



What Are Fuel Additives and Why Use Them?

Put simply, fuel additives are chemicals that are added to fuel either singly or as a ‘package’ that serve either to address a problem or to enhance the performance properties of the fuel in some way.

The first widely used and commonly recognised fuel additive was the lead-based product added to petrol during the 1920s. By the late 1970s, pressure was being brought to bear on the automotive manufacturers to produce increasingly more fuel efficient engines with reduced noxious emissions. The means of achieving this by changing the mechanical design of the engine and the exhaust system required a radical re-think of fuel quality and the introduction of ‘performance packages’ containing fuel detergents. For the first time fuel was being formulated to match the requirements of the engine rather than the engine being designed around the fuel available and fuel technology became a technical differentiator for the major oil companies.

Bringing the story up to date, the macro-economics of the oil industry have changed massively and whilst the political and environmental imperatives remain, the focus of the fuel producers has moved away from fuel quality. As a result, fuel of all grades is now being produced – and increasingly imported – in order to meet the fuel standard rather than significantly exceed it as was the case in the days of the integrated oil companies.

Simultaneously, fuel burning equipment, whether an engine, a domestic boiler or an industrial heat generator, has become more sophisticated and less forgiving of ‘poor’ quality fuel, demanding certain levels of ignition quality, cleanliness and storage stability. Additionally, the introduction of ‘bio’ elements into common fuel grades means that water pick up and bug growth are increasingly common occurrences.

Upgrading a fuel to provide optimum combustion performance or addressing a storage issue is achieved by proper use of the appropriate fuel additive. To this end, fuel additives should be regarded as the norm not the exception.

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