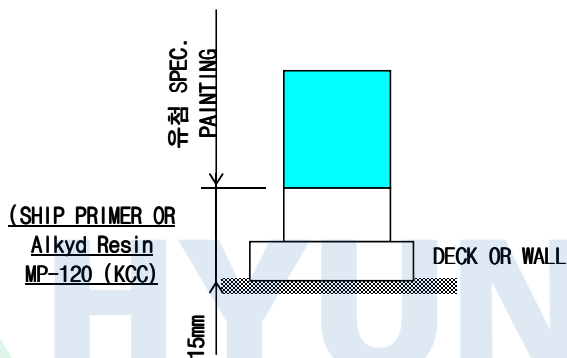
S990 - 995

2

DWG NO.

1511-H12B

1. GALV. 두께 : HOT DIP GALV. 55~80 μ (단, BOLT/NUT류는 45~65 μ 시공)
2. GREASE NIPPLE은 FULL GREASING하고 규정된 고무 CAP을 씌울것.
3. SS400이 아닌 재질의 BOLT/NUT는 재질을 PUNCHING할것.
4. 도장 : 유첨 SPEC.에 준하되 특히 DECK에 취부되는 부위는
DECK OR WALL에서 15mm까지는 SHOP PRIMER 시공할 것.
5. HOT GALV. : DECK/WALL에서 취부되는 부위는 DECK/WALL에서 15mm까지는
Alkyd Resin MP-120(KCC) Coating 하여 도금이 되지 않도록 할것.



6. GALV. 용 HOLE 시공할 경우는 GALV. 후 메공하고 GALV. 손상 부위 수정 후 입고할 것.
7. 납품시 P.O.R SHEET와 유첨도를 첨부할 것.
8. MAKER CERTIFICATE (특수 재료는 MILL SHEET)를 첨부할 것.
9. 무도장으로 입고되는 품목으로서 그 품목의 일부분이 도금이 되어있는 경우는
SHOT BLASTING으로부터 도금 부분이 훼손되지 않도록 보호 MASKING을 하여 입고할 것.
(단 도금 표면에 다시 PAINTING하는 경우는 제외됨)
10. 의장품 자재 PALLET 고박용 번선 및 고박 ITEM에 대한 묶음 WIRE (철사)는 필히
부식 방지용 COATING WIRE를 사용하여 입고 시킬 것.
11. 의장품 자재 입고시 상,하,좌,우로 움직일 수 있는 항목들은 상기 10)번항에 의거하여
반드시 고박하여 입고할 것. (안전사고 사전방지)
12. 납품시 하기 참고하여 입고할 것.
 - 1) 용접선 있는 자재는 용접선 부근 50mm 이내 PAINT MARKER 마킹 적용
(설치 후 은폐 도장 작업 쉽게 하기 위함)
 - 2) 용접선 없는 자재는 자재 인식표 (TAG) 또는 안티 울트라테이프에 마킹 후 부착
(자재 TAG 및 안티 울트라테이프 제거는 의장 1,2부에서 실시함)
 - 3) 적용대상 : 강재로 제작되는 모든 철의장품
 - 4) MARKING 방법 : SHIP NO., BLOCK NO., POR NO., MARKING(PC'S) NO.

