현대중공업 선장설계부 호선 사양서 비교 프로그램

비교 결과: 선종 - 174K LNGC

표준 사양서	프로젝트 사양서	비교 결과
5.6 WATER BALLAST SYSTEM The ballast pumps to be provided in the engine room and to supply sea water to IG cooling water service as follows. No. Two(2) sets Type Vertical, single stage, centrifugal Prime mover Single speed electric motor Discharge rate 2,300 m3/hr Total head 30 m at S.G 1.025 Material Refer to Section 7 The ballast pumps are to have remote start/stop control, and suction and discharge pressure monitoring in the CCR integrated into the IAS, as well as local control. The ballast system is to consist of a ring main with	5.6 WATER BALLAST SYSTEM The ballast pumps to be provided in the engine room and to supply sea water to IG cooling water service as follows. No. Three(3) sets Type Vertical, single stage, centrifugal Prime mover Single speed electric motor Discharge rate 2,500 m3/hr Total head 35 m at S.G 1.025 Material Refer to Section 7 The ballast pumps are to have remote start/stop control, and suction and discharge pressure monitoring in the CCR integrated into the IAS, as well as local control. The ballast system is to consist of a ring main with	비교 결과 5.6 WATER BALLAST SYSTEM The ballast pumps to be provided in the engine room and to supply sea water to IG cooling water service as follows. No. Two(2) Three(3) sets Type Vertical, single stage, centrifugal Prime mover Single speed electric motor Discharge rate 2,300 ^ 2,500 ^ m3/hr Total head 30 35 m at S.G 1.025 Material Refer to Section 7 The ballast pumps are to have remote start/stop control, and suction and discharge pressure monitoring in the CCR integrated into the IAS, as well as local control. The ballast system is to
branches to each ballast tank.	branches to each ballast tank.	consist of a ring main with branches to each ballast
All designated ballast	All designated ballast	tank.
tanks including peak tank	tanks including peak tank	All designated ballast
which may be used for ballast	which may be used for ballast	tanks including peak tank which may be used for

표준 사양서	프로젝트 사양서	비교 결과
water tanks to be capable of being filled or discharged by any ballast pump. Surge protection devices (vibration type level switch) to be fitted at ballast main lines (4 - fore & aft, P&S) for interlock of ballast pump start and concerned valve operation when ballast main lines are not suitably flooded.	water tanks to be capable of being filled or discharged by any ballast pump. Surge protection devices (vibration type level switch) to be fitted at ballast main lines (4 - fore & aft, P&S) for interlock of ballast pump start and concerned valve operation when ballast main lines are not suitably flooded.	ballast water tanks to be capable of being filled or discharged by any ballast pump. Surge protection devices (vibration type level switch) to be fitted at ballast main lines (4 - fore & aft, P&S) for interlock of ballast pump start and concerned valve operation when ballast main lines are not suitably flooded.
5.7 BILGE SYSTEM The bilge pumps to be provided in the engine room and to handle bilge water removal as follows. No. Two (2) sets Type: Vertical, single stage, centrifugal Prime mover: Single speed electric motor	5.7 BILGE SYSTEM The bilge pumps to be provided in the engine room and to handle bilge water removal as follows. No. Two (2) sets Type: Vertical, single stage, centrifugal Prime mover: Single speed electric motor	5.7 BILGE SYSTEM The bilge pumps to be provided in the engine room and to handle bilge water removal as follows. No. Two (2) sets Type: Vertical, single stage, centrifugal Prime mover: Single speed electric motor
Discharge rate: 150 m³/hr Total head: 25 m at S.G 1.025 Material: Refer to Section The bilge pumps are to have remote start/stop control, and suction and	Discharge rate: 200m³/hr Total head: 30 m at S.G 1.025 Material: Refer to Section The bilge pumps are to have remote start/stop control, and suction and	Discharge rate: 150 m³/hr 200m³/hr +++ Total head: 25 30 m at S.G 1.025 Material: Refer to Section The bilge pumps are to have remote start/stop

