

Product Catalog



Power Management Systems

Medium Voltage Switchboard

A higher quality medium voltage switchboard through experience and technology
Specific marine application to LNG ships and large-size container ships



Main Switchboard

Incorporating the latest power management system, ensuring safety and reliability
Suitable for a variety of vessels from bulk carriers to LNG ships



Power Management Systems

Starter Panel

Group Starter Panel

Incorporating high performance, compact, multi-function control units
Advanced control monitoring system by the adoption of expanded functions and an optimized network



Draw-out Type Starter Panel

Achieved by the pursuit of easy maintenance
utilizing JRCS original draw-out structure

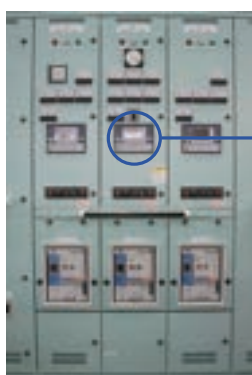


Individual Starter Panel



Generator Plant Control & Power Management System

Easy maintenance in the case of failure by the adoption of
a fully distributed independent generator plant monitoring and control system



Power Management Systems

Emergency Switchboard



Battery Charging & Discharging Board



UPS (Uninterruptible Power Supply) System



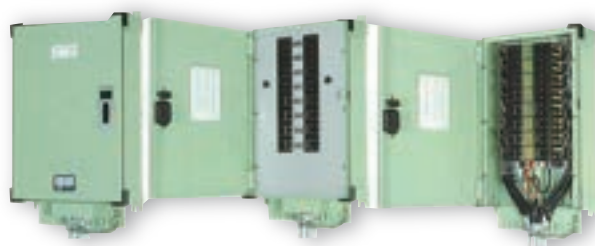
Shore Connection Box



Test Panel



Distribution Board



Power Management Systems

Low Voltage Switchboard & Group Starter Panel

The world's smallest switchboard with higher reliability gained through experience



Cold Ironing System



Providing shore-side electrical power to a ship at berth while a diesel generator is not operating
Positive reduction of air pollution by eliminating environmental pollutants caused by a ship in harbor

Automation Systems

Integrated Automation System (IAS)

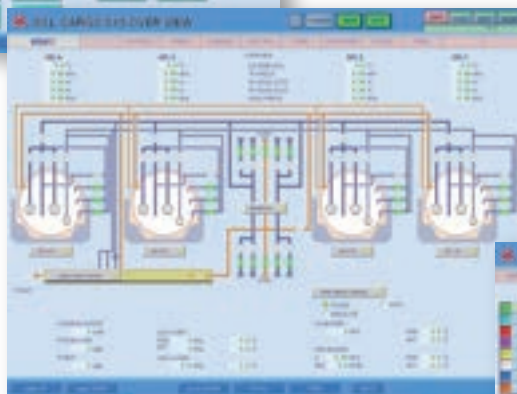
OASIS (Operationally Advanced Super Integrated System)



Designed for high-grade vessels such as LNG ships
User-friendly monitoring and control functions using graphic display screens
Easy and secure operation by the use of a large-size color LCD with a touch panel



GENERATOR CONTROL



CARGO SYSTEM MIMIC



L/D COMPRESSOR CONTROL

<Display Examples>

Automation Systems

Alarm Monitoring & Control System

SMS-55



TREND GRAPH

<Display Examples>



EVENT HISTORY



A large-size color LCD with a touch panel
Display of trend graphs and analog meters
Motor start/stop and valve on/off by touch operation
Saving of trend and history data to USB memory

Alarm & Monitoring System

JMD-P

<Display Examples>



SYSTEM STATUS



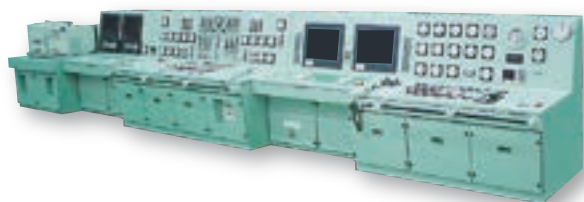
CHANNEL CALL

Cost-saving engine monitoring system using a full color LCD
Simplistic instrument arrangement resulting in a compact panel
Uncomplicated system configuration applying only digital inputs

Automation Systems

Engine Control Console

Robust structure emphasizing resistance to the harsh environment of an engine room
User-friendly engine monitoring and control



