JRCS has our own Customer Support Services and access to the International Service Network. For further information, please contact jrcs@jrcs.co.jp





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2006.5EA1000



System Retrofitting



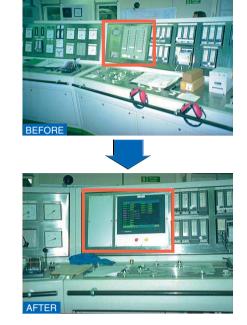
Equipment Retrofitting

JRCS can provide shipowners and offshore operators with design services and products for the replacement of equipment in life-extension and system upgrade programs.

Taking into consideration time limitations and operational priorities, pre-installation surveys and design proposals and approvals offset on-site problems and delays so that the new equipment is installed and commissioned on time.

JRCS has carried out various retrofitting projects where shipowners have taken the decision to replace or modify existing ships' systems. In most cases this has involved the replacement of the automation system due to the poor reliability of the original system, lack of spare parts, high maintenance costs, and in some cases loss of UMS classification. In other cases where additional generators have been installed, JRCS has designed, manufactured, and installed new sections to the existing switchboards and control panels etc. JRCS now has a dedicated Retrofit Department staffed by qualified technicians experienced in system design and shipboard systems. Since JRCS is able to carry out the design, manufacture, installation, and commissioning using its own resources and staff, where necessary supported by authorized JRCS agents, shipowners can be confident that their requirements are in the right hands.

The three key essentials to a successful retrofitting project are Planning, Planning, and Planning. JRCS working closely with the shipowner does this in detail, in particular when carrying out the on-board survey. The end result must be to ensure that the vessel returns to operational duties on time and with the new equipment fully operational.



2. Data Logger System **Retrofitting for Container Vessel**

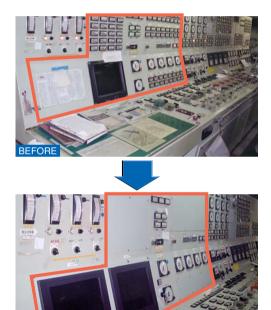
Due to the unreliability and high maintenance costs of the existing system from another manufacturer JRCS was requested to provide the SMS-22-K Alarm & Monitoring System as a replacement. The removal of the old system, installation and commissioning of the new system was carried out in 2 weeks in the dockyard.





1. Automation System Retrofitting for LNG Vessel

Upgrade of LNG Automation System: JRCS replaced the existing 24-year old automation system by installing the SMS-22 Touch Screen Alarm & Monitoring System. Configured to meet the owners' new operational requirements, new sensors were also added whilst existing sensors and ships wiring were checked and utilized. The same work has also been carried out on the sister LNG vessel.



3. Generator Panels Retrofitting for FPSO

Due to the increased load requirements on a FPSO, JRCS manufactured and installed two generator control panels and a synchronizing panel to supplement two existing panels thus enabling four generators to be operated.