					SHIP NO.	8070-8073/8103/8104	
제작품별 납기 LIST					DWG. NO.	1511-H12B	
P.O.R NO	SEQ NO.	BLOCK	STAGE	MARK NO.	DESCRIPTION	Q'TY /SHIP	WEIGHT (KG/SET)
J62	01	E55DL(P)	BF	VLD-S01	VERTICAL LADDER	1	28.1
	02	E55DL(S)	BF	VLD-S01	VERTICAL LADDER	1	28.1
	03	E54DL(P)	BF	VLD-S02	VERTICAL LADDER	1	27.9
	04	E54DL(S)	BF	VLD-S02	VERTICAL LADDER	1	27.9
	05	C16AL(P)	BS	VLD-S03A	VERTICAL LADDER	1	34.8
	06	C16AL(S)	BS	VLD-S03A	VERTICAL LADDER	1	34.8
	07	E51DL(P)	BF	VLD-S03B	VERTICAL LADDER	1	34.8
	08	E51DL(S)	BF	VLD-S03B	VERTICAL LADDER	1	34.8
	09	S11DL(P)	BF	VLD-S04	VERTICAL LADDER	1	24.9
	10	S11DL(S)	BF	VLD-S04	VERTICAL LADDER	1	24.9
	11	S12DL(P)	BF	VLD-S05	VERTICAL LADDER	1	24.9
	12	S12DL(S)	BF	VLD-S05	VERTICAL LADDER	1	24.9
	13	S13DL(P)	BF	VLD-S05	VERTICAL LADDER	1	24.9
	14	S13DL(S)	BF	VLD-S05	VERTICAL LADDER	1	24.9
	15	S14DL(P)	BF	VLD-S05	VERTICAL LADDER	1	24.9
	16	S14DL(S)	BF	VLD-S05	VERTICAL LADDER	1	24.9
	17	S15DL(P)	BF	VLD-S05	VERTICAL LADDER	1	24.9
	18	S15DL(S)	BF	VLD-S05	VERTICAL LADDER	1	24.9
	19	S37DL(P)	BF	VLD-S06	VERTICAL LADDER	1	31.9
	20	S37DL(S)	BF	VLD-S06	VERTICAL LADDER	1	31.9
	21	S38DL(P)	BF	VLD-S07	VERTICAL LADDER	1	32.0
	22	S38DL(S)	BF	VLD-S07	VERTICAL LADDER	1	32.0
	23	S39DL(P)	BF	VLD-S08	VERTICAL LADDER	2	32.1
	24	S39DL(S)	BF	VLD-S08	VERTICAL LADDER	2	32.1
	25	S60DL(P)	BF	VLD-S09	VERTICAL LADDER	1	32.3
	26	S60DL(S)	BF	VLD-S09	VERTICAL LADDER	1	32.3
	27	C14AL(P)	BS	VLD-S10	VERTICAL LADDER	1	32.4
	28	C14AL(S)	BS	VLD-S10	VERTICAL LADDER	1	32.4
	29	C13AL(P)	BS	VLD-S11	VERTICAL LADDER	1	33.0
	30	C13AL(S)	BS	VLD-S11	VERTICAL LADDER	1	33.0

					SHIP NO.	8070-8073/8103/8104	
제작품별 납기 LIST					DWG. NO.	1511-H12B	
P.O.R NO	SEQ NO.	BLOCK	STAGE	MARK NO.	DESCRIPTION	Q'TY /SHIP	WEIGHT (KG/SET)
J62	31	S62P0	C1	VLD-S12P	VERTICAL LADDER	1	25.4
	32	S62S0	C1	VLD-S12S	VERTICAL LADDER	1	25.4
	합 계 (Q'TY, KG/SHIP)					34	1002.6



HYUNDAI

SAMHO HEAVY INDUSTRIES

(주)한진기공

DETAIL OF VERTICAL LADDER (MARK NO.: VLD-S**)

SHIP NO.	8070-8073, 8103/8104	06 /
DWG NO.	1511-H12B	

NO.	DESCRIPTION	SPEC.	MAT'L	Q'TY/SET	WEIGHT(KG)	REMARK
1	SIDE FRAME	65 X 9t F.B	SS400 OR SS275	2	14.3	PAINT ONLY
2	STEP	22 SQ.BAR	SS400 OR SS275	5	7.1	PAINT ONLY
3	UPPER LUG	65 X 9t F.B	SS400 OR SS275	2	1.6	PAINT ONLY
4	LOWER LUG	50 X 50 X 6t E.A	SS400 OR SS275	3	11.8	PAINT ONLY

NO.	DESCRIPTION	SPEC.	MAT'L	Q'TY/SET	WEIGHT(KG)	REMARK
1	SIDE FRAME	65 X 9t F.B	SS400 OR SS275	2	14.3	PAINT ONLY
2	STEP	22 SQ.BAR	SS400 OR SS275	5	7.1	PAINT ONLY
3	LUG	65 X 9t F.B	SS400 OR SS275	4	3.5	PAINT ONLY

NOTE

1. 본도는 PORT SIDE를 나타냄. STB'D SIDE는 대칭 제작할 것.

