

Project for the boilers replacement on ships series "Volgotanker".

There are such river tankers - towed petrol stations equipped with fuel tanks, boiler for its heating + 3 sailors for their maintenance and control.

Vessel class: " O-PR 2.0" of Russian River Register.

Type of ship: nonself-propelled oil tanker.

Purpose of the vessel: transportation of one type of petroleum products with a flashpoint of more than 60 ° C., by towing and pushing.

Navigation area: Domestic water pools "O" category with the wave height not exceeding 2.0 m.

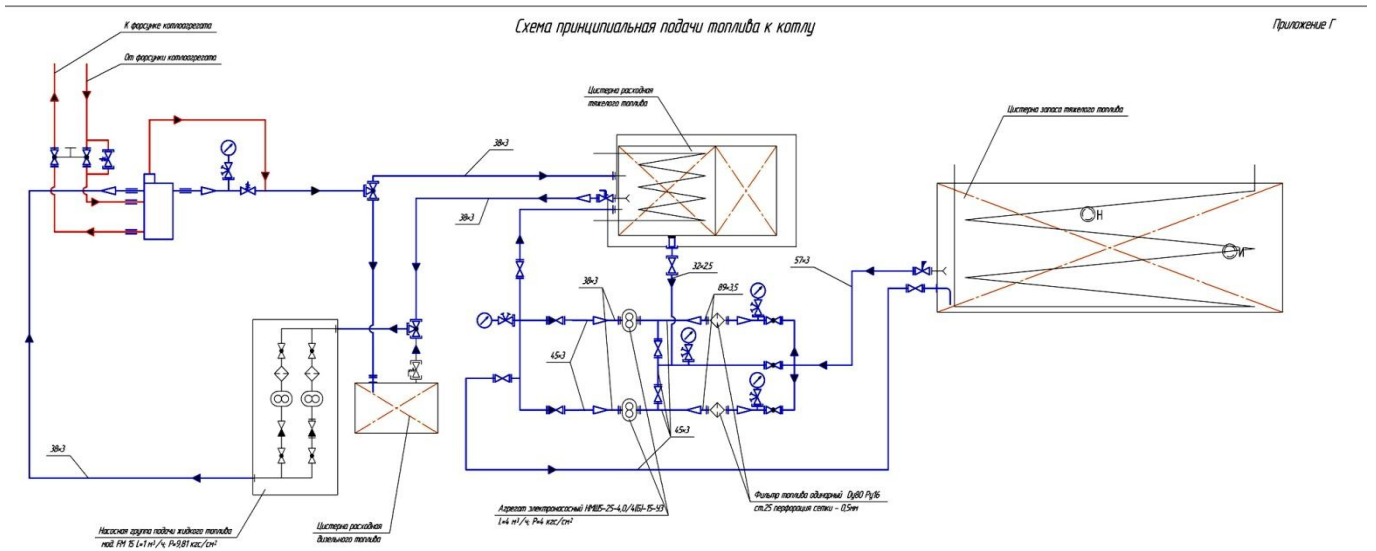
The volume of cargo tanks: m. cub. – 6576.



ships series "Volgotanker"- www.vftanker.ru/proekt-n-05074vft/



boiler system on board is designed to heat transported heavy fuel oil



In February 2013 ACDB Astrakhan (Astrakhan Central Design Bureau – www.ackb.ru), beginning to work out a project for replacement boiler (for heating oil products) on several vessels this series.

As a basic boiler model for this project there was chosen UNEX boiler , which is compact and high efficiency (85%). But, like most boilers of foreign origin, this boiler is very critical to the quality of fuel (the same for foreign origin diesel generators). Gentle atomizer and vulnerable to Russian HFO fine filter need to add into a standard fuel system, device for pre-treatment boilers fuel (improve fuel properties).

The same problems we've seen in the Korean boilers SY2-2000, firm HYNKUK, Italian and many others ... Bourgeois boilers “do not like” Russian HFO ...



Oil-fired boiler
for steam and hot-water applications

UNEX™ BH/B



UNEX™ BH/B is a smoke-tube, two-pass, horizontal boiler for steam or hot-water applications. The boiler can be fired with marine gas oil, diesel oil or heavy fuel oil.

UNEX™ BH:
Steam generating capacity:
1,000-6,000 kg/h

UNEX™ B:
Hot-water capacity:
700-4,000 kW
Design pressure: Up to 12 bar(g)

Considering that optimal system for fuel preparation is the method of hydrodynamic homogenization, as well as the reliability of our equipment series TRGA (compactness, low energy consumption), ACDB Astrakhan offered us take part in this project. **The copy of the letter of invitation below.**



ОТКРЫТОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО
**АСТРАХАНСКОЕ ЦЕНТРАЛЬНОЕ
КОНСТРУКТОРСКОЕ БЮРО**



На № _____ от _____ 28.02.2013 № 09- 231

Просим Вас предложить оборудование для гомогенизации тяжелого топлива котлов UNEX ВН-2500 (установлены на судне пр. 5385), выслать в наш адрес его технические характеристики и сообщить стоимость. Требования, предъявляемые к оборудованию, приведены в приложении А. Схема имеющейся топливной системы приведена в приложении Б.

