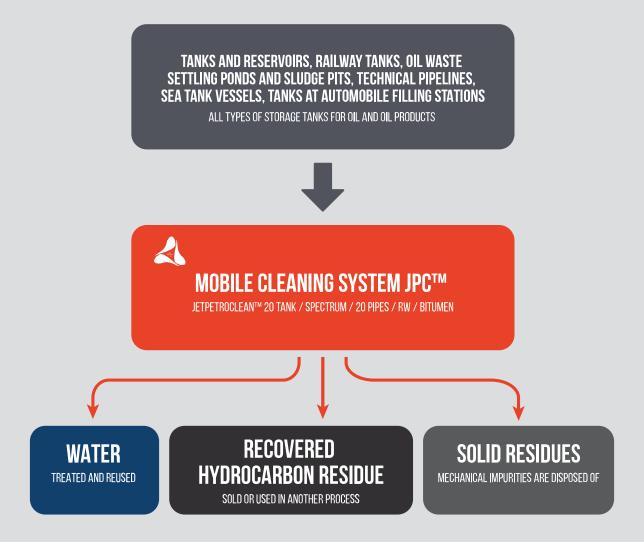




THE BASIC SCHEME OF THE PRINCIPLE OF

OPERATION OF THE SYSTEM



BENEFITS

- Potential additional incomes by sale of oil products extracted from bottom sediments (on average, up to 90% of hydrocarbons are extracted from the sludge, which can be returned to circulation as a trade product).
- Minimization of the amount of waste generated during tank cleaning, which leads to a reduction in the cost of their disposal. In a Separation module the sludge can be divided into oil, water, and solid residues.
- Fully autonomous system. If necessary, it can work autonomously without an external power source, connection to a steam generator, and water.
- Cleaning is carried out in a continuous and automated mode. Does not require staff to enter the tank.
- Reduction of the cleaning time and thereby the downtime of the tank.
- The ability to perform cleaning at a wide temperature range and at any time of the day.
- Maximum compliance with industrial and environmental safety requirements.



MOBILE

CLEANING SYSTEMS

SERVICES

The company offers systems for internal cleaning of oil and petroleum products storage tanks.

Customers are provided with a full range of services for commissioning and ensuring the operation of the purchased equipment.

Depending on the wishes of the equipment customer, the company can provide both training of the customer's personnel in the rules of equipment operation, and the participation of our specialists in the performance of work as instructors for the customer's personnel.

The company carries out not only warranty and post-warranty maintenance and maintenance of equipment, but also carrying out improvements and improvements based on the results of operation or according to the wishes of the customer.

The entire scope of technical support of JetPetroClean™ equipment and systems for each specific case or client is stipulated in advance and is an integral part of the delivery contract.

We value our customers and make every effort to ensure that our equipment works successfully, efficiently and brings maximum benefit to the client.





TECHNOLOGY

JetPetroClean™ is a proven innovative technology of autonomous, automated and mechanized internal cleaning and degassing of stationary and transport storage tanks for oil and oil products and technological pipelines.

USAGE

- Oil depots and oil refineries
- Oil waste settling ponds and sludge pits
- Tanks and reservoirs in terminals
- Technical pipelines (including main pipelines more than 5 km)
- Railway tanks, tank trucks and refuelers
- Tanks at automobile filling stations
- Tanker trucks for the transportation of bitumen and fuel oil
- River and sea tank vessels

PRODUCT LIST

The system can clean tanks after storing the following products:

- Petrol
- Diesel fuel
- Jet fuel
- Engine oils
- Kerosene
- Light oil products
- Petrochemical products
- Solutions of acids and alkalis

All light oil distillation products with a density less than water.



ADVANTAGES



The basis of this system is the technology of heating the residues in the tank with hot steam with special catalysts, which today has no alternative.

The system does not require connection to any resources for operation (water, electricity, steam), which allows it to be used on any work sites, and the frame of a standard container simplifies transportation. Ease of use is achieved by an automated control system.

For example, there is no need for a constant supply of water, since it is cleaned through a flush water separator in a closed circuit ("closed loop" principle), which allows you to clean up to 100 railway tanks at a time, saving water on this.

Hydrocarbons are also collected and regenerated, so that it is possible to obtain processed products from them that have characteristics close to commercial level.





JETPETROCLEAN™ SPECTRUM

The system is designed to perform scheduled maintenance of fuel storage tanks at **automobile filling stations**. The system allows you to perform internal cleaning and degassing of tanks for their technical inspection (flaw detection) and perform necessary repair work, including fire.

TYPES OF TANKS SUITABLE FOR CLEANING:

- Steel or fiberglass horizontal tanks at automobile gas stations. Underground and above-ground.
- Transport tanks: railway tanks, tank trucks, refuelers, ISO tank containers.
- Steel or fiberglass horizontal tanks at terminals and oil depots.
- Steel vertical tanks at terminals and oil depots with a volume of up to 3000 m³.

















JETPETROCLEAN™ 20 TANK

The system for cleaning and degassing oil product storage tanks **at terminals and oil depots**.

