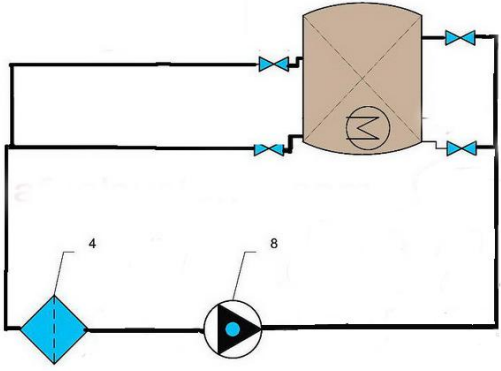
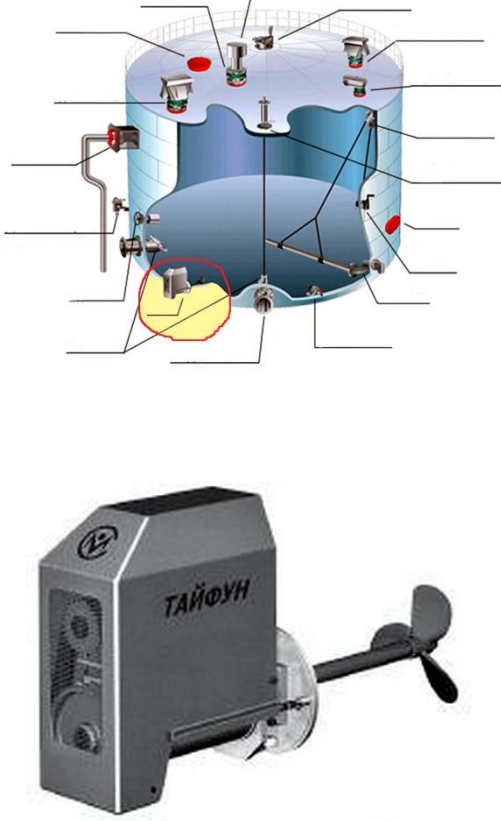
	<p>losses from one transit crude oil tank per year = = sludge (4-5% from tank volume) + + cost for its removal + cost of its recycling.</p> <p>sludge consists from components of natural oil : water, paraffin, heavy fractions, mechanical impurities.</p>
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Sludge losses in transit oil terminal (20 tanks of 20,000 c. m.) per year =
 = **20,000.00 c. m. of crude oil** or **\$8 400 000.00**



how to return sludge components back to the crude oil ?

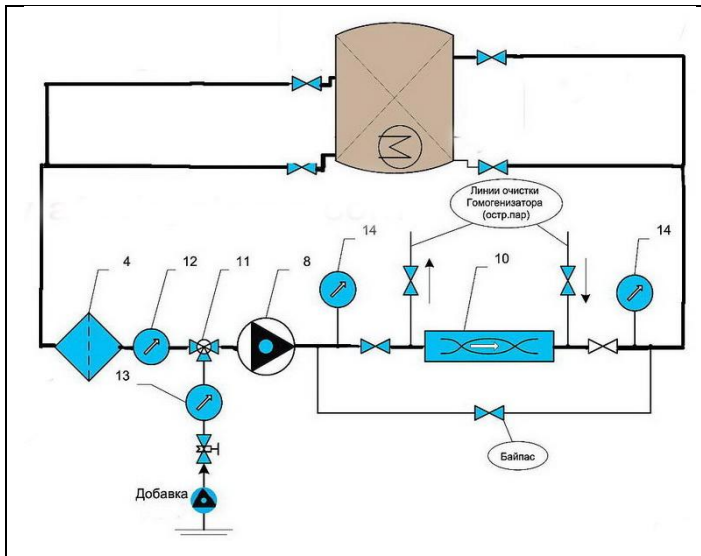
Today we know 2 ways to solve this problem

	<p>1. Stirring with a regular recirculation pump.</p> <p>This process speeds up the sedimentation, coalescence and clumping of fine particles that fall out in the "dead zones" of the reservoir and form a stronger substance than before.</p> <p>If the pump is high-performance and there are no "dead zones", these particles fall out in the pipelines or another tanks.</p> <p>These processes require a huge amount of detergent and dispersant additives and they must be carried out continuously.</p>
	<p>2. Intensive mixing with a submersible screw ("Typhoon" installation), with its own electric motor.</p> <p>Some people say that this erodes the bottom sediments.</p> <p>This process is more intense and more focused.</p> <p>This process destroys large and medium particles and clumps (especially in the direction of the jet but can not destroy small particles, resulting in the coalescence of small particles that fall out in the "dead zones" of the reservoir and form a stronger substance than before.</p> <p>This process requires a lot of energy, it does not work well in medium and large tanks, requires less detergent and dispersant additives and must be carried out continuously. Works only for low-viscosity products</p> <p>Mixing, even intense, does not change the size of the fine particles. So, when these systems are turned off, oil continues to settle. In a tank or in a pipe.</p> <p>Without the use of additives - quickly. With the use of additives - slowly.</p>

Neither the first nor the second method is intended only for mixing.

But is not intended for grinding oil suspension - dispersion of mechanical impurities and changes fractional composition of the oil product. **Intensive mixing of coffee, will never make it as tea.**

Our idea is simple - to return all the oil components to the composition of natural oil. Return continuously or periodically, when the tank cleaning.



This will reduce the loss of oil as a commercial product, dramatically reduce the rate of sludge formation and the amount of slurry, reduce the cost of physical removal and disposal of these sludge deposits.

Proper construction of an oil treatment system based on TRGA mechanical dispersants will efficiently grind all inclusions in oil. **As for the composition** - resins, paraffins, asphaltenes, coke particles. **And in size - large**, medium and small, to a size 5-100 microns, depending on the options.

At the same time, **several more parallel processes** are taking place.

1. Emulsification the remains of water.
2. Increase of light fractions in oil (increases the rate of dissolution of residues).
3. Bubbles appear that work as a catalyst for the dissolution of oil sludge.

It means that

1. our system will work well without the use of additives.
2. If you use additives - you can use them less. If you use the same amount of additives - the process goes several times faster. More info [here](#)
3. **When our systems are turned off**, oil, some time, NOT settle. Then settle.

Without the use of additives - slowly. With the use of additives – very slowly.

Deduction :

1. Losses from **one** transit oil tank **per year** = **sludge (4-5%** from tank volume) +
+ cost for its **removal** + cost of its **recycling**.

2. Sludge losses in transit oil terminal (20 tanks of 20,000 c. m.) **per year** =
= **20,000.00 c. m. of naturale oil** or **\$8 400 000.00** + cost for its **removal** + cost of its **recycling**.

3. We showed you how to reduce these costs, if return all components of natural oil (which are temporarily in sludge form) **back into the crude oil**.

4. The truth is that the disintegrator series TRGA has practical experience of successful work with oil sludge for **3 years continuously and without repairs**. Together with you, we can build an individual project for any oil terminal. It pays off quickly. [Please contact us](#).

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Two types of equipment are possible - a powerful "emergency" system for blurring existing deposits. Low power system - for continuous working, for prevent deposits formation.