Creating performance products
Innospec is a dynamic global specialty chemicals company. Our Fuel Specialties business specialises in manufacturing and supplying additives to improve fuel efficiency, boost engine performance and reduce harmful emissions. Our company has evolved out of the tetra ethyl lead (TEL) business to become the champion of innovative new fuel treatment technologies in a rapidly changing market.
If the success of your business depends on being innovative, dynamic and customer focused, why work with anyone who isn’t?

Innospec’s Performance Specialties team understands the specific needs of the high performance diesel and gasoline fuel markets. We have the market knowledge, technical expertise and capability to deliver bespoke fuel treatments.

Our customers comprise fuel retailers and marketers, fuel manufacturers, terminal operators, vehicle manufacturers and third party additive suppliers. With each customer we create a working partnership that can make a real contribution to the success of their business, whether they are looking to open up new markets, create new products or optimise the performance of a particular type of fuel.

Our dedicated Performance Specialties team is committed to providing exceptional customer service and going that extra mile. What is more, we can draw on the global reach and financial resources that few of our competitors can match.

Innospec’s Fuel Specialties business comprises of a number of dedicated teams. The Performance Specialties team focuses on the performance diesel and gasoline markets. We also have teams serving the needs of the refinery, power, heating, marine and fuel borne catalysts markets.

Innospec’s Fuel Specialties business is registered to supply and sell petroleum additives.

This means our customers profit from a worldwide supply chain, outstanding market knowledge, extensive research capabilities and first-class application technology support.

Today we can provide a wide customer base with innovative solutions to their fuel problems on both a local and international scale.
Responding to market needs

The global performance diesel and gasoline market is very competitive and subject to constant change. Because geographical regions are seldom the same in terms of the type of vehicles being operated and the user profile of the people driving them, different areas require different marketing strategies, products and supporting performance data.

So our customers are presented with fresh challenges all the time. New legislation, environmental initiatives, the need for different types of fuel, advances in engine and vehicle technology and competing marketing strategies are some of the more common issues.

To respond effectively to these challenges, customers require a flexible and innovative approach to product development. By understanding how a market needs to be tackled and what type of product is appropriate, we are able to develop solutions that support our customer’s business strategy.

That’s why our Performance Specialties team delivers bespoke fuel treatments. No two marketing strategies are the same so why should we offer a standard product.

There are many ways in which our customers have benefited from this approach. Our fuel treatments have been used to create new brands of performance fuel and open up niche markets. In some cases they have ensured compliance with environmental legislation and overcome barriers to market entry.

We have also developed treatments that ensure fuels in certain countries demonstrate specific technical attributes such as ultra low temperature valve stick performance or improved flow at low temperatures. Such innovation helps our customers get ahead of their competitors in the fight for market share.

To our customers and the end user these benefits are real and our commitment to research and development ensures we can deliver them time and again.
As a company, Innospec has invested heavily in its scientific capabilities both in terms of physical and human resources. Our people are scientists who have worked in the industry for many years and they understand the chemistry that defines additive performance. This means we can assess an application requirement from a chemistry perspective and provide advice and guidance on how problems may be addressed and which products are suitable.

By investigating new chemical synthesis routes we have also helped to drive down the costs of manufacture so that our customers receive the most cost-effective solution.

From our extensive laboratories at Ellesmere Port, UK and our new testing facility at Millbrook, UK our highly skilled experts work closely with customers to identify, develop and prove fuel treatments that meet a specific technical requirement.

Case Study

Reducing fuel production costs was a key objective for a major international oil producer when it came to looking for a cost-effective fuel treatment for their mid-tier diesel. Five leading global fuel treatment companies were invited to tender for the business, including Innospec’s Performance Specialties team.

Extensive in-house testing at Innospec’s UK testing facility ensured our fuel treatment met the customer’s strict technical and commercial targets. A sample of the proposed product was sent to the oil producer’s technical team for testing.

Evaluation of the Innospec product confirmed it offered an economic and technical advantage over the other treatments under assessment.

