

On a long way from the refinery to the consumer diesel fuel (DT) is exposed to continuous influence of a set of negative factors. It is obvious that even at high quality of initial DT process of transportation with change of tanks and intermediate storage leads to increase in the content of impurity with which oil refinery technologists uncompromisingly fight.

### Impurities in DT: sources and consequences

Contaminations	Source	The consequences
<b>Water</b>	Condensate, precipitation, leakage of transport tanks and intermediate storage tanks	Water forms sulfuric acid products that destroy the precision elements of fuel systems. The lubricating properties of the fuel deteriorate, which leads to wear of the guide needle of the sprayer and violation of its mobility.
<b>Mechanical impurities</b>	Pump wear, dust, DT oxidation products, corrosion	Mechanical impurities reduce the reliability of the fuel equipment units and the engine as a whole, cause clogging of the nozzles.
<b>Microorganisms</b>	Bacteria and fungi develop in the presence of water in the DT	Microorganisms change the composition of DT, form conglomerates and films that block filters and fuel system elements.



Taking care of the quality of DT in the process of delivery and sale to the consumer is a complex and expensive routine that only large manufacturers and networks can do. If the choice of suppliers of diesel fuel is limited, the distance to the nearest filling station forces to maintain the fuel supply, and relatively modern equipment is used, then the question of maintaining the quality of diesel fuel arises. The answer is FCS-DT units. Affordable price, easy operation, high efficiency and mobility make this equipment indispensable for small and medium-sized fuel storage. The DT purification technology implemented in FCS-DT units guarantees the removal of water, mechanical impurities of any nature and biological contaminants with a quality that allows not to worry about the condition of precision fuel equipment.



## Performance characteristics of FCS-DT units

Модель	FCS-DT-08	FCS-DT-16
Parameter	Value	
<b>Technological characteristic</b>		
Media to be cleaned	Diesel fuel	Diesel fuel
Hydraulic capacity of the unit, l / h	480	960
Operating temperature of the liquid, °C, not more	+5 - + 50	+5 - + 50
High intensity NdFeB magnetic filter	1	1
Fine filter-water separator	1	1
Filtration fineness, mcm	5 - 10	5 - 10
Degree of purification from free water in one pass, %	98	98
<b>Technical parameters</b>		
Maximum permissible pressure drop on the filter element, kg / cm2, not more than	1	1
Maximum working pressure, kg / cm2, max	3,0 (set point to shut off the pump)	3,0 (set point to shut off the pump)
The drainage of the separated water	Automatic or manual	Automatic or manual
Power supply	220 V, single phase, 50 Hz, 0,30 kW	220 V, single phase, 50 Hz, 0,30 kW
Power supply cable (Euro plug with earthing contact), m	4	4
Length of sleeves for unit connection, m	3 - suction, 3 - pressure	3 - suction, 3 - pressure
Internal Ø of the sleeves for connecting of unit, mm	16 – suction, 16 - pressure	16 – suction, 16 - pressure
Hydraulic connection (inlet, outlet)	Camlock (nipple - unit, socket - sleeve)	Camlock (nipple - unit, socket - sleeve)
Hydraulic connection (emptying, manual / automatic discharge of separated water)	2 x hose fitting Ø10 mm	2 x hose fitting Ø10 mm
Type of pump unit	Gear or screw	Gear or screw
Weight of the unit empty / in operation, kg, not more	70 / 95	70 / 95
Unit dimensions, mm, LxBxH, no more	L610xW510xH1050	L610xW510xH1050
Ø wheels for moving the unit, mm	4 x 125 (two fixed, two swivel with stopper)	4 x 125 (two fixed, two swivel with stopper)
The main construction material	Stainless steel AISI 304	Stainless steel AISI 304

