

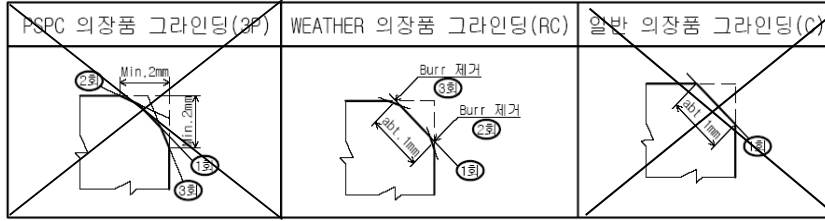
NOTE

PSPC 의장품

WEATHER 의장품

일반 의장품

1. 본도는 WATER BREAK FITTING 제작도임.
2. 모서리 부분은 하기와 같이 GRINDING 할 것. (RC)

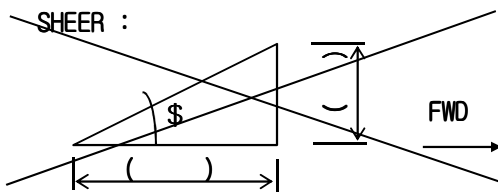


3. 용접은 특기와 하기 표 참조하고 연속 용접할 것.

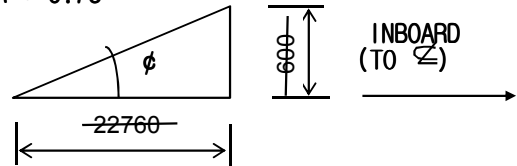
* 필렛의 용접 각장은 아래를 따를 것.

| 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 : 600/227600)를 필히 적용할 것.




CAMBER : 0.76 °



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. : J65
14. TOTAL WEIGHT : 891.0 Kg/SHIP

(표지 포함 14 매)

| | | |
|----------------|-----------------------|--|
| DEP'T. B111 | SHIP NO. 8184-8187 | SHIP TYPE 8,200 TEU CLASS CONTAINER CARRIER |
| TEL. 2895 | 부서명 구조설계부 | 도면명 |
| 승인 이완순 | 검도 이도형 | 작성 |
| | | 도면번호 1511-H15B-0 |
| | | 날짜 2023년 05월 22일 |

| | | | | | |
|---|--------------|---------------------------------------|----------|-----------|----------|
|  | PLAN HISTORY | | SHIP NO. | 8184-8187 | 1 |
| | | | DWG. NO. | 1511-H15B | |
| DATE | REV. NO. | DESCRIPTION | DRAWN | CHECKED | APPROVED |
| 2023.05.22 | O | 8184-8187호선 WATER BREAK FITTING 제작도임. | 이도형 | | 이완순 |
| | | | | | |

| 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-F**) HINGED COVER HANDGRIP | STEEL | NS | T3 | | | | |
| | | | | | | | | |
| GD | HANDRAIL | GALV'D | — | DC | | | | |
| | | | | | | | | |
| | ITEM | IN SIDE & OUT SIDE | | | IN SIDE | OUT SIDE | | |
| | ALL | FINAL | SHOP PRIMER | PRIMER | | | | |
| | | 0 | | | | | | |



製作仕様書(외주구매용)

IP NO.

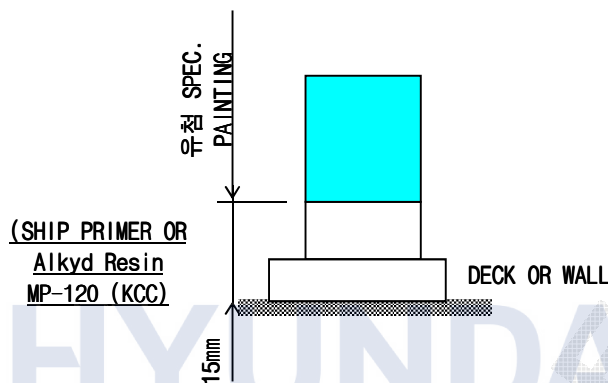
8184-8187

2

DWG NO.

1511-H15B

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. | 8184-8187 | 3 |
|--------------|---------|----------|-------|----------|-----------------|------------|-----------------|
| 제품품별 납기 LIST | | | | | DWG. NO. | 1511-H15B | |
| P.O.R NO | SEQ NO. | BLOCK | STAGE | MARK NO. | DESCRIPTION | Q'TY /SHIP | WEIGHT (KG/SET) |
| J65 | 01 | F61AL(P) | BS | HGR-A01 | HANDGRIP | 1 | 1.0 |
| | 02 | F61AL(P) | BS | STP-A01 | STEP | 3 | 3.2 |
| | 03 | F61AL(S) | BS | HGR-A01 | HANDGRIP | 1 | 1.0 |
| | 04 | F61AL(S) | BS | STP-A01 | STEP | 3 | 3.2 |
| | 05 | F61BL(P) | BS | VLD-F01 | VERTICAL LADDER | 1 | 41.3 |
| | 06 | F61P0 | MS | VLD-F02 | VERTICAL LADDER | 1 | 58.8 |
| | 07 | F61BL(P) | BS | HG-F01 | HANDGRIP | 2 | 2.0 |
| | 08 | F61BL(P) | BS | HC-F01P | HINGED COVER | 1 | 19.7 |
| | 09 | F61P0 | MS | HRF-01P | HANDRAIL | 1 | 32.6 |
| | 10 | F61P0 | MS | HRF-02P | HANDRAIL | 1 | 33.4 |
| | 11 | F61P0 | MS | HRF-03P | HANDRAIL | 1 | 31.4 |
| | 12 | F61P0 | MS | HRF-04P | HANDRAIL | 1 | 34.8 |
| | 13 | F61P0 | MS | HRF-05P | HANDRAIL | 1 | 32.3 |
| | 14 | F61P0 | MS | HRF-06P | HANDRAIL | 1 | 32.4 |
| | 15 | F61P0 | MS | HRF-07 | HANDRAIL | 1 | 36.2 |
| | 16 | F61BL(S) | BS | VLD-F01 | VERTICAL LADDER | 1 | 41.3 |
| | 17 | F61S0 | MS | VLD-F02 | VERTICAL LADDER | 1 | 58.8 |
| | 18 | F61BL(S) | BS | HG-F01 | HANDGRIP | 2 | 2.0 |
| | 19 | F61BL(S) | BS | HC-F01S | HINGED COVER | 1 | 19.7 |
| | 20 | F61S0 | MS | HRF-01S | HANDRAIL | 1 | 32.6 |
| | 21 | F61S0 | MS | HRF-02S | HANDRAIL | 1 | 33.4 |
| | 22 | F61S0 | MS | HRF-03S | HANDRAIL | 1 | 31.4 |
| | 23 | F61S0 | MS | HRF-04S | HANDRAIL | 1 | 34.8 |
| | 24 | F61S0 | MS | HRF-05S | HANDRAIL | 1 | 32.3 |
| | 25 | F61S0 | MS | HRF-06S | HANDRAIL | 1 | 32.4 |
| | 26 | F92P0 | FS | VLD-F03 | VERTICAL LADDER | 1 | 42.9 |
| | 27 | F92P0 | FS | HG-F02 | HANDGRIP | 1 | 13.8 |
| | 28 | F92P0 | FS | HC-F02P | HINGED COVER | 1 | 19.7 |
| | 29 | F92S0 | FS | VLD-F03 | VERTICAL LADDER | 1 | 42.9 |
| | 30 | F92S0 | FS | HG-F02 | HANDGRIP | 1 | 13.8 |

