JetPetroClean automated cleaning systems and solutions for railway tank car cleaning service

We manufacture different versions of preparation station which could be used for cleaning and preparing railway tank wagons for transportation petroleum products and also allows repairs works on tanks

Advantages of our solutions

Modern, technologically advanced and safe method of cleaning, which can be applied to all kind of tanks

Fully mobile solution

Highest safety level of work is guaranteed, while tank cleaning process mechanization allows excluding manual operation inside of non-degassed tank

We manufacture complete cleaning station, not only single cleaning unit

2. Automated tank cleaning in the combination of closed loop cleaning method and use of NonToxic Chemicals

Technology allows preparation of a continuous flow of railway wagon tanks

While technology uses water-based washing solutions, it is environmentally friendly and cost-effective

Due the closed loop method use of flush and disposal water is minimized

Innovative technology for cleaning railway wagon tanks after dark and light petroleum products
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Cleaning method overview

Stages

1. Washing the interior of the wagon using JetPetroClean washing apparatus and installed modules (jet nozzle etc) It is carried through the top hatch of the tank and bottom discharge device

2. Degassing and drying It is carried using pressure centrifugal fans (part of JPC complex)

Type of products that requires wagon tank preparation

GROUP 1
All types of motor fuels, motor oils, jet fuel, kerosene, other fuels, and light petroleum products

GROUP 2
Crude oil, fuel oil, and other dark heavy petroleum products.

Possibility for preparation railway tank after transportation of bitumen will be determined after receiving information about the scope and condition of preparation

More detailed technology description depends on the quality of transported products and amount of residues in tank wagon
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Service basis

All preparation station equipment is based on the JetPetroClean tank cleaning unit:

JetPetroClean tank cleaning unit
Power container with air compressor and steam generator
Tank for waste collection
Pipeline system set
Access platforms
External diaphragm pumps
Drying and degassing fans
Air heaters

Equipment is installed in standard 20F containers and could be set up on any leveled platform 60m long and 7m wide

Installation and dismantling of the preparation station are performed within 7 working days

The total electric power of the station is 380 kW

Additional equipment can be added to the set of station depending on the conditions of the location and scope of work

Washing inner surface of the tank wagon is performed using two tank cleaning unit and two wagons are washed at the same time

Water washing solution temperature is at least +60 C

High efficiency of the station equipment is achieved by matching the pressure and suction lines for liquid flow and the use of suction pumps with greater productivity
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Technological schedule

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1. Washing of tank interior
2. Degassing, drying, removing of solid waste
3. Upper man-way cleaning, bottom discharge device gasket replacement

Basic technological schedule for railway tank wagon preparation after transportation of fuel oil for 12-hours shift

Based on our practice it is a standard to clean and prepare 10 rail tank wagons after transportation of HFO and up to 20 rail tank wagons after transportation of light petroleum products