Cargo Control Console

Secure and efficient cargo monitoring and control by optimal design focusing on operability during cargo handling



Wheelhouse Group Panel



Wheelhouse Control Console



Simulator Training System

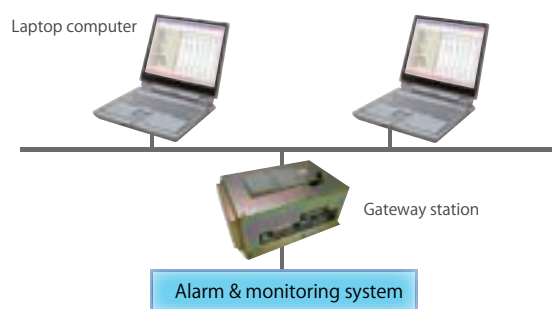


Simulation of at-sea conditions onboard
Training for emergency situations unable to be carried out onboard

Automation Systems

Engine Data Acquisition System

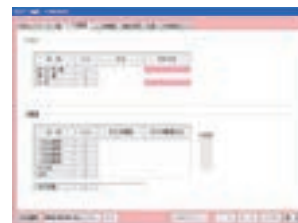
Using engine data collected from an alarm monitoring & control system by a personal computer in each cabin, the making of engine log books and display of regular logs and running hours is possible.



<Display Examples>



Log data list

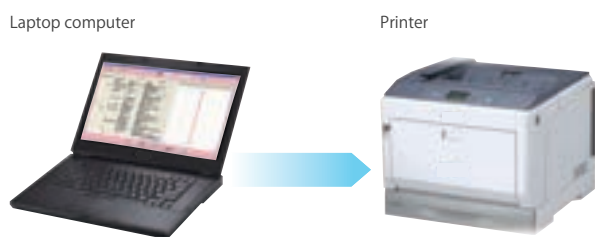


F. O. consumption

Ships Maintenance Management System / Spare Parts Management System

Daily and regular maintenance schedules can automatically be created.
By entering maintenance results, a maintenance report can automatically be created.
Details of parts breakdown can be entered.

<Display Examples>



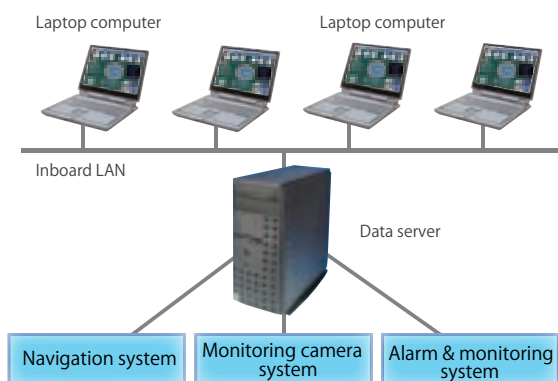
Daily inspection schedule



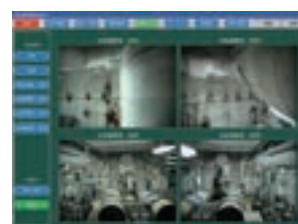
Parts breakdown diagram

Ships Integrated Management System

Integrated data from an alarm monitoring & control system, ship's monitoring camera system and navigation system is collected in a server and displayed at terminals via the inboard LAN.



General information



Monitoring camera

Offshore

Medium Voltage Switchboard

Compact and simple panel arrangement utilizing a multi protection relay



Generator Control Panel

Compact generator control panel designed for limited onboard space



Miscellaneous

Training Program

Training for high voltage switchboards, main switchboards, starter panels and engine control consoles

Theoretical courses using textbooks and drawings, hands-on training courses, and practical courses for troubleshooting and parts replacement

