



Modular Solutions for MGO Operation

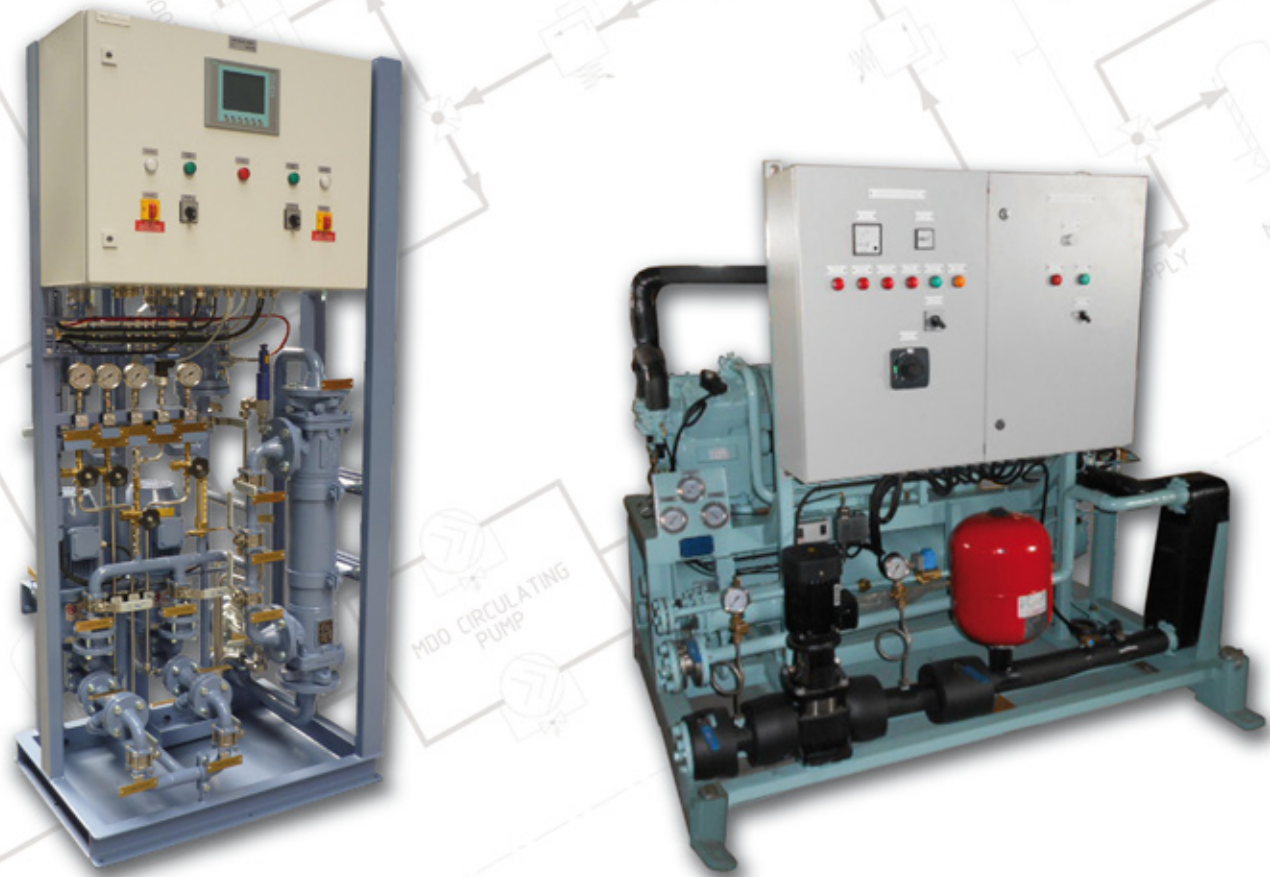
Requirement and Regulation

Due to the new environmental legislations on fuel sulphur contents all vessels have to be prepared to burn marine gasoil (MGO) in the future. MGO fuels have a low viscosity and therefore the fuel temperature has to be controlled carefully. Furthermore it is important to choose appropriate lube oil grades. The usage of DMA (MGO) with maximum sulfur content of 0,1 % requires to keep the temperature below 40 °C. At this temperature level the viscosity will not drop below the 2 cSt limit (specified by engine makers).

Realization and Recommendation

With the new fuel specification we are able to offer an economical MGO supply and cooler system solution. Based on a complete check of your current fuel system on board we design, manufacture and install most suitable and customized solutions.

If the specific parameters on the ship require an Active Cooling System our engineers will offer you a ready-to-install Chiller Water Unit and MGO Supply and Cooler Module that will be able to handle the MGO temperatures on board your vessel.