| | | | | | SHIP NO. | 8184-8187 | 4 |
|--------------|---------------------|-------|-------|----------|--------------|------------|-----------------|
| 제품품별 납기 LIST | | | | | DWG. NO. | 1511-H15B | |
| P.O.R NO | SEQ NO. | BLOCK | STAGE | MARK NO. | DESCRIPTION | Q'TY /SHIP | WEIGHT (KG/SET) |
| J65 | 31 | F92S0 | FS | HC-F02S | HINGED COVER | 1 | 19.7 |
| | 32 | F92P0 | FS | HC-F03P | HINGED COVER | 1 | 19.7 |
| | 33 | F92S0 | FS | HC-F03S | HINGED COVER | 1 | 19.7 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | 합 계 (Q'TY, KG/SHIP) | | | | | 39 | 891.0 |



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

| | | |
|----------|-------------|----|
| SHIP NO. | 8184 - 8187 | 05 |
| DWG NO. | 1511-H15B | |

| NO. | DESCRIPTION | SPEC. | MAT'L | Q'TY/SET | WEIGHT(KG) | REMARK |
|-----|-------------|------------------|----------------|----------|------------|------------|
| 01 | SIDE FRAME | 65 X 9t F.B | SS400 OR SS275 | 2 | 19.6 | PAINT ONLY |
| 02 | STEP | 22 SQ.BAR | SS400 OR SS275 | 7 | 10.0 | PAINT ONLY |
| 03 | LUG | 50 X 50 X 6t E.A | SS400 OR SS275 | 4 | 10.8 | PAINT ONLY |
| 04 | PAD | 10t PLATE | SS400 OR SS275 | 4 | 0.9 | PAINT ONLY |

NOTE

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

| MARK NO. | BLOCK NO. | Q'TY | WEIGHT Kg/SET |
|----------|-----------|-------|------------------|
| VLD-F01 | F61P/S | 1 / 1 | 41.3 |

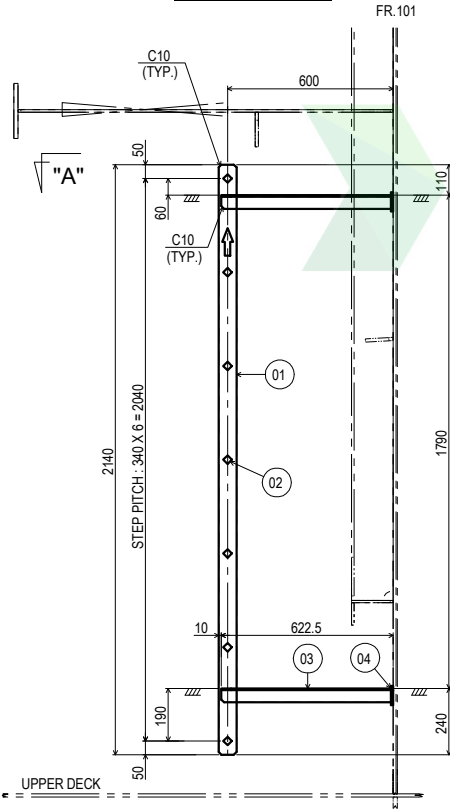
| NO. | DESCRIPTION | SPEC. | MAT'L | Q'TY/SET | WEIGHT(KG) | REMARK |
|-----|-------------|------------------|----------------|----------|------------|------------|
| 01 | SIDE FRAME | 65 X 9t F.B | SS400 OR SS275 | 2 | 22.8 | PAINT ONLY |
| 02 | STEP | 22 SQ.BAR | SS400 OR SS275 | 8 | 11.5 | PAINT ONLY |
| 03 | LUG | 50 X 50 X 6t E.A | SS400 OR SS275 | 6 | 18.7 | PAINT ONLY |
| 04 | PAD | 10t PLATE | SS400 OR SS275 | 6 | 1.2 | PAINT ONLY |
| 05 | BACK BAND | Φ19 R.BAR | SS400 OR SS275 | 1 | 4.6 | PAINT ONLY |

NOTE

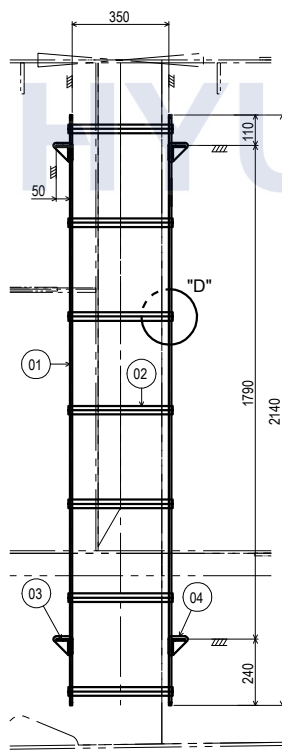
1. 본도는 PORT SIDE를 나타냄. STB'D SIDE는 대칭 제작할 것.

| MARK NO. | BLOCK NO. | Q'TY | WEIGHT Kg/SET |
|----------|-----------|-------|------------------|
| VLD-F02 | F61P/S | 1 / 1 | 58.8 |

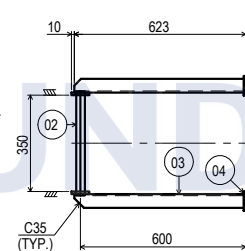
ELEVATION



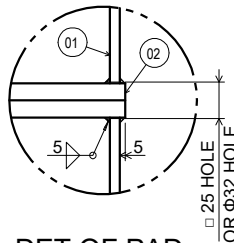
SECTION



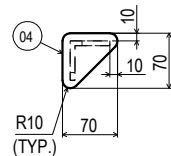
PLAN "A"



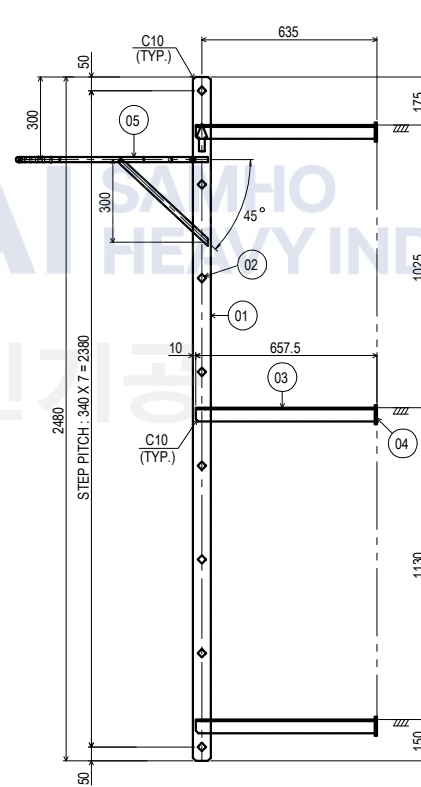
DETAIL OF "D"