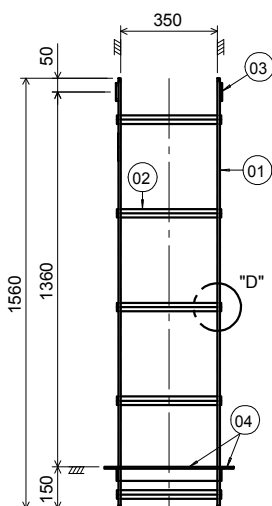
MARK NO.	BLOCK NO.	Q'TY	WEIGHT Kg/SET
VLD-S03A	C16P/S	1 / 1	34.8
VLD-S03B	E51P/S	1 / 1	34.8

NOTE

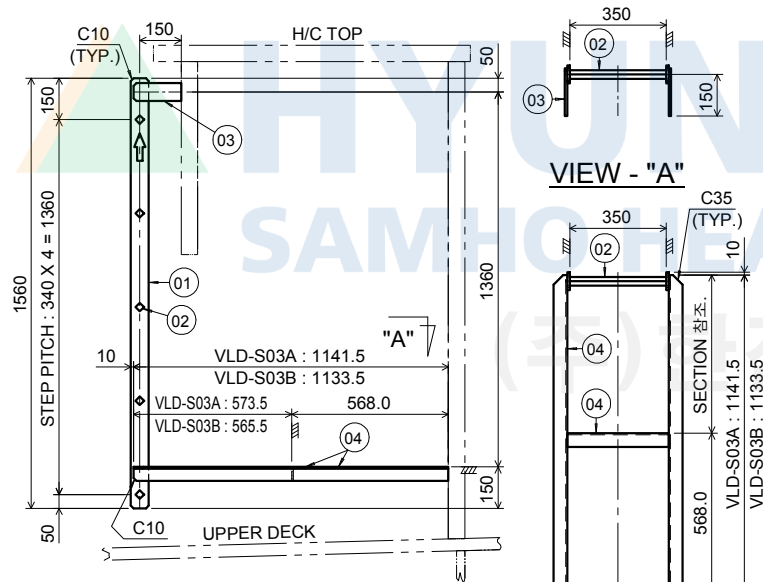
1. 본도는 PORT SIDE를 나타냄. STB'D SIDE는 대칭 제작할 것.

MARK NO.	BLOCK NO.	Q'TY	WEIGHT Kg/SET
VLD-S04	S11P/S	1 / 1	24.9

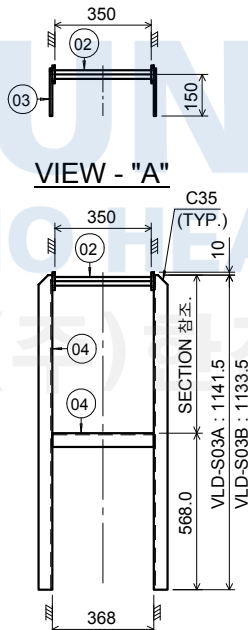
ELEVATION



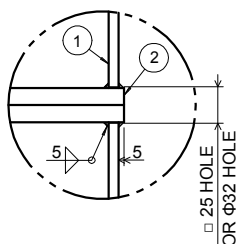
SECTION



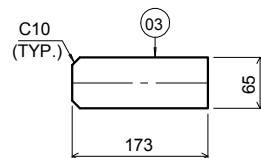
PLAN



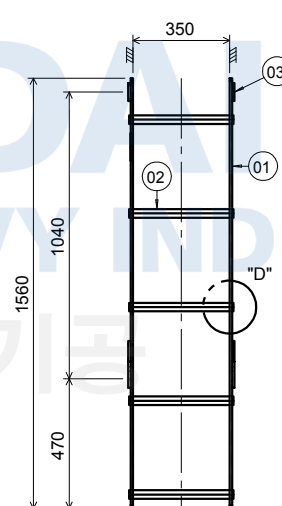
DETAIL OF "D"



