Use and resistance of AFRISO oil components with available liquid fuels



		Fuel oil / diesel		Paraffinic fuels		
					(HV	O / GTL)
Product	Туре	Fuel oil EL /diesel	Mixtures 0-30 % with FAME*	Mixtures 30-100 % with FAME*	HVO / GTL	Mixtures 0-100 % with fuel oil EL
Level sensors	GWG 12	•	•	•	•	•
	GWG 23	•	•	•	•	•
Fuel oil filters	Single-line type V 500, V ½-500, Dual-line type R 500 (with return supply)	•	•		•	•
	Dual-line type Z-500, Z ½-500	•			•	•
Fuel oil de-aerators	Flow-Control 3/K	•	•		•	•
	Flow-Control 3/K HT	•	•	•	•	•
	FloCo-Top-1K, FloCo-Top-1C, FloCo-Top-2, FloCo-Top-2CM	•	•		•	•
Withdrawal systems	Top withdrawal systems: Level sensor GWG chain (SWS) and all OEM versions	•	•		•	•
	Miniflex / Euroflex	•	•		•	•
Level indicators	Unitop, Unitel, DTA 10, DTA 20 E in conjunction with NBR vertical line	•	•		•	•
	Unitop, Unitel, DTA 10, DTA 20 E with tubing kit (vertical line PVC) or stainless steel vertical line	•	•	•	•	•
	MT-Profil / Unimes	•	•	•	•	•
	DIT 10, TankControl 10	•	•	•	•	•
	Hydro Fox DMU 08 (standard version)	•	•		•	•
Filling fittings	Level sensor GWG filler cap, filler cap K, filler cap	•	•	•	•	•
Anti-siphon valves	Diaphragm type anti-siphon valve MAV	•	•		•	•
	Piston type anti-siphon valve KAV	•	•	•	•	•
Testers	Tester for mechanical safety-related equipment against siphoning	•	•	•	•	•
Pressure compensation unit	DAE	•	•		•	•
Leak protection linings	Inner linings AK-S	•	•		•	•
Leak detector	Series LAG, LAS, Eurovac and Europress					

^{* =} Fatty acid methyl ester as per EN 14214









Continued use of AFRISO oil components in existing systems for heat generation with liquid fuels in conjunction with renewable fuels (e.g. HVO, e-fuel, GTL, FAME).

Components that are not in good general condition, e.g. that are damaged or heavily soiled, must always be replaced. Furthermore, the following applies to the use of AFRISO products if a different fuel is to be used:

Paraffinic fuels (e.g. HVO, e-fuel, GTL)	Components
Up to 65 %*	Can be continued to be used
	< 5 years old -> can be continued to be used
65 – 100 %*	5 – 10 years old -> renewal recommended
	> 10 years old -> must be renewed

FAME	Components
Up to 30 %*	Can be continued to be used
30 – 100 %*	Can be continued to be used: GWG 12 or 23, Flow-Control 3/K HT, tank contents gauges (no NBR measuring line), piston type anti-siphon valve
	Not to be used: all other components

^{*} Proportionate admixture to mineral oil-based fuel oil EL

Background information:

All elastomer materials (plastics) absorb aromatics on contact with mineral oil-based fuel oil. They diffuse into the material. On contact with pure paraffinic synthetic fuel, these aromatics are removed again. This process causes changes in some material properties of the plastics. The age of the parts and the duration of exposure to the medium also play a role.

There is no generally valid answer to the question of whether or not these modifications impact the continued serviceability. The operating conditions, which constitute an important factor in the ageing of plastic parts, can vary greatly in practice and must therefore be assessed depending on the system. Key factors include, for example, temperatures, rate of change of temperature, exposure to light (UV radiation) and mechanical influences.

Bottom line:

To be on the safe side, renew used components that are older than 5 years.

All new AFRISO components are approved for all paraffinic fuels up to 100 % and or FAME up to 30 %.