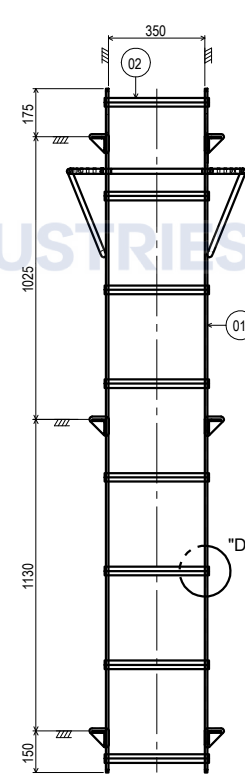
DET.OF PAD



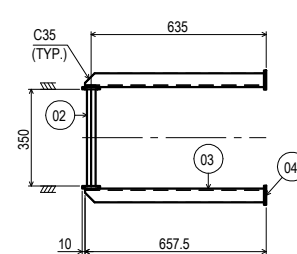
ELEVATION



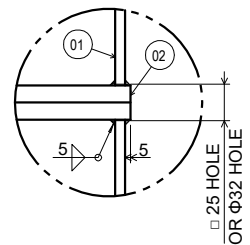
SECTION



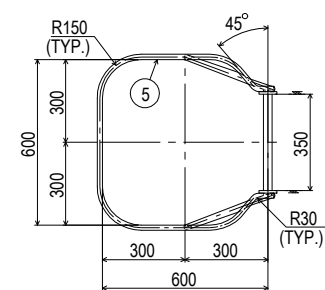
PLAN



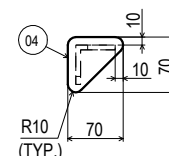
DETAIL OF "D"



DET. OF BACK BAND



DET.OF PAD





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

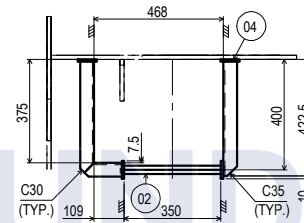
| NO. | DESCRIPTION | SPEC. | MAT'L | Q'TY/SET | WEIGHT(KG) | REMARK |
|-----|-------------|------------------|----------------|----------|------------|------------|
| 01 | SIDE FRAME | 65 X 9t F.B | SS400 OR SS275 | 2 | 19.7 | PAINT ONLY |
| 02 | STEP | 22 SQ.BAR | SS400 OR SS275 | 7 | 10.0 | PAINT ONLY |
| 03 | LUG | 50 X 50 X 6t E.A | SS400 OR SS275 | 6 | 12.0 | PAINT ONLY |
| 04 | PAD | 10t PLATE | SS400 OR SS275 | 6 | 1.2 | PAINT ONLY |

NOTE

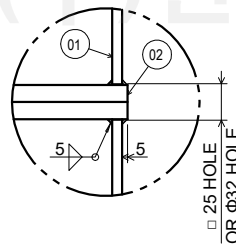
1. 본도는 PORT SIDE를 나타냄. STB'D SIDE는 대칭 제작할 것.

| MARK NO. | BLOCK NO. | Q'TY | WEIGHT Kg/SET |
|----------|-----------|-------|------------------|
| VLD-F03 | F92P/S | 1 / 1 | 42.9 |

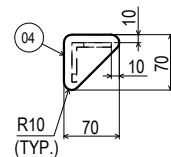
PLAN - "A"



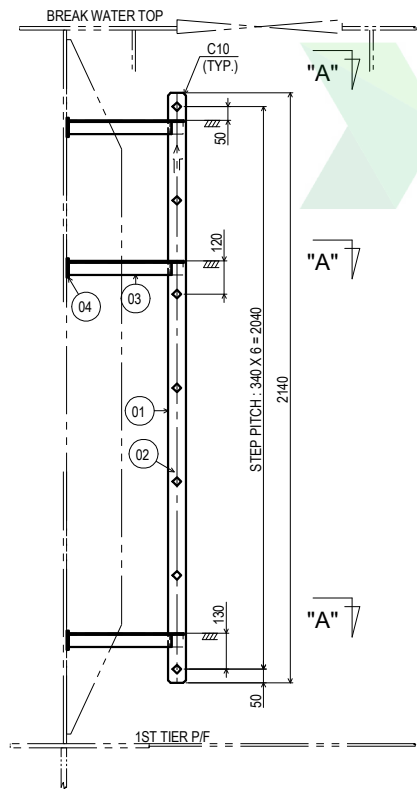
DETAIL OF "D"



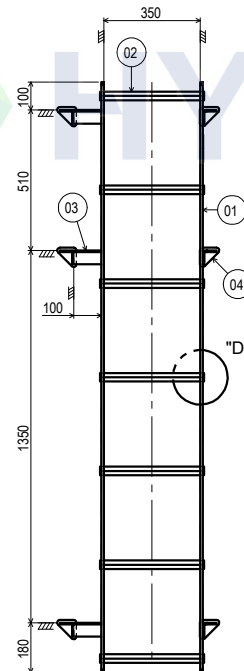
DET.OF PAD



SECTION



ELEVATION

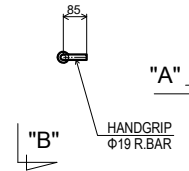


DETAIL OF HANDGRIP

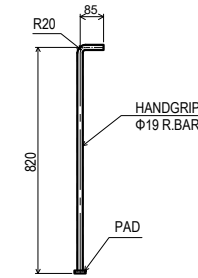
| | | |
|----------|-------------|----|
| SHIP NO. | 8184 - 8187 | 06 |
| DWG NO. | 1511-H15B | |

| MARK NO. | BLOCK NO. | Q'TY | WEIGHT Kg/SET |
|----------|-----------|-------|------------------|
| HG-F01 | F61P/S | 2 / 2 | 2.0 |

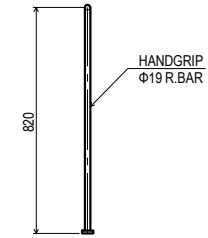
PLAN



ELEVATION - "A"



SECTION - "B"

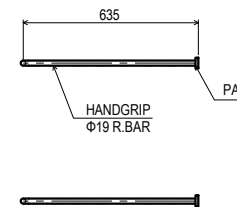


DETAIL OF PAD

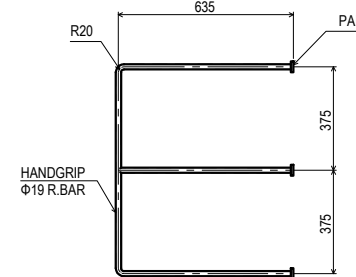


| MARK NO. | BLOCK NO. | Q'TY | WEIGHT Kg/SET |
|----------|-----------|-------|------------------|
| HG-F02 | F92P/S | 1 / 1 | 13.8 |

PLAN 2EA가 1SET임.