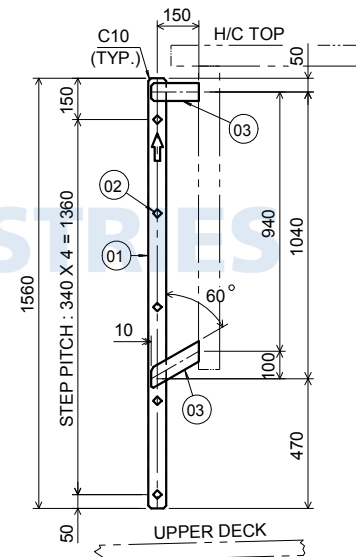
DET.OF UPPER LUG



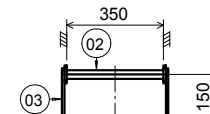
ELEVATION



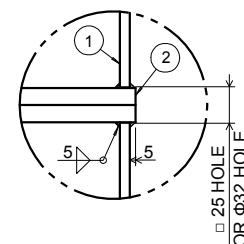
SECTION



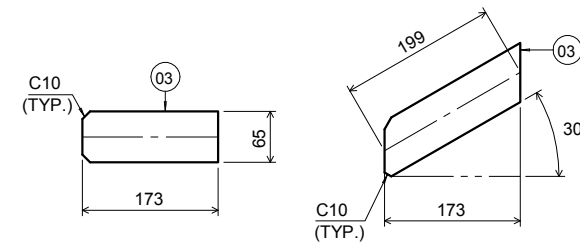
PLAN



DETAIL OF "D"



DET.OF LUG



DETAIL OF VERTICAL LADDER (MARK NO.: VLD-S**)

SHIP NO.	8070-8073, 8103/8104	09 /
DWG NO.	1511-H12B	

NO.	DESCRIPTION	SPEC.	MAT'L	Q'TY/SET	WEIGHT(KG)	REMARK
1	SIDE FRAME	65 X 9t F.B	SS400 OR SS275	2	14.3	PAINT ONLY
2	STEP	22 SQ.BAR	SS400 OR SS275	5	7.1	PAINT ONLY
3	UPPER LUG	65 X 9t F.B	SS400 OR SS275	2	1.6	PAINT ONLY
4	LOWER LUG	50 X 50 X 6t E.A	SS400 OR SS275	3	9.3	PAINT ONLY

NO.	DESCRIPTION	SPEC.	MAT'L	Q'TY/SET	WEIGHT(KG)	REMARK
1	SIDE FRAME	65 X 9t F.B	SS400 OR SS275	2	14.3	PAINT ONLY
2	STEP	22 SQ.BAR	SS400 OR SS275	5	7.1	PAINT ONLY
3	UPPER LUG	65 X 9t F.B	SS400 OR SS275	2	1.6	PAINT ONLY
4	LOWER LUG	50 X 50 X 6t E.A	SS400 OR SS275	3	9.4	PAINT ONLY

NOTE

1. 본도는 PORT SIDE를 나타냄. STB'D SIDE는 대칭 제작할 것.

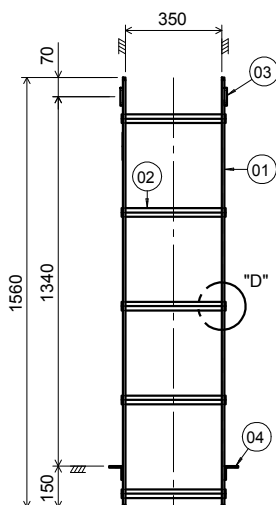
MARK NO.	BLOCK NO.	Q'TY	WEIGHT Kg/SET
VLD-S09	S60P/S	1 / 1	32.3

NOTE

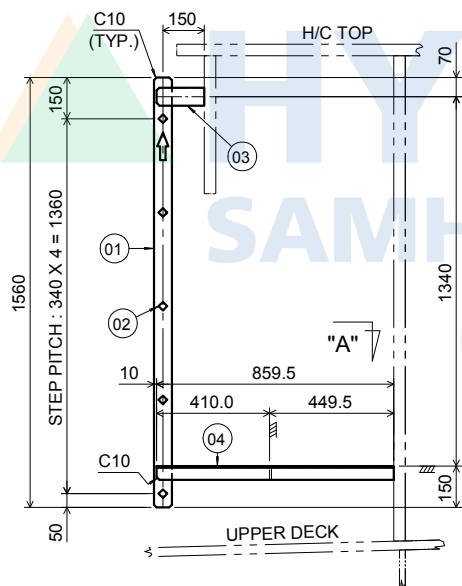
1. 본도는 PORT SIDE를 나타냄. STB'D SIDE는 대칭 제작할 것.

