

## Opine & Commentary

Chornco's game changing additive technologies are setting new benchmarks and expectations on modern fuel performance and efficiency. Yesterday's "good enough" isn't enough. Optimizing efficiency of consumables in all areas of operation is now essential while next generation solutions and energy sources are being developed.

Today, the fuel industry is volatile and fluid in more ways than one. Costs are rising at all sectors, while geopolitical conflict over extraction and distribution threatens global energy security. Exponentially rising fuel and energy consumption in China and India, combined with the refining industry refocusing to produce more petrochemicals, threatens fuel availability. And of course, Climate Change threatens the very viability of fossil fuel use.

The results of these pressures are not in alignment with delivering what the high volume consumer of fuels needs or expects, today or tomorrow. Fuel quality is increasingly inconsistent, and associated problems are further driving up already burdensome operating costs. As equipment design advances, with engineering tolerances becoming tighter, Chornco products are ahead of the "need curve" to meet the new requirements and mitigate fuel derived problems.

Taking "good enough" to "optimum", the benefits Chornco products provide are disrupting fuel distribution biases and traditions of providing "good enough specification fuels". Fuels with Chornco additives provide optimized efficiency that result in environmental benefit. Less fuel is consumed for the same job. Each unit of fuel burns cleaner and more thoroughly; delivering more power, significantly fewer emissions, and impressive integrated cost savings.

## Good News Bad News - Motivate

The tightening of fuel specifications over the last decade has reduced harmful emissions from vehicles and enabled the uptake of the newest and cleanest vehicle technologies. (e.g. "Euro 5" diesel vehicles). Fuel that meets these tighter specifications is more difficult to produce, and only some refineries in the Asia-Pacific can achieve the specifications with consistency.

International fuel specifications share much commonality; however, there is a lack of international consensus on many parameters and new types of contaminants are increasingly entering the fuel chain. By providing needed fuel performance solutions while keeping fuel within specification, Chornco additives mitigate many of the fuel quality inconsistencies while raising the performance bench marks and lowering the environmental impact of treated fuel.

Effective mitigation aside, it is becoming vital that global specifications are established with norms in alignment, where possible, with the new requirements of categories of engines and equipment. Chornco calls on a global review of fuel specifications and action by standards organizations to agree on setting international standards and quality testing protocols in alignment with fuel production capability and market need.