



Fire alarm systems



1

Automatic firefighting systems

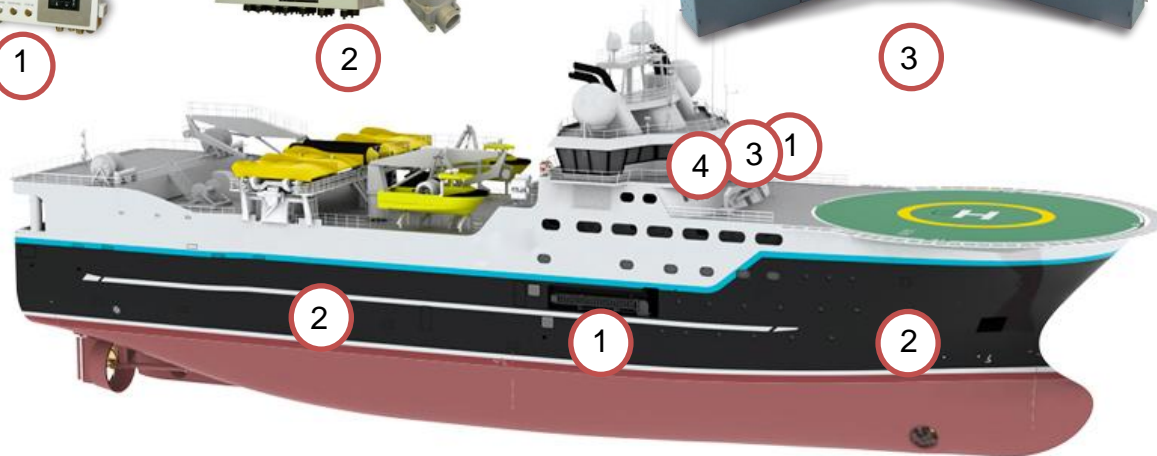


2

Shipborne aircraft takeoff and landing control systems



3



4

Integrated bridge systems



FIRE ALARM SYSTEM



Касатка (Kasatka) Fire Alarm



Certification:

Developed in conformity to requirements by the Navy of Russia

TY Technical Requirements approved by Russian Maritime Register of Shipping (№ 315-22-316782 dd. 30.11.2015)

Approved by Ex-protected and Mining Equipment Certification Centre

Certificate № TC RU C-RU.ГБ05.В.00490

Principal Features

Guidelines for responsive actions in case of fire	provided
Enhanced number of sensors and loops	provided
Types of architecture	Centralized (1008 addresses) Distributed (5000 plus addresses)
For large draught ships and vessels	provided
Power Supply	
Main / Backup / Emergency (from built-in source)	380V 50Hz 3-phase 220V 50Hz 1-phase / 24VDC / 24V
Power Consumption	
Main / Backup	500VA / 250W
Sensors Activation Threshold Settings	
Temperature within the range of	54-100°C
In case of smokes causing reduced optical density of medium within the range of	2.5-50%
In case of fire caused by burning kerosene of sq. 0.1 sq. m	At 10m distance
Working Temperature	0-45°C
Relative Humidity at (25±2)°C	(95±3)%
Full service life	25 years plus





IBS



Control and IBS functions

- Integration of vessel movement controls, navigational aids, mapping and radar means into one control centre;
- Integration of indicators functions;
- Integrated information field;
- Centralized control of equipment;
- Optimized system configuration;
- Automated performance of complicated navigation tasks;
- Lesser incidents caused by human;
- Modular structure;
- Full service life – 25 years plus

Principal Functions

Navigation, steering and maneuvering ;

Navigator's tasks solution;

Platform steering in automatic, tracking and manual modes;

Mooring control;

Planning (voyages, routes, vessel operations);

Seafaring safety provision;

Internal and external communications;

Main and auxiliary propulsion plants control and monitoring of their condition;

Monitoring (warning) of temperature increase or smoke occurrence inside vessel rooms;

Monitoring (warning) of water appearance in the vessel's and of water pumps functioning;

Control of technical facilities that ensure damage control including water drying, fire suppression and vessel motion;

Display of platform technical facilities status data;

Control of signal lights;

In-house and outdoor CCTV monitoring



INTEGRATED HELICOPTER FLIGHT CONTROL SYSTEM FOR FLIGHT CONTROL STATIONS ON VESSELS AND OIL PLATFORMS



Principal Functions



- Equipping the flight control station (Flyco) with the integrated flight control panel (IPRP/ИПРП) allows to do without many devices with various purposes and data display, processing and transfer principles at the Flyco. ;
- Generates recommendations in case of sudden change of situation in the air and on the landing deck
- Geometry of the IPRP can be easily changed

- Information support provided to flight operations officer for helicopter flight preparation
- Information support provided to flight operations officer on helicopter take-off, land approach and landing
- Control over light signaling equipment and helicopter take-off and landing support equipment
- Recording, storage and playback of the registered information
- Training of flight operations officers on helicopter flight control skills