ELEVATION - "A"



DETAIL OF PAD





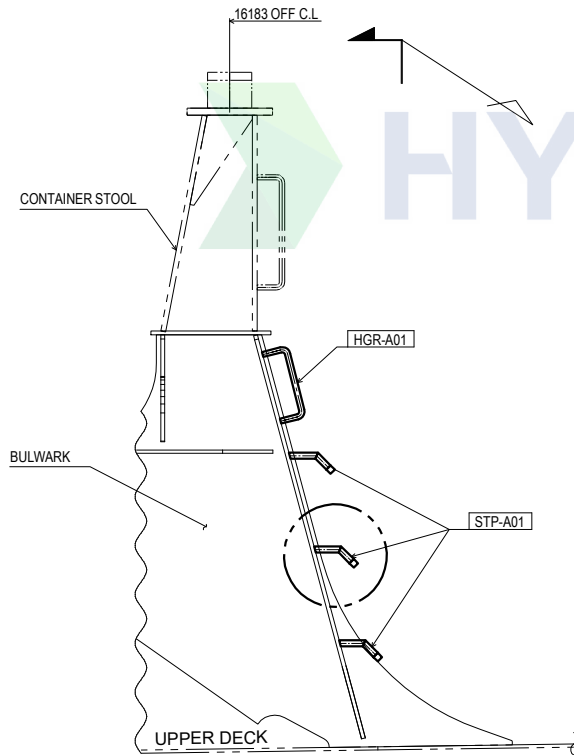
DETAIL OF HANDGRIP & STEP

| | | |
|----------|-------------|----|
| SHIP NO. | 8184 - 8187 | 07 |
| DWG NO. | 1511-H15B | |

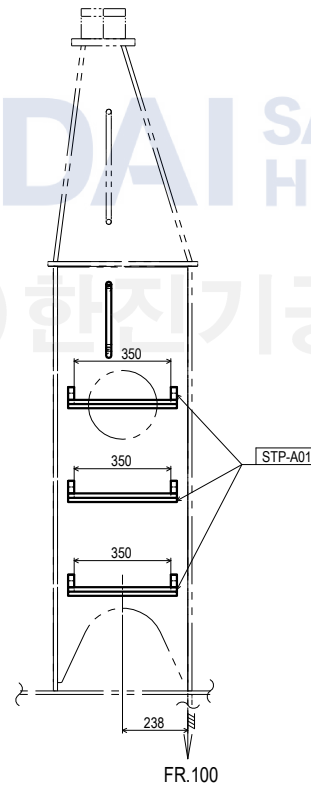
NOTE

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

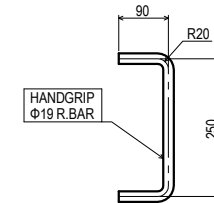
SECTION



ELEVATION

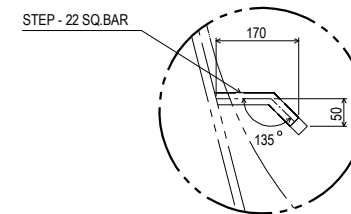


DET. OF HANDGRIP (MARK NO. : HGR-A01)



| MARK NO. | BLOCK NO. | Q'TY | WEIGHT Kg/SET |
|----------|-----------|-------|------------------|
| HGR-A01 | F61P/S | 1 / 1 | 1.0 |

DET. OF STEP (MARK NO. : STP-A01)



| MARK NO. | BLOCK NO. | Q'TY | WEIGHT Kg/SET |
|----------|-----------|-------|------------------|
| STP-A01 | F61P/S | 3 / 3 | 3.2 |

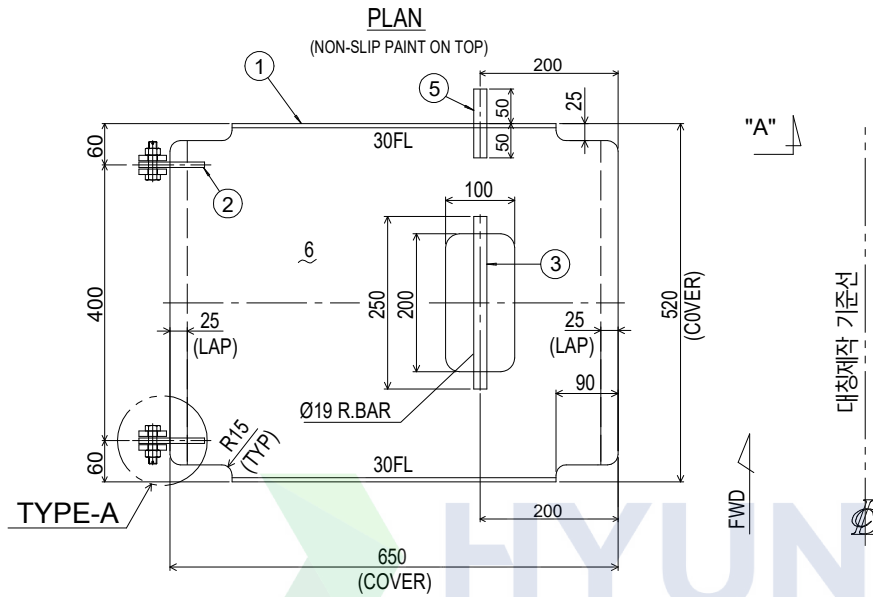


| | | |
|----------|-------------|----|
| SHIP NO. | 8184 - 8187 | 08 |
| DWG NO. | 1511-H15B | |

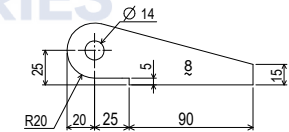
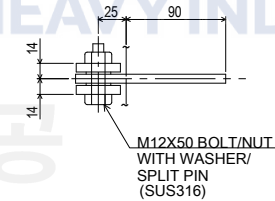
| No. | Description | Spec. | MAT'L | Q'TY | WT.(kg) | Remark |
|-----|-------------|-------------|--------|------|---------|--------|
| 1 | plate | 6t Plate | SS400 | 1 | 16.8 | |
| 2 | Hinge | 8t Plate | SS400 | - | 2.0 | |
| 3 | Hand grip | 19 R. Bar | SS400 | 1 | 0.6 | |
| 4 | Hinge pin | M12X50L B/N | SUS316 | 2 | - | |
| 5 | Stopper | Ø 19 X 100L | SS400 | 1 | 0.3 | |

| MARK NO. | BLOCK NO. | Q'TY | WEIGHT Kg/SET |
|----------|-----------|------|------------------|
| HC-F01P | F61P | 1 | 19.7 |
| HC-F01S | F61S | 1 | 19.7 |

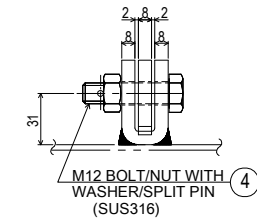
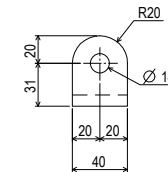
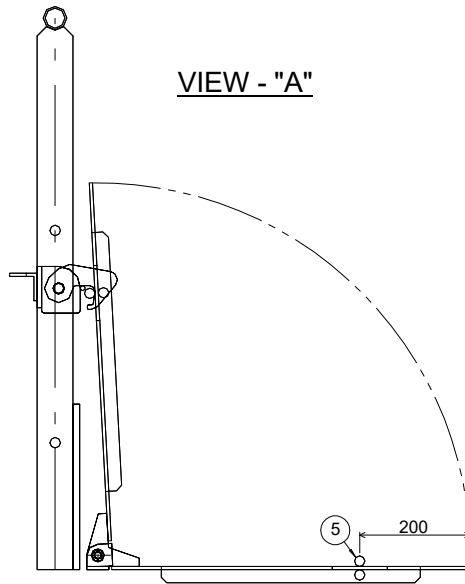
* 본도는 PORT SIDE를 나타냄.
STB'D SIDE는 대칭 제작할 것.



