

WHC ECC 控制台 Control console

概述 Overview



控制台包括WHC型驾驶室控制台和ECC型机舱集中控制台，是船舶安全航行、操控的核心装置，符合国内外船级社规范以及IMO和SOLAS标准。以“集中控制、方便操作、模块化组合、布置合理、美观实用、符合人机工程要求，满足舱室整体布局”为原则进行设计的控制台在外形款式上美观新颖，大方得体，适应最新潮流。控制台整体布局整洁清晰，巧妙合理，操作维修方便，实用可靠，广泛应用于各类型船舶的驾驶室和集控室。

The control console includes WHC wheel house control console and ECC engine control console, is a core unit for safe navigation and manipulation, which also meets the specifications of classification societies home and abroad as well as IMO and SOLAS standards. It is designed to be beautiful and novel, graceful, and adapted to the latest trend, based on the principles of 'centralized control, easy operation, modular combination, reasonable arrangement, beautiful appearance and practical functions, ergonomic requirements, and meeting the overall arrangement of the cabin'. The console's overall arrangement is clear, ingenious and reasonable, and the console is convenient to maintain, practical and reliable, and is widely used in the wheel house and engine control room of various types of ships.



产品特点 Product features

- 控制台采用满足人机工程的“钢琴式”、“立面式”、“平面式”模块化台型结构，通过拼装可形成I型、M型、C型和L型等整体造型；
The console adopts the modular structure of "piano type", "facade type" and "plane type" to meet ergonomics, and can form the overall shape of type I, type M, type C and type L through assembly;
- 控制台以高质量的材料和先进的制造技术为基础，灵活使用钢、铝、碳纤维等材料，采用数控钣金、模具成型等加工方式，创造出独特、通用和创新的产品；
The console is based on high quality materials and advanced manufacturing technology, flexible use of steel, aluminum, carbon fiber and other materials, using CNC sheet metal, mold forming and other processing methods, to create a unique, universal and innovative products;
- 控制台所有的部件都经过表面处理，采用亚光喷塑或喷漆工艺，色调温和而不刺眼，所有的切割或钻孔都在喷漆前完成，以使材料表面受到保护而防止腐蚀；
All parts of the console are treated by surface treatment, adopting matte spray or paint process, the color is mild but not dazzling. All cutting or drilling are completed before the paint to protect the surface of the material from corrosion;

- 控制台配色广泛地选用GSB、RAL、Munsell等色系，可供客户自主选择搭配；
The console widely selection of GSB, RAL, Munsell and other colors available for customers to choose their own collocation;
- 控制台注重细节设计，台面可采用翻起式结构，配置气门撑机构，方便维修保养，同时具有良好的散热、通风、防鼠、防震、防潮等措施，能满足复杂的海上环境要求；
The console pays attention to the details of the design, the top part of console can be upturning type, and equipped with valve support mechanism, convenient maintenance, while with good cooling, ventilation, anti-rat, shockproof, moisture-proof measures, can meet the requirements of complex Marine environment;

产品功能 Product function

- 驾驶室控制台
Wheelhouse control console
- 操舵功能：配以各种型号操舵仪（有自动、随动、手动操作模式的操舵设备）对船舶进行转向操作
Steering: equipped with various models of steering apparatus (automatic, servo and manual steering devices) to turn the direction of the ship
- 操机功能：配以主机遥控装置对机舱主机进行遥控操纵，并提供各种主机传令、状态显示及报警等信息
Machine operation: equipped with engine remote control unit to remotely control and manipulate the cabin engine and provide a variety of engine commands, status display and alarm information and so on

- 控制台设计工程师基于丰富的工程经验，使用先进的三维设计软件和仿真分析软件，设计过程注重客户的参与，以形成满足客户需求的控制台解决方案；
The console design engineers based on a wealth of engineering experience, the use of advanced 3D design software and simulation analysis software, design process focus on customer participation, to form a console solution to meet customer needs;
- 控制台可以提供系统化的集成方案，由各种型号和类型的导航、通信、控制设备组成，以满足特定的桥楼需求。
The console can provide a systematic integrated solution consisting of various models and types of navigation, communication and control equipment to meet specific bridge requirements.

- 航行保障功能：按《国际海上避碰规则》和《钢质海船入级和建造规范》等要求配以各种航行保障设备的控制单元，如雾笛控制器，航行灯、信号灯、闪光灯控制器，窗玻璃雨雪清除器，风速风向仪，计程仪，测深仪，电罗经、磁罗经显示器，电子海图，遇险报警单元等
Sailing guarantee function: according to the requirements of the international regulations for preventing collisions at sea and Rules and Regulations for the Construction and Classification of Sea Going Steel Ships, provide the control units of various sailing guarantee equipment and devices, such as fog horn controller, navigation light, signal light, flash light controller, window glass rain-snow clearer, wind sensor, speed log, echo sounder, gyro compass magnetic compass display, ECDIS and distress alarm unit and so on

