



ENGINEERING AND
SYSTEM INTEGRATION
FOR SWITCHGEAR AND
NAVIGATION SYSTEMS



HEITEC AG is your expert partner in the shipbuilding industry and related supply sector. The company's portfolio of products and services covers the design, planning, engineering and implementation of switchgear, automation, HMI/SCADA and software. System integration in the areas of navigation and communication equipment and entertainment systems round out our offerings. HEITEC AG's technicians and engineers implement solutions – as partial projects or as a complete project – for a wide range of shipbuilding applications in the form of planning engineering services.

We offer individual solutions for the different ship types and sizes, and our interdisciplinary team can draw on a wide range of expertise in different areas of electrical engineering for shipbuilding.

- › **New building projects for mega yachts, PAX ferries, cruise line, merchant and navy vessels**
- › **New building projects for offshore platforms for wind energy technology**
- › **Spare parts, retrofit and repair projects for surface vessels of all kinds**
- › **Spare parts, retrofit and repair projects for offshore platforms**

Hardware integration:

- › Use of different hardware brands, at the customer's option
- › Planning, engineering, installation, software development and commissioning included

Software solutions:

- › Automation
 - › Control for heating, ventilation and air conditioning
 - › Virtual commissioning
 - › Telecontrol
- › Instrumentation and controls
 - › Visualization
 - › Alarm monitoring systems

Switchgear solutions:

- › Main and emergency MV + LV control panels
- › Low-voltage switchgear
- › Consoles for Bridge, Nock, ECR and safety systems
- › Navigation desks and overhead consoles
- › Motor starters in pull-out and conventional design
- › Power distribution systems, light distribution systems, single starter devices
- › Shore connection control panels

NavCom solutions:

- › Navigation systems
- › NAVTEX systems
- › VDR Voyage data recorder systems
- › Entertainment systems, IPTV, video-on-demand, sound systems, multimedia systems
- › External communication systems, VSAT, GMDSS, Anti-piracy system
- › Internal communication systems, PABX, PA systems, fire alarm systems, intercoms, Catering Intercom System
- › Automatic ship identification systems (AIS)
- › Compass systems
- › DGPS electronic positioning
- › Echo sounder systems



Complete solutions from a single source:

- › Consulting & planning
- › Development & design
- › Manufacturing & test
- › Commissioning & training
- › Service & maintenance

From concept to commissioning:

1. Customer order

- › Concept development
- › Specifications
- › Offer preparation

2. Project planning & engineering

- › Technical clarification, short-circuit calculation, and component design
- › Preparation of documentation
- › Software development

3. Procurement

- › Procurement
- › Ordering of materials
- › Commissioning

4. Assembly & production

- › Mechanical construction and wiring
- › Software development and visualization
- › Documentation review

5. Testing & acceptance (FAT)

- › Visual inspection
- › Functional inspection
- › Acceptance by the customer

6. Assembly & Installation

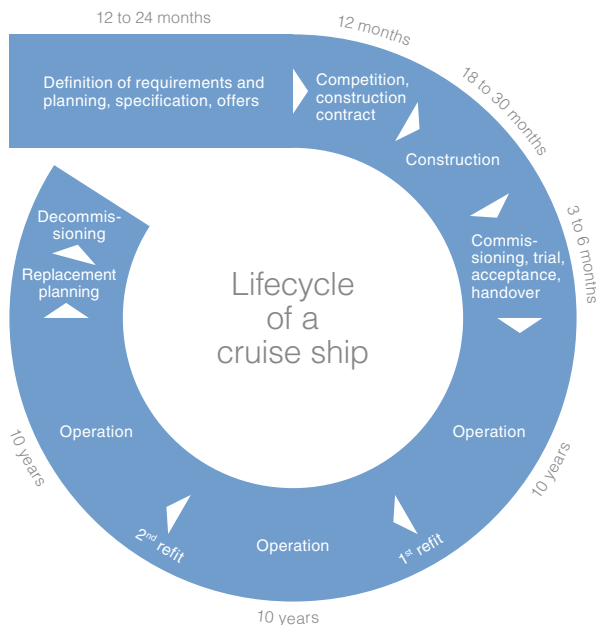
- › Transport and installation of control panels
- › Cable routing
- › Connections

7. Commissioning

- › Complete commissioning, system settings and parameterization
- › Function test with customer and acceptance
- › Preparation of finalized documentation

8. Service & maintenance

The choice is yours:
Individual product and service packages according to your requirements or complete solution provided from a single source



Your benefits with HEITEC

- › Customer-oriented project management
- › Mid-sized structures ensure fair prices
- › Comprehensive expertise in-house
- › Extensive experience with the maritime industry
- › Scalable range of products and services
- › Local presence shortens response times

References



HVDC-Platforms

Planning, engineering and production of switchgear for internal requirements as well as for platform air conditioning in process area and living quarters



Supply vessels

Planning, engineering, retrofit and commissioning of main control panel, distribution systems and cables



Navy vessels

Planning, engineering and production of the IMAC system (Siemens)

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