DET. OF HINGE



VIEW - "A"





DETAIL OF HINGED COVER

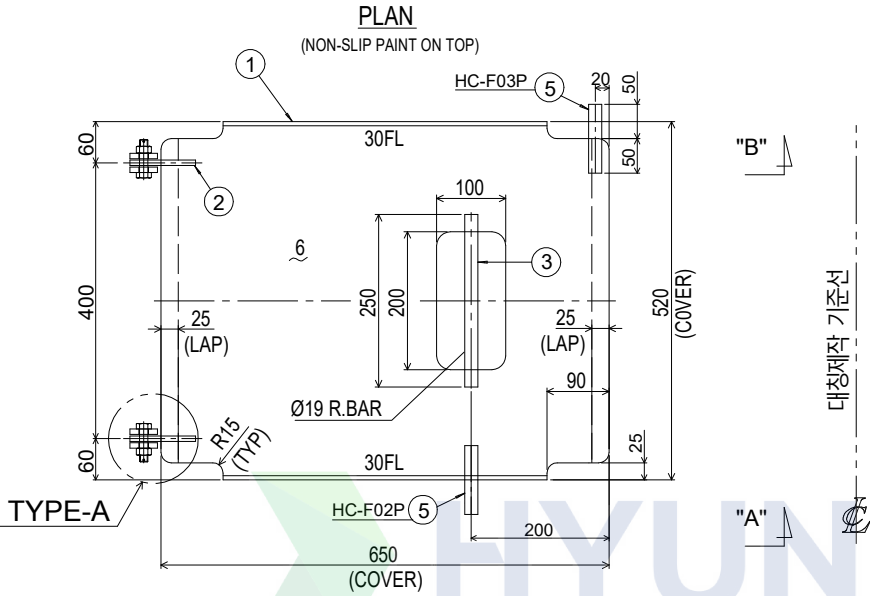
| | | |
|----------|-------------|----|
| SHIP NO. | 8184 - 8187 | 09 |
| DWG NO. | 1511-H15B | |

| No. | Description | Spec. | MAT'L | Q'TY | WT.(kg) | Remark |
|-----|-------------|-------------|--------|------|---------|--------|
| 1 | plate | 6t Plate | SS400 | 1 | 16.8 | |
| 2 | Hinge | 8t Plate | SS400 | - | 2.0 | |
| 3 | Hand grip | 19 R. Bar | SS400 | 1 | 0.6 | |
| 4 | Hinge pin | M12X50L B/N | SUS316 | 2 | - | |
| 5 | Stopper | Ø 19 X 100L | SS400 | 1 | 0.3 | |

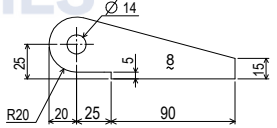
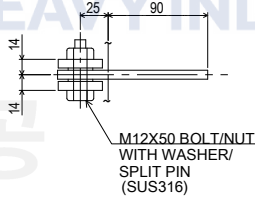
* HC-F02P/S와 HC-F03P/S는 ITEM NO. 5 위치가 서로
다름으로 제작 시 주의하여 제작할 것.

| MARK NO. | BLOCK NO. | Q'TY | WEIGHT kg/SET |
|----------|-----------|------|------------------|
| HC-F02P | F92P | 1 | 19.7 |
| HC-F03P | F92P | 1 | 19.7 |
| HC-F02S | F92S | 1 | 19.7 |
| HC-F03S | F92S | 1 | 19.7 |

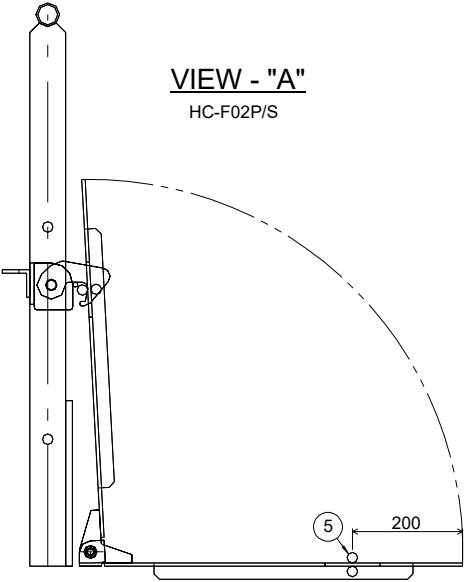
* 본도는 PORT SIDE를 나타냄.
STB'D SIDE는 대칭 제작할 것.



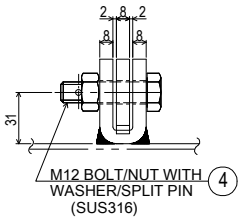
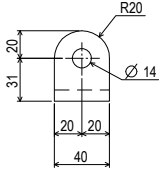
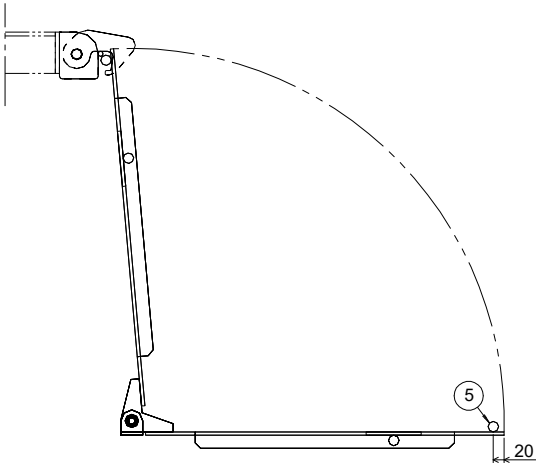
DET. OF HINGE