Также просим Вас предложить решение и оборудование (гомогенизатор, самоочищающийся фильтр или сепаратор) для повышения работоспособности системы тяжелого топлива котлоагрегата NG/C 4000 (судно проекта 1577/5681). Принципиальная схема подачи топлива к котлу приведена в Приложении В. Проблемы при эксплуатации существующей системы подачи топлива к котлоагрегату и требования, предъявляемые к оборудованию приведены в Приложении Г.

С уважением,

Генеральный директор

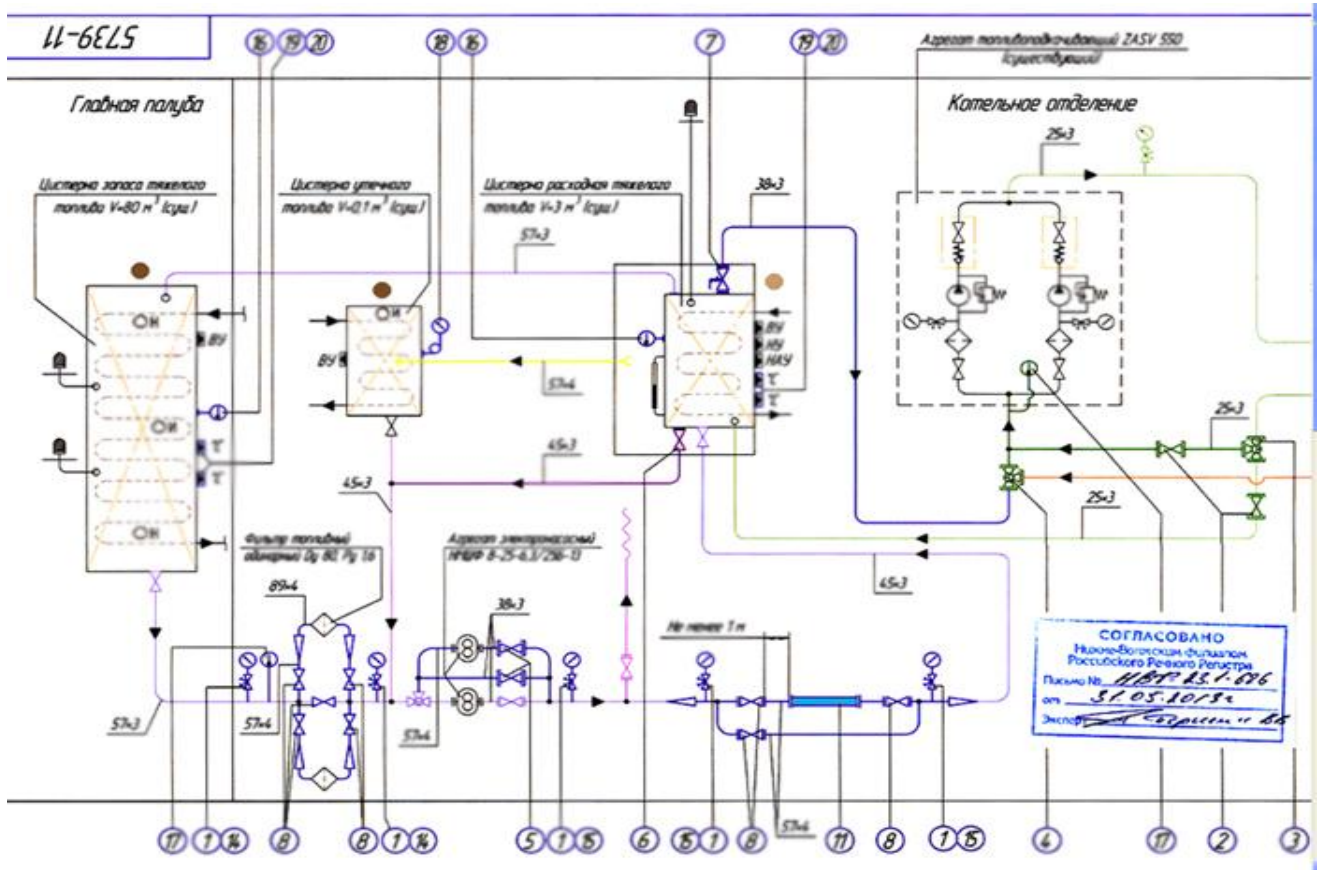
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ACDB Astrakhan developed preliminary design for fuel preparation (radical improvement of the properties of heavy fuel oil). After our recommendations **it have been partially modified** (for expand some functions for TRGA homogenizer), **and finally agreed with the Russian River Register.**

The initial version of the project. Some inscriptions and information on the scheme - overwritten.



Homogenizer TRGA labeled: in the diagram blue in the photo – by pointer.

