

# Intelligent Steering Gear Control System



# Introduction

Being the manufacturer of ships manoeuvring control systems, Navis has been producing the steering control systems since 2002 year.

Despite the seeming simplicity of the system, we used an experience in ship motion controlling to create the new generation of rudder control system.

It enabled us to create an adaptive and intelligent steering gear control system.

## Major assets

We offer the system no one of our competitors can offer — 4 subsystems in one:

- Rudder position control system;
- Motor starter system;
- Alarm system;
- Rudder angle indication system.

For sure it is possible to supply just part or any combination of that.

The intelligent automation of the system monitors the running status of crucial elements and makes decision independently to fix a fault, for example, by starting an auxiliary steering gear pump or switching to a backup control unit.

The adaptivity nature of the STCS5000 checks an operating efficiency of a steering gear and, if necessary, corrects itself the rudder turning algorithms for better performance of a gear without operator involvement.

The PLUG-AND-PLAY system is supplied as pre-configured and tuned on the factory, so you only need to connect the devices with cables without any calibrations and adjustments onboard.

## Application

Unique features of the system allow you to use STCS5000 system for comprehensive control of entire steering gear of any operating principle produced by any manufacturer in the world, or only for steering control as a part of ship's motion control system.

In any case, you have the freedom of choice to choose the rest part of navigation equipment by your favorite maker.

## Main benefits

### Fast installation

The network based plug-and-play system lets to reduce the cost and time of cabling works and to make commissioning much easier.

### Real redundancy

Having a knowledge in development of complicated automatic manoeuvring control systems we designed all elements of STCS5000 system to ensure operation in case of failure of one of the elements.

## Easy alignment on a bridge

The most compact and functional system on the market is ensured to save space and add a value to bridge integrators' designs. Each component can be easily located at any place on the bridge console and do not require to be delivered in specially dedicated steering stand.

## Rational integration

Network architecture provides simple integration with various Navis motion control systems using less units and cables. For sure easy switching between all systems, control positions and control modes is ensured.

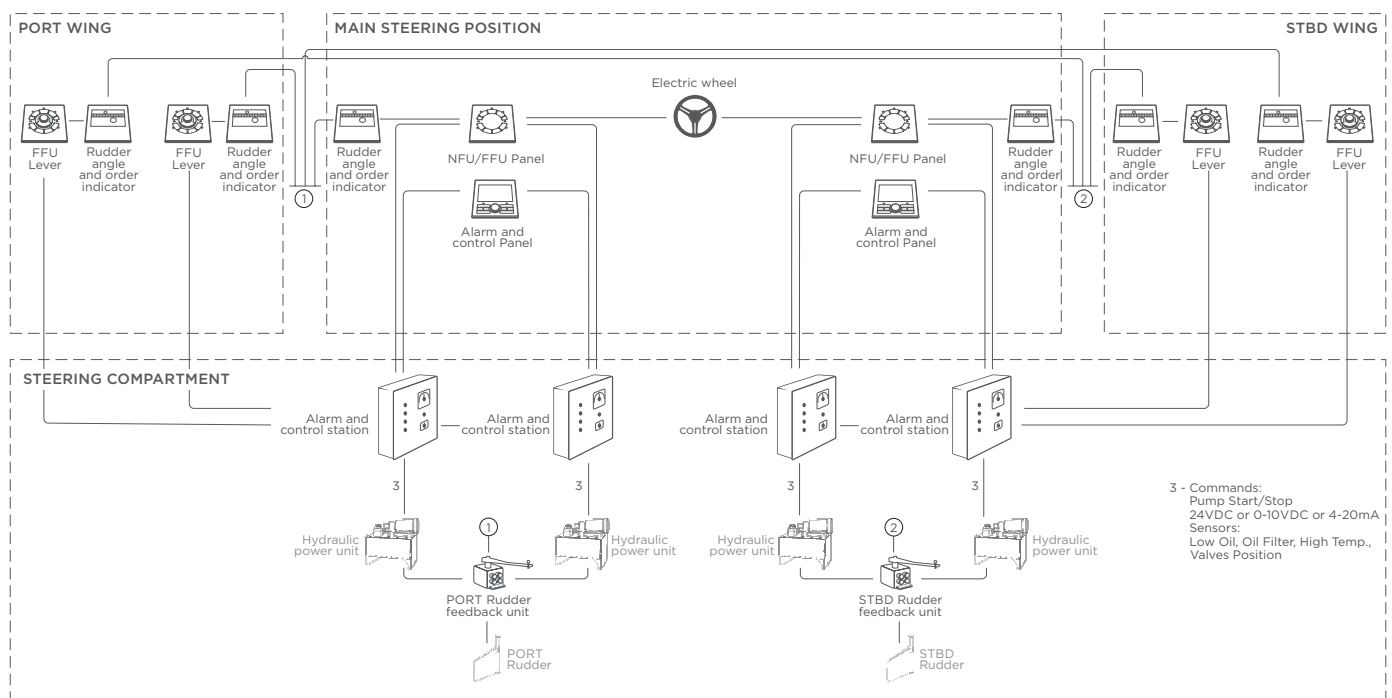


## Easy NavAP integration

Deep integration between the products allows to install trimmed down, cost effective version of NavAP. This resulting cost and time saving during installation without losing functionality.

## Save your time

System is designed to fit any boat type and can be delivered with certificate of any class. Herewith it can be specially customised for the needs of your project at very early stage of the design. It enables you to save time on this part of the project and concentrate more on the field you have expertise in.



In the figure: two independent steering gears with two pumps in each gear is completely processed by represented STCS5000 system on three steering positions.