

THE REMAN-TRA

David Eszenyi provides an insight into the world of remanufacturing

In 1943 'Make Do and Mend' was a pamphlet issued by the British Ministry of Information aimed at giving housewives practical tips on how to be frugal during times of rationing. There was even a section on turning men's clothes into women's and it became an indispensable guide for households.

Although driven by pressures on society as a result of war and lack of supply, in a sense, this initiative was a forerunner to modern day remanufacturing which, in automotive terms, is a prime example of sustainability.

Governments and businesses around the developed world are being urged to embrace what's called the 'Circular Economy', as part of a global bid to control the rate at which we consume resources and pollute the environment. The concept champions a range of activities including reuse, sharing, pay-per-use, repair, refurbishment, remanufacturing and recycling of products in order to preserve natural resources, minimise energy consumption and avoid landfilling. At the same time economic benefits such as job creation from innovation and process allow an economy to grow and prosper without increasing environmental degradation.

Remanufacturing is a fundamental part of a Circular Economy as it's a cost-effective alternative to manufacturing brand new products whilst also saving on raw materials and energy. Typically, a remanufactured engine from Ivor Searle will save 55kg in core metal. Multiply that by the number of engines being manufactured across the world and the amount of weight involved is almost planetary. Not only that, on average, 85% of an engine's original



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components will be brought back to OEM specification during Ivor Searle's stringent remanufacturing process.

With regard to energy usage, which is high on the agenda in Whitehall in terms of how the UK powers the next generation, remanufacturing requires substantially less energy. In fact, the process typically uses 85% less energy than manufacturing and, at the other end of the cycle, reduces the quantity of landfill and associated energy needed for disposal.

The UK is one of the four leading remanufacturing countries in Europe, alongside Germany, France and Italy. Much of the current market is in the aerospace sector but this is followed by the automotive industry.

According to a report published this year by The European Remanufacturing Network (ERN), the remanufacturing sector could triple in size within Europe and be worth €90bn by 2030. At present the organisation estimates it to be just under €30bn, around 2% of the size of the new manufacturing market.

There is a sticking point to achieving this projected growth, however. A recent conference held by Westminster's All-Party Parliamentary Sustainable Resource Group (APSRG) and All-Party Parliamentary Manufacturing Group (APMG) concluded that there was a systemic blockage in the UK political system regarding remanufacturing, so a lot needs to happen in order for progress to be made.

THE REMANUFACTURING PROCESS

The remanufacturing process aims to return a product to at least its original specification and performance with a warranty that is equivalent or better than that of the newly manufactured product. In contrast, a reconditioned engine is a unit that has been stripped or disassembled, cleaned and may have had some damaged components replaced prior to being rebuilt.

Furthermore, a remanufactured engine is required to meet a specific standard for it to be described as such under BSI AU 257:2002. This is a British Standard Automobile Series Code of Practice that applies to the remanufacturing of petrol and diesel engines.

With the legal requirement that all EU-manufactured cars are 95% recyclable, it's clear that the automotive sector is a trailblazer for sustainability in its widest sense but seeking greater volumes of new product is, in itself, unsustainable, as technology improves.

