Oil Market Report: October 2018

It's always difficult to gauge the temperature of any particular industry at an annual exhibition or conference. Let's face it, the kind of companies that attend these events have typically had a good year (how else can you justify the time and cost of attending?) and most attendees are fairly determined to enjoy themselves. This month's UEIL (Union of the European Lubricants Industry) Annual Congress, held in Budapest was no different, with attendees enjoying lavish drinks parties and a gala evening event that took place in one of the Hungarian capital's beautiful palaces.

Far more technical than other parts of the oil industry, the lubricants sector can on occasion feel like some sort of giant engineering geekfest. Conversations revolve around viscosity, hydraulic stability and pour points, whilst the sheer number of different lube formulations can be baffling for any outsider. The many and varied lubricant uses are partly the result of the manufacturing process which unusually involves both the top and bottom of the "barrel" in the refining process. Synthetic and "light-end" lubricants (typically higher spec but produced in lower volumes) fractionate early and go through a petro-chemical process to create the final product. At the other end of the scale, base oil (lower quality but mass volume) sinks to the bottom of the refining tower, taking much longer to boil and is eventually drawn off as a gloopy lubricant "syrup".

Whether used for high-spec engineering apparatus (synthetic) or bog-standard machinery (base oil), lubricants are required wherever 2 (normally) metal working parts come into contact with each other. Lubricants are essential for every engine, piston, turbine, power transmission system and mechanical lift in the world, as well as having all kinds of auxiliary applications in medical equipment, refrigeration, gas sealants, coolants and anti-corrosion agents. Because lubes aren't combusted for energy release, volume consumption (and CO2 emissions) tends to be lower when compared with other refined fuel products (petrol, diesel, jet fuel etc). But with much higher margins than fuel, the lubricants industry continues to be very much big business and is dominated by the usual oil major suspects (ExxonMobil, Shell, Chevron BP etc). Every year 35m tonnes of lubricant products are produced globally – which means that on the day you read this report, more than 110m litres of lubricants will have been consumed across the world.

But despite its scale, the global lubes industry still faces the same problems as the wider oil sector, as it addresses declining consumption in developed markets (due to engine and manufacturing efficiencies) and the onset of automotive electrification. Of course growth in the developing world continues to be very strong, with Asia now accounting for 47% of global lubricant consumption (up from only 33% 10 years ago). But the headwinds against this industry are nonetheless strengthening – perhaps not quite at the same force as those facing the diesel market - but enough to mean that changes will have to be made if lubricant companies are to continue to prosper.

A whopping 65% of all oil lubes currently sold go into the internal combustion engine (ICE), but if automotive electrification is to become a reality, then standard lubricant use will drastically reduce. It is true that certain uses of lubricants will see their usage increase in electric cars, particularly those products that look after the electric motor and the heat / power transmission systems. So demand for coolants, gear oils and greases should all remain buoyant. But bog-standard engine oil (designed to preserve internal ICE mechanisms and wash away the build-up of carbon matter) would be made virtually redundant in electric vehicles, because the number of working parts are much reduced and material deposits are non-existent.

Industry optimists highlight the sector's technical heritage, which they say will allow a transition to electrification with the formulation of new and different products. Furthermore, they point out that the lubrication industry has seen volume downturns in the past and has effectively dealt with them. The 1970's and 80's for example saw heavy manufacturing drastically decrease in large parts of the West and the result was a drastic reduction in demand for industrial lubricants (at the time, the biggest lube sector). Back then, the industry reacted quickly by shifting supply to new regions (the developing world) and new market spaces (passenger cars).

Looking into the Portland crystal ball however, it is difficult to see what new regions or products will rescue the lubricants industry in any post-petrol world. Short of even more people populating the globe, the inevitable outcome of electric vehicles, coupled with general improvements in industrial processes, fundamentally means fewer lubricants being used. Of course this most technical of sectors will be capable of adapting, but if and when electric automation does become a reality, the scale of the lubes industry will surely reduce and its nature become considerably more specialised.