Qualified Support
Instrumentation and control technology
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To provide its customers optimum service support, MAN PrimeServ has established own expert teams dedicated to the specific requirements in the service of turbomachinery.

Comprehensive advice on operation and maintenance, rapid and competent support in the event of malfunctions as well as the development and realization of individually tailored modernization solutions are key features of a powerful service organization. In order to meet these requirements as effectively as possible, MAN PrimeServ has set up its own engineering department especially focused on the particular requirements of the service business. Specialized expert teams for core engine, instruments and controls, systems engineering and thermodynamic calculation facilitate comprehensive support for the entire turbomachinery unit from a single source.

Competence
With a total of around 200 years of professional experience in the field of turbomachinery instrumentation and control technology, the members of the instruments and controls team are specialists in the specific requirements of turbomachinery control and safety systems. Amongst others, the high level of competence is made evident by the capability of independently designing and commissioning turbomachinery control and safety systems, certifications by TÜV Rheinland as ‘Functional Safety Engineer’ and ‘Functional Safety Expert’ and many years of experience in field service.

With their acknowledged professional competence, the members of the instruments and controls team contribute in standardization committees and regularly report in specialist publications on current industry themes. Among others, they have been involved in the development of the following standards:

- API 670: Turbomachinery Protection Systems
- API 691: Risk Based Machinery Management
- EN/ISO 1012: Compressor Safety
- VDMA Specification 4315: Functional Safety
- VGB 121: Guideline for Supervision, Limiting and Protection Devices on Gas Turbine Systems

Services
The MAN PrimeServ instruments and controls team develops and realizes individually tailored modernization concepts for existing turbomachinery units:

- Control system
- Machine monitoring
- Instrumentation
- Remote data transmission

The modernization solutions can be realized either on standard platforms such as Allen Bradley or Siemens PCS7 as well as on the basis of MAN Diesel & Turbo’s Turbolog platform. Detailed knowledge of the complex algorithms required for the control of turbomachinery and the use of dynamic simulations already during the development phase provide for safe and reliable operation. Close collaboration with the other expert teams, direct access to the complete machine documentation as well as the complete spectrum of MAN Diesel & Turbo developments and patents enable the professional realization of comprehensive modernization solutions.

In addition to this, by analyzing the operating data the instruments and controls team supports the operating personnel in assessing the condition of the plant and in identification, analysis and elimination of malfunctions. Therefore, the employees have access to the operating data supplied by the optionally available iRs® system or can directly access and analyze the control system data with customer’s consent.

Summary
The MAN PrimeServ instruments and controls team is dedicated to the particular requirements of turbomachinery service:

- Comprehensive instruments and controls and turbomachinery competence
- Close collaboration with other expert teams
- Development of individually tailored modernization solutions
- Qualified support in the assessment of the unit condition and the identification, analysis and elimination of malfunctions
- Provision of support for turbomachinery units over their entire lifecycle
- Numerous reference projects

Comprehensive Modernization
MAN PrimeServ provides comprehensive modernization concepts to modernize your equipment – no matter if you want to optimize reliability, operating costs, environmental sustainability or any other characteristic. Please contact us for further information.