TYPES OF TANKS SUITABLE FOR CLEANING:

Horizontal cylindrical tanks with a volume of up to 100 m³ and an internal diameter of up to 4 meters:

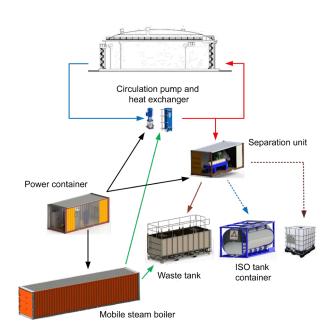
- steel;
- glass reinforced plastic (GRP);
- aboveground;
- underground;

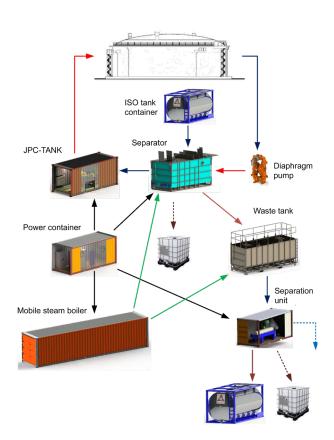
Vertical cylindrical tanks with a volume of up to 100,000 m³ and an internal diameter of up to 110 meters:

- with dome roof;
- with dome roof and internal floating roof (pontoon);
- with external floating roof;

In addition to these types of tanks, the systems allow cleaning of underground concrete tanks and underground trench-type tanks.

The JPC™ 20 TANK system includes about 10 basic elements. Below is the connection of the elements of the 20 TANK system under two different modes of operation of the mobile system.





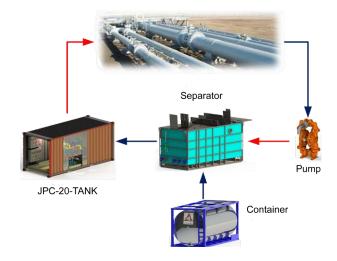
JETPETROCLEAN™

20 PIPES

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A system for internal cleaning and degassing of all types of technological pipelines 2...4 km or more, used at terminals, oil depots and technological complexes of refineries.

The system uses the same equipment as the JetPetroClean™ 20 TANK system.

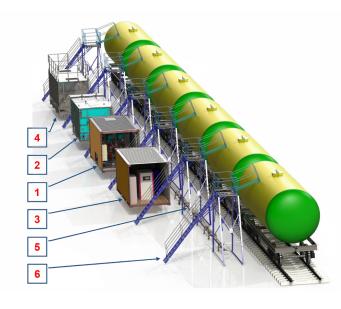


JETPETROCLEAN™

A system for preparing railway tank wagons after transporting dark products (oil, fuel oil, shale oil) and light products (gasoline, diesel fuel, kerosene, oils, etc.) for filling products and repairing tanks using fire work.

Tank cars can also be treated after bitumen or other products with a density higher than water. To do this, a special separator is included in the equipment set.

The basic set of equipment is presented below:







JETPETROCLEAN™ BITUMEN

The system for internal cleaning of **tankers for the transportation of bitumen and fuel oil**. The main purpose of cleaning is the maximum release of the tank from the remnants of bitumen and fuel oil before the next filling of the product for its transportation.

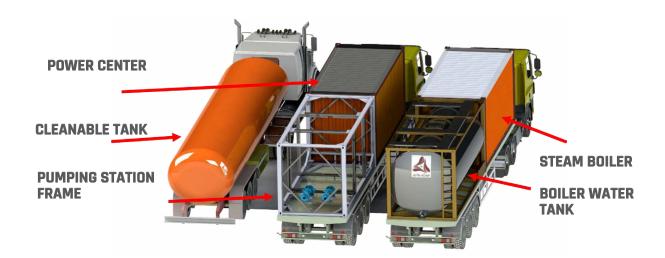
The JPC™ Bitumen system allows performing internal cleaning of the following types of tanker tanks from product residues:

- 3-axle bitumen truck semi-trailer steel
- 4-axle bitumen truck semi-trailer steel



MOBILE VERSION OF THE SYSTEM

The system is installed on two automobile container semi-trailers. The scheme of installing the system on the work site is presented below:



O U R

BUSSINESS PARTNERS



Latvia

US EMBASSY RIGA

Cleaning the fuel system serving the entire Embassy compound. Two underground storage tanks, and five day-tanks. Over 25,000 liters of diesel fuel has been filtered.

AS TARTU TERMINAL



An internal cleaning of 26 horizontal tanks (75 m³ each) and their pipes at a terminal. The tanks were cleaned after exhaust oil and additionally 4 vertical tanks were cleaned after storing a diesel.



AS E.R.S.

Participation in the supply Project of the aviation jet fuel for NATO ISAF in Afghanistan. The main task in this projet was the railway tank cars` provision, train – formation and freight forwarding to the recipient through Estonia, Russian Federation and other countries.



AS ALEXELA SILLAMÄE

Cleaning long route technical pipelines and fuel tanks in compliance with all requirements for environmental protection.

OTHER PARTNERS



AL MAMOON OILFIELD & INDUSTRIAL SUPPLIES CO.



ESTONIAN RAILWAYS LTD.



ABU DHABI NATIONAL OIL COMPANY



DENHOLM YAM, UAE



OLEREX AS



GREEN MARINE LTD.



NESTE OIL CORPORATION



GNPOC, Sudan, Port Sudan, Bashair Marine Terminal. Cleaning of the vertical cylindrical tank with a floating roof of 80 000 m3, crude oil.



Saudi Arabia. ${\sf JetPetroClean^{\sf TM}}$ tank cleaning station for ISO tank containers.



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