<Sample of training curriculum>

High Voltage Switchboards Training Schedule			
Day	Time	Description	
Day 1	09:30 ~ 9:40	Opening meeting	
	09:40 ~ 10:40	Orientation (Company Profile) Factory Tour	
	10:40 ~ 10:50	Break	
	10:50 ~ 12:00	Specialized Knowledge of High voltage switchboards	Classroom Lecture
	12:00 ~ 13:00	Lunch Break	
	13:00 ~ 13:30	Dangers of High voltage switchboards	Classroom Lecture
	13:30 ~ 15:10	Structure / Special equipment of High voltage switchboards Video viewing of the internal arc fault test	
	15:10 ~ 15:20	Break	
	15:20 ~ 16:30	Structure / Special equipment of High voltage switchboards	Simulator
	16:30 ~ 17:00	Q and A	
Day 2	~ 17:00	Closing meeting	
	09:30 ~ 10:00	Opening meeting	
	10:00 ~ 10:30	Maintenance of High voltage switchboards	Classroom Lecture
	10:30 ~ 10:40	Break	
	10:40 ~ 12:00	Multi-Function Protection Relay "VAMP" (General Information / Function / Operation) Each Protection Function / Operation, Replacement Procedure of Spare Parts	Simulator
	12:00 ~ 13:00	Lunch Break	
	13:00 ~ 15:10	VCB / VMC (General Information / Function) Interlock / Draw out / Insert Procedures Lifter operation, Bus Earthing Operation	Simulator
	15:10 ~ 15:20	Break	
	15:20 ~ 16:30	Vacuum Check Procedure of VCB / VMC	Simulator
	16:30 ~ 17:00	Q and A	
	~ 17:00	Closing meeting	

<Image of theoretical and practical courses>



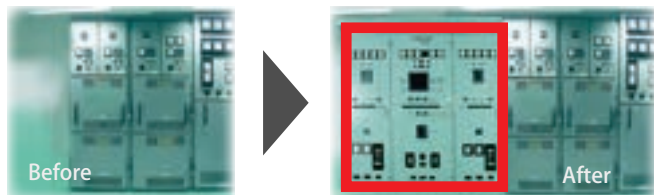
System Retrofitting

Case 1 : Addition of a generator for FPSO

Due to an increase in the power load of FPSO, 2 sets of generator control panels and a synchronizing panel were added.

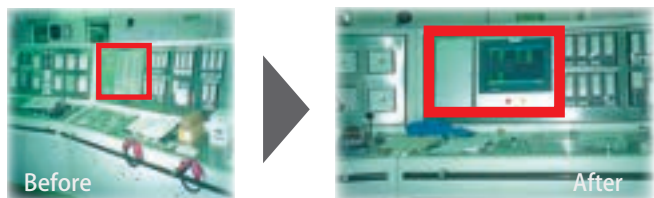
Using the existing 2 generator panels, in total 4 sets of generators are able to be controlled.

*FPSO=Floating Production, Storage and Offloading System



Case 2: Retrofitting of automation system for LNG ship

The existing 20 year-old monitoring system (other maker) was replaced with JRCS alarm monitoring system.



Regular Maintenance

Reduction of repair cost due to unexpected trouble and safer operation of vessels

Prevention of potential trouble due to defect or wear-out of parts





■JRCS Shimonoseki (headquarters):

1-2-14 Higashiyamato-machi, Shimonoseki,
Yamaguchi, 750-8515 Japan
Tel: +81 (0)83 261 0200 Fax: +81 (0)83 261 0360
E-mail : jracs@jracs.co.jp
URL : www.jracs.co.jp

■JRCS Tokyo (headquarters):

CIRCLES Shimbashi 11F, 2-11-13 Nishishimbashi,
Minato-ku, Tokyo, 105-0003 Japan
Tel: +81 (0)3 5948 5952 Fax: +81 (0)3 5948 5953

■JRCS Toyoura:

2155 Kawatana, Toyoura-cho, Shimonoseki,
Yamaguchi, 759-6301 Japan
Tel: +81 (0)83 775 1100 Fax: +81 (0)83 775 1105

■The Netherlands Subsidiary: JRCS Euro Marine Service B.V.

Prof. J.H. Bavincklaan 7, Unit 202, 1183 AT Amstelveen, The Netherlands
Tel : +31 20 2996583
E-mail : eu-service@jracs.co.jp

■Singapore Subsidiary: JRCS Engineering Singapore Pte. Ltd.

26 Boon Lay Way #01-82 TradeHub 21, 609970 Singapore
Tel : +65 6515 8286 Fax : +65 6515 9334
E-mail : jracs.engineering@jracs.com.sg

■Shanghai Subsidiary: JRCS (Shanghai) Co.,Ltd.

Rm #1223, Cimic Tower, #1090 Century Blvd Road, Pudong New Area,
Shanghai, 200120, China
Tel : +86 21 2222 0052 Fax : +86 21 2222 0053
E-mail : shanghai@jracs-sh.com