

CARETREAT VALVES

A Post-Combustion fuel ash modifier very efficiently reducing high temperature corrosion causing premature exhaust valve failure in low-speed and particularly medium-speed diesels

- * Reduces deposits caused by combinations of sodium, vanadium and sulphur in combustion zones, turbochargers and especially on exhaust valve seats and valve stems.
- * Increasing exhaust valve life substantially.
- * Raising fuel ash sinter and melting point temperatures above the normal engine operating temperatures.
- * Reduces turbocharger fouling.
- * Reduces high temperatures fused salt corrosion of valve alloys.
- * Modifying vanadium compounds to non-adherent ash forms.
- * Converts crystalline ash forms to light and friable, easily exhausted fuel ash.
- * Prevents vanadium from converting sulphur dioxide to sulphur trioxide catalytically.
- * Improves combustion.

Application

Caretreat Valves has been formulated primarily for use in 2-cycle and 4-cycle medium speed diesel engines which are highly turbocharged and in which premature exhaust valve failure is a frequent problem.

Dosage

Dosage point location varies depending on engine fuel system layout. The most efficient and economical dosing method is obtained with a metering pump, dosing the additive as near to the oil injection point as possible, f.inst. to the suction side of the booster pump.

Dosage rates are depending upon engine characteristics, operating conditions and especially the quality of fuel oil. Consult your local Marine Care Service Engineer for recommendation of dosage, etc. based on specific problems and requirements onboard.

Guide for approximate dosage rates:

Constituent	Level	Dosage Rates
Conradson Carbon up to:	5%	1:7000
	5% - 10%	1:5000
	10% - 15%	1:4000
	15% and up	1:3000
Sodium	up to 20 ppm	1:8000
	20-30 ppm	1:6000
	30 ppm and up	1:4000
Sulphur	up to 2%	1:8000
	2% - 3%	1:4000
	3% - 4%	1:3000
	4% and up	1:2000
Vanadium	up to 200 ppm	1:6000
	200 - 300 ppm	1:5000
	300 - 400 ppm	1:3000
	400 ppm and up	1:2000

The combination between the various constituents changes with each bunker supply. It is therefore imperative that dosages are set for the worst case, viz. the highest value of any of the above fuel oil constituents.

Properties

Caretreat Valves is a light brown coloured liquid containing oil soluble organo-metallic compounds, special solvents, emulsion breakers, anti-oxidants, anti-corrosive agents, combustion catalyst and dispersants. Compatible with all types of fuel oil.

Specific Gravity (20°C) : 0.835
Flash Point PM CC : 63°C
IMO Class : 9-3082-T310

NATURE OF SPECIAL RISKS AND SAFETY ADVICE

In accordance with the latest E.E.C. Council directives this product is not subjected to any official recommendations.

The details of our products are given completely free of undertaking. Since their application lies outside our control we cannot accept any liability for the results.