VIEW - "A"
HC-F02P/S

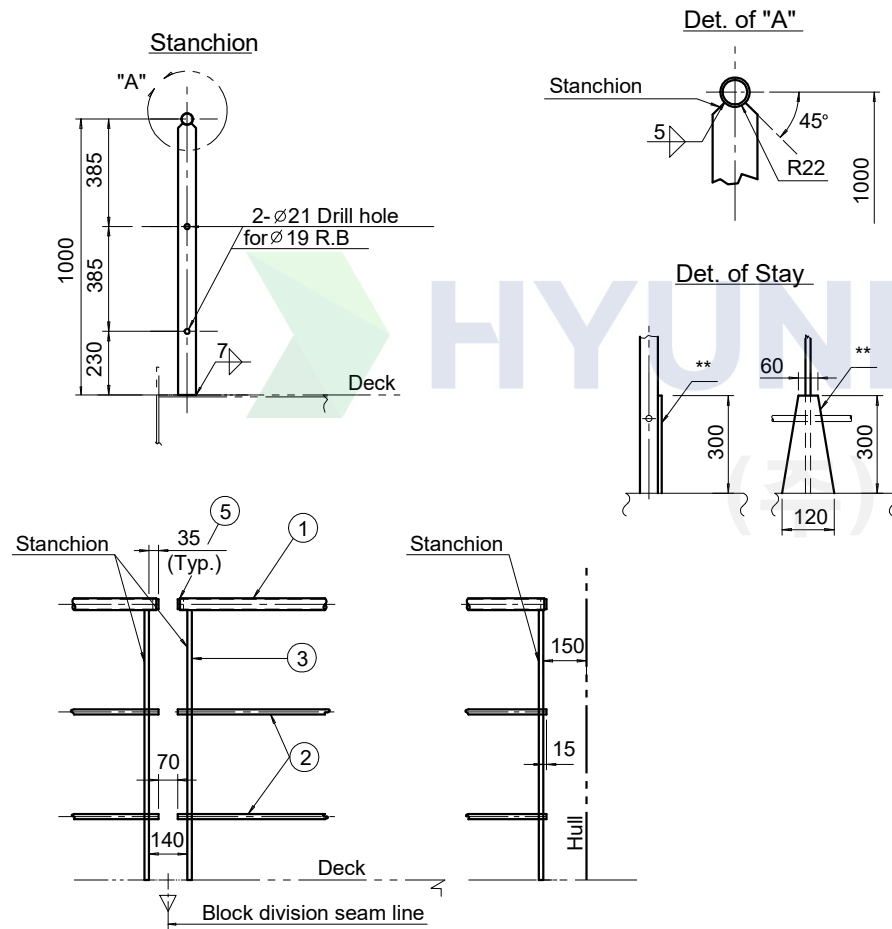


VIEW - "B"
HC-F03P/S



H8184-1511H15B-009

| HANDRAIL (TYPE-A1) | | | | | | |
|--------------------|-------------|-----------------|----------------|-----------|--------|--------|
| No. | Description | Size | Mat'l | Q'ty /Set | Wt(kg) | Remark |
| 1 | Top rail | 32A(O.D Ø 42.7) | SPP | 1 | | Galv. |
| 2 | Mid rail | Ø 19 R.B | SS400 or SS275 | 2 | | Galv. |
| 3 | Stanchion | 65X16t F.B | SS400 or SS275 | 1 | | Galv. |
| 4 | Stay | 12t Plate | SS400 or SS275 | 1 | | Galv. |
| 5 | End plate | 6t Plate | SS400 or SS275 | 1 | | Galv. |



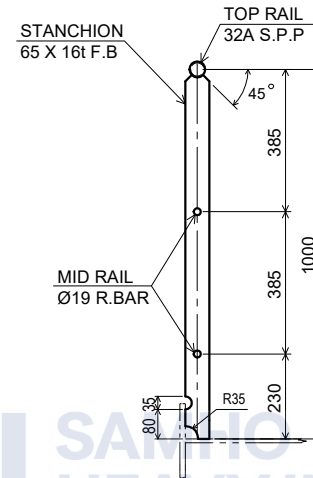
Note

1. Stanchion space : Abt. 1200mm interval.
2. Stay space : At every third stanchion pitch.
3. Application : working platform on braekwater
4. (*, ** Mark) Stay shall be applied in way of narrow passageway space.
(Stay space : Two stanchion pitch)

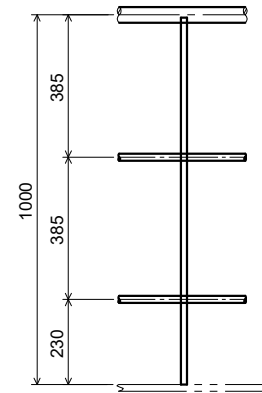
DETAIL OF STANCHION FOR RAIL

| | | |
|----------|-------------|----|
| SHIP NO. | 8184 - 8187 | 10 |
| DWG NO. | 1511-H15B | |

TYPE - M



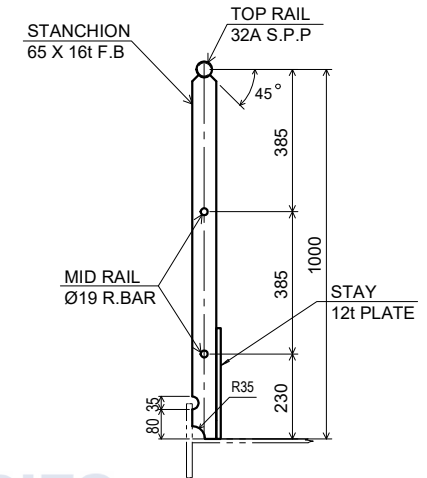
(MID STANCHION에 적용)



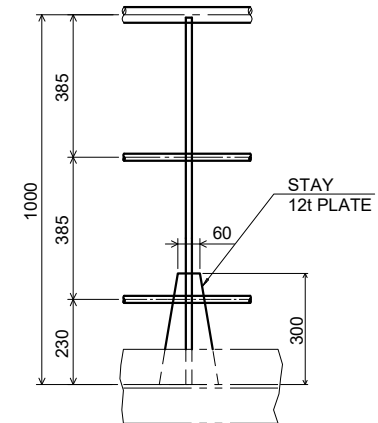
TOP RAIL : 32A PIPE (SPP)

MID RAIL : Ø19 R.BAR

TYPE - MS



(MID STANCHION에 적용)



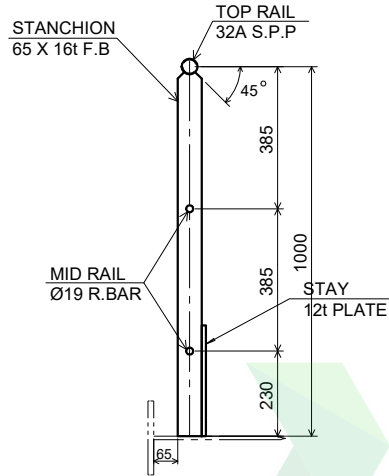
STANCHION : 65 X 16t F.BAR

STAY : 12t PLATE

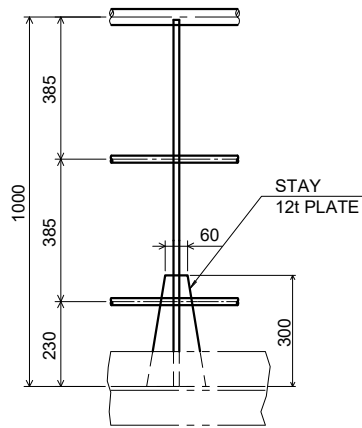


DETAIL OF STANCHION FOR RAIL

TYPE - MS1



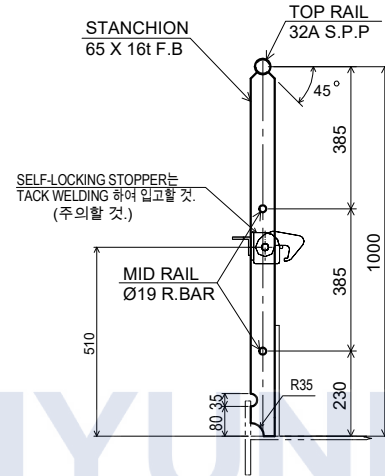
(MID STANCHION에 적용)