○通信指挥功能:配以雷达、导航、无线电通讯单元(中高频、甚高频电话、对讲单元、雷达显示器等设备)保证航行的安全

Communication and command: equipped with radar, navigation, radio communication units (MF/HF, VHF telephone, intercom unit, radar display, etc.) to ensure the security in navigation

○内部通讯功能: 配以全船广播、声力电话、自动电话, 实现全船信息的传递

Internal communications: equipped with the whole public address sound power telephone and automatic telephone, to realize the transmission of whole ship's information

■ 机舱集中控制台

Engine control console

○船内通信模块: 主要由声力电话、自动电话、轮机员呼叫主机、广播遥控台、机舱组合报警灯柱等组成, 进行船内通信、联络等作用

Internal communication modules: mainly composed of sound power telephone, automatic telephone, engineer calling host, radio remote control unit, and engine combination alarm light column, used for onboard communications, contract and so on

○主机监控模块: 主要由主机遥控、检测报警灯和各种仪表等组成, 进行主机操纵、主机及各种辅助设备工作状态监控及显示、声光报警、应急处理及其它有关功能, 以实现对手机等操纵和监控

Engine monitoring module: mainly composed of engine remote control and detection alarm light and a variety of other instruments, and is used to operate the main engine, monitor and display the working status of main engine and other auxiliary devices, give out sound and light alarm, respond under emergency and perform other related functions, in order to operate and monitor the main engine and other devices

○电源配电功能: 配以交流220V配电、直流24V配电和UPS电源, 保证供电的连续性和航行的安全性

Power distribution: equipped with AC220V power supply, DC24V power supply and UPS power supply, to ensure the continuity of power supply and the security in navigation

○其他辅助和报警功能: 如调光、照明、火灾报警、通用报警、值班报警等

Other auxiliary and alarm functions: such as dimming, lighting, fire alarm, general alarm, watch alarm, etc.

○发电机监控模块: 主要由检测报警灯和各种仪表等组成, 进行发电机及各种辅助设备工作状态监控及显示, 声光报警、应急处理及其他有关功能, 以实现发电机的操纵和监控

Generator monitoring module: mainly consists of detection alarm light and other instruments, and is used to monitor and display the working status of generators and auxiliary equipment, give out sound and light alarm, respond under emergency and perform other related functions, in order to operate and monitor the generators

○其他电气设备: 集中检测、显示和报警各种船用设备的工作状态, 如压力、温度、电流、电压、功率及其运行状态等参数, 和各舱柜的液位和温度

Other electrical equipment and devices: centralized detection, display and alarm of the working conditions of all marine equipments, such as pressure, temperature, current, voltage, power and running states and other parameters, as well as the liquid level and temperature of each tank

▶ 台型分类

Console type classification



A型操舵屏
Type A steering wheel panel



A型转角屏
Type A corner panel



A型通用屏
Type A universal panel



B型操舵屏
Type B steering wheel panel



B型转角屏
Type B corner panel



B型通用屏
Type B universal panel



C型操舵屏
Type C steering wheel panel



C型转角屏
Type C corner panel



C型通用屏
Type C universal panel

注: 台型分类包括但不限于上述款型。
Note: The console type classification includes but is not limited to the above models.

■ 产品标准尺寸见下表:

Product Standard sizes are shown in the following table:

设备名称 Equipment name		宽度 W(mm)	高度 H(mm)	深度 D(mm)	备注 Remarks
A型 Type A	操舵屏 Steering wheel panel	1200	1250	1410	左侧表格内尺寸不含底部基座 Size in the left side of the table does not contain the bottom base
	转角屏(30°) Corner panel	853	1250	1160	
	通用屏 Universal panel	650/800	1250	1160	
B型 Type B	操舵屏 Steering wheel panel	1400	1263	1635	
	转角屏(30°) Corner panel	905	1263	1265	
	通用屏 Universal panel	850	1263	1265	
C型 Type c	操舵屏 Steering wheel panel	1200	1280	1525	
	转角屏(30°) Corner panel	730	1280	990	
	通用屏 Universal panel	800	1280	990	

▶ 技术指标

Technical index

■ 工作电压: AC220V±10%, 50/60Hz; DC24V±20%

Working power: AC220V ±10%, 50/60Hz; DC24V ±20%

■ 环境温度: -10°C~55°C

Working temperature: -10°C~55°C

■ 安装形式: 落地式

Installation: floor type

■ 防护等级: IP22

Protection grade: IP22

▶ 型号命名

Model naming

控制台型号: WHC: 驾驶室控制台 ECC: 集中控制台

Console model: WHC: wheel house control console ECC: engine control console

整体形式: I:I字型 M:M字型 C:C字型 L:L字型 O:其他

Overall form: I:I shape M:M shape C:Cshape L:L shape O:other

结构形式: 1: 钢琴式 2.立面式 3.平面式

Structural form: 1: piano modular 2.elevation modular 3.plane modular

▶ 选型说明

Selection description

例: WHC-M/1

表示: 驾驶室控制台、整体造型为M型、钢琴式台体结构

For example: WHC-M/1

It means: wheelhouse control console, M-shaped modeling, and piano modular

