ENGINEERING AND SYSTEM INTEGRATION FOR SWITCHGEAR AND NAVIGATION SYSTEMS
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

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.
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

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**Complete solutions from a single source:**
- Consulting & planning
- Development & design
- Manufacturing & test
- Commissioning & training
- Service & maintenance

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**Lifecycle of a cruise ship**

- **Definition of requirements and planning, specification, offers**
- **Construction**
- **Commissioning, construction contract**
- **Operation**
- **Competition, trial, acceptance, handover**

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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)