MGO Supply and Cooler Module for LT or Chiller Water

Chiller Water Unit

Active Cooling System

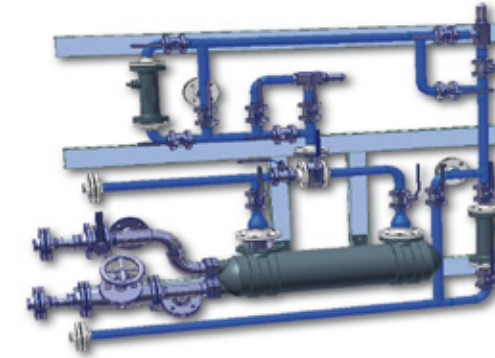
GenSys solutions helps achieve lower sulphur emissions.



MGO Retrofit Systems



Change Over Unit with Buffer Tank

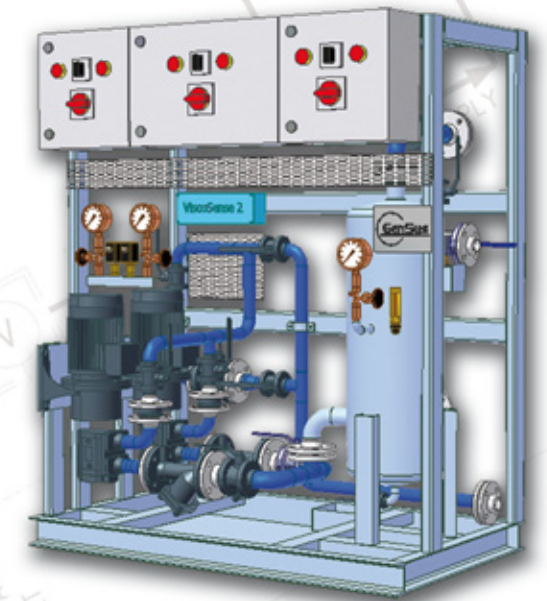
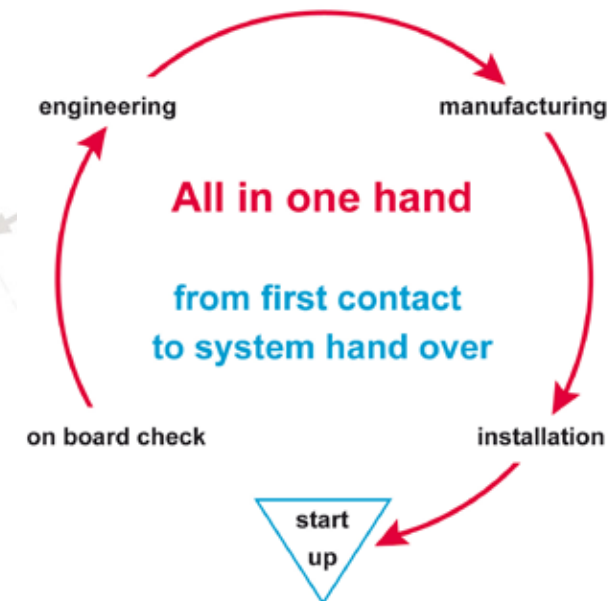


MGO Cooler and Measuring Module (Wall mounted solution)

GenSys solutions offers shipping companies an easy, fast and cost-efficient solution for entering the new era of lower sulphur emissions required by the new regulations.

Competence is essential here!

With more than 15 years of experience in modular and equipment construction, we provide the necessary competence so that we, as a system supplier, can develop, manufacture, install, and put the ideal solution for any application into operation. Precisely in the case of retrofitting, competence is the most essential key to fully meet the new requirements for fuel systems in a low-sulfur and HFO operation. Every type of ship and each fuel system is different and there is a need for an exact and optimal coordination to the mode of operation and the operational requirements of the ship for the main engine(s) and auxiliary diesel motors. Based on the documents made available, we prepare an initial concept and refine it after an on-board tour and following consultation with you in order to develop the best system with regard to costs and benefits. Our engineers and technicians will accompany you from the first step of the system analysis, as well as production and installation of the systems, to the initial operation, release to the ship classification, and delivery to the crew.



MGO Supply Module (with Mixing Tanks and Viscosity sensor)

Benefits:

- ▶ Check existing system on board by our engineers
- ▶ Complete design optimized according existing system requirements
- ▶ Customized compact design with small footprint
- ▶ Worldwide installation by our DNV GL classified teams
- ▶ Start up and commissioning by our service team