Innospec’s Research & Development team had created a superior fuel treatment that could be used at highly cost-effective treat rates. This allowed the oil producer to dose mid-tier diesel at minimum cost and enjoy a significant reduction in overall fuel treatment spend.

As a result Innospec was offered a global contract to supply the product to over 30 countries. As part of the agreement, Innospec also provided each area with local representation to ensure the needs of individual users were met.

An added benefit for the multinational was that it could consolidate supply down to a single supplier - a process Innospec made smooth and straightforward by bringing its technical, logistical and manufacturing capabilities into play to meet tight supply deadlines. Regular reports now provide data on performance against quality, supply and logistical targets.
Increased market share was critical to the growth of a newly privatised oil company in the Asia-Pacific region. The answer was to adopt a more aggressive marketing strategy and promote a better quality branded gasoline that offered superior engine performance.

Innospec’s Performance Specialties team was invited to work with the oil company to develop a new fuel treatment package that would deliver improved engine performance in terms of power, acceleration, cleanliness and fuel economy.

Our Performance Specialties team’s first task was to evaluate the gasoline being sold by the competition - the multinational oil companies already operating in the country - and research market opportunities for a new branded fuel. Differentiating the customer’s gasoline and creating a fuel geared to the unique characteristics of the customer’s home market was critical to the success of the project. To do this Innospec had to develop a bespoke fuel treatment package that could cope with the heavy traffic conditions and punishing stop-and-go driving cycles of an urban city environment.

Over a three-year period Innospec’s relationship with the oil company grew from strength to strength. The new premium quality gasoline was launched and started to gain significant market share with the increased revenue ultimately offsetting the development costs of the fuel treatment package.

Throughout this period Innospec’s Performance Specialties team played a major supporting role, helping to launch and promote the product as part of its added value service. Determined to secure the continued success of the partnership, the oil company offered Innospec an unprecedented five-year technical and supply agreement. The two companies now work together to draw up strategic plans on new fuels to maintain market competitiveness. Joint research projects have also been established to create additional business opportunities.
Creating performance products

Octimise D3000 diesel performance additives

- Lubricity Improver
  An effective lubricity improver reduces vehicle pump wear which controls the level of emissions.

- Cold flow improvement
  Cold flow improvement allows ‘super’ winter grade fuel to be marketed with no refinery alterations.

- Corrosion Protection
  Fuel tanks and delivery systems can be protected by using a suitable corrosion inhibitor.

- Emulsion co-additives
  Blending ethanol or water into diesel fuel with Innospec proprietary additives allows stable fuels to be produced which reduce particulate and NOx emissions. Additives for other bio fuels are also available.

- Combustion Improver
  By improving fuel combustion an engine will return better fuel economy and cleaner emissions.

- Antifoam
  Antifoam fuel treatments ensure cleaner and faster fuel delivery.

- Octimise Detergent System
  Octimise detergent system can be used to improve both passenger and heavy vehicle performance. By maintaining fuel injector cleanliness it is possible to significantly reduce fuel consumption and exhaust emissions. The product cleans up existing engine deposits to restore vehicles, which have previously run on untreated diesel, to optimum performance.

- Cetane Number Improver
  Boosting a fuel’s cetane number improves fuel economy and emissions and reduces engine noise.

- Dyes, markers & re-odourants
  Dyes, markers and re-odourants customise a fuel brand and make it instantly recognisable.
Our Performance Specialties team has the skills to formulate highly complex specialty chemicals at different treat rates to create new fuel treatment products. These are designed to perform specific functions within diesel or gasoline fuels.

Our Octimise D3000 and G2000 solutions help refiners to maximise diesel and gasoline quality from available fuel stocks and allow blenders to meet national fuel specifications. They also provide a cost-effective method of differentiating one fuel from a competitor product.

The diagram below illustrates how various components of a multifunctional package can be used to enhance fuel performance.
For more information on how Innospec’s Performance Specialties team can work with you, please contact one of our sales offices.

This international office network offers unrivalled product support and it has the resources to deliver fuel treatments to a customer’s specification anywhere in the world.

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