표준 사양서 프로젝트 사양서 비교 결과 discharge pressure discharge pressure control, and suction and monitoring in the CCR monitoring in the ECR discharge pressure integrated into the IAS, as integrated into the IAS, as monitoring in the CCR well as well as **ECR** integrated into the local control. local control. IAS, as well as The bilge system is to The bilge system is to local control. consist of a main bilge line consist of a main bilge line The bilge system is to with branches to each with branches to each consist of a main bilge line with branches to each bilge bilge well in the engine room, well in the engine room, bilge cargo holds, and other cargo holds, and other well in the engine room, designated designated cargo holds, and other compartments. compartments. designated All bilge wells to be All bilge wells to be compartments. capable of being emptied capable of being emptied All bilge wells to be capable of being emptied by any bilge pump. by any bilge pump. Surge protection devices Surge protection devices by any bilge pump. (vibration type level (vibration type level Surge protection devices switch) to be fitted at switch) to be fitted at (vibration type level switch) to be fitted at bilge main bilge main lines (2 - fore & aft) for lines (2 - fore & aft) for bilge main interlock of bilge pump interlock of bilge pump lines (2 - fore & aft) for start and concerned valve start and concerned valve interlock of bilge pump operation when bilge operation when bilge start and concerned valve main lines are not suitably main lines are not suitably operation when bilge flooded. flooded. main lines are not suitably flooded.

비교 보고서

[차이점 분석]

차이점 1:

- 표준 사양서: 5.6 BALLAST SYSTEM

- 표준 사양서에서는 볼라스트 펌프가 2개의 세트로 명시되어 있고, 펌프의 특성은 수직형, 단일 단계, 원심 펌프, 주 동력은 단일 속도 전기 모터, 배출량은 2,300 m3/hr, 총 헤드는 30m이며, 재료는 섹션 7을 참조하라고 명시되어 있습니다. 또한, 볼라스트 펌프는 원격 시동 및 정지 제어, CCR에 통합된 IAS 내 흡입 및 배출 압력 모니터링 및 현지 제어가 가능하도록 설계되어야 합니다. 볼라스트 시스템은 각 볼라스트 탱크로의 분기가 있는 링 메인으로 구성되어야 합니다. 모든 지정된 볼라스트 탱크는 볼라스트 펌프에 의해 충전 또는 방출될 수 있어야 합니다. 볼라스트 주 라인에는 파도 보호 장치(진동형 레벨 스위치)가 장착되어 있어야 하며, 볼라스트 주 라인이 적절하게 침수되지 않은 경우 볼라스트 펌프 및 관련 밸브 작동을 위한 인터록이 이루어져야 합니다.
 - 프로젝트 사양서: 5.6 BALLAST SYSTEM
- 프로젝트 사양서에서는 볼라스트 펌프가 3개의 세트로 명시되어 있고, 나머지 특성은 표준 사양서와 동일하나, 배출량은 2,500 m3/hr, 총 헤드는 35m로 변경되었습니다. 그 외에는 표준 사양서와 동일한 내용이 명시되어 있습니다.
 - 차이점: 5.6 볼라스트 시스템
- 프로젝트 사양서에서는 볼라스트 펌프의 세트 수가 2개에서 3개로 증가하였고, 배출량은 2,300 m3/hr에서 2,500 m3/hr로, 총 헤드는 30m에서 35m로 변경되었습니다.

차이점 2:

- 표준 사양서: 5.7 BILGE SYSTEM
- 표준 사양서에서는 빌지 펌프가 2개의 세트로 명시되어 있고, 펌프의 특성은 수직형, 단일 단계, 원심 펌프, 주 동력은 단일 속도 전기 모터, 배출량은 150 m³/hr, 총 헤드는 25m이며, 재료는 섹션 7을 참조하라고 명시되어 있습니다. 또한, 빌지 펌프는 원격 시동 및 정지 제어, CCR에 통합된 IAS 내 흡입 및 배출 압력 모니터링 및 현지 제어가 가능하도록 설계되어야 합니다. 빌지 시스템은 엔진실, 화물칸 및 지정된 구획의 각 빌지 웰로 브랜치가 있는 주

출력