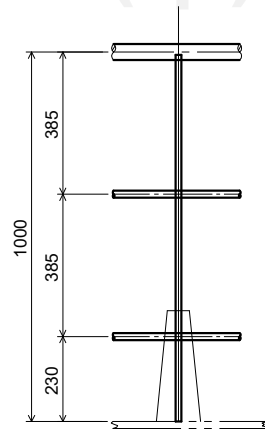
TOP RAIL : 32A PIPE (SPP)

MID RAIL : Ø19 R.BAR

TYPE - ML



(MID STANCHION에 적용)



STANCHION : 65 X 16t F.BAR

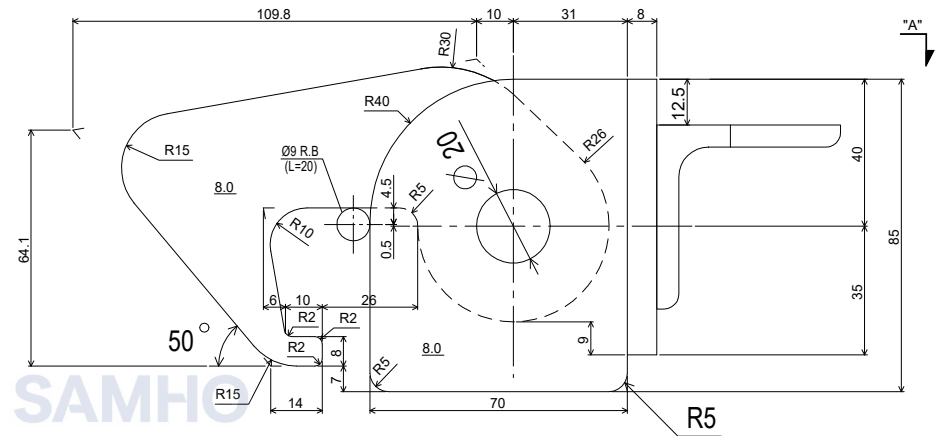
DET. OF SELF-LOCKING STOPPER

| | | |
|----------|-------------|----|
| SHIP NO. | 8184 - 8187 | 11 |
| DWG NO. | 1511-H15B | |

DET. OF SELF-LOCKING STOPPER

(HOT DIP GAL'V)

* HOOK 작동여부 확인 및 고착되지 않도록 제작할 것.

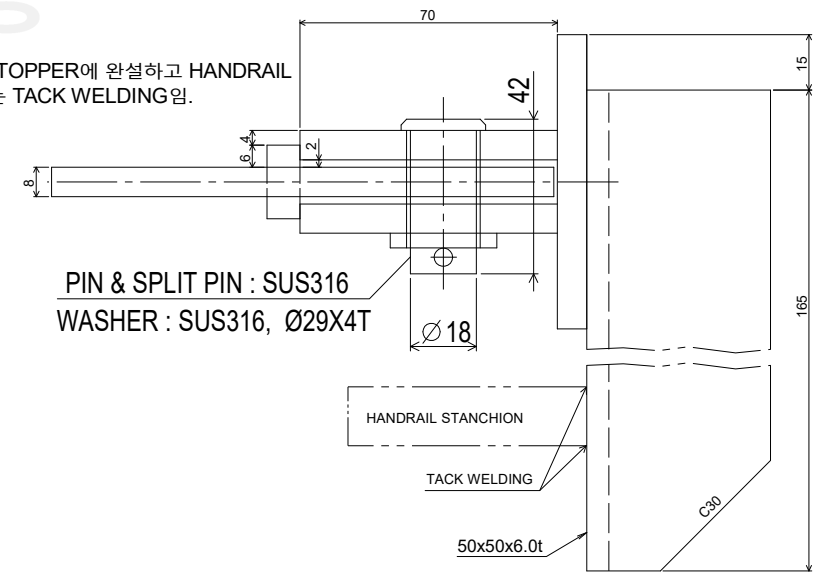


VIEW - "A"

본도는 HRF-01P용 이며 HRF-01S는 본도에 대칭임.

NOTE

50x50x6t EA는 STOPPER에 완설하고 HANDRAIL STANCHION 에는 TACK WELDING임.