MARK NO.	BLOCK NO.	Q'TY	WEIGHT Kg/SET
VLD-S10	C14P/S	1 / 1	32.4

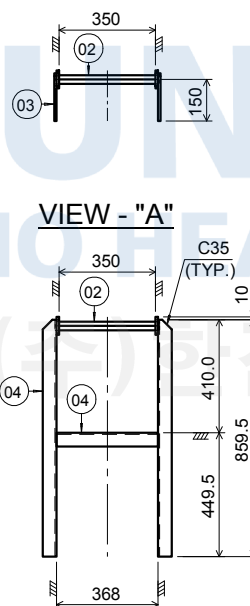
ELEVATION



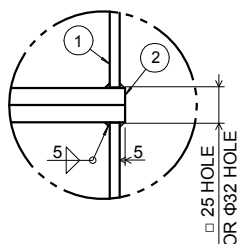
SECTION



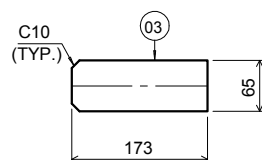
PLAN



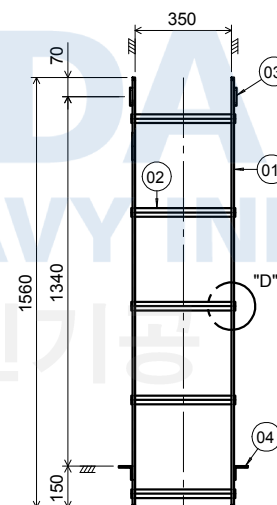
DETAIL OF "D"



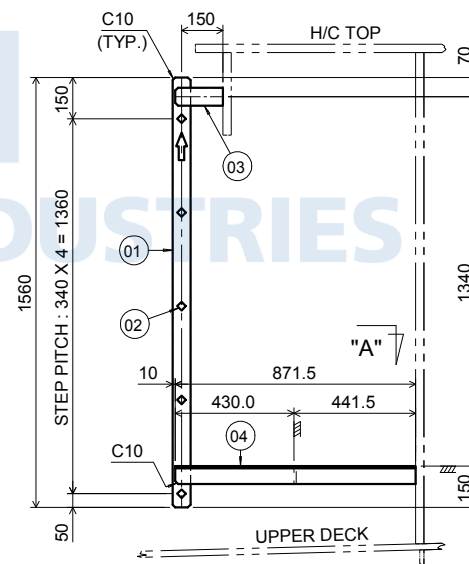
DET.OF UPPER LUG



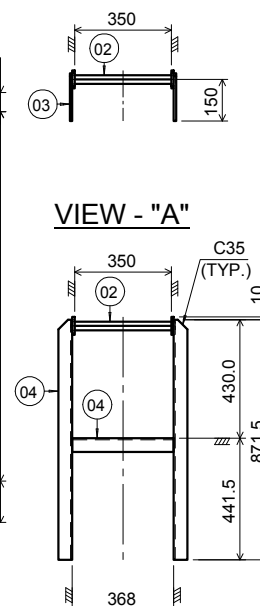
ELEVATION



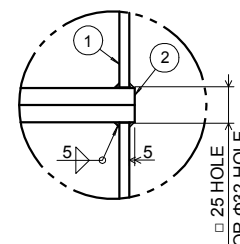
SECTION



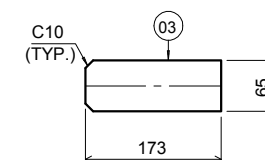
PLAN



DETAIL OF "D"