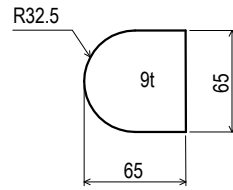
대칭제작 기준선



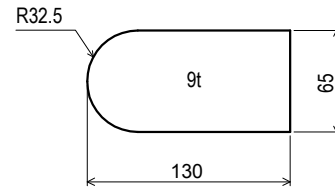
DETAIL OF HANDRAIL

| | | |
|----------|-------------|-----|
| SHIP NO. | 8184 - 8187 | 012 |
| DWG NO. | 1511H15B | |

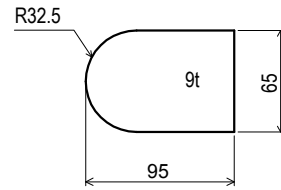
TYPE - EP



TYPE - EP1

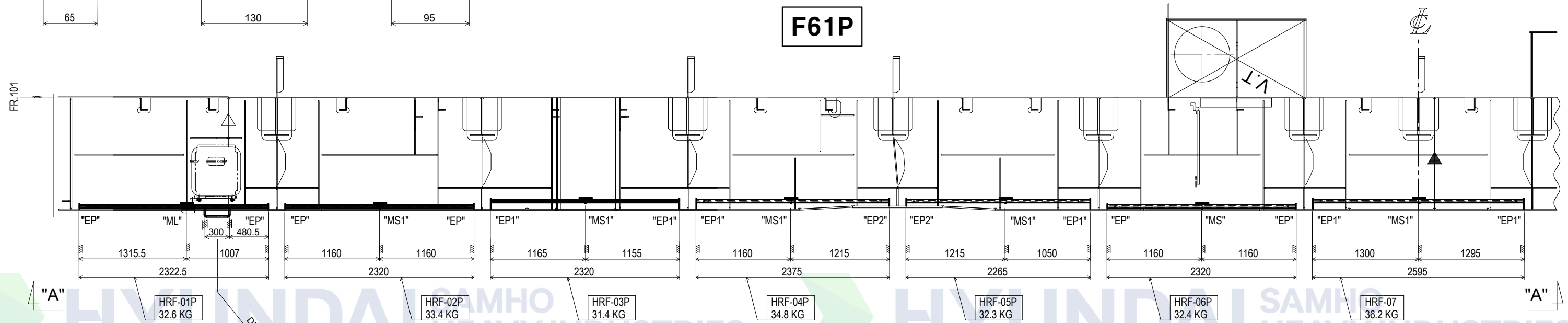


TYPE - EP2

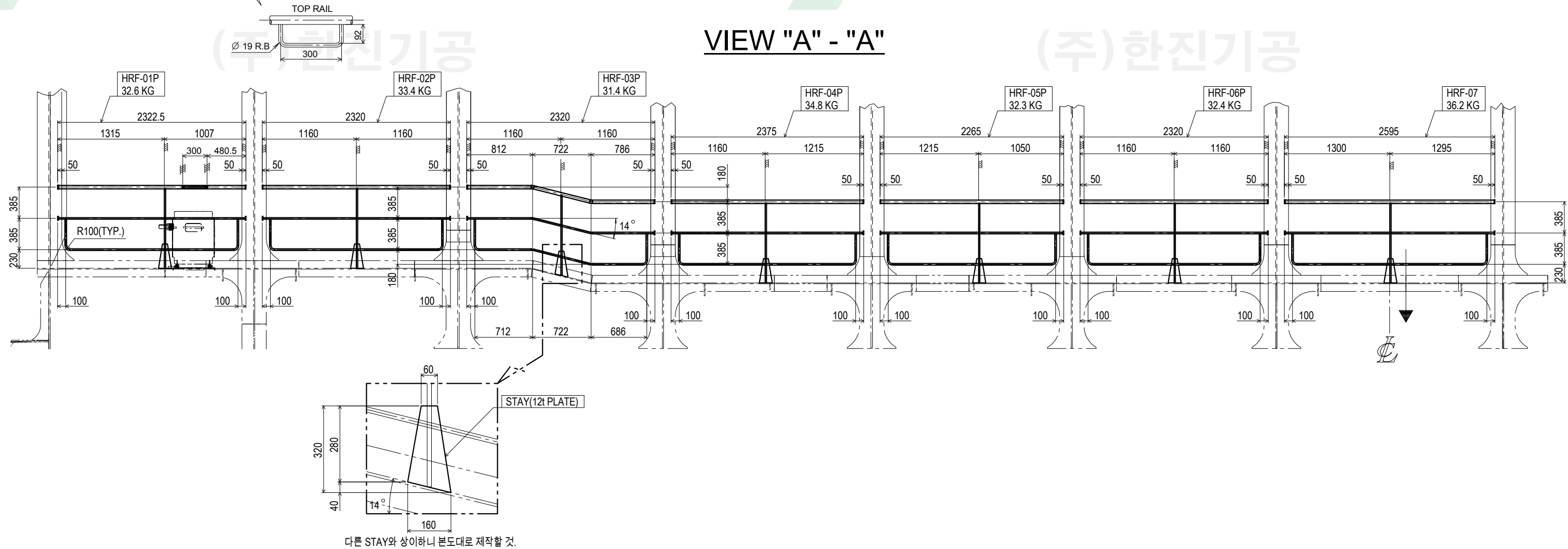


WORKING PLATFORM PLAN

F61P



VIEW "A" - "A"





DETAIL OF HANDRAIL

| | | |
|----------|-------------|-----|
| SHIP NO. | 8184 - 8187 | 013 |
| DWG NO. | 1511H15B | END |

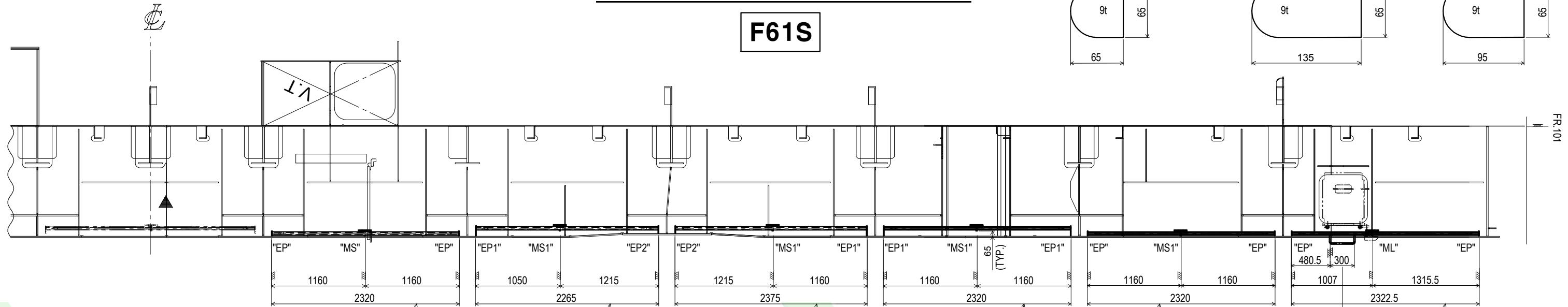
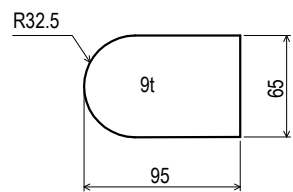
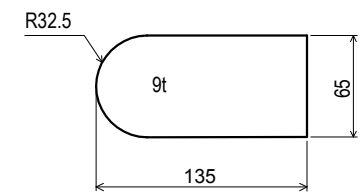
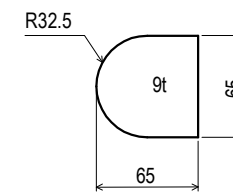
WORKING PLATFORM PLAN

F61S

TYPE - EP

TYPE - EP1

TYPE - EP2



"A"

HRF-06S
32.4 KG

HRF-05S
32.3 KG

HRF-04S
34.8 KG

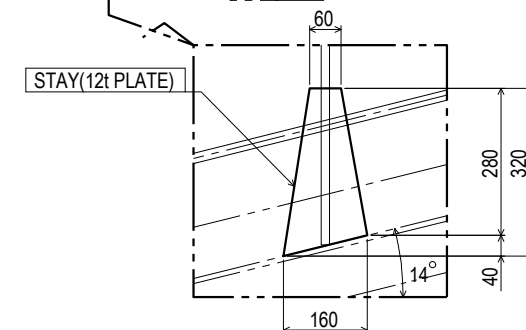
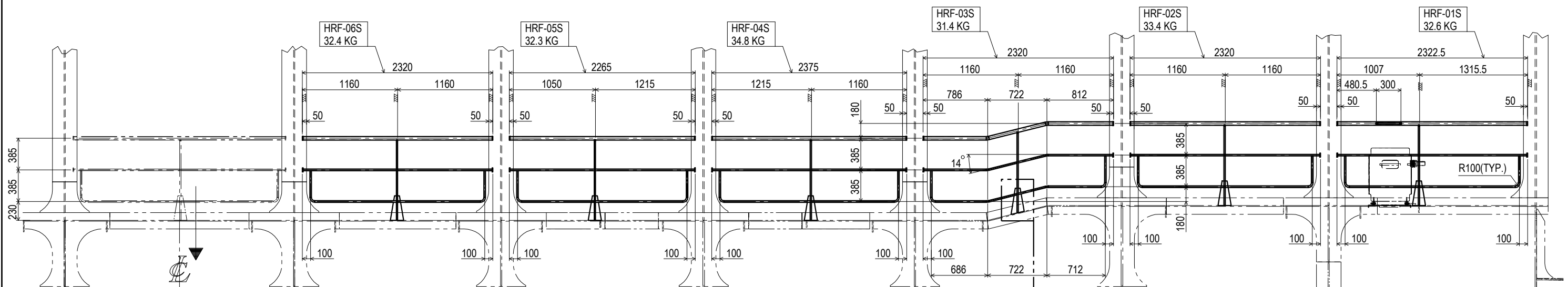
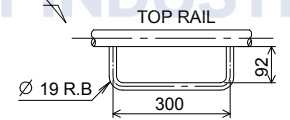
HRF-03S
31.4 KG

HRF-02S
33.4 KG

HRF-01S
32.6 KG

"A"

VIEW "A" - "A"



다른 STAY와 상이하니 본도대로 제작할 것.

H8184-1511H15B-013