DET.OF UPPER LUG



SHIP NO.	8070-8073, 8103/8104	10 END
DWG NO.	1511-H12B	

NO.	DESCRIPTION	SPEC.	MAT'L	Q'TY/SET	WEIGHT(KG)	REMARK	NO.	DESCRIPTION	SPEC.	MAT'L	Q'TY/SET	WEIGHT(KG)	REMARK
1	SIDE FRAME	65 X 9t F.B	SS400 OR SS275	2	14.3	PAINT ONLY	1	SIDE FRAME	65 X 9t F.B	SS400 OR SS275	2	11.4	PAINT ONLY
2	STEP	22 SQ.BAR	SS400 OR SS275	5	7.1	PAINT ONLY	2	STEP	22 SQ.BAR	SS400 OR SS275	4	5.8	PAINT ONLY
3	UPPER LUG	65 X 9t F.B	SS400 OR SS275	2	1.6	PAINT ONLY	3	LUG	65 X 9t F.B	SS400 OR SS275	2	1.6	PAINT ONLY
4	LOWER LUG	50 X 50 X 6t E.A	SS400 OR SS275	3	10.0	PAINT ONLY	4	SUPPORT	65 X 65 X 6t E.A	SS400 OR SS275	4	6.6	PAINT ONLY

MARK NO.	BLOCK NO.	Q'TY	WEIGHT Kg/SET
VLD-S11	C13P/S	1 / 1	33.0

MARK NO.	BLOCK NO.	Q'TY	WEIGHT Kg/SET	REMARK
VLD-S12P	S62P	1	25.4	본도제작

Technical drawing of a vertical section of a staircase. The drawing shows a series of steps with a total height of 1560 and a total width of 1360. The width of each step is 350. The drawing includes labels 01, 02, 03, and 04, and a dimension 'D' indicating the depth of the steps. The drawing is a technical drawing of a staircase section, showing the profile of the steps and the overall dimensions. The total height is 1560, and the total width is 1360. The width of each step is 350. The drawing includes labels 01, 02, 03, and 04, and a dimension 'D' indicating the depth of the steps.

Technical drawing of a staircase section showing dimensions and components. The drawing includes the following details:

- Overall Dimensions:**
 - Vertical dimension: 1560
 - Horizontal dimension: 1360
 - Horizontal dimension: 937.5
 - Horizontal dimension: 450.0
 - Horizontal dimension: 487.5
 - Horizontal dimension: 150
 - Horizontal dimension: 10
 - Horizontal dimension: 50
- Labels and Components:**
 - C10 (TYP.)**: Callout for the top rail.
 - H/C TOP**: Label for the handrail top.
 - 01**, **02**, **03**, **04**: Callouts for specific components or fasteners.
 - C10**: Callout for the bottom rail.
 - "A"**: Label for a specific section or detail.
 - UPPER DECK**: Label for the upper deck area.
- Notes:**
 - STEP PITCH : 340 X 4 = 1360

Technical drawing showing a side view of a vertical assembly. Dimensions include a top width of 350, a total height of 937.5, and a bottom width of 368. Callouts include 02, 03, 04, and C35 (TYP.).

Technical drawing of a hole in a plate with a fillet. The drawing shows a circular plate with a horizontal hole. A fillet with a radius of 5 is shown at the bottom of the hole. Dimensions include a hole diameter of 25, a hole depth of 32, and a fillet radius of 5. Callouts 1 and 2 point to the fillet and the hole respectively.

Technical drawing of a vertical assembly. The drawing shows a side view of a structure with a total width of 350. The structure consists of several horizontal bars connected by vertical supports. Callouts include: (01) pointing to the left vertical support, (02) pointing to the top horizontal bar, (03) pointing to the right vertical support, and (04) pointing to the bottom horizontal bar. A dimension line at the top indicates a width of 350. A circular detail view labeled "D" is shown on the right side, indicating a detail of the horizontal bar.

Technical drawing of a ship's bulwark showing a side elevation and a plan view.

Side Elevation:

- Top width: 165
- Vertical height: 150
- Total height: 1235
- Base offset: 50
- Horizontal offset: 375
- Angle: 100°
- Label: BULKWARK TOP
- Text: STEP PITCH : 345 X 3 = 1035
- Callouts: 01, 02, 04

Plan View:

- Width: 165
- Depth: 350
- Base width: 172
- Callouts: 02, 03

VIEW - "A"

Technical drawing of a mechanical part (Fig. 1.10) showing a cross-section with dimensions: 375, 10, 30, 201, 298, 350, and callouts 04, 02.

SUPPORT는
TACK WELDING하여 입고할 것.

80°

V-LADDER STEP은
수평하게 제작할 것.